



ENWIN Powerlines Ltd.

RP-2004-0203\EB-2004-0531

Conservation and Demand Annual Report

March 30, 2006

Annual Report of CDM Initiatives

1. Introduction

ENWIN budgeted and spent the following on CDM in 2005:

Program	Budget for 2005 (\$)	Actual Spending in 2005 (\$)	Total Budget (\$) Before Transfers	Total Budget (\$) After Transfers
1. System Loss Reduction/Power Factor Correction	0	0	909,090	909,090
2. Energy Conservation Media Campaign	50,000	51,649	150,000	150,000
3. Distributed Generation with Local Large Manufacturer (Cancelled)	0	0	0	0
4. Local Large Manufacturers	118,000	13,400	354,000	354,000
5. GS > 50, Intermediate and Large Use Remaining	134,283	8,642	402,850	402,850
6. Residential and GS < 50	33,333	40	100,000	277,710
7. Home Improvements – Little River Acres	1,250	2,513.81	50,000	50,000
8. Educational Program for Elementary School Students (Cancelled)	59,237	0	177,710	0
9. Traffic Engineering – LED Lights	0	17	110,000	110,000
Totals	396,103	76,262	2,253,650	2,253,650

The main spending shortfalls came with Programs 4 and 5. However, with all of the existing proposals taken into account, the potential for spending as of December 2005 is \$91,945.67 and \$93,860.55, respectively, for these two programs, which is significantly more in line with the budget for 2005. The spending shortfall on Program 6 will most likely be made up in 2006 with a retail compact fluorescent light program. It is also important to note that Program 8 has been cancelled with all funds re-allocated to Program 6 and that the City of Windsor no longer appears to be going forward on an LED traffic light program (Program 9). Hence, *ENWIN* is looking for other avenues to make use of these funds.

System Loss Reduction/Power Factor Correction

In 2005 *ENWIN* completed the design for a distribution system enhancement, the conversion of a 4.16 kV feeder to 27.6 kV. The result will be reduced line losses resulting in a savings of approximately 427,000 kWh per annum, enough energy to supply 50 homes for one year. This program is currently out for tender and is planned as a fixed price contract.

Energy Conservation Media Campaign

ENWIN immediately embarked on an energy conservation information campaign on the very popular AM 800 radio station. This program is hosted by *ENWIN*'s corporate spokesperson and has included various expert guests, including home auditors and electrical suppliers. Ads were placed in the Windsor Star and the City of Windsor Recycling Calendar. *ENWIN* also had a booth at a home show and presented/participated in various public forums/town halls.

Local Large Manufacturers, GS>50, Intermediate and Large Use Remaining

In 2005, *ENWIN* met with its largest commercial and industrial customers and introduced them to a new incentive – \$13.79 per annual megawatt-hour of reduced electrical consumption. This program is focused on obtaining maximum benefit per dollar spent. The incentive is available for upgrades to more energy-efficient technology, for example, T8/T5 fluorescent fixtures, compact fluorescent lighting, LED Exit signs, premium efficiency motors, and variable speed drives. *ENWIN* arrived at this figure by taking its total available dollars for CDM (\$2,253,650) and dividing by 5% (government target) of the recent average annual kWh consumption for the *ENWIN* system. The administration of the program is quite simple: the customer is asked to submit a proposal, *ENWIN* reviews the proposal, both parties sign an agreement, the customer implements the program which is verified by an engineer, and *ENWIN* issues a cheque according to the energy savings reported by an engineer or auditor. To date there have been a number of successful projects and proposals, mainly lighting upgrades to industrial and commercial facilities, compressor upgrades, variable speed drive installations, building envelope improvements, exhaust controls and individual metering. It is important to note that Appendix A and B of this report only includes projects completed by December 2005. Projects that were in progress at the end of 2005 but not complete will be reflected in the 2006 annual report.

Residential and GS<50

The residential education program will be in the form of a retail compact fluorescent light discount and education program. Administration of this program will be contracted externally. *ENWIN* requested proposals in late 2005 and received a number of submissions. The company is currently at the pre-award stage of this contract. The intention is to run the program in 2006. The program will both educate customers on the use of energy efficient lighting and will result in significant energy savings.

Home Improvements – Little River Acres

ENWIN quickly established a relationship with the Little River Acres Association, an electrically heated subdivision, and a local Energuide for Houses home auditor. Efforts culminated in a discount energy audit program for electrically heated homes and an agreement to match NRCan grants for upgrades verified in a second home audit. This program garnered significant media attention and further promotion by the mayor and then Energy Minister, Dwight Duncan. To date, *ENWIN* has contributed toward 10 free audits and 23 discounted audits. *ENWIN* is most pleased to report that two households took steps to improve their efficiency by way of window and door upgrades. As agreed, *ENWIN* will reward these efforts by matching the Natural Resources Canada grant given to households that improve their energy efficiency rating.

Traffic Engineering/LED Lights (City of Windsor)

The City of Windsor no longer appears to be going forward on an LED traffic light program. *ENWIN* is looking for other avenues to make use of these funds.

Overall Project Management

ENWIN produces monthly CDM compliance reports and holds monthly meetings attended regularly by our President and COO, Director of Operations, CEO of our holding company, as well as Regulatory Affairs, Corporate Communications, and Engineering.

ENWIN has engaged KPMG LLP, to provide guidance in regard to the project management process. This includes providing feedback on key aspects of *ENWIN*'s project management process including planning and initiation, monitoring, communication and information management as well as specific aspects of project management including authorization controls, expenditure tracking, benefit tracking, key communications tracking and verification. KPMG will also be performing specified procedures on a quarterly basis. These procedures have been agreed upon by KPMG and *ENWIN*, and will focus on expenditures and utilization of the internal project management process.

