

## TAY HYDRO ELECTRIC DISTRIBUTION COMPANY INC.



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ONTARIO EMERGY BOARD

November 25, 2004

Ontario Energy Board P.O. Box 2319 26<sup>th</sup> Floor 2300 Yonge Street Toronto, Ontario M4P 1E4

Attention: Mr. J. Zynch, Board Secretary

Dear Mr. Zynch: 10 Mg

Re: Licence #ED-2002-0519

Conservation and Demand Management 2004 Plan

Enclosed, please find Tay Hydro's above noted plan for your approval.

Yours truly,

Tay Hydro Electric Distribution Company Inc.

Encl.

Lillian C. King

Vice-President Finance & Customer Service

# Tay Hydro Electric Distribution Company Inc. ED-2002-0519

## Conservation and Demand Management 2004 Plan

November 25, 2004

#### Introduction

The Ministry of Energy through the Ontario Energy Board (OEB) is requiring all electricity local distribution companies (LDCs) to prepare conservation and demand management (CDM) programmes. With these energy conservation programmes taking place throughout the province, a five percent target of reducing province-wide electricity demand, can be achieved by 2007. It was felt that LDCs are well positioned to influence the outcome and invest in CDM programmes.

The investment must be at least as great as the third installment of the LDC's previously approved incremental market adjusted revenue requirement. The LDC must seek approval from the OEB for its CDM plan. The LDC must establish a deferral account to be used to track expenditures related to the programmes.

The criteria for approval of the CDM plans are:

- 1. a description of the proposed programmes identifying the affected customer classes and the specific details of each program;
- 2. the total programme budget including the total amount and schedule of the annual expenses for the 2004-2007 time period; and
- 3. the anticipated programme benefits, including quantifiable benefits where these can be identified (i.e.: energy savings (kW or kWh)). Where the programme has anticipated qualitative benefits (such as enabling technologies or customer education), these expected qualitative benefits must be described.

#### **Tay Hydro Proposed Programmes**

Tay Hydro is proposing three types of programmes to achieve its CDM Plan.

#### 1. Education and Promotion

Using bill stuffers and energy conservation messages to educate residential and commercial consumers on conservation tips and products available to help them reduce their electricity usage.

#### 2. School Conservation and Safety Promotion

Provide educational and information sessions in the primary schools to instill at an early age, the need for wise energy usage. This would ensure the children promote conservation at home and reduce residential consumption. This would be coupled with information on electricity safety.

## 3. System Optimization

Perform a distribution system study to determine where savings can be realized to reduce losses. Recommendations from the study would be acted upon to realize the most cost effective expected savings and reduce the amount of electricity wasted through they distribution system. This will benefit all classes of customers. Expected areas of savings would be through better balancing of loads, changing open points in the distribution system, upgrading wire sizes and changing to low loss transformers.

## **Programme Budget**

- 1. Education and Promotion \$7,000 Design, development, purchase and mailing of brochures and flyers to residential and commercial consumers. All in 2005.
- 2. School Conservation and Safety Promotion \$5,000 Design, development and delivery of educational sessions in the five primary schools. All in 2005.
- 3. System Optimization \$44,000 Consultant to perform system study, and then labour, material and overheads to implement the most cost effective recommendations. \$30,000 in 2005 and \$14,000 in 2006.
- 4. CDM Plan Development Expense \$3,000 Using an external consultant and internal staff to design the Plan and research programmes. \$2,000 in 2004 and \$1,000 in 2005.

Total Plan Budget - \$59,000

#### **Programme Benefits**

The Tay Hydro total 2003 annual energy usage was 46,278,000 kwh.

The residential usage was 31,983,000 kwh, and the commercial usage was 10,455,000 kwh.

The distribution system line losses are 8.3%.

#### 1. Education and Promotion

It is estimated that because of the education and promotion of energy conservation that residential and commercial consumers will reduce their annual consumption by 2%. This will provide an annual 849,000 kwh savings.

#### 2. School Conservation and Safety Promotion

It is estimated that because of the education and promotion of energy conservation in the schools that residential consumers will reduce their annual consumption by 1%. This will provide an annual 320,000 kwh savings.

### 3. System Optimization

Identifying and correcting total system line losses because of the system optimization study will reduce lines losses by 1%. This will provide an annual 463,000 kwh savings.

Total system annual energy savings of 1,632,000 kwh.

Using a kwh cost of 6 cents, this yields a total CDM savings of \$97,920.

#### **Application**

Tay Hydro Electric Distribution Company Inc. is submitting this application to the OEB for a final order to implement a CDM Plan. This application is in response to the Minister of Energy granting LDCs the opportunity to proceed to the OEB with applications for CDM Plans and deferral accounts to track investments in conservation and demand management initiatives.

Tay Hydro is committed to investing the equivalent of one year of the third installment of its incremental market adjusted revenue requirement, over the period December 2004 to September 2006. Tay Hydro will do this by designing, developing and implementing CDM programmes as described above. As these programmes proceed, Tay Hydro will be monitoring their effectiveness to ensure maximum conservation benefits.

Jim Crawford, President

Tay Hydro Electric Distribution Company Inc.

Date

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