KITCHENER WILMOT HYDRO INC.

2005 Conservation and Demand Management Annual Report

March 31, 2006


KITCHENER WILMOT
HYDRO
INC.

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1. Introduction

Kitchener-Wilmot Hydro Inc. (Kitchener-Wilmot Hydro) is a local distribution company that is responsible for distributing electricity to more than 79,500 homes and businesses within the City of Kitchener and the Township of Wilmot.

On March 17, 2005, the Ontario Energy Board approved Kitchener-Wilmot Hydro's Conservation and Demand Management (CDM) plan with a budget amount of $2,350,000 (RP-2004-0203 / EB-2005-0193).

Subsequently, on March 21, 2005, the Ontario Energy Board issued Kitchener-Wilmot Hydro's rate order for the 2005 rate year (RP-2005-0013 / EB-2005-0042) granting the utility its final instalment of MARR of $2,340,264.

Kitchener-Wilmot Hydro's CDM program approved by the Ontario Energy Board is guided by the following key principles:

- The plan includes a mix of utility-side and customer-side programs. In addition, the programs are targeted at or benefit all customer rate classes.
- The plan addresses some or all of the other priorities identified by the Minister, such as addressing low income customers, promoting distributed or embedded generation, leveraging funding of other organization, and helping to meet the Minister's target of a 5% reduction in peak demand by 2007.
- The plan builds on existing programs and leverages funding, where possible.
- The plans allows for flexibility in expenditures to allow the LDC to avoid potential lost opportunities and to respond to changing circumstances.

Distributor CDM activities must address both the efficiency with which its customers use electricity as well as the efficiency of the distribution system itself. Consequently, Kitchener-Wilmot Hydro's CDM plan includes both utility-side programs and customer-side programs (capital and operating).

Each new program, whether capital or operating, is evaluated on its own merits to ensure it meets the Ontario Energy Board's TRC test requirements before implementation. We believe that a detailed analysis of each program must be undertaken in order to implement the programs that are sustainable and effective in achieving long-term energy savings.

2. Evaluation of the CDM Plan

Kitchener-Wilmot Hydro's CDM programs implemented to date show a positive TRC value, demonstrating that these programs are successful in achieving our electricity conservation goals by reducing both kWh and peak demand. The overall effectiveness of the seven programs undertaken to date has produced the following total returns (see Appendix A):

- Net TRC value: $2.2 million
- Annual energy savings: 4, 260 MWh and 598 kW, which accounts for:
  - 0.21% of the total kWh delivered and,
  - 0.15% of Kitchener-Wilmot Hydro's peak demand in 2005.
- Gross CDM expenditures: $320,506.55.
- Expenditure per kWh saved: $0.08
- Expenditure per kW saved: $536.38

3. Discussion of Programs

The CDM programs that were started and/or completed in 2005 include the following seven programs (discussed in detail below):

A) CAPITAL PROGRAMS – UTILITY-SIDE INVESTMENTS

i. Capacitor Bank Program:

In its commitment to improve the overall efficiency of its distribution system, a load flow analysis was performed on Kitchener-Wilmot Hydro's 13.8 kV distribution system (Phase I of the project) in 2005. A model was subsequently developed using software called Distribution Engineering Software Solution (DESS) to investigate the opportunities for system optimization and improved phase balancing. DESS helped the Utility identify the optimum location to install capacitor banks to extract these savings.

Capacitor banks are attached to the utility pole to improve the voltage power factor and reduce distribution system losses. Extensive analysis has shown that the **annual savings generated will be 3.1% of this Utility's 2005 summer peak demand or 12.25 MVA.**

Kitchener-Wilmot Hydro has commenced the installation of 67 capacitor banks within the City of Kitchener. Installation is scheduled to be complete in May 2006, prior to the 2006 summer peak period. With the installation of the 67 capacitor banks, it is estimated that distribution system losses will be reduced by approximately $100,000 per annum.

Phase II of the project will begin in the summer of 2006. DESS will be used to model the 27.6 kV distribution system in the Township of Wilmot. This model will identify the best locations to install the capacitor banks in the Township rural areas for reduced distribution system losses.

Specifics of the programs are as follows:

- Phase I equipment cost is $363,400 and direct program costs are $236,600 for a total Phase I program cost of $600,000.
- The estimated energy savings are:
  - 1,815 mWh and,
  - 438 kW per year.
- The net TRC value is approximately $1.2 million.

- The benefit to cost ratio is 3.04.

The total dollar amount invested in this program to December 31, 2005 is $185,429.54.

Kitchener-Wilmot Hydro has budgeted $1,150,000 for the total project, to be completed in two phases.

ii. In-house Retrofit Program

Kitchener-Wilmot Hydro wants to ensure that its own facilities use energy efficiently, and serve as a model for what it hopes its customers will emulate. To this end, the Utility has commenced activities aimed at internal energy efficiency improvements in 2006 by commissioning an energy audit. Retrofitting of the Utility's lighting system will also be undertaken in 2006.

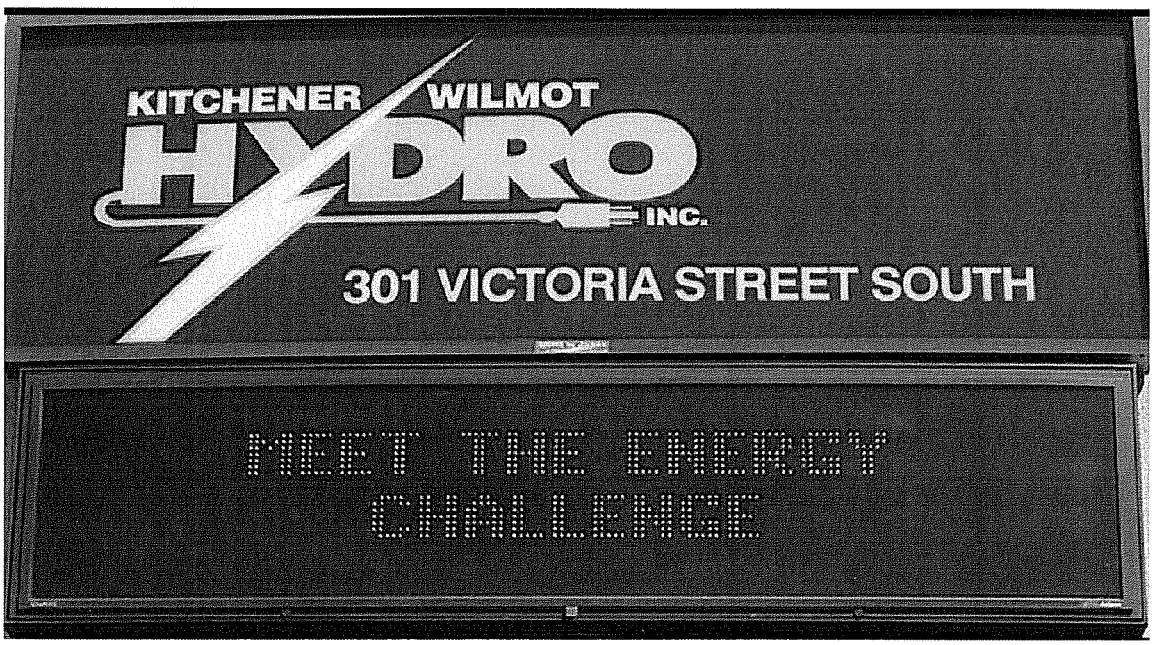
As part of the program in 2005 and to enhance customer education on energy conservation, an LED sign was installed above the main entrance to our office building in May. The sign, which had a capital cost of $18,443, flashes helpful energy saving tips to customers. It is estimated that approximately 24,845 customers passed through the front door to pay bills and another 4,500 new customers signed for new services from May to Dec 2005. In addition, the sign is visible to the street, allowing drive-by traffic an opportunity to read the messages. Overall exposure of these energy conservation messages is therefore quite high.

At present, the messages displayed are changed on a monthly basis. The sign displays "MEET THE ENERGY CHALLENGE" in addition to the following example messages which have been displayed depending on the season:

- "Turn off lights, TV sets and appliances when not needed"
- "Switch to compact fluorescent bulbs. A BRIGHT way to save!"
- Buy energy efficient appliances displaying the ENERGY STAR label"
- "SWITCH TO COLD. Wash your clothes in cold water to save energy & $$$"
- Turn off lights when you leave a room. BE A 'SWITCH' HITTER"
- "YOU have the POWER to conserve!"
- "Clean or change furnace filters every few months"
- "To improve energy efficiency clean your refrigerator coils every 3 months"
- "Open your blinds it's a free way to brighten a room"
- "Compact fluorescent light bulbs can use 75% less electricity and last longer"
- "Insulate water pipes to reduce heat loss in the fall and winter"
- "Who helps you to save money by using LESS of their product? WE DO!"
- "Visit us on the Web for more energy and $$ saving tips"
- "CLOSE blinds and draperies during the day"
- "Raise A/C thermostat by several degrees"
- "Cool only rooms that you use. Close off unused rooms"

- o "Shut off A/C if you leave home for extended periods"
- o "Consider using FANS instead of A/C"

The following picture shows the LDC sign at the front entrance of Kitchener-Wilmot Hydro's facilities:



The total dollars invested in this program to December 31, 2005 is $18,443.

Kitchener-Wilmot Hydro has budgeted $150,000 for the total project.

Additional activities, including an energy audit to identify areas for improvement and retrofitting of Kitchener-Wilmot Hydro's lighting system will be undertaken in 2006.

B) OPERATING AND MAINTENANCE PROGRAMS

i. *Municipal Building Lighting Program*

The City of Kitchener has been actively improving the energy efficiency of municipal buildings over the last twenty years and the City allocates a budget each year for improvements. In keeping with this objective, in 2005, Kitchener-Wilmot Hydro provided funding to the City of Kitchener to upgrade the lighting systems at Kitchener Memorial Auditorium, City Hall and the City Hall parking garage (for detail of work performed see Appendix C). The following activities were performed:

Kitchener Memorial Auditorium

- Total funding $21,100.
- Estimated energy savings are:
  - 87,079 kWh and,
  - 16.1 kW.
- All fixtures identified as inefficient T12 fluorescent lights were retrofitted to newer, high efficient T8 technology.
- All existing incandescent fixtures were retrofitted to high efficiency compact fluorescent lighting.
- Retrofit "exit" signs to LED technology.
- All fixtures were cleaned for improved aesthetics and light output.

City Hall

- Total funding $10,664.
- Estimated energy savings are:
  - 118,152 kWh and,
  - 14.1 kW.
- All existing fixtures were upgraded to 150W high efficiency quartz lighting.

City Hall Parking Garage

- Total funding $21,084.
- Estimated energy savings are:
  - 78,971 kWh and,
  - 9.02 kW.
- All 150 watt quartz fixtures were replaced with 15 watt compact long-life fluorescent fixtures (a 90% reduction of total energy used).All fixtures were cleaned for improved aesthetics and light output.