2. Evaluation of the CDM Plan – See Appendix A attached

3. Discussion of the Programs – See Appendix B attached

4. Lessons Learned

System Loss Reduction/Power Factor Correction

- Design complete, contracted out as a fixed price contract
- Work to be completed in 2006

Energy Conservation Media Campaign

- Educational radio show successful to date
- Home show and public forums well received

Local Large Manufacturers, GS>50, Intermediate and Large Use Remaining

- A few successes to date, more expected
- Delivery to continue
- Difficult to get sign-ups on projects with paybacks greater than a couple of years

Residential and GS<50

- RFP went out, submissions received
- Projected to run in 2006

Home Improvements – Little River Acres

- Some success
- Delivery to continue
- Alternatives shall be assessed
- Electrically heated homes are generally more efficient than gas-heated homes and as such aren't eligible for as much in grants from NRCan

Traffic Engineering/LED Lights (City of Windsor)

- Not successful to date
- City needed greater incentive (than that provided by ENWIN's funding model) for LED traffic lights in order to go forward
- Alternatives being sought

5. Conclusion

In 2005 *ENWIN* was able to get a number of CDM initiatives off the ground including the design of a line loss reduction program, an educational media campaign, an incentive program for commercial and industrial customers, a request for proposal for a retail compact fluorescent lighting program and a discount home audit program for electrically heated homes. There has been some success in the area of incentives provided to large use and >50 kW customers; however, *ENWIN* needs to continue its aggressive promotion of energy conservation incentives to its commercial, industrial and institutional customers in order to ensure that it meets its targets.

Steve Bastounas, Conservation and Demand Management Coordinator

Alison Keys, Controller

Giovanna Gesuale, Regulatory Affairs

Shawn Filice, Director of Operations

Appendix A - Evaluation of the CDM Plan

	Total	Media	Local Large	GS>50	Residential	LRA	LED		
Net TRC value (\$):	86,128.87	-44,636.18	62,090.34	72,338.52		-3,663.81			
Benefit to cost ratio:	1.336	0.134	1.363	3.432		0.000			
Number of participants or units delivered:	80,000	75,921	1	3		33			
Total kWh to be saved over the lifecycle of the plan (kWh):	5,005,362	205,860	2,890,698	1,908,804		0			
Total in year kWh saved (kWh):	1,492,232	51,465	963,566	477,201		0.00			
Total peak demand saved (kW):	220.29	10.00	156.00	54.29		0.00			
Total kWh saved as a percentage of total kWh delivered (%):	0.0457%	0.0016%	0.0295%	0.0146%		0.0000%			
Peak kW saved as a percentage of LDC peak kW load (%):	0.0404%	0.0018%	0.0286%	0.0100%		0.0000%			
Gross in year C&DM expenditures (\$):	76,261.58	51,649.05	13,399.57	8,642.32	40.11	2,513.81	16.72		
Expenditures per kWh saved (\$/kWh)*:	0.05111	1.00358	0.01391	0.01811		N/A			
Expenditures per kW saved (\$/kW)**:	346.19	5164.91	85.89	159.19		N/A			
Utility discount rate (%):	6.90538								

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

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

Appendix B - Discussion of the Program

A. **Name of the Program:** Portfolio Total - 2005

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

This represents EnWin's entire portfolio as it stood in December 2005.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered:			
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	\$ 342,107.20
TRC Costs (\$):	\$ 255,978.33
Utility program cost (less incentives):	\$ 56,234.42
Participant cost:	\$ 199,743.91
Total TRC costs:	\$ 255,978.33
Net TRC (in year CDN \$):	\$ 86,128.87

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 1.34

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

Conservation Programs:

Demand savings (kW):	Summer	220.29
	Winter	220.29

Energy saved (kWh):	5005362	lifecycle	1492232	in year
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):

Energy savings (kWh):

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

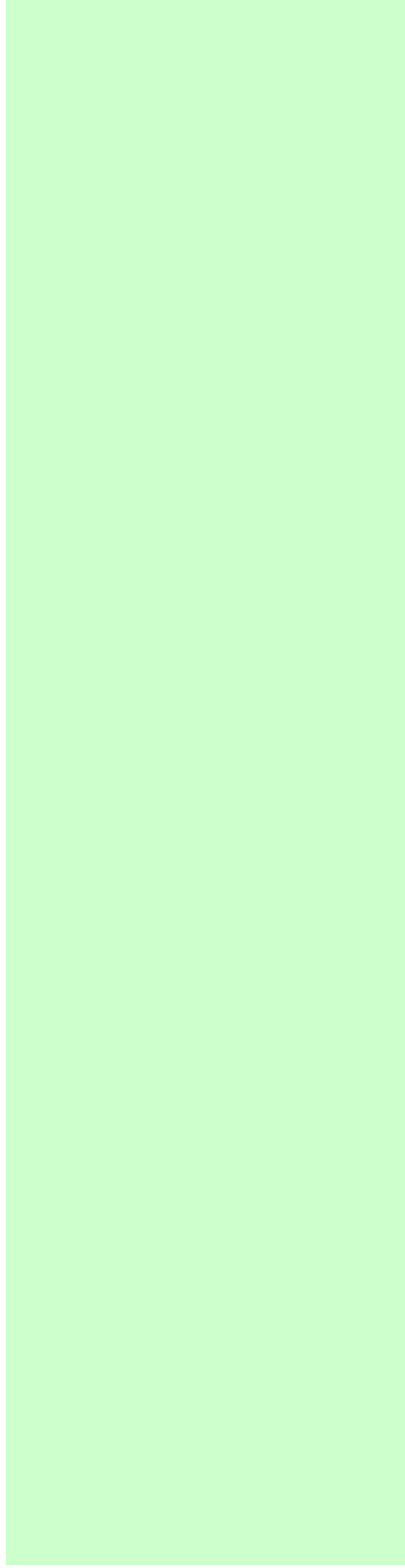
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>			
	<i>Incremental capital:</i>		\$ -
	<i>Incremental O&M:</i>		\$ 56,218.26
	<i>Incentive:</i>		\$ 19,872.83
	<i>Total:</i>		\$ 76,091.09
<i>Utility indirect costs (\$):</i>			
	<i>Incremental capital:</i>		0
	<i>Incremental O&M:</i>		170.49
	<i>Total:</i>		170.49
<i>Participant costs (\$):</i>			
	<i>Incremental equipment:</i>		\$ 148,237.11
	<i>Incremental O&M:</i>		\$ 51,506.80
	<i>Total:</i>		\$ 199,743.91

