

## **Introduction**

Energysshop.com was engaged by 32 Local Distribution Companies (LDCs), across the province of Ontario, to design, deliver and track a fall coupon campaign with retailer Canadian Tire. Throughout the late summer and early fall billing periods, Tillsonburg Hydro Inc. (THI) provided their customers with a bill insert containing valuable energy-savings coupons to help them save on their electricity bill.

THI customers had until December 31, 2005 to redeem their point of purchase coupons at any local Canadian Tire outlet. Upon redemption, Canadian Tire sent the coupon to a redemption house, who then sorted by utility and product.

As part of this effort, SeeLine Group Inc. (SLG) was asked to undertake a Total Resource Costs (TRC) test assessment of the 2005 Lighten Your Electricity Bill Program as delivered by Energysshop.com. Using many of the technology cost and savings estimates outlined in the

Ontario Energy Board's TRC Guide, program results were screened using SLG's SeeTool™ TRC Calculator. The number of participant and program cost data provided by Energysshop.com.

THI also implemented a Smart Meter Pilot program in response to the Government of Ontario's initiative to install 800,000 smart electricity meters by December 31, 2007. The pilot program involved the installation of 384 smart meters in the fall of 2005.

This report includes a summary of assumptions and results from the TRC screening. Appendix A and B provides the detailed information on program assumptions.

## **Lessons Learned**

We believe that the '2005 Lighten Your Electricity Bill' program was a huge success in Tillsonburg. Initially it was estimated that there would be a 3% response rate in the coupon program. Tillsonburg was amount the highest with a 17% response. In this respect, we have decided to participate in OPA's Education and Incentive Program for 2006.

## **Conclusion**

Programs and incentives for power factor correction and energy audits are in place for 2006. With the installation of Smart Meters in late fall of 2005, we are only now receiving a web presentment for the customers in the pilot. An educational session will be held within the next 2 months.

**Tillsonburg Hydro Inc.**

**Bryan Drinkwater**  
**Operations Manager**

## Appendix A - Evaluation of the CDM Plan

	Total	Residential	Commercial	Institutional	Industrial	Agricultural	LDC System	Smart Meter Pilot	Other 2	Other 3	Other 4
<i>Net TRC value (\$):</i>		\$60,332									
<i>Benefit to cost ratio:</i>		6.72									
<i>Number of participants or units delivered:</i>		1184									
<i>Total kWh to be saved over the lifecycle of the plan (kWh):</i>		1,670,162									
<i>Total in year kWh saved (kWh):</i>		119,897									
<i>Total peak demand saved (kW):</i>		11.56									
<i>Total kWh saved as a percentage of total kWh delivered (%):</i>		0.05									
<i>Peak kW saved as a percentage of LDC peak kW load (%):</i>		0.03									
<i>Gross in year C&amp;DM expenditures (\$):</i>		\$6,749									
<i>Expenditures per kWh saved (\$/kWh)*:</i>		\$0.004									
<i>Expenditures per kW saved (\$/kW)**:</i>		\$584									
<i>Utility discount rate (%):</i>	7.63										

\*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

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

A. **Name of the Program:** 2005 Lighten Your Electricity Bill

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

In partnership with Energysshop.com and 32 LDCs , across Ontario, to design, deliver and track a fall coupon campaign with retailer Canadian Tire. The intent is to increase public awareness of energy conservation and demand management in Ontario and contribute to the overall development of an energy conservation culture in Ontario, as well, to help acheive energy conservation and demand management results for our 2005 program year.

**Measure(s):**

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	Incandescent lighting	Incandescent lighting	Non Programmable Thermostat
Efficient technology:	Compact Fluorescent Bulbs	LED Christmas Lighting	Programmable Thermostat
Number of participants or units delivered:	519	448	83
Measure life (years):	4	30	18

B. **TRC Results:**

TRC Benefits (\$):	\$ 70,883.00
TRC Costs (\$):	
Utility program cost (less incentives):	\$ 1,323.00
Participant cost:	\$ 9,228.00
Total TRC costs:	\$ 10,551.00
<b>Net TRC (in year CDN \$):</b>	<b>\$ 60,332.00</b>
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	\$ 6.72

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

**Conservation Programs:**

Demand savings (kW):	Summer	11.56
	Winter	30.58
	lifecycle	in year
Energy saved (kWh):	1,670,162	119,897
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):		
	<i>lifecycle</i>	<i>in year</i>
Energy savngs (kWh):		

**Distributed Generation and Load Displacement Programs:**

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

**Other Programs (specify):**

Metric (specify):	
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D. **Program Costs\*:**

Utility direct costs (\$):	Incremental capital:	\$	-
	Incremental O&M:	\$	1,322.46
	Incentive:	\$	5,334.00
	Total:	\$	6,656.46
Utility indirect costs (\$):	Incremental capital:		
	Incremental O&M:		
	Total:		
Participant costs (\$):	Incremental equipment:	\$	9,228.00
	Incremental O&M:		
	Total:	\$	9,228.00

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E. **Comments:**

SLG used many of the technology savings identified by the OEB in its Total Resource Guide. For those technologies without defined savings, every effort was made to develop reasonable assumptions, defensible under the OEB guidelines.

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

2005 Lighten Your Electricity Bill program cont...

**Measure(s):**

	Measure 1	Measure 2
<i>Base case technology:</i>	No Timers	No Ceiling Fan
<i>Efficient technology:</i>	Indoor/Outdoor/AC Timers	Ceiling Fan
<i>Number of participants or u</i>	90	44
<i>Measure life (years):</i>	20	20

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