Specifics of the total Municipal Building program are as follows:

- The total cost is $52,848.

- The estimated energy saving is:
  - 284,202 kWh and,
  - 39.14 kW.

- The net TRC value is $34,336.

- The benefit to cost ratio is 2.30.

Kitchener-Wilmot Hydro has budgeted $75,000 for the total project.

ii. *Fall Discount Coupon Program*

Kitchener-Wilmot Hydro Inc., in partnership with Enerconnect / Energy Shop issued 71,500 coupons (attached see Appendix D) to encourage customers to purchase energy saving products at Canadian Tire Stores. The program "2005 Lighten Your Electricity Bill" gave customers the following discounts which were funded by Kitchener-Wilmot Hydro:

- Programmable thermostat ($15)
- Outdoor light timer ($5)
- Indoor light timer ($1)
- Compact fluorescent light ($3)
- LED Christmas lights, string of 25 ($5)
- Ceiling fan ($5)
- EnerGuide for Houses (free with home evaluation)

The final report was issued by SeeLine Group Inc. on March 8, 2006 and the results show the program to be a success. Details regarding the coupon program (including participation and expected energy savings) are provided below:

Summary of Program Participation and Net Program Savings
2005 Lighten Your Electricity Bill Program

Technology	# of Participants	Summer Peak kW Savings	Annual kWh Savings in Year	Measure Life	Lifecycle kWh Savings
Compact Fluorescent Bulbs	3,114	-	292,568	4	1,170,272
LED Christmas Lights - Replace 5 watt Lights (25 lights)	650	-	27,480	30	824,400
LED Christmas Lights - Replace incandescent mini lights	650	-	10,517	30	315,511
Programmable Thermostats - Space Heating	68	-	89,497	18	1,610,953
Programmable Thermostats - Space Cooling	176	25.88	25,256	18	454,611
Timers - outdoor	149	-	39,157	20	783,144
Timers - indoor light	23	1.22	2,030	20	40,605
Timers - indoor air conditioners	23	3.60	2,252	20	45,043
Ceiling Fan	63	-	-	20	-
EnerGuide for Existing Homes - Space Heating	-	-	39	25	973
Totals	***4,916***	***30.70***	***488,796***	***205***	***5,245,512***

A breakdown of the data gives the following TRC values by technology:

Technology	TRC Benefits $$$	Incremental Equipment Costs $$$	Utility Program Costs $$$	TRC Net Benefits $$$	TRC B/C Ratio
Compact Fluorescent Bulbs	71,299	5,605	-	65,694	12.72
LED Christmas Lights - Replace 5 watt Lights (25 lights)	25,578	1,235	-	24,343	20.71
LED Christmas Lights - Replace incandescent mini lights	9,789	1,235	-	8,554	7.93
Programmable Thermostats - Space Heating	61,345	3,662	-	57,683	16.75
Programmable Thermostats - Space Cooling	30,586	9,526	-	21,060	3.21
Timers - outdoor	29,105	2,682	-	26,423	10.85
Timers - indoor light	2,148	145	-	2,004	14.83
Timers - indoor air conditioners	3,533	145	-	3,388	24.38
Ceiling Fan	-	2,381	-	(2,381)	-
EnerGuide for Existing Homes - Space Heating	31	23	-	8	1.32
Program Costs	-	-	15,316	(15,316)	-
Totals	***233,414***	***26,639***	***15,316***	***191,460***	***5.56***

A copy of SeeLine's report is attached as Appendix E.

Specific TRC results of the program show the following:

- The equipment cost is $26,639 and direct program cost is $15,316.
- The estimated energy saving is:
  - 115.57 kW (winter peak)
  - 30.70 kW (summer peak) and,
  - 488,797 kWh per year.
- The net TRC value is $191,459.
- The benefit to cost ratio is 5.56.

The total dollar amount invested in this program to December 31, 2005 is $15,285. Additional expenditures are expected in 2006 for the actual coupon redemption value.

The Fall Discount Coupon Program was not originally part of Kitchener-Wilmot Hydro's approved CDM budget; however, it was chosen to become part of the overall plan following an extensive TRC analysis, in which the projected savings from conservation proved to be positive.

iii. Energy Conservation Kits

The Minister has identified low income consumers as a key target for CDM programs. Kitchener-Wilmot Hydro's energy conservation kit program was designed specifically to reach low income consumers.

Through the program, Kitchener-Wilmot Hydro supplied 70 energy conservation kits to the Fall Energy Forum, held at the Kitchener's Farmer's Market and hosted by John Milloy M.P.P. In addition, 649 of these kits were supplied to the Region of Waterloo, which distributed the kits to eligible consumers in the City of Kitchener and the Township of Wilmot. Eligible consumers include low income consumers who reside in subsidized housing. The remaining kits were distributed at other local community energy and conservations functions. Each kit included the following:

- Compact fluorescent light
- Fridge thermostat
- Shower coach
- Hot water gauge
- Insulation for light switch covers
- Three (3) feet of adhesive weather strip

Specific TRC results of the program show the following:

- The equipment cost is $15,397.
- The estimated energy saving is:
  - 1,328,800 kWh and,
  - 71.5 kW per year.
- The net TRC value is $731,170.
- The benefit to cost ratio is 53.77.

iv. Pilot Program Funding for Social Housing Services Corporation (SHSC)

The SHSC has commenced an "Energy Management Program" whereby they are conducting energy audits in over 5,000 social housing units in the Province of Ontario. Using key partnerships within the public and private sectors, including the Ministry of Energy, SHSC's program will serve as a central resource for energy management in the social housing sector including its over 1,500 members that comprise 250,000.

In late March and early April 2005, energy consultants visited the pilot buildings to identify energy conservation measures and entered their findings into an Energy Management System. This on-line system will prioritize the various measures, recommend funding sources, assist housing providers in planning retrofits, and then monitor and report energy savings.

In support of SHSC's program, Kitchener-Wilmot Hydro provided funding to SHSC for 91 unit townhouses within the Utility's service area. The total sponsorships was $50 per unit for a total of $4,550.

Specifics of the TRC test are presented below:

- The total cost is $120,570 (including Kitchener-Wilmot Hydro funding of $4,550).
- The estimated energy savings is:
  - 343,161 kWh and,
  - 18.2 kW per year.
- The net TRC value is $14,643.
- The benefit to cost ratio is 1.13.

v. *Commercial Customer Education*

Kitchener-Wilmot Hydro recognizes that education is the key to successful energy conservation and promotes events that are focused on energy efficiency, demand response and/or demand management.

During the year 2005, the Utility conducted two local *"Dollars to $ense"* Workshops in partnership with Natural Resources Canada on June 23, 2005 and November 8, 2005 (for detail see Appendix F). Over the past six years, more than 6,500 Canadians have found ways to save energy in their companies and organizations by attending these workshops. In addition to learning from highly trained instructors, workshop participants received instructional materials, which they took back to their workplace to share with colleagues.

"Spot the Energy Savings Opportunities" was held on June 23, 2005. The workshop highlighted learning through hands-on demonstrations how to identify opportunities in your electrical and thermal processes, from point of purchase to end-use including:

- Reviewing energy basics
- Analyzing the incremental cost of energy, and identifying up-front opportunities.
- Discovering how to minimize energy lost through distribution and conversion.
- Picking up tips on operating and maintaining boilers, compressors, motors, pumps, fans and more.

The *"Spot the Energy Savings Opportunities"* workshop was by attended by 19 of Kitchener-Wilmot Hydro's large industrial customers (>200 kW).

The second workshop entitled *"Learn to Monitor and Track Energy Costs"* was held on November 8, 2005. This workshop targeted new energy savings opportunities such as:

- Pinpointing energy waste.
- Forecasting savings and chart gains.
- Integrating energy management into every aspect of an organization.
- Discovering low-cost opportunities for saving money and options for financing retrofits and upgrades.
- Instilling an energy-efficient culture – taking energy management from the boardroom to the shop floor.

The *"Learn to Monitor and Track Energy Costs"* workshop was attended by 26 of our large industrial customers (>200 kW), including 3 of our large use customers (>5,000 kW).

Both workshops were very well received. Participants showed a keen interest in all topics and their feedback was very encouraging and positive.

The total cost of the two workshops is $7,643.35.

Additional Commercial Customer Education:

In April 2005, the Independent Electricity System Operator (IESO) produced a brochure called "The Bottom Line on Energy Management. Making Ontario's electricity market work for your business". This educational booklet was designed for larger customers and explained:

- How the electricity pricing system works in the Province of Ontario.
- Interval meters and how they record electricity consumption.
- Energy conservation.
- Retail contracts.
- Load shifting.

Kitchener-Wilmot Hydro mailed out these CDM information booklets to general service customers incurring postage cost of $359.07 to make the total incurred cost for commercial customer education $8,002.42.

vi. Low-Income Residential Education Program

World-Wide Opportunities for Women (WWOW) is a non-profit organization that has been active in Waterloo Region since 1994. WWOW is a member of the Green Communities Association, which has developed the Home Energy $aver Program and offers support, training and advice to the community.

The program focuses on energy efficiency, water efficiency, and alternative household cleaning items, reducing household waste and life-style improvement. Through the program, two people (often a male and a female) from WWOW, trained in home energy assessment audits, visit a household and complete a four-hour assessment. During their visit, they provide education, small retrofits and assessment recommendation to the household. If necessary, they will also assist the household in advocating to their landlord energy efficiency repairs, improvements and upgrades. They are able to offer the home assessment in over 16 languages. The follow up 45 days after the assessment to see house the household is progressing.

To date, WWOW has completed 2,500 home assessments across the Region. Assessments were previously available to anyone in the community with a request for a $10 donation. 75% of the assessments conducted were for people in a low-income bracket and unable to make a donation. The actual cost of the assessment is $380.

The focal point of WWOW energy audits is to develop the Home Energy $aver program and to empower low-income and ethnic groups to take action and make measurable changes with their home environment. The program is targeted at families and individuals who typically would not be able to take advantage of developing a greater awareness of energy management.

In support of WWOW's objectives, Kitchener-Wilmot Hydro made a donation to the organization for the amount of $3,000 to help WWOW continue to make the Home Energy $aver Program more accessible to residents in the City of Kitchener and the Township of Wilmot.

