

Newmarket-Tay Power Distribution Ltd.

An amalgamation of the former utilities Newmarket Hydro Ltd. and Tay Hydro
Electric Distribution Company Ltd.

This report contains the CDM annual reports for both entities which are now one.

Newmarket Hydro
RP-2004-0203
EB-2005-0236

Conservation and Demand Management Plan
2007 Annual Report

Tay Hydro
RP-2004-0203
EB-2004-0512

Conservation and Demand Management Plan
2007 Annual Report

April 8, 2008

Introduction

The goal of the Newmarket Hydro Conservation and Demand Management Plan (CDM Plan) was to create awareness around the importance of energy conservation and to encourage conservation behaviours by all of its customers. In 2007 our funds supported this goal by granting access to conservation resources in hopes of achieving a sustained conservation movement throughout our service area. Through education campaigns and incentive programs Newmarket Hydro customers were informed and also encouraged to participate in energy conservation activities.

Newmarket Hydro's budget for its CDM Plan is \$1,267,010.00. We offered several conservation programs targeting customers in all consumer classes.

Residential customers were encouraged to conserve through incentive programs and various education initiatives. We put an emphasis on energy conservation in the home through appliance retirement and upgrades as well as switching to compact fluorescent lighting. Residential customers were also offered tools to help monitor their own energy usage and therefore became aware of opportunities to conserve energy.

Newmarket Hydro built a working relationship with the housing providers in Newmarket in the social housing sector. We also successfully engaged members of the commercial and industrial sectors through incentive programs.

On August 17, 2006 the Ontario Energy Board approved Newmarket Hydro's proposal for a Time-of-Use Pricing Pilot Project. In conjunction with this project Newmarket Hydro was approved to reallocate \$130,000 of its CDM funds - \$50,000 from the residential sector and \$80,000 from the business/commercial/industrial sector - to install smart thermostats in the homes of volunteer time-of-use pilot project participants.

Evaluation of the CDM Plan

Newmarket Hydro's expenditures for the 2007 reporting year total \$671,672 representing 53% of its total CDM budget. Total CDM Plan expenditures are \$1,255,956 or 99.1% of the total approved budget.

The benefit to cost ratio for all Newmarket Hydro CDM programs in 2007 is 2.68, and 2.97 for the full three years. The 2007 total energy savings achieved are 1,966,683 kWh and the total peak demand saved is 377 kW. Our expenditures per kWh saved amounts to \$0.03/kWh. The expenditures per kW saved were \$1782.76/kW. The cumulative totals life-to-date are: 5,211,394 kWh saved; 1276 kw saved; expenditures per kWh of \$0.24; and \$984.29 expenditures per kW saved.

Total energy savings as a percentage of total kWh delivered is 0.28% in 2007, and 0.75% over the three years. The peak demand saved as a percentage of Newmarket Hydro's peak load for 2007 is 0.26%.

A detailed summary is presented in Appendix "A" and Appendix "C", which are attached to this report.

Discussion of the Programs

A detailed analysis of each program is presented in the Appendices "B", which are attached to this report.

Residential Programs

CFL Discount and Giveaway Programs

Newmarket Hydro sold 35 six-packs of CFL's to its residential customers in 2007. Each pack is subsidized by Newmarket Hydro in the amount of \$11.00. As an incentive to attend public information sessions, Newmarket Hydro gave away 750 CFL bulbs to residential customers. Both programs have a TRC benefit to cost ratio of 13.12 and yield a combined total annual energy savings of 90,202 kWh.

Energy Star Qualified Appliance Rebate Program

Newmarket Hydro offered rebates for the purchase of an Energy Star qualified dishwasher with time delay or front-loading clothes washer. A total of 529 residential customers participated in 2007 yielding a total annual energy savings of 152,262 kWh and a total peak demand savings of 61.8 kW. The benefit to cost ratio for the program is 2.55. The overall lifecycle energy savings of the program amount to 4,109,892 kWh. The rebate program for the Energy Star qualified refrigerator only operated until May 15, 2006.

Appliance Retirement Program

A total of 618 residential customers participated in Newmarket Hydro's appliance recycling program. Appliances such as freezers, room air conditioners and refrigerators were eligible until June 2007 for the rebate. For the freezers and refrigerators, customers purchased an \$11 appliance pick-up tag from the local municipal office and Newmarket Hydro then reimbursed them for the full cost of the tag as a rebate on their hydro bill. The room air conditioners were returned to the local Home Depot store, as advertised through the Clean Air Foundation's Keep Cool Program, for a \$25 rebate. For all appliance categories combined, the program yields an annual energy savings of 434,835 kWh. The benefit to cost ratio for the program is 4.09.

