



EB-2005-0203
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CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

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ONTARIO ENERGY BOARD
08/99

January 14, 2005

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
26th Floor
Toronto, ON M4P 1E4

Attn: John Zych, Board Secretary

Dear Mr. Zych: 70 1711 199

Re: RP 2004-0203/EB-2004-522

Enclosed please find an electronic copy of our final submission of our EarthWise program plan in response to the Conservation and Demand Management program requirement. The hard copies were sent via priority post on January 12, 2005.

Sincerely,

CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

Sharon Parkin
Executive Assistant



EarthWise

**Conservation and
Demand Management Programs**

- to be Delivered by -

Energy+

Cambridge and North Dumfries Hydro Inc.



we deliver.

Introduction

Cambridge and North Dumfries Hydro Inc. is a local distribution company that serves over 47,000 customers in the City of Cambridge and the Township of North Dumfries. Our Vision is to be a leader in innovation and the preferred choice in the delivery of energy.

We fully support the government initiative to foster a new “electricity conservation” culture in the Province of Ontario. This forward thinking initiative will empower the electricity industry to add value to benefit our customers and expand on our ability to deliver customer service excellence.

The attached plan outlines, by general customer type, a description of the new initiatives Cambridge and North Dumfries Hydro Inc. plans to introduce for its delivery of the Conservation and Demand Management Programs.

Cambridge and North Dumfries Hydro Inc. hereby requests the Board's approval and final order authorizing its Conservation and Demand Management Plan, subject to approval of an order for distribution rates including the final tranche of the market adjusted revenue requirement (MARR). Cambridge and North Dumfries Hydro Inc. submits that this plan is appropriate and effective in discharging Cambridge and North Dumfries Hydro Inc.'s obligation to make Conservation and Demand Management investments in an amount equivalent to its final MARR installment.

Cambridge and North Dumfries Hydro Inc. hereby requests the Board's approval and final order authorizing its Conservation and Demand Management Plan as being appropriate and effective in discharging its Conservation and Demand Management Plan investment obligation, subject to issuance in due course of an order for distribution rates including the final tranche of the market adjusted revenue requirement (MARR).

Contact

Questions and/or clarification on Cambridge and North Dumfries Hydro Inc.'s Conservation and Demand Management proposal may be directed to:

Cambridge and North Dumfries Hydro Inc.

John Grotheer

President and CEO

1500 Bishop Street, P. O. Box 1060

Cambridge, Ontario

N1R 5X6

Telephone: 519-621-8405 Ext. 2355

Facsimile: 519-621-0383

Email: jgrotheer@camhydro.com

Priority: Consumer Education and Development of Conservation Culture
Focus: Total Customer Base

- Leverage on our registered wordmark “EarthWise” to brand our programs in print, website and other media.
- In-house develop and partnering with other organizations (ie: Canadian Energy Efficiency Alliance) to create and distribute customer bill stuffers.
- Using print media to create awareness advertising and articles relating to conservation and demand management.
- Provide a speaker bureau to local organizations such as service clubs and schools to present and promote the conservation culture.
- Intensive and detailed internal education of all staff. As our corporate ambassadors, we will ready each employee to be a “mobile education resource” for promoting a conservation culture throughout our community.
- Program planning, management and co-ordination of overall programs.
- Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$100,000	\$125,000	\$60,000	\$285,000
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$100,000	\$125,000	\$60,000	\$285,000

Priority: Conservation and Demand Management Initiatives
Focus: Residential Customer Base

- Social Services operated by the Region of Waterloo provides heating assistance to residents by way of the “Heat Bank”.

A pilot will be offered to provide free home energy assessments to Heat Bank recipients. These assessments will be provided through World-Wide Opportunities for Women who have been operating the Home Energy Saver Program since 1999.

Focus: Residential Customer Base - Continued

- In partnership with a local organization REEP (Residential Energy Efficiency Project) we will fund a new special enhanced home inspection program, which includes a targeted electrical inventory. This newly developed custom program will include subsidized fees, a separate electricity report along with an EnerGuide for Houses report, a lighting kit installed in each home and participants may be provided with energy saving product coupons.