A detailed summary of above seven programs is listed as follows:

	Capital		Operating					
Detail	**Capacitor Banks**	**In-house Retrofits**	**Municipal Building Lighting**	**Fall Discount Coupon**	**Energy Conservation Kits**	**SHSC Energy Pilot**	**Customer Education**	**Program Admin**
Equipment Cost	$363,400	$18,443	$52,848	$26,639	$15,397.00	$120,570		
Program Cost	$236,600			$15,316			$11,002	
Total Cost	*$600,000*	*$18,443*	*$52,848*	*$41,955*	*$15,397*	*$120,570*	*$11,002*	*$0*
Annual Energy Saved (kWh)	1,814,845		284,202	488,797	1,328,800	343,161		
Energy Saved (kW)	438.00		39.14	30.70	71.50	18.20		
Net TRC	$1,222,282		$34,336	$191,459	$731,170	$14,643		
Benefit to Cost Ratio	3.04		2.30	5.56	53.77	1.13		
$$$ Spent to Date	$185,430	$18,443	$52,848	$15,285	$15,397	$4,450	$11,002	$17,652

Administration costs for 2005 include the costs of planning, reporting, monitoring and evaluation of the program for total administration cost of $1,652 for the year. 2004 administration costs include professional fees of $16,000 for the initial CDM budget, making the total administrative cost to date $17,652.

4. Lessons Learned

- Distribution system improvements play a key role in conservation. Distribution systems losses can have a significant impact on the overall efficiency of the system. By making improvements to our own distribution system, we are "starting at home" in the goal of energy conservation.

- The feedback from the customer education programs has been very encouraging and positive. The attendees have shown a keen interest with regards to energy conservation. It has been strongly suggested that more customer education programs should be undertaken in the future. Ontarians do want to conserve. You simply have to give them the proper tools.

- There are many potential projects available for funding but not all may realize potential positive TRC values or short pay-back periods. We believe that a detailed analysis of each program must be undertaken in order to implement the programs that are sustainable and effective in achieving long-term energy savings.

5. Conclusion

The initial TRC results indicate that Kitchener-Wilmot Hydro's 2005 CDM program has been a great success due to the significant energy savings generated overall.

Kitchener-Wilmot Hydro will continue to strive to generate even more savings in 2006 through implementation of its other budgeted programs including:

- Continued installation of capacitor banks on the Utility's distribution system.
- Fuel Switching Program (electricity to gas)
  - A collaborative effort with Kitchener Utilities to target residential customers with electric water heaters and, where feasible, provide incentives for them to convert to natural gas. This incentive program, started in February 2006, will provide an energy savings of 10,000,000 kWh of annual electricity usage. A fixed incentive of $200 per conversion is provided by Kitchener-Wilmot Hydro.
- Cool Shops Program
  - A collaborative effort with the Clean Air Foundation to target 750 small commercial businesses in the City of Kitchener and the Township of Wilmot to provide education and outreach on energy conservation and to identify and implement in-store energy management measures to reduce energy use and save on utility costs. The Cool Shops program includes the following activities:
    - A free on-site Palm Pilot assisted energy audit.
    - Immediate short, medium and long-term recommendations on how to save money resulting from Palm Pilot audits
    - Instant energy savings through the installation of two free compact fluorescent light bulbs (CFLs) and LED exit light bulb replacements.
    - Energy Conservation tips and advice.
    - Education on Time-of-Use electricity rates and Smart Meters.
    - Direct access to discounts off energy efficient products (CFLs, T8s, LED exit sign lights, pre-rinse spray nozzles, etc)
    - Free marketing through window/door branding decal, exposure through Cool Shops website, and through local and national newspapers and magazines.

Kitchener-Wilmot Hydro Inc.

Evaluation of the CDM Plan

	Total	Residential	Commercial	Institutional	Industrial	Agricultural	LDC System	Other 1	Other 2	Other 3	Other 4
Net TRC value ($):	$ 2,193,889.26	$ 937,271.72		$ 34,335.52			$ 1,222,282.02				
Benefit to cost ratio:	65.80	60.46		2.30			3.04				
Number of participants or units delivered:	3,417	2,491		859			67				
Total KWh to be saved over the lifecycle of the plan (kWh):	61,879,554	23,593,240		1,989,414			36,296,900				
Total in year kWh saved (kWh):	4,259,805	2,160,758		284,202			1,814,845				
Total peak demand saved (kW):	598	120		39			438				
Total kWh saved as a percentage of total kWh delivered (%):	*0.21%*										
Peak kW saved as a percentage of LDC peak kW load (%):	*0.15%*										
Gross in year C&DM expenditures ($):	$ 320,506.55										
Expenditures per KWh saved ($/kWh):*	$ 0.08										
*Expenditures per KW saved ($/kW)**:*	$ 536.38										

*Utility discount rate (%)***:*	7.52

*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.

*** The discount rate has been calculated using the actual debt to equity ratios of 49.5 % and 50.5% respectively. The deemed interest and return on equity rates used are 6% and 9% as per this Utility's 2006 electricity distribution rate application.

Capacitor Bank Program

A. **Name of the Program:** Capacitor Banks

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

In 2005, a load flow analysis was performed on Kitchener-Wilmot Hydro's 13.8 kV distribution system (Phase 1 of the project) A model was subsequently developed using Distribution Engineering System software (DESS) with the goal being system optimization and improved phase balancing. The DESS software helped the Utility identify the optimum location to install capacitor banks, which are designed to improve the voltage power factor and reduce distribution system losses.
Kitchener-Wilmot Hydro has commenced the installation of 67 capacitor banks within the City of Kitchener. Installation is scheduled to be complete in May 2006.
Phase II of the project will begin in the summer of 2006. DESS will be used to model the 27.6 kV distribution system in the Township of Wilmot. This model will identify the best locations to install the capacitor banks in the Township rural areas for reduced distribution

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:	Capacitor banks installation		
Number of participants or units delive	67		
Measure life (years):	20		

B. **TRC Results:**

TRC Benefits ($):		$	1,822,282.02
TRC Costs ($):			
	Utility program cost (less incentives):	$	600,000.00
	Participant cost:	$	-
	Total TRC costs:	$	600,000.00
Net TRC (in year CDN $):		$	1,222,282.02
Benefit to Cost Ratio (TRC Benefits/TRC Costs):			3.04

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

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):	38700
Distribution system power factor at begining of year (%):	90.6%
Distribution system power factor at end of year (%):	94.4%

Line Loss Reduction Programs:

Peak load savings (kW):		438
	lifecycle	*in year*
Energy savngs (kWh):	36,296,900	1,814,845

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:*	$ 363,400.00
	Incremental O&M:	$ 236,600.00
	Incentive:	
	Total:	$ 600,000.00
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. **Comments:**

Total dollars invested to December 31, 2005 is $185,429.54. The total budget for the entire project is $1,150,000.

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

In-House Retrofit Program

A. **Name of the Program:** In-house Retrofit Program

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

Kitchener-Wilmot Hydro Inc. wants to ensure that its own facilities use energy efficiently and want to serve as a model for what it hopes its customers will emulate. To this end, the Utility has commenced activities aimed at internal energy efficiency improvements in 2006 including an energy audit. Retrofitting of the Utility's lighting system will also be undertaken in 2006.
As part of the program in 2005, an LED sign was installed above the main entrance to the utility in May 2005. The sign flashes helpful energy saving tips to customers. Overall exposure to the sign is quite high as it is visible to all customers coming through the front door as well as to drive-by traffic.

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	$ 18,442.97
	Incremental O&M:	
	Incentive:	
	Total:	$ 18,442.97
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. **Comments:**

Total program cost to date is $18,443.

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

Municipal Building Lighting Program

A. **Name of the Program:** Municipal Building Lighting Program

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

The City of Kitchener has been actively improving the energy efficiency of municipal buildings over the last twenty years and the City allocates a budget each year for improvements.
In keeping with this objective, Kitchener-Wilmot Hydro provided funding to the City of Kitchener to upgrade the lighting systems at Kitchener Memorial Auditorium, City Hall and the City Hall parking garage.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	Ceiling mounted - quartz		
Efficient technology:	Compact fluorescent fixture		
Number of participants or units delive	859		
Measure life (years):	7		

B. **TRC Results:**

TRC Benefits ($):		*$ 121,519.05*
TRC Costs ($):		
	Utility program cost (less incentives):	$ 52,848.00
	Participant cost:	$ -
	Total TRC costs:	$ 52,848.00
Net TRC (in year CDN $):		$ 34,335.52
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		2.30

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

Conservation Programs:

Demand savings (kW):	*Summer*		39.14
	Winter		39.14
	lifecycle		*in year*
Energy saved (kWh):	1,989,414		284,202
Other resources saved :			
Natural Gas (m3):			
Other (specify):			

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	
	Incremental O&M:	$ 52,848.00
	Incentive:	
	Total:	$ 52,848.00
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. **Comments:**

The total cost to date is $52,848.

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

Fall Discount Coupon Program

A. **Name of the Program:** Fall Discount Coupon Program

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

Kitchener-Wilmot Hydro Inc., in partnership with Enerconnect/Energy Shop issued 71,500 coupons to encourage customers to purchase energy savings products at Canadian Tire Stores. The program "2005 Lighten Your Electricity Bill" gave customers discounts on a number of products including a programmable thermostat, indoor and outdoor timers, Christmas lights, a ceiling fan, a compact fluorescent light and an EnerGuide for Houses.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:	Programmable Thermostat	Compact Fluorescent Light	LED Christmas Light
Number of participants or units delive	244	3114	1300
Measure life (years):	18	4	30

B. **TRC Results:**

TRC Benefits ($):		$	*233,414.00*
TRC Costs ($):			
	Utility program cost (less incentives):	$	15,316.00
	Participant cost:	$	26,639.00
	Total TRC costs:	$	41,955.00
Net TRC (in year CDN $):		$	191,459.00
Benefit to Cost Ratio (TRC Benefits/TRC Costs):			5.56

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

Conservation Programs:

Demand savings (kW):	*Summer*		30.70
	Winter		115.57
	lifecycle	*in year*	
Energy saved (kWh):	5,245,513		488,797
Other resources saved :			
Natural Gas (m3):			
Other (specify):			

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	$ -
	Incremental O&M:	$ 15,316.00
	Incentive:	
	Total:	$ 15,316.00
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	$ 26,639.00
	Incremental O&M:	
	Total:	$ 26,639.00

E. **Comments:**

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

Energy Conservation Kits Program

A. **Name of the Program:** Energy Conservation Kits Program

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

The Minister has identified low income consumers as a key target for CDM programs. Kitchener-Wilmot Hydro's energy conservation kit program was designed specifically to reach low income consumers.
Through the program, Kitchener-Wilmot Hydro supplied 70 energy conservation kits to the Fall Energy Forum, held at the Kitchener's Farmer's Market and hosted by John Milloy M.P.P. In addition, 649 of these kits were supplied to the Region of Waterloo, which distributed the kits to eligible consumers in the City of Kitchener and the Township of Wilmot. Eligible consumers include low income consumers who reside in subsidized housing. The remaining kits were distributed at other local community energy and conservations functions.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:	Compact Fluorescent Light	Shower Coach	Adhesive Weather Strips
Number of participants or units delive	1100	1100	1100
Measure life (years):	3	12	25