Time-of-Use Pilot Project

Out of a possible 400 eligible residential customers, 121 volunteered, and remained, participating in our smart thermostat program as part of our time-of-use pilot project. The installation of programmable thermostats shows an annual energy savings of 17,324 kWh, a peak demand savings of 319.51 kW and a benefit to cost ratio of 3.75. The thermostats are equipped with a communication chip that allows Newmarket Hydro to cycle participants' air conditioners during provincial critical peak periods. Two demand response events were scheduled in the summer of 2007. One yielded at .48kW/customer reduction and the second yielded a .23kW/customer reduction. Full details are provided in a Navigant Consulting Report to Newmarket Hydro dated February 11, 2008; the OEB has a copy of this report.

Small Business < 50 kW

This program was combined with the Business/Commercial/Industrial program.

Business/Commercial/Industrial

In 2007 Newmarket Hydro provided incentives to commercial and industrial customers who performed energy-efficiency upgrades. Two customers, an electronics company and an industrial building, completed a manufacturing process humidification system replacement and lighting retrofits. A combined total incentive of \$66,508 was provided to the companies. The programs generated a total in-year energy savings of 999,036 kWh and a peak demand savings of 141 kW for the reporting year. The 2007 benefit to cost ratio was 1.97. The total take-up for this program by the business/commercial/industrial sector was not as successful as originally anticipated.

Social Housing

Newmarket Hydro was very successful in engaging its social housing residential customers in 2007. The total funding spent on social housing programs was \$368,742 or 55% of the total spending for the reporting year. Programs, including energy audits, Energy Star appliances, CFL giveaways, electric thermal storage heaters, door upgrades, weather stripping, and caulking, all contributed to a benefit to cost ratio of 2.21. The programs yielded a total energy saving of 290,348 kWh and a total peak demand savings of 30 kW.

We also funded a pilot project in two electrically-heated housing co-ops in Newmarket. Ten electric thermal storage heaters were installed. The units supplement the existing baseboard heating. Electric thermal storage heating uses off-peak electricity to generate heat energy and stores it in ceramic bricks. The stored heat is then circulated throughout the home during on-peak hours when the cost of electricity and environmental impact of generation are high. The in year savings is 18,103 kWh, and a total savings of 325,854 kWh for the ten unit's lifecycle.

In an attempt to spread conservation awareness Newmarket Hydro, in cooperation with members of the social housing community, distributed its first issue of Conservation Comes Home in the fall of 2006. The newsletter focuses on conservation information and tips to be applied in the home and communities at large. It will be distributed to all customers residing in social housing communities in the Newmarket area on a quarterly basis.

Program Development and Administration

Newmarket Hydro requires administrative support to develop, implement and maintain all of its CDM programs. We also provide customer support via telephone, email, our website and through various public information sessions held throughout the year.

Education Program

Newmarket Hydro initiated an extensive education program in 2005, which continued throughout 2006 and 2007. The education and marketing budget spanned across all programs. The creation of the Newmarket Hydro Conserve logo has allowed us to be recognized in our community as a leader in conservation initiatives. We continue to provide education and marketing for all programs through the one education budget.

In 2007 we expanded our conservation education program to reach approximately 10,000 elementary school students. A poster contest was designed and 136 students participated. Four winners and four runners up were chosen, and they were recognized at their school, in the newspaper and with cash prizes.

Newmarket Hydro was also involved in a local ecology festival, promoting our conservation programs and various conservation ideas.

System Optimization and Analysis

Newmarket Hydro performed a distribution optimization study to determine where savings can be realized to reduce line and system losses. Study results should lead to the most cost effective way to operate the distribution system in order to reduce the amount of electricity wasted. The final analysis indicated that the system is currently operating efficiently. No operational changes were made.

Lessons Learned

Residential Programs

Newmarket Hydro CDM programs targeting the residential sector proved to be successful for the 2007 reporting year.

CFL Discount and Giveaway Programs

The CFL discount and giveaway programs created awareness around the benefits of switching to compact fluorescent lighting. The 2007 programs yield a total lifecycle energy savings of 360,806 kWh. Newmarket Hydro will continue to promote the use of CFL's. We are finding that practically all the people we talk to at home shows and other presentations are already exclusively using CFLs where possible.

Keep Cool Room Air Conditioner Appliance Retirement

The Keep Cool Program was successful in informing the public of the energy and environmental costs of old room air conditioning (RAC) units. It contributed a total lifecycle energy savings of 514,272 kWh to our residential programs. Results indicate that it is much more beneficial to have an RAC retired instead of replaced by an Energy Star qualified one. Approximately 60% of all participants retired an old RAC without replacing it.

Energy Star Qualified Appliance Rebate Program

In the case of the Energy Star qualified appliance rebate program, the front-loading clothes washer rebate shows the best results with an individual annual energy savings of 132,192 kWh, representing 87% of the total annual energy savings for the program. Peak demand savings for the clothes washer is 61.8 kW while the dishwasher has no TRC Guide summer demand savings. Even though the Energy Star qualified dishwasher with time delay rebate program showed poor results with a benefit to cost ratio of only 0.63, the dishwasher rebate program was developed in response to requests from our time-of-use pilot project participants. The time delay setting allows for load shifting to off-peak times. This benefit cannot be quantified using the TRC, but we feel that load shifting is extremely important and should be encouraged.

