



RECEIVED  
FB-2004-0535

DEC 8 2004

ONTARIO ENERGY BOARD

December 7, 2004

Mr. John Zych  
Board Secretary  
Ontario Energy Board  
26th Floor/ P.O. Box 2319  
2300 Yonge St.  
Toronto, Ontario  
M4P 1E4

Re: Halton Hills Hydro Inc. Demand Side Management Program

Dear Mr. Zych:

Please find enclosed six copies of our Demand Side Management program.

If you have any questions, please give me a call.

Yours truly,

Arthur A. Skidmore CMA  
Chief Financial Officer



## **DEMAND SIDE MANAGEMENT PROGRAM**

**December 7, 2004**

## **TABLE OF CONTENTS**

- 1.) Executive Summary
- 2.) Utility Characteristics
- 3.) Program Details
- 4.) Summary

## **EXECUTIVE OVERVIEW**

Halton Hills Hydro is committed to assisting the province and our ratepayers on a Demand Side Management Program effective January 1<sup>st</sup>, 2005. Our program is specifically designed to empower all rate classes in their conservation efforts either with programs at the LDC level or at the customer specific level. Our goal is consistent with the provincial goal of a 5% reduction in both demand and consumption charges by 2007. Our spending will match the amount received from the 3<sup>rd</sup> tranche of our MBRR, specifically April 1<sup>st</sup>, 2005 to March 31<sup>st</sup>, 2006. We trust that the OEB will proactively approve the demand side expenditure in enough detail to ensure 100% recovery. Our program will cover six areas that we feel have the most DSM potential:

- 1.) Co-Generation Investment
- 2.) Smart Metering Pilot Project
- 3.) System Loss reductions
- 4.) Commercial Industrial Power Factor Correction
- 5.) Water Heater Load Control
- 6.) Customer Information/Education

Further, we will not spend the \$25,000 research money, as it is our opinion that the money is better spent on the above-mentioned initiatives therefore, our senior management team has prepared our submission.

## **UTILITY CHARACTERISTICS**

Halton Hills Hydro is at the western fringe of the GTA and has experienced both customer and load growth over the past few years. Our historical customer base reflects mainly residential customers however, new commercial/industrial servicing of lands will greatly affect our Utility in the next few years.

	<b>2002</b>	<b>2003</b>	<b>2004 (est)</b>
# of Customers	17,828	18,365	18,900
AVG KW Demand	91,164	97,779	98,125
MWH Purchased	431,190	462,324	467,419
MWH Conservation Target			23,371

Our conservation goal is consistent with the Province of Ontario at 5%. Therefore from a kWh perspective, the conservation goal is 23,371 MWH.

# **PROGRAM DETAIL**

## **1.) Co-generation Investment**

We believe this has the most potential for load reduction. In the models we have explored, potential consumption reductions are in the magnitude of 15-17 MWH/customer. While this is a customer specific investment, the returns to the province are dramatic as these projects are long term (15 to 20 year duration).

Conservation Impact	Conservation Budget	Customer Impact	Conservation Measurement
15-17MWH	\$200,000	Specific	Bill reduction

## **2.) Smart Metering Pilot Program**

This program is essential for the viability of the smart metering initiative. We intend to provide smart metering to a number of interested residential customers and to allow those customers and utility staff the opportunity to familiarize themselves with the metering technology and, through a partnership, strategize on full-scale deployment in 2007.

Conservation Impact	Conservation Budget	Customer Impact	Conservation Measurement
Minimal	\$50,000	Residential Pilot	Interval vs. non Interval comparisons

### **3.) System Loss Reduction**

#### Conductor:

This program will assist all customers of Halton Hills Hydro by enabling the Utility to aggressively pursue infrastructure investments that will reduce overall system losses to the Utility. Strategic conductor replacement on heavily loaded lines with upgraded conductors will affect all customers.

Conservation Impact	Conservation Budget	Customer Impact	Conservation Measurement
Contingent on conductor upgrade	\$125,000	All customer – system losses	Calculated base on conductor loss theory

#### Transformers:

This program will help all customers of Halton Hills Hydro by enabling the utility to aggressively pursue infrastructure investments that will reduce overall system losses to the utility and then ultimately to the customer. Strategic replacement of “old “ transformers with new low loss transformers will have a positive impact to all customers.

Conservation Impact	Conservation Budget	Customer Impact	Conservation Measurement
Contingent on transformer upgrade	\$150,000	All customer – system losses	Calculated base on transformer loss theory

### **4.) Water Heater Load Control**

This program will enable the utility, in conjunction with the homeowner, to conserve and shift the water heater load to favourably priced intervals. We will install these load control devices on all new water heater installations beginning in the spring of 2005. We estimate that we will install approximately 360 devices in the first year.

<b>Conservation Impact</b>	<b>Conservation Budget</b>	<b>Customer Impact</b>	<b>Conservation Measurement</b>
More to load shifting than conservation	\$80,000	All water heater customers in Halton Hills	Calculated based on controlling time period

### 5.) Commercial/Industrial Energy Audits

This initiative will assist our commercial and industrial customers by reviewing their operations and recommending energy reduction strategies.

<b>Conservation Impact</b>	<b>Conservation Budget</b>	<b>Customer Impact</b>	<b>Conservation Measurement</b>
Contingent on type of program implemented	\$90,000	Customer specific	Bill reduction

### 6.) Customer Conservation Education

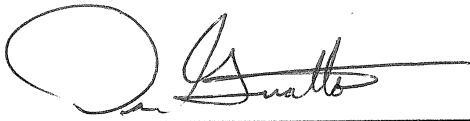
This initiative will assist our customers by providing additional information via our website. All customers will be able to view their consumption history on-line and be able to graph and ascertain trends in their usage. Our interval-metered customers will have next day information available to them to assess their consumption patterns and be able to track current market prices.

<b>Conservation Impact</b>	<b>Conservation Budget</b>	<b>Customer Impact</b>	<b>Conservation Measurement</b>
Contingent on type of information presented	\$20,000	Customer specific	Conservation information



## **SUMMARY**

We anticipate that you will find our conservation efforts complete with program details, budgeted expenditure and conservation impact. We look forward to a positive response from the Ontario Energy Board.

A handwritten signature in dark ink, appearing to read 'Dan Guatto', written over a horizontal line.

Daniel F. Guatto, P.Eng  
President

A handwritten signature in dark ink, appearing to read 'Arthur A. Skidmore', written over a horizontal line.

Arthur A. Skidmore CMA,  
Chief Financial Officer