B. **TRC Results:**

TRC Benefits ($):		$	*827,827.67*
TRC Costs ($):			
	Utility program cost (less incentives):	$	15,396.99
	Participant cost:	$	-
	Total TRC costs:	$	15,396.99
Net TRC (in year CDN $):		$	731,169.72
Benefit to Cost Ratio (TRC Benefits/TRC Costs):			53.77

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

Conservation Programs:

Demand savings (kW):	*Summer*		71.5
	Winter		71.5
		lifecycle	*in year*
Energy saved (kWh):		15,945,600	1,328,800
Other resources saved :			
Natural Gas (m3):			
Other (specify):			

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	
	Incremental O&M:	$ 15,396.99
	Incentive:	
	Total:	$ 15,396.99
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. **Comments:**

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

Pilot Program Funding for SHSC

A. **Name of the Program:** Energy Pilot Funding for Social Housing Services Corporation (SHSC)

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

The SHSC has commenced an "Energy Management Program" whereby they are conducting energy audits in over 5,000 social housing units in the Province of Ontario. Using key partnerships within the public and private sectors, including the Ministry of Energy, SHSC's program will serve as a central resource for energy management in the social housing sector.
In the spring of 2005, energy consultants visited the pilot buildings to identify energy conservation measures and entered their findings into an Energy Management System. This on-line system will prioritize the various measures, recommend funding sources, assist housing providers in planning retrofits, and then monitor and report energy savings.
Kitchener-Wilmot provided funding to SHSC for 91 unit townhouses within the Utility's service area.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	T12 lamps		
Efficient technology:	T8 lamps	motion sensor	smart thermostat
Number of participants or units delive	91	91	91
Measure life (years):	3	10	18

B. **TRC Results:**

TRC Benefits ($):	$	*136,840.00*
TRC Costs ($):		
Utility program cost (less incentives):	$	4,550.00
Participant cost:	$	116,020.00
Total TRC costs:	$	120,570.00
Net TRC (in year CDN $):	$	14,643.00
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		1.13

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

Conservation Programs:

Demand savings (kW):	*Summer*		18.2
	Winter		18.2
		lifecycle	*in year*
Energy saved (kWh):		2,402,127	343,161
Other resources saved :			
Natural Gas (m3):			
Other (specify):			

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	

	Incremental O&M:	$	4,550.00
	Incentive:		
	Total:	$	4,550.00
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		
Participant costs ($):	*Incremental equipment:*	$	116,020.00
	Incremental O&M:		
	Total:	$	116,020.00

E. Comments:

Total sponsorships totaled $40 per unit for a total of $4,550.

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

Commercial Customer Education

A. **Name of the Program:** Commercial Customer Education Program

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

Kitchener-Wilmot Hydro recognized that education is the key to successful energy conservation and promotes events that are focused on energy efficiency, demand response and/or demand management.
In 2005, Kitchener-Wilmot Hydro Inc. conducted two "Dollars to $ense" Workshops in partnership with Natural Resources Canada. The first workshop entitled "Spot the Energy Savings Opportunities" was attended by 19 of our large industrial customers (>200 kW). The second workshop entitled "Learn to Monitor and Track Energy Costs" was attended by 26 of our large industrial customers (>200 kW) including 3 of our large use customers (>5,000 kW). Both workshops were very well received.

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	
	Incremental O&M:	$ 8,002.42

	Incentive:	
	Total:	$ 8,002.42
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. Comments:

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

Low-Income Residential Education

A. **Name of the Program:** Low-Income Residential Education program

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

KWH donated $3,000 to World-Wide Opportunities for Women (WWOW) to support its Home Energy $aver program. WWOW is a non-profit organization, which is a member of the Green Communities Association. The program targets low-income and immigrant residents in the Region of Waterloo to encourage them to improve the health of their household as well as their community. Through the program, two people from WWOW trained in home energy assessment audits, visit a household and complete a four-hour assessment. During the visit, WWOW provides education, small retrofits and assessment recommendations to the household. So far, WWOW has successfully conducted 4800 green home visits in the Region of Waterloo.

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

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

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

Metric (specify):	

D. **Program Costs*:**

Utility direct costs ($):	*Incremental capital:*	
	Incremental O&M:	$ 3,000.00

	Incentive:	
	Total:	$ 3,000.00
Utility indirect costs ($):	*Incremental capital:*	
	Incremental O&M:	
	Total:	
Participant costs ($):	*Incremental equipment:*	
	Incremental O&M:	
	Total:	

E. Comments:

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

DETAILED BILL OF MATERIAL & PRICING - CITY HALL - QUARTZ LIGHTING UPGRADE

FOR COST AVOIDANCE & ENERGY SAVINGS

CITY OF KITCHENER - CITY HALL, 200 KING STREET WEST

Part A: Bill of Materials (Schedule 2)

n 1: Current Configuration			Section 2: Proposed Retrofit Configuration		Section 3: Pricing By Gerrie Electric Wholesale				
Retrofit Location	Existing Fixture Type	Qty	Description	Part Number	Qty	Gerrie Electric Item Cost	Sub Total $ (Qty. x Cost)	Gross Margin	Total Cost
ł #2 - NORTH WALL	TRACK-MOUNTED - 150W QUARTZ	6	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	6	$39.00	$234.00	0.94	$248.94
R #2 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	8	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	8	$39.00	$312.00	0.94	$331.91
R #2 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	8	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	8	$39.00	$312.00	0.94	$331.91
T ENTR. TO MAYOR'S OFFICE	TRACK-MOUNTED - 150W QUARTZ	6	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	6	$39.00	$234.00	0.94	$248.94
US ROOM	TRACK-MOUNTED - 150W QUARTZ	13	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	13	$39.00	$507.00	0.94	$539.36
US ROOM - HIGH CEILING	TRACK-MOUNTED - 150W QUARTZ	6	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	6	$39.00	$234.00	0.94	$248.94
R #3 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	4	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	4	$39.00	$156.00	0.94	$165.96
R #3 - MEETING ROOM	CEILING MOUNTED - 150W QUARTZ	2	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	2	$39.00	$78.00	0.94	$82.98
R #3 - NARROW NORTH CORR.	TRACK-MOUNTED - 150W QUARTZ	5	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	5	$39.00	$195.00	0.94	$207.45
R #3 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	6	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	6	$39.00	$234.00	0.94	$248.94
FLOOR N/E CORNER	CEILING MOUNTED - 150W QUARTZ	4	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	4	$39.00	$156.00	0.94	$165.96
R #3 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	8	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	8	$39.00	$312.00	0.94	$331.91
R #3 - AROUND ELEVATOR	CEILING MOUNTED - 150W QUARTZ	2	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	2	$39.00	$78.00	0.94	$82.98
FLOOR - FRONT OF WILLIAMS	TRACK-MOUNTED - 150W QUARTZ	12	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	12	$39.00	$468.00	0.94	$497.87
FLOOR - ACROSS CASHIER	TRACK-MOUNTED - 150W QUARTZ	3	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	3	$39.00	$117.00	0.94	$124.47
ANCE TO CONESTOGA ROOM	CEILING MOUNTED - 150W QUARTZ	2	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	L1838P HALO / COOPER	2	$39.00	$78.00	0.94	$82.98
IOR - EAST SIDE	STEM-MOUNTED 250W QUARTZ	5	NEW COMPACT FLUORESCENT FIXTURE @ 42 WATTS	PLSFK42-120 COOPER	5	$175.00	$875.00	0.94	$930.85
E LOCATIONS	150 WATT QUARTZ LAMPS	95	NEW COMPACT FLUORESCENT 15 WATT LAMPS	CF15EL/R30/830 LAMP	95	$15.00	$1,425.00	0.95	$1,500.00
E LOCATIONS	300 WATT QUARTZ LAMPS	5	NEW COMPACT FLUORESCENT 42 WATT LAMPS	CF42DT/E/IN/841 LAMP	5	$8.50	$42.50	0.95	$44.74

Total Cost of Materials (Less Taxes)	$6,417.08
Total PST	$513.37
Total GST	$449.20
Total Materials Cost From Gerrie Electric (Including Taxes) (Transfer amount to Detailed Scope of Work & Analysis Document)	$7,379.64

ECT NAME:
f Kitchener: City Hall - Quartz Lighting
ng Upgrade: ENERGY SAVINGS

ared by: Joe Moser May 25, 2005

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Appendix C

CITY OF KITCHENER - CITY HALL

LIGHTING UPGRADE - ENERGY SAVINGS - 150W QUARTZ FIXTURES

200 King Street West, Kitchener, Ontario

IT LOCATION	EXISTING FIXTURE TYPE	FIXT QTY	LAMPS PER FIXT	LIGHTING USAGE HRS/YR	WATTS PER FIXT	ENERGY SAVINGS ..... LIGHTING UPGRADE	UNIT QTY	WATTS PER UNIT	TOTAL WATTS SAVED	EST ANNUAL ENERGY SAVINGS
#2 - NORTH WALL	TRACK-MOUNTED - QUARTZ	6	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	6	15	810	$631.51
#2 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	8	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	8	15	1080	$842.01
#2 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	8	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	8	15	1080	$842.01
ENTR. TO MAYOR'S OFFICE	TRACK-MOUNTED - QUARTZ	6	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	6	15	810	$631.51
S ROOM	TRACK-MOUNTED - QUARTZ	13	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	13	15	1755	$1,368.27
S ROOM - HIGH CEILING	TRACK-MOUNTED - QUARTZ	6	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	6	15	810	$631.51
#3 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	4	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	4	15	540	$421.01
#3 - MEETING ROOM	CEILING MOUNTED - QUARTZ	2	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	2	15	270	$210.50
#3 - NARROW NORTH CORRIDOR	TRACK-MOUNTED - QUARTZ	5	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	5	15	675	$526.26
#3 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	6	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	6	15	810	$631.51
LOOR N/E CORNER	CEILING MOUNTED - QUARTZ	4	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	4	15	540	$421.01
#3 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	8	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	8	15	1080	$842.01
#3 - AROUND ELEVATOR	CEILING MOUNTED - QUARTZ	2	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	2	15	270	$210.50
LOOR - FRONT OF WILLIAMS	TRACK-MOUNTED - QUARTZ	12	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	12	15	1620	$1,263.02
LOOR - ACROSS FROM CASHIER	TRACK-MOUNTED - QUARTZ	3	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	3	15	405	$315.75
NCE TO CONESTOGA ROOM	CEILING MOUNTED - QUARTZ	2	1	8760	150	NEW COMPACT FLUORESCENT FIXTURE @ 15 WATTS	2	15	270	$210.50
IOR - EAST SIDE	STEM-MTD 250W QUARTZ	5	1	4500	300	NEW COMPACT FLUORESCENT FIXTURE @ 42 WATTS	5	42	1290	$516.65
FIXTURE QUANTITY		100					100	KW Saved:	14.1	$10,515.53

oidance is Based on Estimated Failure and Replacement Rate of Existing Lighting System.

l Hydro Rate Used = $0.089 / KWh (Includes Demand & KWh Consumption).

ormation is supplied to Kitchener City Hall for its internal Management use only and is not to be

d to any other outside sources without a written agreement from Sylvania Lighting Services.