Appliance Recycling Program

The appliance recycling program, restricted to just refrigerators and freezers in 2007, yielded a total lifecycle energy savings of 2,144,631 kWh, a result far greater than any other residential program offered by Newmarket Hydro. The refrigerator recycling program is the most beneficial with a benefit to cost ratio of 4.78, compared to the 3.58 ratio for freezers. Newmarket Hydro will continue appliance retirement programs with the OPA's appliance retirement program starting in the summer of 2007 and continuing through 2008, 2009 and 2010.

Time-of-Use Pilot Project

The installation of programmable thermostats as part of our time-of-use pilot project yields a summer demand savings of 319.51 kW each year because of the programmable features of the thermostat. The demand response portion of the program yielded 85.91 kW during the five hours dispatched in 2007. This is the most demand savings achieved by a residential program offered by Newmarket Hydro in 2007. Newmarket Hydro is installing more thermostats throughout the Newmarket area through participation in the OPA's residential and small commercial demand response program for 2007 through to 2010 cooling seasons.

A net TRC dollar result for this demand response cannot be quantified, but we feel that load shifting is extremely important and should be encouraged.

Business/Commercial/Industrial

The incentive program for Newmarket Hydro customers was mildly successful in 2007. The lighting retrofit and the humidification replacement project completed in 2007 lead to a lifecycle energy savings of 10,805,352 kWh. This program alone saved 0.10% of the peak load for Newmarket in 2007.

The program did not yield as much activity as we would have liked (only 4 participants over the three years). But since beginning the OPA's ERIP program through the remainder of 2007, 11 participant projects have been signed up. Newmarket Hydro plans to continue participating in the OPA business incentive program.

Social Housing

Members of the social housing community showed great enthusiasm in implementing conservation measures in their housing complexes. In support of relationship with Newmarket Hydro, we allocated a significant portion of our CDM funds to energy efficiency upgrades within five housing complexes in the Newmarket area. Depending on each complex needs, units received energy audits, hot water heater upgrade, door upgrades, caulking, Energy Star refrigerators, CFLs, weather stripping, Energy Star washers, and/or timers.

We experienced high energy savings from the program in the five social housing complexes in the Newmarket area. The lifecycle savings amounted to 3,977,671 kWh. We also saw positive results from our electric thermal storage pilot and hope to relieve some of the burden placed on our customers residing in social housing complexes with electric heat.

Conclusion

The 2007 reporting year has been very successful one for the Newmarket Hydro conservation and demand management programs. We have had overwhelming participation from our customers in the residential sector and have achieved positive results from all residential programs. Our incentive program for the Business/Commercial/Industrial sector encouraged large users to invest in lighting and system retrofits that reduce operating costs and generate high energy savings. We have successfully engaged members of the social housing community and continue to work closely with those individuals to achieve our conservation goals.

Newmarket Hydro remains in close contact with all of its customers in regard to conservation matters. We continue to refine our conservation programs to meet customer needs and achieve optimum results. As a continuation of our diverse conservation programs we will participate in all conservation programs facilitated by the OPA. Newmarket Hydro has completed a successful year in conservation and demand management and look forward to our future conservation endeavors.

Attachments

- Appendix "A"
- Appendices "B"
- Appendix "C"
- PDF electronic copy
- Excel electronic copy of Appendices only

Introduction

Tay Hydro in its commitment to investing the equivalent of one year of the third installment of its incremental market adjusted revenue requirement, developed and implemented four programmes over the period December 2004 to July 2007. Tay Hydro has done this by designing, developing and implementing CDM programmes as described below. Tay Hydro has concluded all of their plans. Tay Hydro amalgamated with Newmarket Hydro in early 2007, and therefore the Tay Hydro report is contained in the Newmarket Hydro report.

This report outlines the programmes and their successes in the year 2007. The total budget was \$59,000 with actual spending over the three years of \$45,900. Because the System Optimization analysis indicated no significant changes were required, there was no need for capital spending; therefore actual spending was less than planned.

Evaluation of CDM Plan

Tay Hydro's CDM plan consists of four main components:

1. Education and Promotion
Through the use of bill stuffers, coupons, and energy conservation, messages residential and commercial consumers were informed and educated about conservation tips and products available to help them reduce their electricity usage. The coupon programme was aimed toward the residential sector. The majority of this work was performed prior to 2007, with a radio ad for energy conservation being the only activity in 2007.
2. School Conservation and Safety Promotion
Provided educational and information sessions in 2005 in the primary schools to instill at an early age, the need for wise energy usage. This would ensure the children promote conservation at home and reduce residential consumption. The in-school sessions also involve a component on electricity safety.
3. System Optimization
Performed a distribution system study to determine where savings could be realized to reduce losses. Recommendations from the study were acted upon to realize the most cost effective savings and reduce the amount of electricity wasted through losses in the distribution system. This benefited all classes of customers. The final analysis indicated that the system is currently operating efficiently, with only minor load balancing changes being made.