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** System Loss Reduction/Power Factor Correction: Total

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:			
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	
TRC Costs (\$):	
Utility program cost (less incentives):	
Participant cost:	
Total TRC costs:	
<u>Net TRC (in year CDN \$):</u>	

Benefit to Cost Ratio (TRC Benefits/TRC Costs):

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

Conservation Programs:

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 beginning of year (%):

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

Line Loss Reduction Programs:

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. **Program Costs*:**

Utility direct costs (\$):

Incremental capital:
Incremental O&M:
Incentive:
Total:

Utility indirect costs (\$):

Incremental capital:
Incremental O&M:
Total:

Participant costs (\$):

Incremental equipment:
Incremental O&M:
Total:

E. Comments:

No charges to date.



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** Energy Conservation Media Campaign: Total

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

This is primarily a qualitative program, consisting of a radio campaign and print advertising. The only measurable benefits of this program are the result of bulb give-aways at a home and leisure show.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60 W incandescent		
Efficient technology:	13 W fluorescent		
Number of participants or units delivered:	500		
Measure life (years):	4		

B. **TRC Results:**

TRC Benefits (\$):	\$ 6,915.37
TRC Costs (\$):	\$ 51,551.55
Utility program cost (less incentives):	\$ 51,551.55
Participant cost:	\$ -
Total TRC costs:	\$ 51,551.55
Net TRC (in year CDN \$):	-\$ 44,636.18

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 0.13

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

Conservation Programs:

Demand savings (kW):	Summer	10
	Winter	10

Energy saved (kWh):	205860	51465	in year
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):

Energy savings (kWh):

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

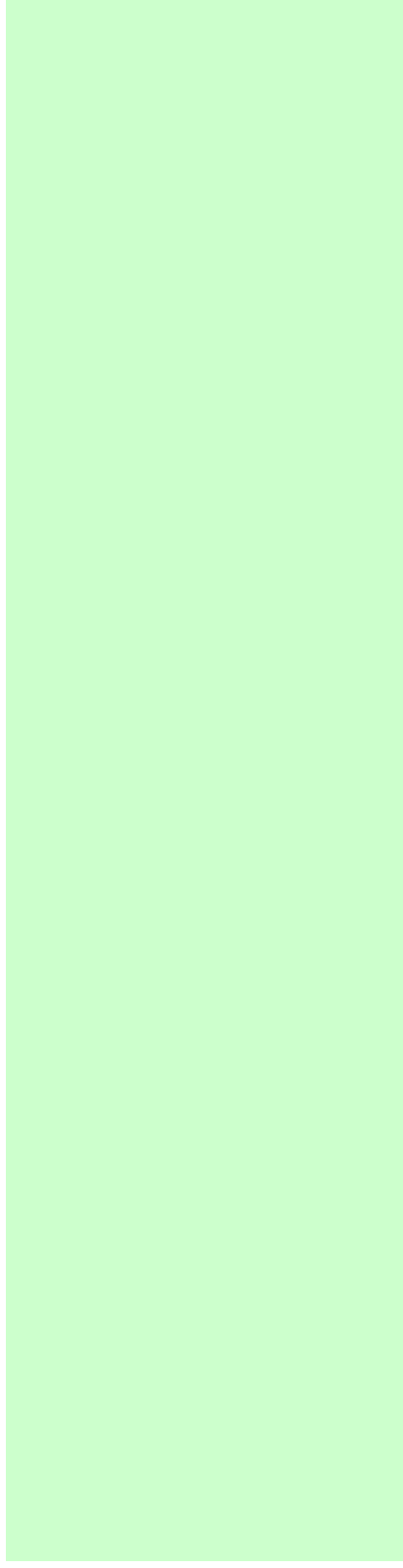
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		51,649.05
<i>Incentive:</i>		
<i>Total:</i>		\$ 51,649.05
<i>Utility indirect costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		
<i>Total:</i>		
<i>Participant costs (\$):</i>		
<i>Incremental equipment:</i>		
<i>Incremental O&M:</i>		
<i>Total:</i>		\$ -

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** Local Large Manufacturers: Total

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

All programs with large manufacturers are included here.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered:	1		
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	\$ 233,105.63
TRC Costs (\$):	\$ 171,015.29
Utility program cost (less incentives):	\$ 108.89
Participant cost:	\$ 170,906.40
Total TRC costs:	\$ 171,015.29
Net TRC (in year CDN \$):	\$ 62,090.34