SER, May 25, 2005

IA LIGHTING SERVICES

TOTAL SUPPLY & INSTALL PROJECT PRICE QUOTATION	$10,150.00
ESTIMATED ANNUAL ENERGY SAVINGS	$10,515.53
ESTIMATED ANNUAL COST AVOIDANCE DURING PAYBACK PERIOD	$650.00
ESTIMATED ANNUAL SAVINGS DURING PAYBACK PERIOD	$11,165.53
PAYBACK PERIOD IN MONTHS BASED ON ABOVE DATA UTILIZATION	10.9
ESTIMATED MONTHLY SAVING - ENERGY COSTS & COST AVOIDANCE	$930.46

CITY OF KITCHENER - AUDITORIUM - LIGHTING UPGRADE QUOTATION - ENERGY SAVINGS

Kitchener Auditorium Complex

Detailed Scope of Work & Pricing Analysis Document

20-Jun-05

Part A: Bill of Materials:				
Total Cost of Materials from Gerrie Electric Wholesale: (Refer to attached Schedule 2) (PST & GST EXTRA -- SEE SUMMARY BELOW)				$9,928.09
Part A: Miscellaneous Consumables: Conduit, Hangars, Hooks, Rods, Relays Barrettes, wire, fasteners, connectors, cleaning solutions, cloths, labelling, etc.				$970.00
Part B: Total Cost of Project Labour -- INCLUDING EQUIPMENT RENTAL				$7,736.00
Part C: Project Audit & License Fee				
Audit / Consulting Fee: $1,690.00	Permit / License Fee: N/A Re- ESA Blanket Coverage		Total Fees:	$1,690.00
Part D: Disposal Fee				$775.91
Total Project Cost: Parts: A, B, C, D			**Taxes Extra**	**$21,100.00**
			PST on Part 'A' Materials Only	$794.25
			GST on Total Project Cost	$1,477.00
SUMMARY			**Total Project Cost Including Taxes**	**$23,371.25**

Part E: Notes:

Cost Avoidance: Is an estimate based on the failure and replacement rate of existing lighting system

Cost Avoidance Estimate (Accuracy Range +/- 20%)	$890.00

Definition: Hydro Savings: Includes demand and KWH consumption

Annual Hydro Savings Estimate	$7,750.00

Part F: Summary

Total Project Price: Parts A, B, C, D	**$21,100.00**
Estimated Monthly Savings:	$720.00
Payback Period (Years):	2.4

NOTES:

For turn-key Project Supply and Install, the Purchase Order from the City of Kitchener must be forwarded to Gerrie Electric for the Total Project Cost as shown in the Pricing Summary above

For Supply Only (Where the City of Kitchener Installs the Project) the Purchase Order for the Materials (Plus PST & GST) and the Audit / Consulting Fee (Plus GST only), must be forwarded to Gerrie Electric

KITCHENER

Gary England
Energy & Building Controls Operator
City Hall PO Box 1118
200 King Street West
Kitchener, Ontario
Canada N2G 4G7
Phone: (519) 741-2215
FAX: (519) 741-2222
Email: gary.england@city.kitchener.on.ca

July 7, 2005

Rhonda Moreau
Manager, Customer Service
Kitchener Wilmot Hydro
301 Victoria St. S.
P.O. Box 9010
Kitchener ON N2G 4L2

Dear Rhonda:

RE: LIGHTING UPGRADE PROPOSAL OF QUALIFICATION FOR KITCHENER WILMOT HYDRO CDM PLAN – ENERGY SAVINGS @ CITY HALL UNDERGROUND PARKING GARAGE FACILITY

EXECUTIVE SUMMARY:

Thank you for the opportunity to provide you a proposal for upgrades to the City's lighting system at the under ground parking facility at Kitchener City Hall.

A detailed lighting survey / analysis has recently been processed for this facility to determine if an opportunity exists for significant energy savings by utilization of new technology T8 FO32/841 XP ECO lamps and T8 universal voltage L.B.F. 4-lamp electronic ballasts.

Following are some of the findings and comments resulting from this detailed lighting survey:

- The parking garage consists of the following lighting fixtures on both P1 & P2 levels:
  - 380 fixtures @ 8-foot utilizing (4) 4-foot T8 lamps per fixture
  - 25 fixtures @ 4-foot utilizing (2) 4-foot T8 lamps per fixture
- Ballasts are primarily Philips Advance 120 volt @ 0.98 amps per fixture
- Lamps are primarily Philips 741 series T8 lamps
- Energy consumption on the 8-foot fixture is approximately @ 118 - 120 watts per fixture
- Lamp colour through-out the facility is a mixture of:
  - 741 cool white series lamps
  - 735 and 730 warm white series lamps
- The Lamp mixture of warm white and cool white is a serious concern with regards to poor aesthetics. The under-ground parking facility at City Hall should consist strictly of 4100 Kelvin (colour temperature). Warm light sources have a low colour temperature and feature more light in the red / orange / yellow range. Light with a higher colour temperature (4100K) features more blue light and is referred to as "Cool White".

.../2

- Many of the lamps in the fixtures have failed, or are in the failure mode.
- Several fixtures exhibit broken or cracked sockets – This can lead to arching and/or melt-down – broken or cracked sockets should always be changed.
- As I understand it, the ballasts in these fixtures are approximately 12 years old, therefore it may be an ideal time to:
    - Re-ballast with more efficient energy saving technology products
    - Retrofit the fixtures to obtain maximum energy savings, with consideration to light levels
- Light levels – the following is a summary of light levels documented on P1 and P2 levels of the parking garage (in foot-candles):
    - Between fixtures: 13 – 9 – 11 – 12 – 10 – 16 – 6 – 13
    - Directly under fixtures: 48 – 40 – 48 – 50 – 45 – 46 – 36 – 45
    - The overall average of the above is in the area of 28 foot-candles.
    - The existing light levels are significantly higher than the required standards for under-ground parking structures.

RECOMMENDATIONS:

Lighting technology is now available in the T8 lighting systems as outlined below, which could be applied to the under-ground parking facility to achieve very compelling results in terms of energy savings and longer life products.

- T8 FO32/841 XP ECO lamps
- T8 universal voltage, high efficiency electronic ballasts, with lower ballast factors, parrallel-wired, instant start
- The input watts on the above technology is rated at:
    - 95-watts per 4-lamp fixture
    - 48-watts per 2-lamp fixture
- The T8 FO32/841 XP ECO lamp has @ rated life of 24,000 hours as opposed to 20,000 hours on standard T8 lamps
- Additionally, this proposal includes use of 841 series type T8 Lamps, which provide for:
    - Improved (CRI) colour rendering index
    - 5% more lumens than the existing 741 series type T8 lamps
- Although the system lumens will be slightly lower as a result of the lower ballast factor, it is recommended that this should be the desired result, as a strong case can be made that excessive light levels "result in waste" when considering these options for energy savings.
- I would recommend that the issue of lighting level be tested by initially retrofitting a few fixtures to determine the visual results.

This lighting retrofit is expected to provide energy savings of approximately $7,028.00 annually, and a further estimated maintenance cost avoidance savings of $3,600.00 per year during the payback period. The lighting retrofit upgrade is expected to result in 2.29 years simple payback period, based on the data utilized in the analysis documents. Additionally, the analysis documents indicate an overall reduction of 9.02 kilowatts of power resulting from use of the energy efficient lighting upgrades.

.../3

The lighting retrofit proposal for this facility also includes:

- Fixture cleaning for improved aesthetics and light output
- Disposal of replaced lamps and ballasts from your facilities is included in pricing
- 5-years warranty on the T8 electronic ballasts, including labour warranty – subject to warranty policy
- 3-years warranty on the T8 XP ECO lamps used in this lighting upgrade – subject to warranty policy
- Replacement of broken or cracked lamp-holder sockets

The significant features & benefits on the attached data sheets are highlighted below:

• Quoted Supply & Install Project Cost (Plus Taxes)	$24,346.00

• Expected annual electrical (energy) savings	$ 7,028.00
• Estimated annual cost avoidance during payback period	$ 3,600.00
• Total estimated annual saving during payback period	$10,628.00

• Expected monthly savings during payback period	$ 886.00
• *R.O.I. (Expected Simple Payback in Years)*	*2.29 Years*

NOTE: PROJECT SAVINGS IS BASED ON THE FOLLOWING FACTORS USED:

1. Hydro cost blended rate @ $0.089 per kilowatt hour
2. Lighting burn hours (utilization) as outlined in analysis documents for each location
3. Maintenance cost-avoidance resulting from upgraded lighting system regarding lamps, ballasts, maintenance labour, and applicable warranty on completion of the lighting retrofit

Please advise if you require any changes to the above data used in this overall lighting analysis.

Yours truly,

Gary England
Energy & Building Controls Operator

GE/cr

CITY OF KITCHENER - CITY HALL PARKING GARAGE - LIGHTING UPGRADE QUOTE

CITY OF KITCHENER - CITY HALL - PARKING GARAGE

Detailed Scope of Work & Pricing Analysis Document

06-Jul-05

Part A: Bill of Materials:			
Total Cost of Materials from Gerrie Electric Wholesale: (Refer to attached Schedule 2) (PST & GST EXTRA -- SEE SUMMARY BELOW)			$11,929.00
Part A: Miscellaneous Consumables: Conduit, Hangars, Hooks, Rods, Marrettes, wire, fasteners, connectors, cleaning solutions, cloths, labelling, etc.			$690.00
Part B: Total Cost of Project Labour			$8,935.00
Part C: Project Audit & License Fee			
Audit / Consulting Fee: $1,850.00	Permit / License Fee: N/A	Total Fees:	$1,850.00
Part D: Disposal Fee			$942.00
Total Project Cost: Parts: A, B, C, D		**Taxes Extra**	**$24,346.00**
		PST on Part 'A' Materials Only	$954.32
		GST on Total Project Cost	$1,704.22
SUMMARY		**Total Project Cost Including Taxes**	**$27,004.54**

Part E: Notes:	
Cost Avoidance: Is an estimate based on the failure and replacement rate of existing lighting system	
Cost Avoidance Estimate (Accuracy Range +/- 20%)	$3,600.00
Definition: Hydro Savings: Includes demand and KWH consumption	
Annual Hydro Savings Estimate	$7,028.00
Part F: Summary	
Total Project Price: Parts A, B, C, D	**$24,346.00**
Estimated Monthly Savings:	$885.67
Payback Period (Years):	2.29