4. Plan Research, Design and Development
Designed the plan, researched and evaluated the programmes using an external consultant and internal staff.

Appendices "A" and "C" attached, include the evaluation of the programmes.

With the exception of minor system optimization work in 2007, no programmes were implemented in the reporting year, therefore there are no Appendix "B"s attached. The cumulative totals life-to-date are lifecycle energy savings of 287,481 kWh and a demand savings of 159 kW. The cumulative totals life-to-date for all programmes shows expenditures of \$1.34 per kWh, with a benefit to cost ratio of 7.08.

Discussion of the Programmes

The main part of Tay Hydro's conservation efforts in 2007 was the system optimization analysis. A radio ad was performed to continue the energy conservation promotion and education.

The electricity distribution system Tay Hydro purchased from Hydro One Networks, back in 1999, has shown some ineffectiveness in minimizing system losses. The final analysis of the distribution system indicated the system is currently operating efficiently, with only minor load balancing changes being made.

The Education and Promotion actual programme costs are included in the analysis titled "Education and Promotion – Overall". The advertising and promotional costs cannot be attributed to any particular programme since they were all advertised together, so these costs are all lumped together under Overall.

Lessons Learned

The residential programmes were successful when analyzed under the TRC guidelines. The participation by the consumers was less than what was hoped. Increased advertising and promotion would have yielded even better results.

The System Optimization programme analysis showed that the current system is operating efficiently. This was unexpected, but most welcomed.

Conclusion

Tay Hydro's experiences with the CDM programmes have been quite positive, and we have encountered no barriers in their execution.

Attachments

- Appendix "A"
- Appendix "C"
- PDF electronic copy
- Excel electronic copy of Appendices only

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.

Newmarket Hydro	⁵ Cumulative Totals Life-to-date	Total for 2007	Residential	Commercial	Social Housing	Industrial	Education	LDC System	⁴ Smart Meters	Program Development	Admin. Support
Net TRC value (\$):	\$ 1,216,275	\$ 414,747	\$ 271,085	\$ -	\$ 103,476	\$ 40,186	\$ -	\$ -		\$ -	\$ -
Benefit to cost ratio:	2.97	2.68	3.26	0.00	2.21	1.97	0.00	0.00		0.00	0.00
Number of participants or units delivered:	77,028	13,828	2,053		1,521	254	10,000				
Lifecycle (kWh) Savings:	37,368,687	19,914,330	5,131,307	0	3,977,671	10,805,352	0	0		0	0
Report Year Total kWh saved (kWh):	5,211,394	1,966,683	677,299	0	290,348	999,036	0	0		0	0
Total peak demand saved (kW):	1276	377	206	0	30	141	0	0		0	0
Total kWh saved as a percentage of total kWh delivered (%):	0.75	0.28	0.10		0.04	0.14					
Peak kW saved as a percentage of LDC peak kW load (%):		0.26	0.14		0.02	0.10					
¹ Report Year Gross C&DM expenditures (\$):	\$ 1,255,966	\$ 671,672	\$ 104,160	\$ -	\$ 368,742	\$ 66,508	\$ 28,774	\$ 32,400	\$ -	\$ -	\$ 71,088
² Expenditures per kWh saved (\$/kWh):	\$ 0.24	\$ 0.03	\$ 0.02	\$ -	\$ 0.09	\$ 0.01	\$ -	\$ -		\$ -	\$ -
³ Expenditures per kW saved (\$/kW):	\$ 984.29	\$ 1,782.76	\$ 505.63	\$ -	\$ 12,390.52	\$ 471.69	\$ -	\$ -		\$ -	\$ -
Utility discount rate (%):	7.625										

- 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, 2007 CDM Annual report for third tranche will include 2006, 2005 and 2004 numbers, if any).

Appendix C - Program and Portfolio Totals

Report Year:

2007 - Newmarket Hydro

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		TRC Costs (PV)		\$ Net TRC Benefits		Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle Savings (kWh)	Total Peak Demand (kW) Saved		Report Year Gross C&DM Expenditures (\$)
	(PV)											
Energy Gateway Pilot							0.00					
CFL Discount	\$ 4,957	\$ 378	\$	\$ 4,579	-	13.11	19,732	78,926				\$ 1,770
CFL Giveaway	\$ 17,706	\$ 1,350	\$	\$ 16,356	-	13.12	70,470	281,880				\$ 17,222
Keep Cool (No replacement)	\$ 25,465	\$ 7,850	\$	\$ 17,615	-	3.24	89,080	414,480		42	\$	\$ 11,481
Keep Cool (Energy Star Replacement)	\$ 9,126	\$ 3,402	\$	\$ 5,724	-	2.68	8,316	99,792		102	\$	\$
Christmas Light Exchange						0.00						
Switch To Cold						0.00						
Refrigerator Rebate						0.00						
Dishwasher Rebate	\$ 12,676	\$ 20,070	\$	\$ 7,394	-	0.63	20,070	260,910				\$ 16,725
Clothes Washer Rebate	\$ 179,053	\$ 55,080	\$	\$ 123,973	-	3.25	132,192	1,850,688		62	\$	\$ 30,600
Dishwasher Recycling						0.00						
Clothes Washer Recycling						0.00						
Clothes Dryer Recycling						0.00						
Freezer Recycling	\$ 32,242	\$ 9,000	\$	\$ 23,242	-	3.58	81,000	486,000				\$ 1,100
Ranges/Ovens Recycling						0.00						
Refrigerators Recycling	\$ 110,030	\$ 23,040	\$	\$ 86,990	-	4.78	276,439	1,658,631				\$ 2,816
TOU Programmable Thermostat						0.00						\$ 22,446
*Totals App. B - Residential	\$ 391,255	\$ 120,170	\$	\$ 271,085	-	3.26	677,299	5,131,307		206	\$	\$ 104,160
Residential Indirect Costs not attributable to any specific program												
Total Residential TRC Costs		\$ 120,170										
**Totals TRC - Residential	\$ 391,255	\$ 120,170	\$	\$ 271,085	-	3.26						

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		TRC Costs (PV)		\$ Net TRC Benefits		Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle Savings (kWh)	Total Peak Demand (kW) Saved		Report Year Gross C&DM Expenditures (\$)
	(PV)											
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					

9. Admin. Support 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.

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 (\$)
Administrative Support				0.00				\$ 71,088
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 - Admin. Support			\$ -	0.00	0	0	0	\$ 71,088
Admin. Support Indirect Costs not attributable to any specific program								
Total TRC Costs			\$ -					
*Totals TRC - Admin. Support			\$ -	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	\$ 661,990	\$ 247,243	\$ 414,747	2.68	\$ 1,966,683	\$ 19,914,330	\$ 377	\$ 671,672
Any other Indirect Costs not attributable to any specific program	→							
TOTAL ALL LDC COSTS		\$ 247,243						
*LDC PORTFOLIO TRC	\$ 661,990	\$ 247,243	\$ 414,747	2.68				

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

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

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. Name of the Program: Energy Gateway Pilot Project

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

The energy gateway pilot program offered by Clameter provided customers with existing broadband service links to their thermostat and existing electric meter and back office system via the internet to provide customers with energy management capabilities and information. Goals of this project were to prove the technology and infrastructure exists to control loads in residential and small commercial facilities; manage the control of HVAC loads in real time.

Measure(s):

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 (\$):		2409.30
2. TRC Costs (\$):		
Utility program cost (excluding incentives):		900.00
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:		900.00
Net TRC (in year CDN \$):		1509.30

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 2.68

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

Conservation Programs:	Demand savings (kW):	Summer	Winter	Cumulative	Lifecycle	Annual Savings
54						
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):

lifecyle

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. Actual Program Costs:

Utility direct costs (\$):

Incremental capital:
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.
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 - Compact Fluorescent Discount

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

Newmarket Hydro customers can purchase a 6-pack of Phillips Marathon 15w CFLs for \$11.49 plus taxes. Newmarket Hydro subsidizes this program at a rate of \$11.00 per 6-pack.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	139.2		
Efficient technology:	34.8		
Number of participants or units delivered for reporting year:	35		
Measure life (years):	4		
Number of Participants or units delivered life to date	285		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 4,957.88	\$ 40230.01
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs):	\$ 378.00	\$ 3077.48
Total TRC costs:	\$ 378.00	\$ 3077.48
Net TRC (in year CDN \$):	\$ 4,579.88	\$ 37152.53
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	\$ 13.12	\$ 13.07

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

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:

Utility direct costs (\$):

Incremental capital:

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.
- 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 - Compact Fluorescent Giveaway

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

Newmarket Hydro provides Phillips Marathon Classic 60 15w CFLs as an incentive for attendance of public information sessions discussing various CDM programs.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	139.2		
Efficient technology:	34.8		
Number of participants or units delivered for reporting year:	750		
Measure life (years):	4		
Number of Participants or units delivered life to date	2430		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 17,706.70	\$ 92522.87
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs):	\$ 1,350.00	\$ 7074.00
Total TRC costs:	\$ 1,350.00	\$ 7074.00
Net TRC (in year CDN \$):	\$ 16,356.70	\$ 85448.87
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	\$ 13.12	\$ 13.08

Cumulative Results:

Conservation Programs:	Summer	Winter	Cumulative	Annual Savings
Demand savings (kW):				
Energy saved (kWh):	281880	70470	1477051	369263
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

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. Actual Program Costs:

Utility direct costs (\$):

Incremental capital:
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. 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 - Keep Cool Program (No Replacement)

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

In collaboration with the Clean Air Foundation Newmarket Hydro encouraged customers to retire old, inefficient room air conditioners (RACs). Customers brought an old RAC to one of two Home Depot locations and received a \$25 gift card.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	880		
Efficient technology:	792		
Number of participants or units delivered for reporting year:	157		
Measure life (years):	12		
Number of Participants or units delivered life to date	302		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 25,465.76	\$ 48,985.09
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs):	\$ 7,850.00	\$ 15,100.00
Total TRC costs:	\$ 7,850.00	\$ 15,100.00
Net TRC (in year CDN \$):	\$ 17,615.76	\$ 33,885.09
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	3.24	3.24
Results: (one or more category may apply)		Cumulative Results:

Conservation Programs:	Summer	Winter	Cumulative	Annual Savings
Demand savings (kW):	42.39			81.54
Energy saved (kWh):				
Other resources saved:				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:	lifecycle	in year	Cumulative	Annual Savings
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):				
Peak hours dispatched in year (hours):				

Demand Response Programs:	lifecycle	in year	Cumulative	Annual Savings
Dispatchable load (kW):				
Peak hours dispatched in year (hours):				

Power Factor Correction Programs:	lifecycle	in year	Cumulative	Annual Savings
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):		Utility Programs (specify):					
D.							
Actual Program Costs:		Utility direct costs (\$):	Incremental capital:	Incremental O&M:	Incentive:	Reporting Year	Cumulative Life to Date
			Total:				
		Utility indirect costs (\$):	Incremental capital:	Incremental O&M:	Total:		

E. Assumptions & Comments:

Total program costs in 2007 was \$28,703.00. Since 157 participants represents approximately 60% of the total participation we have therefore reported 60% of the total costs under Utility direct costs for this portion of the program.

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 - Keep Cool Program (old RAC replaced by new Energy Star RAC)
 Description of the program (including intent, design, delivery, partnerships and evaluation):

In collaboration with the Clean Air Foundation Newmarket Hydro encouraged customers to retire old, inefficient room air conditioners (RACs). Customers brought an old RAC to one of two Home Depot locations and received a \$25 gift card. Customers purchased a new Energy Star RAC.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	880		
Efficient technology:	792		
Number of participants or units delivered for reporting year:	105		
Measure life (years):	12		
Number of Participants or units delivered life to date	201		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
1 TRC Benefits (\$):	\$ 9,126.91	\$ 17471.52
2 TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	\$ 3,402.00	\$ 6512.40
Total TRC costs:	\$ 3,402.00	\$ 6512.40
Net TRC (in year CDN \$):	\$ 5,724.91	\$ 10959.12
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	2.68	2.68
C. Results: (one or more category may apply)	Cumulative Results:	

Conservation Programs:	Summer	Winter	
Demand savings (kW):	102.06		195.37
Energy saved (kWh):	99792		
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:

Utility direct costs (\$):

Incremental capital:
Incremental O&M:
Incentive:

Total:

Utility indirect costs (\$):

Incremental capital:
Incremental O&M:
Total:

E. Assumptions & Comments:

Total program costs in 2007 was \$28,703.00. Since 105 participants represents approximately 40% of the total participation we have therefore reported 40% of the total costs under Utility direct costs for this portion of the program.

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.

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 - Christmas Light Exchange

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

Newmarket Hydro customers were encouraged to bring in an old set of Christmas Lights and receive one free set of 24 LED Indoor/Outdoor Christmas lights. This programme was active for the Christmas 2005 and 2006 seasons.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	19.4		
Efficient technology:	0.54		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	30		
Number of Participants or units delivered life to date	714		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		11822.36
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)		1356.60
Total TRC costs:		1356.60
Net TRC (in year CDN \$):		10465.76

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 8.73

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

Cumulative Results:

Conservation Programs:

Demand savings (kW):

Summer

Winter

lifecycle

in year

Cumulative

lifecycle

Annual Savings

Cumulative

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):	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 O&M:	Incremental O&M:	\$ 11,987.50
		Incentive:		
		Total:		\$ -11,987.50
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 - Switch To Cold

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

Newmarket Hydro customers were informed about the Switch to Cold campaign through a billing insert in 2005. Customers were provided with information on average savings achieved by washing laundry in cold water and encouraged to participate online and they were provided with a code unique to each LDC.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	779		
Efficient technology:	156		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	1		
Number of Participants or units delivered life to date	1022		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
1 TRC Benefits (\$):		31727.19
2 TRC Costs (\$):		
Utility program cost (excluding incentives):		7665.00
Incremental Measure Costs (Equipment Costs)		7665.00
Total TRC costs:		24062.19
Net TRC (in year CDN \$):		4.14
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		
C. Results: (one or more category may apply)		Cumulative Results:

Conservation Programs:	Demand savings (kW):	Summer	15.94
		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):

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. Actual Program Costs:

Utility direct costs (\$):

Incremental capital:
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.
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 - Energy Star Qualified Refrigerator Rebate Program
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Description of the program (including intent, design, delivery, partnerships and evaluation):

Newmarket Hydro customers were encouraged to replace older refrigerator with one that is Energy Star qualified. Upon proof of purchase the customer received a \$100 rebate applied to their Newmarket Hydro bill. The program was completed as of May 15, 2006.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	514		
Efficient technology:	440		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	19		
Number of Participants or units delivered life to date	121		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 7677.06	
² TRC Costs (\$):		
Utility program cost (excluding incentives):	\$ 7623.00	
Incremental Measure Costs (Equipment Costs):	\$ 7623.00	
Total TRC costs:	\$ 15246.00	
Net TRC (in year CDN \$):	\$ 118.04	

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 1.01

C. Results: (one or more category may apply)	Cumulative Results:
Conservation Programs:	
Demand savings (kW):	35.18
Summer	
Winter	
lifecycle	
in year	
Energy saved (kWh):	153114
Other resources saved:	8058
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 (%):	

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.

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 cost. 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 - Energy Star Qualified Dishwasher with Time Delay, Setting Rebate Program

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

Newmarket Hydro customers were encouraged to replace older dishwashers with one that is Energy Star qualified and has a time delay setting. The program provides energy savings through upgrading to Energy Star efficiency and also encourages load shifting to off-peak times. The program commenced in September 2006, and was completed as of July 2007, and offered a \$75 rebate applied to their Newmarket Hydro bill.

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:

¹ TRC Benefits (\$):

² TRC Costs (\$):

Utility program cost (excluding incentives):	\$ 20,070.00	\$ 20,070.00	\$ 20,070.00
Incremental Measure Costs (Equipment Costs):	\$ 20,070.00	\$ 20,070.00	\$ 20,070.00
Total TRC costs:	\$ 20,070.00	\$ 20,070.00	\$ 20,070.00
Net TRC (in year CDN \$):	-\$ 7,393.27	\$ -9979.26	

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

0.63

C.

Results: (one or more category may apply)

Cumulative Results:

Conservation Programs:	Demand Response Programs:	Demand Management Programs:	Other resources saved:	Other (specify):
Demand savings (kW):	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):
Peak hours dispatched in year (hours):	Dispatchable load (kW):	Energy shifted On-peak to Off-peak (kWh):	Energy shifted Mid-peak to Off-peak (kWh):	Energy shifted On-peak to Off-peak (kWh):
Amount of KVar installed (KVar):	Amount of KVar installed (KVar):	Amount of KVar installed (KVar):	Amount of KVar installed (KVar):	Amount of KVar installed (KVar):
Distribution system power factor at beginning of year (%):	Distribution system power factor at beginning of year (%):	Distribution system power factor at beginning of year (%):	Distribution system power factor at beginning of year (%):	Distribution system power factor at beginning of year (%):
Distribution system power factor at end of year (%):	Distribution system power factor at end of year (%):	Distribution system power factor at end of year (%):	Distribution system power factor at end 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. Actual Program Costs:

Utility direct costs (\$):

Incremental capital:
Incremental O&M:

Incremental:

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. 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 - Energy Star Qualified Front-Loading Clothes Washer Rebate Program

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

Newmarket Hydro customers were encouraged to replace older clothes washer with an Energy Star qualified front-loading clothes washer. Upon proof of purchase the customer receives a \$100 rebate applied to their Newmarket Hydro bill.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	779		
Efficient technology:	299		
Number of participants or units delivered for reporting year:	306		
Measure life (years):	14		
Number of Participants or units delivered life to date	596		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 179,053.01	\$ 348,236.17
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	\$ 55,080.00	\$ 107,280.00
Total TRC costs:	\$ 55,080.00	\$ 107,280.00
Net TRC (in year CDN \$):	\$ 123,973.01	\$ 240,956.17
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	3.25	3.25
C. Results: (one or more category may apply)	Cumulative Results:	

Conservation Programs:	Summer	Winter	Cumulative	Cumulative
Demand savings (kW):	61.8			120.36
Energy saved (kWh):	1850688			3604608
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		
Utility direct costs (\$):		Cumulative Life to Date		
Incremental capital:				
Incremental O&M:				
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.

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:	Description of the program (including intent, design, delivery, partnerships and evaluation):
Residential - Recycling Program - Dishwasher	

Newmarket Hydro customers are encouraged to retire old and inefficient appliances. Our customers are reimbursed for the full cost of an appliance pick-up tag purchased at the local Municipal office. A rebate of \$11.00 is applied to their Newmarket Hydro account for each appliance pick-up tag purchased.