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 1.36

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

Conservation Programs:

Demand savings (kW):	Summer	156
	Winter	156

Energy saved (kWh):	2890698	lifecycle	963566	in year
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): _____

Energy savings (kWh): _____

lifecycle _____

in year _____

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW): _____

Energy generated (kWh): _____

Peak energy generated (kWh): _____

Fuel type: _____

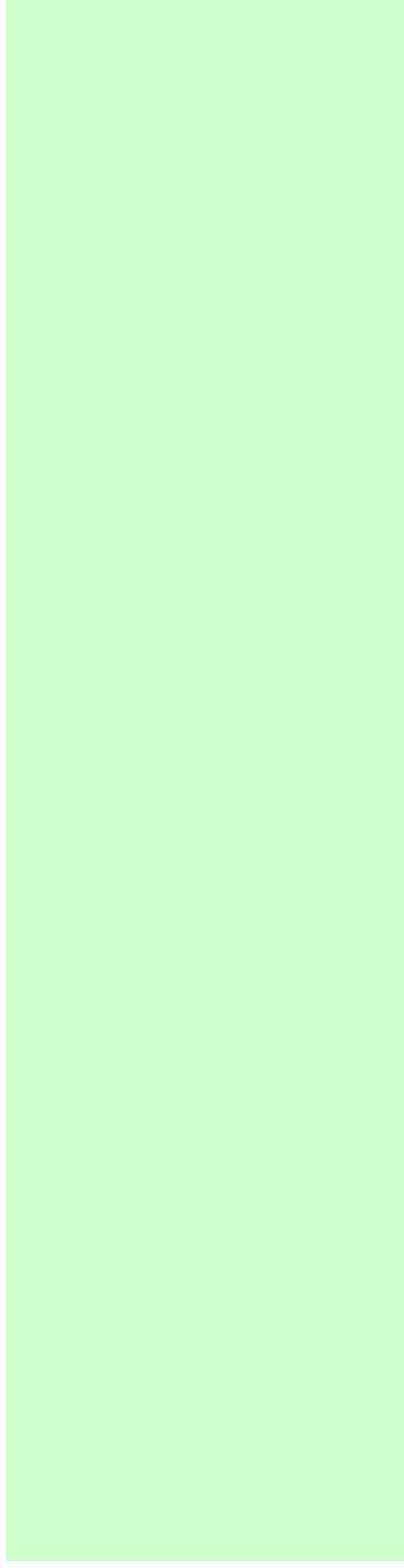
Other Programs (specify):

Metric (specify): _____

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		\$ 55.40
<i>Incentive:</i>		\$ 13,290.68
<i>Total:</i>		\$ 13,346.08
<i>Utility indirect costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		53.49
<i>Total:</i>		53.49
<i>Participant costs (\$):</i>		
<i>Incremental equipment:</i>		\$ 120,549.60
<i>Incremental O&M:</i>		\$ 50,356.80
<i>Total:</i>		\$ 170,906.40

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. Name of the Program:

Local Large Manufacturers: Unnamed Customer - Lighting Project

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

[Redacted description text]

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	2-T12 - HO (237 W) fixture	Replace HID Fixtures	Remove Fixtures
Efficient technology:	4-T8 (112W) fixture	Old style HID Fixtures	-
Number of participants or units delivered:	1011	22	124
Measure life (years):	3		

B. TRC Results:

TRC Benefits (\$):	\$	233,105.63
TRC Costs (\$):	\$	170,906.40
Utility program cost (less incentives):	\$	-
Participant cost:	\$	170,906.40
Total TRC costs:	\$	170,906.40
Net TRC (in year CDN \$):	\$	62,199.23

Benefit to Cost Ratio (TRC Benefits/TRC Costs):

1.36

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

Conservation Programs:

Demand savings (kW):	Summer	156
	Winter	156

Energy saved (kWh):	2890698	lifecycle	963566	in year
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):

Energy savings (kWh):

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

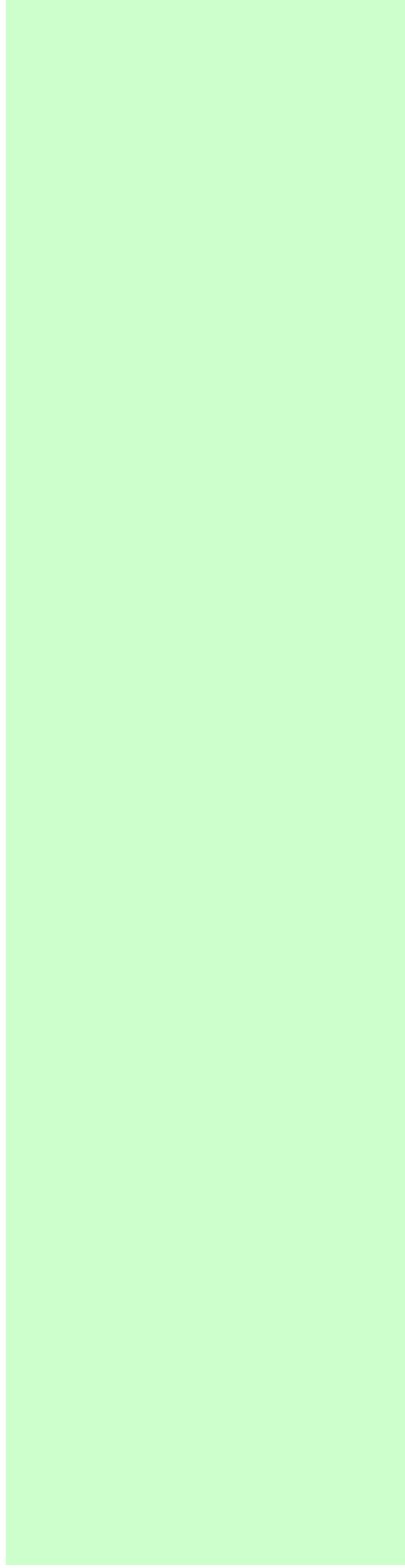
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	
	<i>Incentive:</i>	\$ 13,290.68
	<i>Total:</i>	\$ 13,290.68
<i>Utility indirect costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	
	<i>Total:</i>	
<i>Participant costs (\$):</i>		
	<i>Incremental equipment:</i>	\$ 120,549.60
	<i>Incremental O&M:</i>	\$ 50,356.80
	<i>Total:</i>	\$ 170,906.40