NOTES:

1. For turn-key Project Supply and Install, the Purchase Order from the City of Kitchener must be forwarded to Gerrie Electric for the Total Project Cost as shown in the Pricing Summary above
2. For Supply Only (Where the City of Kitchener installs the Project) the Purchase Order for the Materials (Plus PST & GST) and the Audit / Consulting Fee (Plus GST only), must be forwarded to Gerrie Electric

DETAILED BILL OF MATERIAL & PRICING - CITY HALL PARKING GARAGE - LIGHTING UPGRADE

FOR COST AVOIDANCE & ENERGY SAVINGS

CITY OF KITCHENER - City Hall Parking Garage, Kitchener, Ontario

Part A: Bill of Materials (Schedule 2)

Section 1: Current Configuration			Section 2: Proposed Retrofit Configuration		Section 3: Pricing By Gerrie Electric Wholesale				
Retrofit Location	Existing Fixture Type	Quantity	Description	Part Number	Quantity	Gerrie Electric Item Cost	Sub Total $ (Qty. x Cost)	Gross Margin	Total Cost
CITY OF KITCHENER	FLUORESCENT FIXTURES	1570	FLUORESCENT FIXTURES	T8 FO32/841 XP ECO Lamps	1570	$1.95	$3,061.50	0.95	$3,222.63
City Hall - Parking Garage	T8 32 Watt Lamps		T8 FO32/841 XP ECO Lamps	CODE #21767					
CITY OF KITCHENER	FLUORESCENT FIXTURES	380	FLUORESCENT FIXTURES	QHE4X32T8 UNV ISL SC	380	$20.56	$7,812.80	0.95	$8,224.00
City Hall - Parking Garage	Ballasts - 118 System Watts		Ballasts - 95 System Watts	CODE #49867					
CITY OF KITCHENER	FLUORESCENT FIXTURES	25	FLUORESCENT FIXTURES	QHE2X32T8 UNV ISL SC	25	$18.33	$458.25	0.95	$482.37
City Hall - Parking Garage	Ballasts - 60 System Watts		Ballasts - 48 System Watts	CODE #49863					

PROJECT NAME:
City of Kitchener – City Hall Parking Garage Lighting Upgrade – P1 & P2 Levels

Prepared by: Joe Moser 06-Jul-05

Total Cost of Materials (Less Taxes)	$11,929.00
Total PST	$954.32
Total GST	$835.03
Total Materials Cost From Gerrie Electric (Including Taxes) (Transfer amount to Detailed Scope of Work & Analysis Document)	$13,718.35

Appendix C

ENERGY ANALYSIS & SCOPE OF WORK DETAILS

Kitchener City Hall - Parking Garage Lighting

CITY OF KITCHENER - CITY HALL PARKING GARAGE

LIGHTING UPGRADE - ENERGY SAVINGS - RETROFIT EXISTING FIXTURES

Parking Garage, P1 & P2 Levels

RETROFIT LOCATION	EXISTING FIXTURE TYPE	FIXT QTY	LAMPS PER FIXT	LIGHTING USEAGE HRS/YR	WATTS PER FIXT	PROPOSED RETROFIT CHANGES	UNIT QTY	WATTS PER UNIT	TOTAL WATTS SAVED	ANNUAL HYDRO SAVINGS
PARKING GARAGE - P1 LEVEL	T8 1X8 4-FOOT 4-LAMP STRIP	191	4	8760	118	RETROFIT FIXTURES TO T8 ELECTRONIC QHE LBF BALLAST 4 T8 FO32/841 XP ECO LPS	191	95	4393	$3,424.96
PARKING GARAGE - P1 LEVEL	T8 1X4 4-FOOT 2-LAMP STRIP	6	2	8760	59	RETROFIT FIXTURES TO T8 ELECTRONIC QHE LBF BALLAST 2 T8 FO32/841 XP ECO LPS	6	48	66	$51.46
PARKING GARAGE - P2 LEVEL	T8 1X8 4-FOOT 4-LAMP STRIP	189	4	8760	118	RETROFIT FIXTURES TO T8 ELECTRONIC QHE LBF BALLAST 4 T8 FO32/841 XP ECO LPS	189	95	4347	$3,389.10
PARKING GARAGE - P2 LEVEL	T8 1X4 4-FOOT 2-LAMP STRIP	19	2	8760	59	RETROFIT FIXTURES TO T8 ELECTRONIC QHE LBF BALLAST 2 T8 FO32/841 XP ECO LPS	19	48	209	$162.94
TOTAL FIXTURE QUANTITY		405					405	Kw Savings	9.02	$7,028.45

Cost Avoidance is Based on Estimated Failure and Replacement Rate of Existing Lighting System

Blended Hydro Rate Used = $0.089/ KWh (INCLUDES DEMAND & KWH CONSUMPTION)

Estimated Utilization Hours -- Subject to Client Approvals

120 VOLT LIGHTING SYSTEM

Prepared By: Joe Moser, July 6, 2005

SYLVANIA LIGHTING SERVICES

TOTAL SUPPLY & INSTALL PROJECT PRICE QUOTATION	$24,346.00
ESTIMATED ANNUAL HYDRO SAVINGS	$7,028.45
ESTIMATED ANNUAL COST AVOIDANCE DURING PAYBACK PERIOD	$3,600.00
PROJECTED ANNUAL SAVINGS DURING PAYBACK PERIOD	$10,628.45
PAYBACK PERIOD IN YEARS BASED ON ABOVE DATA UTILIZATION	2.29
ESTIMATED MONTHLY SAVINGS - ENERGY COSTS & COST AVOIDANCE	$885.70

ntario's Electricity Utilities are joining forces to ave you money

Conserving electricity can help us to reduce the need to build new generation stations in the future.

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ENERGUIDE FOR HOUSES

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EXPIRY DATE: March 31, 2006

File number

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imers utdoor - pool & hot tub

id at point of purchase on the timers listed below purchased at Canadian Tire Associate tres between Oct. 1, 2005 and Dec. 31, 2005. One coupon per person. No copies or similes. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed en you forward this coupon to Lighten Your Electricity Bill, t. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 January 15, 2006. **EXPIRY DATE: Dec. 31, 2005**

-8815-0, 052-8819-2, 052-8822-2, 052-8829-8, 052-8845-8, -8857-0, 052-8859-6, 052-8863-4, 052-8882-8

* 2 3 6 6 *

ceiling fan

Valid at point of purchase on any ceiling fan purchased at Canadian Tire Associate Stores between Oct. 1, 2005 and Dec. 31, 2005. One coupon per product. No copies or facsimiles. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed when you forward this coupon to Lighten Your Electricity Bill, 2 St. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 by January 15, 2006.

EXPIRY DATE: Dec. 31, 2005

* 2 3 1 1 *

Seasonal LED Lights

Valid at point of purchase on any Seasonal LED Lights purchased at Canadian Tire Associate Stores between Oct. 1, 2005 and Dec. 31, 2005. One coupon per product. No copies or facsimiles. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed when you forward this coupon to Lighten Your Electricity Bill, 2 St. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 by January 15, 2006.

EXPIRY DATE: Dec. 31, 2005

* 2 3 2 2 *

Compact Fluorescent Lights

Valid at point of purchase on any package of Compact Fluorescent Lights purchased at Canadian Tire Associate Stores between Oct. 1, 2005 and Dec. 31, 2005. One coupon per product. No copies or facsimiles. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed when you forward this coupon to Lighten Your Electricity Bill, 2 St. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 by January 15, 2006. **EXPIRY DATE: Dec. 31, 2005**

* 2 3 3 3 *

Programmable Thermostat

Valid at point of purchase on any Programmable Thermostat purchased at Canadian Tire Associate Stores between Oct 1, 2005 and Dec 31, 2005. One coupon per product. No copies or facsimiles. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed when you forward this coupon to Lighten Your Electricity Bill, 2 St. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 by January 15, 2006. **EXPIRY DATE: Dec. 31, 2005**

* 2 3 4 4 *

Timers Indoor - light & appliance

Valid at point of purchase on the indoor timers listed below purchased at Canadian Tire Associate Stores between Oct. 1, 2005 and Dec. 31, 2005. One coupon per product. No copies or facsimiles. Taxes payable on price before rebate. **To the Retailer:** You will be reimbursed when you forward this coupon to Lighten Your Electricity Bill, 2 St. Clair Avenue East, Suite 1206, Toronto, Ontario, M4T 2T5 by January 15, 2006. **052-8814-2, 052-8827-2, 052-8817-6, 052-8837-8, 052-8825-6, 052-8838-6**

EXPIRY DATE: Dec. 31, 2005

* 2 3 5 5 *

"Lighten Your Electricity Bill"

powerWISE

Money Saving Coupons

from

KITCHENER WILMOT HYDRO INC.

CANADIAN TIRE

See the www.powerwise.ca web site for more ways to save energ

Compact Fluorescent Lights (CFLs)

Use up to 75% less electricity and produce the same light output as incandescent bulbs. CFLs last up to 8 times longer than incandescent bulbs and come in a range of sizes and shapes to fit almost any fixture indoors or out. Some CFLs can even be used with dimmers.

Programmable Thermostats

Programming your thermostat is the #1 way to reduce your energy bill. These units automatically raise and lower the temperature to match your schedule and lifestyle. Lowering your winter temperature by 1 degree overnight will save 3% on your energy bill. Raising your summer temperature by 1 degree will also save.

Indoor & Outdoor Timers

Use electricity only when you need it. Many people leave lights on when they leave for work, or leave the air conditioner on all day. Timers can automatically turn on and off lights, air conditioners, pool pumps, and holiday lights so that the house is ready when you come home.

Ceiling Fans

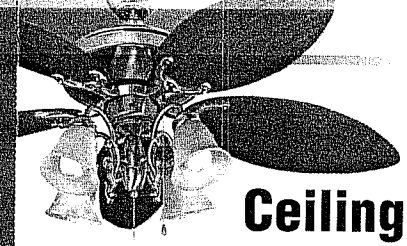
Saves you money several ways. You can create a cool breeze with or without air conditioning. The wind chill effect created can make you feel up to 7 degrees Celsius cooler. In the winter, set your ceiling fan on reverse to push the warm air down, allowing you to lower your thermostat and save energy.

Seasonal LED Lights

You can light up your life for holidays at a fraction of the cost. Seasonal light emitting diode (LED) strings use up to 90% less energy and have a bulb life of 200,000 hours. They have no filaments or glass bulbs to break and produce very little heat, reducing the risk of fire.

EnerGuide for Houses

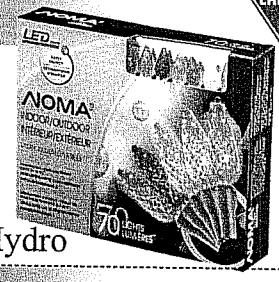
This home energy evaluation will help you plan energy efficiency retrofits that will *save you money*. A qualified energy advisor will evaluate where energy is being wasted. You will receive an EnerGuide for Houses rating along with a customized report with recommended improvements. Homeowners who complete recommended energy efficiency retrofits may qualify for a grant from the Government of Canada.