As an extension of this program a new marketing campaign will include public workshops and links to the “One Tonne Challenge” initiative.

Grants will be provided to homeowners who convert to a solar system for hot water heating in place of an electric water heater, the purchase of ground source heat pumps and the participation in the EnerGuide for Houses (EGH) Retrofit Incentive awards.

- In partnership with the Region of Waterloo and the Co-operative and Non-Profit community-housing portfolio we will provide funding for targeted appliance retrofits (ie: Safe T Elements) and smart thermostats from “Log-One Ltd.” in electrically heated residential - apartment and townhouses.
- To encourage consumer awareness, we will embark on a Christmas light exchange program by providing LED Christmas light sets in exchange for older less efficient lighting strings.
- To facilitate the removal from service of old inefficient refrigerators and freezers we will provide a buy-back and proper disposal program.

- Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$469,000	\$521,000	\$0	\$990,000
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$469,000	\$521,000	\$0	\$990,000

Priority: Conservation and Demand Management Initiatives
Focus: Small Business Customer Base

- In partnership with the Chamber of Commerce we plan to launch events geared to this market segment to bring the message and the positive economic impacts.
- An on-site audit program will be implemented to provide feedback on retrofit projects and operational changes that will reduce energy consumption.
- Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$30,000	\$45,000	\$25,000	\$100,000
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$30,000	\$45,000	\$25,000	\$100,000

Priority: Conservation and Demand Management Initiatives
Focus: Mid to Large Scale Commercial/Industrial Customer Base

- ENERconnect, our settlement services provider has created a new product called eMeter Data.

We will provide this Internet based service that will initially allow 200 of our largest customers to review their energy consumption for prior periods.

These 200 customers represent approximately 55% of our sales volume.

These companies will receive assistance in interpretation of the data and financial assistance for consulting services for programs/projects to improve their demand and consumption profiles.

- An investment in additional interval meters will be made to expand the customer base that can use eMeter Data.
- Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$50,000	\$55,000	\$25,000	\$130,000
Capital Expenditures	\$35,000	\$35,000	0	\$70,000
Totals	\$85,000	\$90,000	\$25,000	\$200,000

Priority: Conservation and Demand Management Initiatives
Focus: Government/Institutional Customer Base

- Currently 85% of the traffic lights in our service area employ standard lighting technology. Using a cost sharing approach, we plan to provide funding for retrofit of traffic lights to newer and more efficient LED technology.
- Approximately 2,400 streetlights in our service area are the older, less energy efficient mercury vapour type. Using a cost sharing approach, we plan to provide funding to start the replacement of these lights with high-pressure sodium lights that use 39% less energy.

• Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$20,000	\$292,000	\$88,000	\$400,000
Capital Expenditures	0	0	0	0
Totals	\$20,000	\$292,000	\$88,000	\$400,000

Priority: Conservation and Demand Management Initiatives
Focus: Local Distribution Company – Asset Base

- The Corporate offices will have assessments completed to determine the feasibility of improving the efficiency of the energy consumption profile. Based on these findings, retrofits will be completed.
- Loss factors for new and replacement transformers will be evaluated. If feasible, future transformers will be purchased with a lower loss factor requirement with the incremental cost difference allocated to the conservation and demand management program.
- Voltage conversion programs will be completed to reduce losses associated with feeders and our substation locations.

• Budget

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
Operating Expense	\$0	\$0	\$0	\$0
Capital Expenditures	\$40,000	\$146,652	0	\$186,652
Totals	\$40,000	\$146,652	\$0	\$186,652

Budget Summary

Consumer Education and Development of Conservation Culture:

Total Customer Base \$ 285,000

Conservation and Demand Management Initiatives:

Residential Customer Base 990,000

Small Business Customer Base 100,000

Mid to Large Scale Commercial/Industrial Customer Base 200,000

Government/Institutional Customer Base 400,000

Local Distribution Company – Asset Base 186,652

Total Fund \$2,161,652