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. Name of the Program: GS>50: Total

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:	3		
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	\$ 102,086.20
TRC Costs (\$):	\$ 29,747.68
Utility program cost (less incentives):	\$ 2,060.17
Participant cost:	\$ 27,687.51
Total TRC costs:	\$ 29,747.68
Net TRC (in year CDN \$):	\$ 72,338.52

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 3.43

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

Conservation Programs:

Demand savings (kW):	Summer	54.29
	Winter	54.29

Energy saved (kWh):	1908804	lifecycle	477201	in year
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): _____

Energy savings (kWh): _____

lifecycle _____

in year _____

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW): _____

Energy generated (kWh): _____

Peak energy generated (kWh): _____

Fuel type: _____

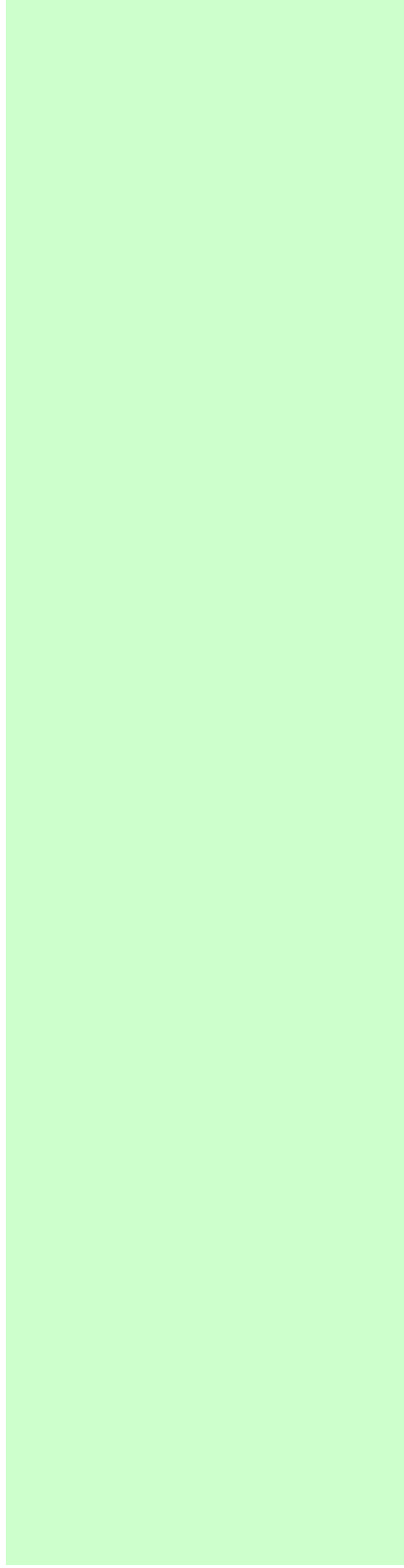
Other Programs (specify):

Metric (specify): _____

D. Program Costs*:

<i>Utility direct costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	\$ 2,000.00
<i>Incentive:</i>	\$ 6,582.15
<i>Total:</i>	\$ 8,582.15
<i>Utility indirect costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	60.17
<i>Total:</i>	60.17
<i>Participant costs (\$):</i>	
<i>Incremental equipment:</i>	\$ 27,687.51
<i>Incremental O&M:</i>	\$ -
<i>Total:</i>	\$ 27,687.51

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** GS>50, Intermediate and Large Use Remaining: Unnamed Customer - Lighting Upgrade

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

Incentive provided to Grachanica for successful completion of lighting upgrades.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60 W incandescent	100 W incandescent	
Efficient technology:	CFL Screw-in 15 W	CFL Screw-in 23 W	
Number of participants or units delivered:	650	300	
Measure life (years):	4	4	

B. **TRC Results:**

TRC Benefits (\$):	\$	26,508.91
TRC Costs (\$):	\$	5,477.85
Utility program cost (less incentives):	\$	-
Participant cost:	\$	5,477.85
Total TRC costs:	\$	5,477.85
Net TRC (in year CDN \$):	\$	21,031.06
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		4.84

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

Conservation Programs:

Demand savings (kW):	Summer	13
	Winter	13

Energy saved (kWh):	458586	lifecycle	114646.5	in year
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):

Energy savings (kWh):