SAVE $5
Ceiling Fan
Kitchener-Wilmot Hydro

CANADIAN TIRE

SAVE $5
LED Lights - Seasonal
Kitchener-Wilmot Hydro



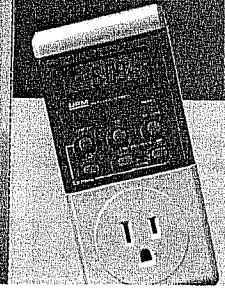
CANADIAN TIRE

SAVE $3 /pack
Compact Fluorescent Lights
Kitchener-Wilmot Hydro

CANADIAN TIRE

SAVE $15
Programmable Thermostat
Kitchener-Wilmot Hydro

CANADIAN TIRE



SAVE $1
Timers
Indoor - light and appliance
Kitchener-Wilmot Hydro

"Lighten Your Electricity Bill"

save money with these coupons at

CANADIAN TIRE

from Oct. 1, 2005 to Dec. 31, 2005

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CANADIAN TIRE

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SAVE $20

Advice you can live with

Retro Limited

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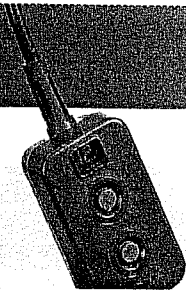
RETROFIT

Residential Efficiency Training Resources Ontario

CANADIAN TIRE



SAVE $4
Timers
Outdoor - pool and hot tub
Kitchener-Wilmot Hydro

TOTAL RESOURCE COST TEST ASSESSMENT OF THE '2005 LIGHTEN YOUR ELECTRICITY BILL' PROGRAM

For
Kitchener Wilmont Hydro

By
SeeLine Group Inc.
416-703-8695

February 2006
Revised

SeeLine group inc.

1.0 Introduction

Energyshop.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, participating utilities provided their customers with a bill insert containing valuable energy-savings coupons to help them save on their electricity bill.

Customers from each of the 32 LDCs, 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 Energyshop.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 Energyshop.com.

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

2.0 Program Objectives

As outlined by Energyshop.com, this program was designed to achieve the following objectives:

- To help participating utilities achieve energy conservation and demand management results for their 2005 program year.
- Increase public awareness of energy conservation and demand management in the province of Ontario.
- Contribute to the overall development of an energy conservation culture in Ontario.

3.0 Program Results

3.1 Technology Savings Assumptions

SLG used many of the technology savings identified by the OEB in its Total Resource Guide.[1] For those technologies without defined savings, every effort was made to develop reasonable assumptions, defensible under the OEB guidelines. The following provides a brief outline of the savings assumptions used for this assessment.

[1] http://www.oeb.gov.on.ca/documents/cases/RP-2004-0203/cdm_assumptionsmeasureslist_141005.xls

Compact Fluorescent Bulbs

The 2005 program provided customers with a $3 coupon on any pack of compact fluorescent bulbs. Using store data provided by Energyshop.com, the number of bulbs sold by wattage was used to develop the average wattage of bulb sold. Based on this information, it was assumed that the average wattage sold during this program was 15 watts. Additional detail can be found in Appendix A.

LED Seasonal Lights

Like the CFLs, customers were provided with a $5 coupon for the purchase of any package of LED seasonal lights. Using store data provided by Energyshop.com, average size of LED light string sold during the campaign was determined. Based on this information, it was assumed that the average string sold had 59 bulbs.

Using the information in the OEB's TRC Guide, LED savings assumptions were adjusted to reflect a string with 59 bulbs as opposed to the 25 bulbs per string. Additional detail can be found in Appendix A.

With guidance from Energyshop.com, it was also assumed that 50% of the LED lights sold were those replacing a 5 watt Christmas string and the remaining 50% were used to replace mini lights which yields a slightly lower savings.

Ceiling Fans

At the time of this analysis, SLG felt there was not enough significant evidence to support a savings estimate for ceiling fans.

Programmable Thermostats

SLG used the savings estimate outlined in the OEB's TRC Guide. Participant rates were adjusted to account for market share. Using data provided by Energyshop.com and other studies, the following province wide fuel share assumptions were used:

Electrical Space Heating	17.3%
Electrical Space Cooling (central air)	45.0%

Indoor Timers

In the absence of OEB savings estimates for indoor timers, SLG developed savings estimates for timers used on indoor lighting and air conditioners. Detailed information can be found in Appendix B.

The savings estimate for timers for indoor lighting is considered to be small. It assumes that the timer is used on a 60 W bulb and provides savings during the winter peak, winter mid peak and summer peak periods. In total, the timer is expected to provide approximately 98 kWh savings.

The savings estimate developed for timers used on unit air conditioners is based on the owner setting the timer to bring the air conditioner on a few hours before he or she

arrives home. Based on this assumption, a timer used for a unit air conditioner would provide approximately 108 kWh in annual savings.

Based on discussions with EnergyShop.com it was assumed that 50% of the timers would be used for lighting and the remaining 50% would be used for air conditioners. SLG made an additional assumption and assumed that it was unlikely that all of the timers would be used appropriately; participation rates were reduced by 30%.

Outdoor Timers

The savings estimate for the outdoor timer is based on information from the OEB's TRC Guide.

EnerGuide for Homes

Based on information provided by Energyshop.com the potential savings for space heating load is estimated to be 250 kWh. Using the participant data provided by EnergyShop.com, SLG made adjustments to account for uptake on the audit recommendations and fuel market share. No additional fuel savings were considered for this analysis.

3.2 Summary of Program Participation

Technology	Number of Participants	Free Ridership
Compact Fluorescent Bulbs	3,114	10.0%
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	650	5.0%
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights	650	5.0%
Programmable Thermostat - Space Heating, Existing Single Family Detached	68	10.0%
Programmable Thermostat - Space Cooling, Existing Single Family Detached	176	10.0%
Timer - Outdoor Light	149	10.0%
Timer - Indoor – Light	23	10.0%
Timer - Indoor - Air Conditioners	23	10.0%
Ceiling Fan	63	10.0%
EnerGuide for Existing Homes - Space Heating	0	10.0%

* Adjusted for fuel share and usage uptake

3.3 Summary of Net Program Savings

Technology	Summer Peak kW Savings	Annual kWh Savings in Year	Measure Life	Lifecycle kWh Savings
Compact Fluorescent Bulbs	0	292,568	4	1,170,272
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	0.00	27,480	30.00	824,400
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights	0.00	10,517	30.00	315,511
Programmable Thermostat - Space Heating, Existing Single Family Detached	0.00	89,497	18.00	1,610,953
Programmable Thermostat - Space Cooling, Existing Single Family Detached	25.88	25,256	18.00	454,611
Timer - Outdoor Light	0.00	39,157	20.00	783,144
Timer - Indoor - Light	1.22	2,030	20.00	40,605
Timer - Indoor - Air Conditioners	3.60	2,252	20.00	45,043
Ceiling Fan	0.00	-	20.00	-
EnerGuide for Existing Homes - Space Heating	0.00	39	25.00	973
Total	**30.70**	**488,797**		**5,245,513**

3.4 Summary of Total Resource Cost Test Results

Technology	TRC Benefits	Incremental Equipment Costs	Utility Program Costs	TRC Net Benefits	TRC B/C Ratio
Compact Fluorescent Bulbs	$71,299	$5,605	$ -	**$65,694**	**12.72**
LED Christmas Lights (indoor or outdoor) Replacing 5w Christmas Lights C-7 (25 Lights)	$25,578	$1,235	$-	**$24,343**	**20.71**
LED Christmas Lights (indoor or outdoor) Replacing Incandescent Mini Lights	$9,789	$1,235	$-	**$8,554**	**7.93**
Programmable Thermostat - Space Heating, Existing Single Family Detached	$61,345	$3,662	$-	**$57,683**	**16.75**
Programmable Thermostat - Space Cooling, Existing Single Family Detached	$30,586	$9,526	$-	**$21,060**	**3.21**
Timer - Outdoor Light	$29,105	$2,682	$-	**$26,423**	**10.85**
Timer - Indoor - Light	$2,148	$145	$-	**$2,004**	**14.83**
Timer - Indoor - Air Conditioners	$3,533	$145	$-	**$3,388**	**24.38**
Ceiling Fan	$-	$2,381	$-	**$(2,381)**	**0.00**
EnerGuide for Existing Homes - Space Heating	$31	$23	$-	**$8**	**1.32**
Program Costs	$-	$-	$15,316	**$(15,316)**	**0.00**
Total	**$233,414**	**$26,639**	**$15,316**	**$191,459**	**5.56**

Appendix A

Compact Fluorescent Bulb and LED Light Details

SeeLine Group Inc.