Measure(s):	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
Measure 1	592	0	0	6	651
Measure 2 (if applicable)					
Measure 3 (if applicable)					

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		64173.68
² TRC Costs (\$):		
Utility program cost (excluding incentives):		32550.00
Incremental Measure Costs (Equipment Costs):		32550.00
Net TRC (in year CDN \$):		31623.68

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 1.97

C. Results: (one or more category may apply)	Cumulative Results:
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 beginning of year (%):	
Distribution system power factor at end of year (%):	

Line Loss Reduction Programs:

Peak load savings (kW):

Energy savings (kWh):

lifecyle

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. Actual Program Costs:

Utility direct costs (\$):

Incremental capital:

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 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 - Recycling Program - Clotheswasher

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

Newmarket Hydro customers are encouraged to retire old and inefficient appliances. Our customers are reimbursed for the full cost of an appliance pick-up tag purchased at the local Municipal office. A rebate of \$11.00 is applied to their Newmarket Hydro account for each appliance pick-up tag purchased.

Measure(s):			
Base case technology:	779	Measure 1	
Efficient technology:	0	Measure 2 (if applicable)	
Number of participants or units delivered for reporting year:	0	Measure 3 (if applicable)	
Measure life (years):	6		
Number of Participants or units delivered life to date	552		

B. TRC Results:		Reporting Year		Life-to-date TRC Results:	
¹ TRC Benefits (\$):	7,1583.95				
² TRC Costs (\$):					
Utility program cost (excluding incentives):					
Incremental Measure Costs (Equipment Costs)	27600.00				
Total TRC costs:	27600.00				
Net TRC (in year CDN \$):	43983.95				

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 2.6

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

Conservation Programs:		Summer		Winter	
Demand savings (kW):					
Energy saved (kWh):					
Other resources saved:					
Natural Gas (m3):					
Other (specify):					

Demand Management Programs:		Summer		Winter	
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:		Summer		Winter	
Dispatchable load (kW):					
Peak hours dispatched in year (hours):					

Power Factor Correction Programs:		Summer		Winter	
Amount of kVar installed (kVar):					
Distribution system power factor at beginning of year (%):					
Distribution system power factor at end of year (%):					

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. Name of the Program: Residential - Recycling Program - Clothes-Dryer
Description of the program (including intent, design, delivery, partnerships and evaluation):

Newmarket Hydro customers are encouraged to retire old and inefficient appliances. Our customers are reimbursed for the full cost of an appliance pick-up tag purchased at the local Municipal office. A rebate of \$11.00 is applied to their Newmarket Hydro account for each appliance pick-up tag purchased.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	916		
Efficient technology:	0		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	6		
Number of Participants or units delivered life to date	439		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		66974.91
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs):		21950.00
Total TRC costs:		21950.00
Net TRC (in year CDN \$):		45024.91

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 3.06

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

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

Demand Management Programs:	Controlled load (kW)	Energy shifted On-peak to Mid-peak (kWh):	Energy shifted On-peak to Off-peak (kWh):	Energy shifted Mid-peak to Off-peak (kWh):
Demand Response Programs:	Dispatchable load (kW):	Peak hours dispatched in year (hours):		

Power Factor Correction Programs:	Amount of KVar installed (KVar):	Distribution system power factor at beginning of year (%):	Distribution system power factor at end of year (%):
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Line Loss Reduction Programs:		Peak load savings (kW):	lifecycle	in year
Distributed Generation and Load Displacement Programs:		Energy savings (kWh):		
		Amount of DG installed (kW):		
		Energy generated (kWh):		
		Peak energy generated (kWh):		
		Fuel type:		
Other Programs (specify):		Metric (specify):		
D. Actual Program Costs:		Utility direct costs (\$):	Incremental capital:	Incremental O&M:
		Incremental capital:	Incremental O&M:	Incremental capital:
		Incremental O&M:	Incremental capital:	Incremental O&M:
		Total:	Total:	Total:
		Utility indirect costs (\$):		
Reporting Year				
Cumulative Life to Date				

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.

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 - Recycling Program - Freezer
Description of the program (including intent, design, delivery, partnerships and evaluation):

Newmarket Hydro customers are encouraged to retire old and inefficient appliances. Our customers are reimbursed for the full cost of an appliance pick-up tag purchased at the local Municipal office. A rebate of \$11.00 is applied to their Newmarket Hydro account for each appliance pick-up tag purchased.

Measure(s):	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	900		
Efficient technology:	0		
Number of participants or units delivered for reporting year:	100		
Measure life (years):	6		
Number of Participants or units delivered life to date	377		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 32,242.86	120955.74
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	\$ 9,000.00	33930.00
Total TRC costs:	\$ 9,000.00	33930.00
Net TRC (in year CDN \$):	\$ 23,242.86	87025.74
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	3.58	3.56

C. Results: (one or more category may apply)	Cumulative Results:
Conservation Programs:	
Demand savings (kW):	
Summer	
Winter	
lifecycle	
Energy saved (kWh):	486000
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 (%):	