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

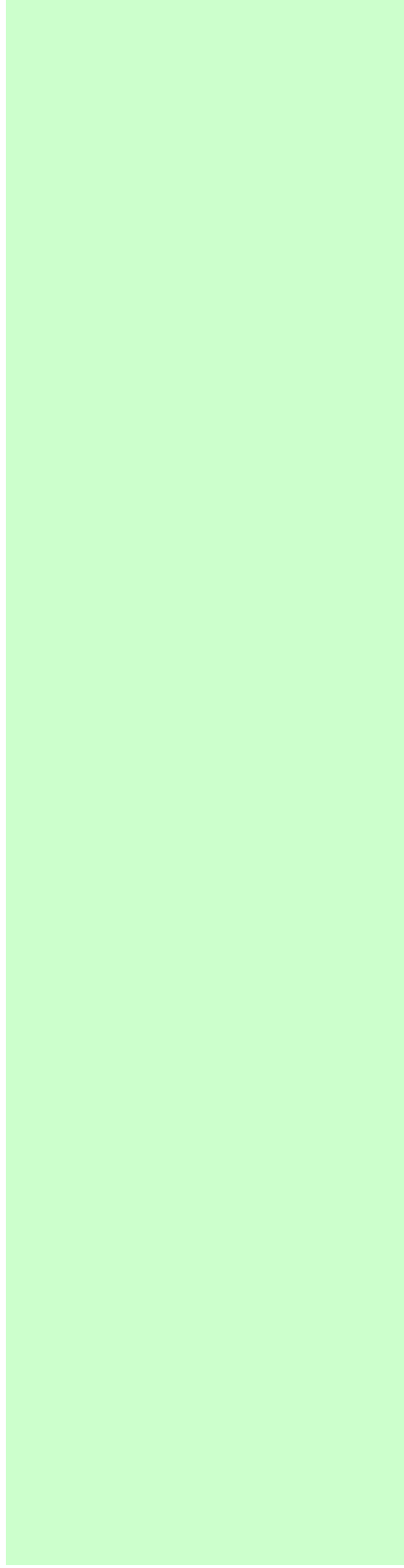
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		
<i>Incentive:</i>		\$ 1,581.35
<i>Total:</i>		\$ 1,581.35
<i>Utility indirect costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		
<i>Total:</i>		
<i>Participant costs (\$):</i>		
<i>Incremental equipment:</i>		\$ 5,477.85
<i>Incremental O&M:</i>		
<i>Total:</i>		\$ 5,477.85

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** GS>50, Intermediate and Large Use Remaining: Unnamed Customer - Lighting Upgrade

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

Incentive provided to Stonecroft for successful completion of lighting upgrades.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60 W incandescent		
Efficient technology:	CFL Screw-in 13 W		
Number of participants or units delivered:	70		
Measure life (years):	4		

B. **TRC Results:**

TRC Benefits (\$):	\$ 1,613.59
TRC Costs (\$):	\$ 126.00
Utility program cost (less incentives):	\$ -
Participant cost:	\$ 126.00
Total TRC costs:	\$ 126.00
Net TRC (in year CDN \$):	\$ 1,487.59
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	12.81

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

Conservation Programs:

Demand savings (kW):	Summer	3.29
	Winter	3.29

Energy saved (kWh):	115281.6	28820.4	in year
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):

Energy savings (kWh):

in year

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

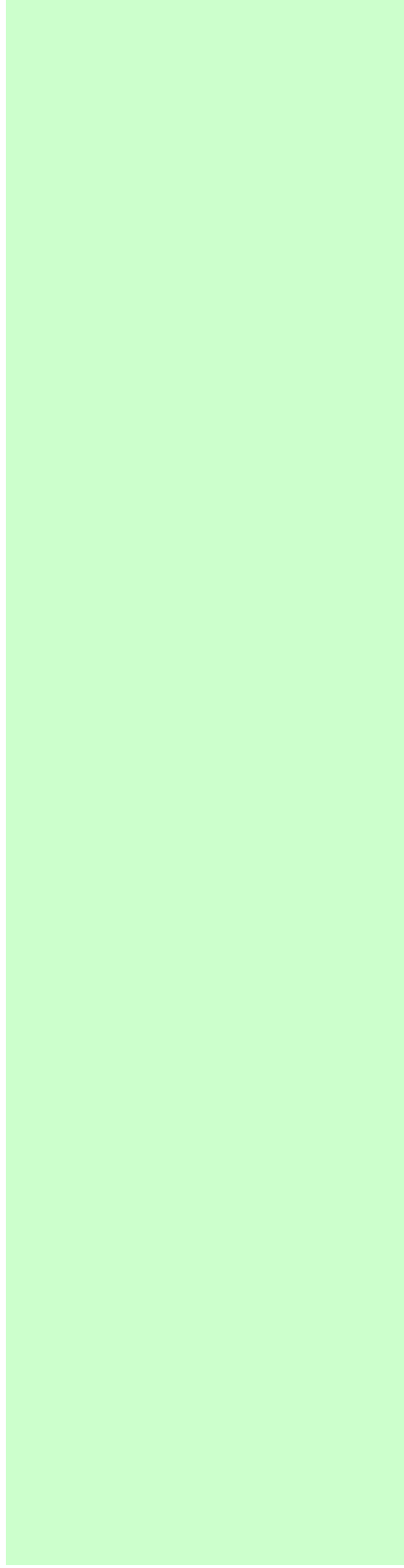
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	
	<i>Incentive:</i>	\$ 397.53
	<i>Total:</i>	\$ 397.53
<i>Utility indirect costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	
	<i>Total:</i>	
<i>Participant costs (\$):</i>		
	<i>Incremental equipment:</i>	\$ 126.00
	<i>Incremental O&M:</i>	
	<i>Total:</i>	\$ 126.00