Data provided by Energyshop.com

CFL Sales - Ontario

Product Number	Description	Watts	Pack Size	Units Sold	Bulbs Sold	Ave # of bulbs	Average Wattage
052-5109-0	COMPFL-REPL.13W 2700	13	1	3,510	3,510		45630
052-5119-6	COMPFL-REPL.9W 4100	9	1	794	794		7144.2
052-5120-0	CFL 13W SPIRL 3PK	13	3	79,920	239,760		3116880
052-5121-8	CFL 26W SPIRL 3PK	26	3	60,480	181,440		4717440
052-5124-2	13W MINI 6PK NOMA	13	6	41,310	247,860		3222180
052-5125-0	26W MINI NOMA	26	1	4,644	4,644		120744
052-5126-8	10W MINI 2PK GE	10	2	10,800	21,600		216000
052-5127-6	26W MINI 2PK GE	26	2	15,390	30,780		800280
052-5128-4	CFL 10W SPIRL 3PK	10	3	32,940	98,820		988200
052-5135-6	32W MINI GE	32	1	1,620	1,620		51840
052-5137-2	45W MINI GE	45	1	3,024	3,024		136080
052-5140-2	TRI 15/26/40 NOMA	40	1	1,890	1,890		75600
052-5141-0	TRI 12/23/32 MINI GE	32	1	1,620	1,620		51840
052-5144-4	DIMMABLE 29W BIAX GE	29	1	216	216		6264
052-5146-0	13W MINI BLACK NOMA	13	1	2,754	2,754		35802
052-5153-2	13W MINI RED NOMA	13	1	3,240	3,240		42120
052-5157-4	13W MINI GREEN NOMA	13	1	3,348	3,348		43524
052-5159-0	13W MINI BLUE NOMA	13	1	3,456	3,456		44928
052-5167-0	TUBE-CIRCLNE12"32WKB	32	1	540	540		17280
052-5168-8	TUBE-CIRCLNE8"22WK&B	22	1	918	918		20196
052-5176-8	13W MINI 2PK GE	13	2	32,454	64,908		843804
052-5182-2	CFL 12/20/26W TRILIT	26	1	3,780	3,780		98280
052-5183-0	COMPFL 26W SW DIMMBL	26	1	1,620	1,620		42120
052-5189-8	11W MINI BUG LGHT GE	11	1	540	540		5940
052-5190-2	CFL BUG LIGHT 13W	13	1	2,052	2,052		26676
052-5191-0	CFL BUG LIGHT 23W	23	1	864	864		19872
052-5192-8	9W NAT/COOL 2PK NOMA	9	2	13,554	27,108		243972
052-5193-6	13W NAT/COOL 2PKNOMA	13	2	25,380	50,760		659880
052-5194-4	23W NAT/COOL 2PKNOMA	23	2	19,440	38,880		894240
052-5195-2	10W MINI NOMA	10	1	2,160	2,160		21600
052-5196-0	13W MINI NOMA	13	1	4,320	4,320		56160
052-5331-8	COMPFL 9WG25 3PK	9	3	1,458	4,374		39366
052-5332-6	COMPFL 7W A-LINE	7	1	3,186	3,186		22302
052-5333-4	COMPFL 15W R30	15	1	2,268	2,268		34020
052-5334-2	COMPFL 23W PAR38	23	1	1,890	1,890		43470
052-5335-0	COMPFL 15WR30 2PK	15	2	2,484	4,968		74520
052-5352-8	R20 11W FLD NOMA	11	1	1,890	1,890		20790
052-5353-6	R20 11W FLD GE	11	1	1,080	1,080		11880
052-5355-2	R30 15W FLD GE	15	1	1,998	1,998		29970
052-5356-0	R30 15W FLD DIM GE	15	1	540	540		8100
052-5357-8	PAR38 26W FLD 2PK NO	26	2	2,160	4,320		112320
052-5358-6	PAR38 26W FLD GE	26	1	2,592	2,592		67392
052-5360-8	PAR38 23W FLD RED NO	23	1	1,998	1,998		45954
052-5361-6	PAR38 23W FLD GRN NO	23	1	1,620	1,620		37260
052-5362-4	PAR38 23W FLD BLU NO	23	1	1,242	1,242		28566
052-5363-2	PAR38 23W FLD YLW NO	23	1	594	594		13662
052-5364-0	R40 26W FLD NOMA	26	1	918	918		23868
052-5365-8	R40 26W FLD GE	26	1	540	540		14040
052-5366-6	R40 26W FLD DIM GE	26	1	270	270		7020
052-5367-4	A-LINE 11W GE	11	1	1,026	1,026		11286
052-5368-2	A-LINE 15W NOMA	15	1	1,620	1,620		24300
052-5369-0	A-LINE 15W GE	15	1	2,700	2,700		40500
052-5370-4	G25 9W NOMA	9	1	1,188	1,188		10692
052-5371-2	G25 9W GE	9	1	972	972		8748
052-5372-0	G30 15W GE	15	1	378	378		5670
052-5373-8	CHANDLR 5W MED GE	5	1	540	540		2700
052-5374-6	CHANDLR 7W MED NOMA	7	1	756	756		5292
052-5375-4	CHANDLR 7W MED GE	7	1	540	540		3780
052-5376-2	CHANDLR 9W MED GE	9	1	756	756		6804
052-5377-0	CHANDLR 5W CAN GE	5	1	540	540		2700
052-5378-8	CHANDLR 7W CAN NOMA	7	1	756	756		5292
052-5379-6	CHANDLR 7W CAN GE	7	1	648	648		4536
052-5382-6	CHANDLR 9W CAN GE	9	1	1,350	1,350		12150
052-5390-6	9W ULTRAMINI 3PK NOM	3	3	7,668	23,004		69012
052-5391-4	13W ULTRAMINI 3PK NO	13	3	12,042	36,126		469638
052-5392-2	13W ULTRAMINI 6PK NO	13	6	2,754	16,524		214812
				443,540	**1,174,538**	2.65	18,204,928
							15.499653 average watts

Data provided by Energyshop.com

SLEDs

Total Units Sold

50524

Lights / string	%age	Program sales	Whole number	Average Bulb per String
25	15%	7384.266944	7384	3.653841216
35	22%	11311.7249	11314	7.836085259
70	52%	26025.92566	26026	36.05840386
100	11%	5802.082488	5802	11.4838146
				59.03214493

Appendix B

Technology Savings Data

TOTAL RESOURCE COST TEST																					
Program	Participant/Technology Information				Unit Energy Savings																
									Electricity Savings												
									Winter			Summer			Shoulder						
	Measure Life	Distribution Line Losses	Unit Incremental Costs	Program Delivery Costs	Unit Water Savings m3 (000's litres)	Unit Propane Savings m3 (000's litres)	Unit Oil Savings litres	Unit Diesel Savings m3	On Peak	Mid Peak	Off Peak	On Peak	Mid Peak	Off Peak	Mid Peak	Off Peak	Demand Type (C, DR)	Peak Demand Savings (Summer)	Comments
CFL Screw-In 15W	4	0.00%	$2.00	$ -	0.00	0.00	0.00	0.00	15.5	7.7	20.3	0.0	11.7	14.0	17.5	17.7	C	0.000	Average wattage of bulb sold during campaign (see Appendix A)
LED Christmas Lights (indoor or outdoor) Replacing 5w Ch	30	0.00%	$2.00	$ -	0.00	0.00	0.00	0.00	13.4	8.9	22.3	0.0	0.0	0.0	0.0	0.0	C	0.000	Savings based on 59 bulbs per string. Refer to Appendix A
LED Christmas Lights (indoor or outdoor) Replacing Incand	30	0.00%	$2.00	$ -	0.00	0.00	0.00	0.00	5.1	3.4	8.5	0.0	0.0	0.0	0.0	0.0	C	0.000	Savings based on 59 bulbs per string. Refer to Appendix A
Programmable Thermostat - Space Heating, Existing Singl	18	0.00%	$60.00	$ -	0.00	0.00	0.00	0.00	202.1	231.0	541.8	0.0	0.0	0.0	219.0	272.4	C	0.000	
Programmable Thermostat - Space Cooling, Existing Singl	18	0.00%	$60.00	$ -	0.00	0.00	0.00	0.00	0.0	0.0	0.0	28.4	42.5	88.2	0.0	0.0	C	0.163	
Timer - Outdoor Light	20	0.00%	$20.00	$ -	0.00	0.00	0.00	0.00	43.3	21.6	56.9	0.0	32.9	39.0	48.8	49.5	C	0.000	
Timer - Indoor - Light	20	0.00%	$7.00	$ -	0.00	0.00	0.00	0.00	14.5	7.3	19.1	0.0	11.0	13.1	16.4	16.6	C	0.059	
Timer - Indoor - Air Conditioners	20	0.00%	$7.00	$ -	0.00	0.00	0.00	0.00	0.0	0.0	0.0	19.4	29.1	60.3	0.0	0.0	C	0.174	
Ceiling Fan	20	0.00%	$42.00	$ -	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	0.000	
EnerGuide for Existing Homes - Space Heating	25	0.00%	$150.00	$ -	0.00	0.00	0.00	0.00	34.5	39.4	92.4	0.0	0.0	0.0	37.3	46.4	C	0.000	
				$ -															

KITCHENER WILMOT HYDRO INC.

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Concerned About Rising Energy Costs?

Register for Natural Resources Canada's
Office of Energy Efficiency
"Dollars to $ense" Workshop – "Spot the Energy Savings Opportunities"

Becoming more energy efficient helps your business remain competitive.

Natural Resources Canada and Kitchener-Wilmot Hydro Inc.
are hosting an all day "Dollars to $ense" Workshop
on
Thursday, June 23, 2005 from 8:30 a.m. to 4:00 p.m.
Four Points Sheraton – Kitchener Suite#2
105 King St E, Kitchener, ON

Spot the Energy Savings Opportunities

Learn through hands-on demonstrations how to identify opportunities in your electrical and thermal processes, from point of purchase to end-use including:

- **Reviewing energy basics**
- **Analyzing the incremental cost of energy, and identifying up-front opportunities**
- **Discovering how to minimize energy lost through distribution and conversion**
- **Learning energy-saving factors about heating, ventilating and air conditioning, refrigeration and lighting systems**
- **Picking up tips on operating and maintaining boilers, compressors, motors, pumps, fans and more**

Over the past six years, more than 6,500 Canadians have found ways to save energy in their companies and organizations by attending "Dollars to $ense" workshops, sponsored by Natural Resources Canada's Office of Energy Efficiency. In addition to learning from highly trained instructors, workshop participants will receive instructional materials, which they can take back to their workplace and share with colleagues.

Kitchener-Wilmot Hydro Inc. is proud to sponsor this workshop for our commercial customers at a reduced fee of $25.00 (regular fee is $340.00). Continental breakfast and lunch will be included. As space is limited, we recommend you register early (one participant per company).

To register, please contact Penny Tucker at Kitchener-Wilmot Hydro Inc. at (519) 745-4771 extension 218.

KITCHENER/WILMOT HYDRO INC.

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Learn to Monitor and Track Energy Costs

Register for Natural Resources Canada's
Office of Energy Efficiency
"Energy Monitoring and Tracking Workshop" and "Energy Master Plan Workshop"

Becoming more energy efficient helps your business to remain competitive.

Natural Resources Canada and Kitchener-Wilmot Hydro Inc.
are hosting an all day workshop entitled "Energy Monitoring and Tracking and Energy Master Plan"
on
Tuesday, November 8, 2005 from 8:30 a.m. to 4:00 p.m.
(Continental Breakfast served at 8:00 a.m.)
Holiday Inn – Michigan Room
30 Fairway Rd S, Kitchener

Target New Energy Saving Opportunities

Learn to gather and analyze information to get the greatest value for your energy dollar:

- **Pinpoint energy waste**
- **Forecast savings and chart gains**
- **Integrate energy management into every aspect of your organization**
- **Discover low-cost opportunities for saving money and options for financing retrofits and upgrades**
- **Instill an energy-efficient culture – take energy management from the boardroom to the shop floor**

The following are some participant comments from our previous workshop held in June:

- *Hassan Alemi from AirBoss Rubber Compounding Division writes, "I really appreciate the time that you spent to provide such an easy to understand binder including master plan flowcharts, slides and guidebook as well as an impressive presentation at almost no charge."*
- *Paul Finnigan from Borden Cold Storage Limited states, "The speakers presented good information on new products that will lead to energy conservation."*

Kitchener-Wilmot Hydro Inc. is proud to sponsor this workshop for our commercial customers at a reduced fee of $25.00 (regular fee is $340.00). Continental breakfast and lunch will be included. As space is limited, we recommend you register early (one participant per company).

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