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. Name of the Program: GS>50, Intermediate and Large Use Remaining: Unnamed Customer - Lighting Upgrade

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

Incentive provided to WECHC for successful completion of lighting upgrades.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60 W incandescent	100 W incandescent	
Efficient technology:	CFL Screw-in 15 W	CFL Screw-in 20 W	
Number of participants or units delivered:	542	1600	
Measure life (years):	4	4	

B. TRC Results:

TRC Benefits (\$):	\$ 73,963.71
TRC Costs (\$):	\$ 22,083.66
Utility program cost (less incentives):	\$ -
Participant cost:	\$ 22,083.66
Total TRC costs:	\$ 22,083.66
Net TRC (in year CDN \$):	\$ 51,880.05
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	3.35

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

Conservation Programs:

Demand savings (kW):	Summer	38
	Winter	38

Energy saved (kWh):	1334936.4	lifecycle	333734.1	in year
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):

Energy savings (kWh):

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

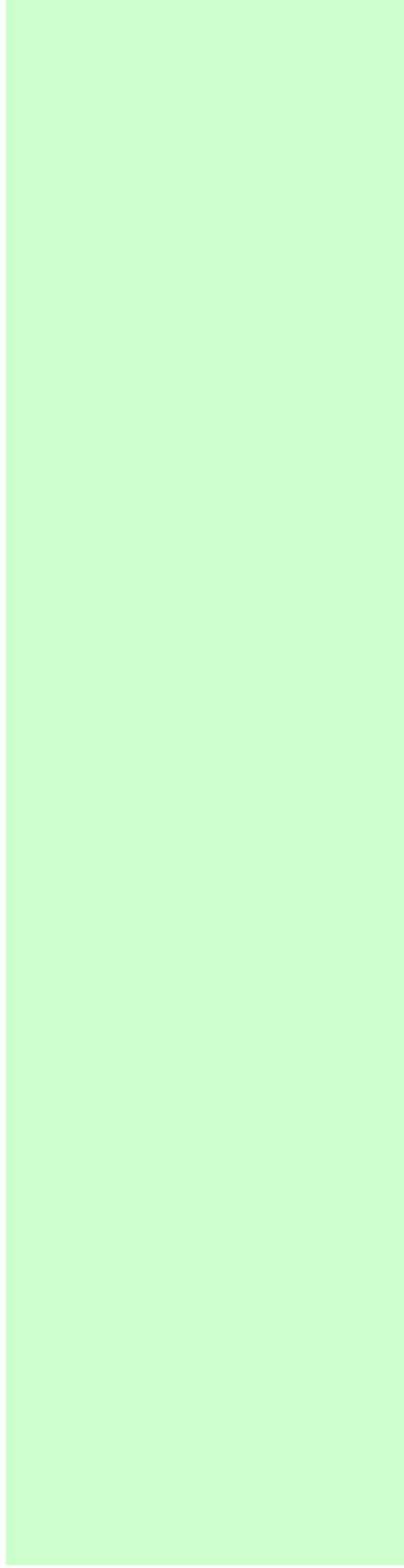
Other Programs (specify):

Metric (specify):

D. Program Costs*:

<i>Utility direct costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		
<i>Incentive:</i>		\$ 4,603.27
<i>Total:</i>		\$ 4,603.27
<i>Utility indirect costs (\$):</i>		
<i>Incremental capital:</i>		
<i>Incremental O&M:</i>		
<i>Total:</i>		
<i>Participant costs (\$):</i>		
<i>Incremental equipment:</i>	\$ 22,083.66	
<i>Incremental O&M:</i>		
<i>Total:</i>	\$ 22,083.66	

E. Comments:



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** Residential and GS<50: Total

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:			
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	
TRC Costs (\$):	
Utility program cost (less incentives):	
Participant cost:	
Total TRC costs:	
Net TRC (in year CDN \$):	
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	

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

Conservation Programs:

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 beginning of year (%):

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

Line Loss Reduction Programs:

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):

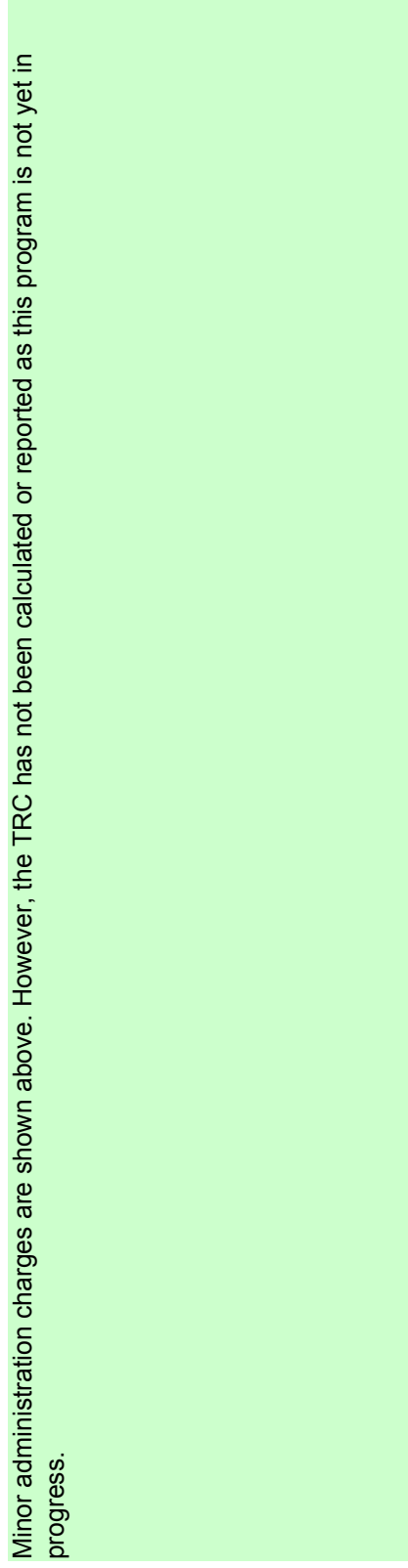
Metric (specify):

D. **Program Costs*:**

<i>Utility direct costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	
<i>Incentive:</i>	
<i>Total:</i>	
<i>Utility indirect costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	40.11
<i>Total:</i>	40.11
<i>Participant costs (\$):</i>	
<i>Incremental equipment:</i>	
<i>Incremental O&M:</i>	
<i>Total:</i>	

E. Comments:

Minor administration charges are shown above. However, the TRC has not been calculated or reported as this program is not yet in progress.



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** Traffic Engineering-LED: Total

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:			
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	
TRC Costs (\$):	
Utility program cost (less incentives):	
Participant cost:	
Total TRC costs:	
Net TRC (in year CDN \$):	
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	

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

Conservation Programs:

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 beginning of year (%):

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

Line Loss Reduction Programs:

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):

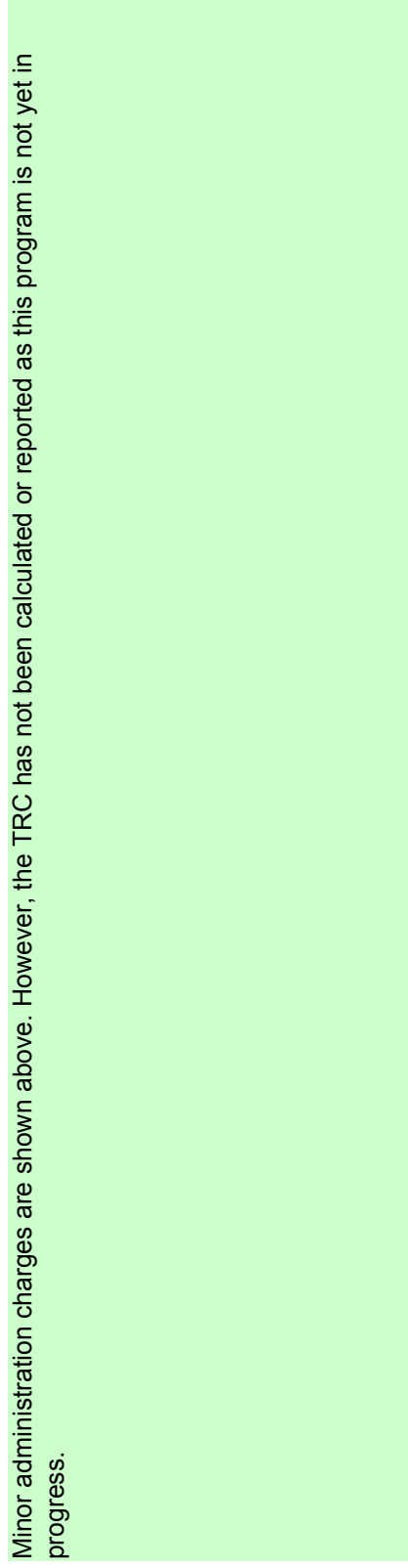
Metric (specify):

D. **Program Costs*:**

<i>Utility direct costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	
<i>Incentive:</i>	
<i>Total:</i>	
<i>Utility indirect costs (\$):</i>	
<i>Incremental capital:</i>	
<i>Incremental O&M:</i>	16.72
<i>Total:</i>	16.72
<i>Participant costs (\$):</i>	
<i>Incremental equipment:</i>	
<i>Incremental O&M:</i>	
<i>Total:</i>	

E. Comments:

Minor administration charges are shown above. However, the TRC has not been calculated or reported as this program is not yet in progress.



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.

Appendix B - Discussion of the Program

A. **Name of the Program:** Home Improvements - Little River Acres (Home Audit and Retrofit Grant Program): Total

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

Discounts provided for home audits to electrically heated homes. Benefits will result when households make the recommended upgrades and will be measurable following a post retrofit evaluation. These numbers will be reflected in the 2006 annual report.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered:	33		
Measure life (years):			

B. **TRC Results:**

TRC Benefits (\$):	\$ -
TRC Costs (\$):	\$ 3,663.81
Utility program cost (less incentives):	\$ 2,513.81
Participant cost:	\$ 1,150.00
Total TRC costs:	\$ 3,663.81
Net TRC (in year CDN \$):	-\$ 3,663.81

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 0.00

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

Conservation Programs:

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 beginning of year (%):

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

Line Loss Reduction Programs:

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. **Program Costs*:**

<i>Utility direct costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	\$ 2,513.81
	<i>Incentive:</i>	
	<i>Total:</i>	\$ 2,513.81
<i>Utility indirect costs (\$):</i>		
	<i>Incremental capital:</i>	
	<i>Incremental O&M:</i>	
	<i>Total:</i>	
<i>Participant costs (\$):</i>		
	<i>Incremental equipment:</i>	
	<i>Incremental O&M:</i>	\$ 1,150.00
	<i>Total:</i>	\$ 1,150.00

E. Comments:

Two homes have actually improved their home energy efficiency to date. These benefits will be reflected in the 2006 report, however, as they were not effected until the new year.



*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.