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BY EMAIL AND COURIER

March 9, 2007

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli:

Request for Approval for Hydro One Networks' Regulated Price Plan Time-of-Use Pilot Project

In accordance with the Board's Standard Supply Service Code, Hydro One Distribution Networks Inc. (Networks) applies for approval to proceed with a Regulated Price Plan (RPP) Time-of-Use (TOU) pilot project as described in the attached proposal.

Networks believes the pilot project will provide very useful information with respect to load research and program implementation information related to RPP TOU rates. In order for Networks to start the pilot project on time in May 2007, we respectfully request the Board process this request as expeditiously as possible.

Yours truly,

A handwritten signature in cursive script that reads "Susan Frank".

Susan Frank

Proposal for RPP TOU Pilot Project

Hydro One Distribution Networks Inc. (Networks) plans to undertake a pilot project involving 500 customers for 5 months (May to September 2007) to assess the response of its residential, farm and small general service customers to use of Regulated Price Plan (RPP) Time-of-Use (TOU) commodity rates. This study is required because results from TOU pilot projects currently undertaken by other LDCs in the province may not be directly applicable to Networks since most of our customers are primarily rural based and have higher usage of electric equipment such as electric space and water heating. In addition, Networks' proposed pilot offers the following special features:

- Farm and small general service customers are included in the study;
- Effectiveness of real time in-home display monitors and smart thermostats will be tested with RPP TOU rates;
- Pilot participants will be paying RPP TOU rates, getting a RPP TOU bill and seeing their consumption profiles through a special web site set up for the project.

The RPP TOU pilot will be fully funded by Networks' 3rd tranche CDM budget under Program Management and Research which was already approved by the Board in RP-2004-0203/EB-2005-0198. Networks has an approved budget allocation of \$2.6 million for Program Management and Research and as of Q4, 2006 has spent about \$1.6 million under this category. There will be sufficient funding in the allocated budget to cover the incremental cost for this pilot.

In order to minimize time delays as well as costs, pilot participants will be randomly selected from customers who already had smart meters installed as part of the provincial smart meter initiative. The primary purpose of this pilot is to examine the impact of RPP TOU rates and whether that affects conservation behaviour. In addition, Networks intends to use this opportunity to assess the extent to which real time in-home display monitors will help our customers on RPP TOU rates shift load and/or reduce energy consumption more effectively. Also, some selected customers with central air conditioning who are willing to participate in Networks' load control program will be offered a smart thermostat from which customers could remotely control their air conditioning setting. Professor Dean Mountain of McMaster University will be retained to provide general guidance for the pilot project, while detailed load shape analysis will be undertaken in-house by the Hydro One Load Research Team.

Networks intends to share the pilot project results with the Board. If deemed useful and assuming results from other LDC RPP TOU pilot projects are available, province-wide RPP TOU impact analysis can be performed using the LDC-specific load profiles prepared recently for 80 LDCs for cost allocation informational filings as required by EB-2005-0317.

Pilot Project Objectives

- Assess how RPP TOU commodity rates affect the hourly electricity consumption patterns of Networks' residential, farm and small general service customers. Since Networks' customers are mostly rural based, it will be useful to compare the Networks' pilot results with other LDC RPP TOU pilot projects undertaken for urban customers in the province.
- Assess the impact and effectiveness of real time in-home display monitors helping customers on RPP TOU rates shift and/or reduce load.

- Assess the impact and effectiveness of smart thermostats helping customers remotely manage their air conditioning load in the summer months.
- Assess the communication and settlement support required to implement the RPP TOU rates for all Networks' customers with smart meters in the future.

Study Approach

- Professor Dean Mountain of McMaster University, a recognized expert in load research in the province, will be retained to provide general guidance for the pilot study and particularly in the areas of sample design, customer selection and the methodology used by the Hydro One Load Research Team for assessing the load impacts. Based on preliminary analysis, a sample size of about 500 customers should be sufficient to construct a representative sample for the RPP TOU pilot study.
- In order to minimize time delays and costs, residential, farm and small general service customer that already had interval meters installed as part of the provincial smart meter initiative will be stratified and randomly selected to ensure a representative sample is chosen for the pilot project.
- After receiving approval from the Board for this pilot project, selected customers will be contacted in April 2007 to determine whether they are willing to participate in the pilot project and pay the RPP TOU rates for 5 months (May to September 2007). Participation in the pilot is entirely voluntary. Customers agreeing to participate in the pilot project will be asked to sign a contract agreeing to participate and pay the RPP TOU prices during the pilot study.
- For the study period, pilot participants will get a monthly bill clearly showing their electricity consumption differentiated by RPP TOU rates. In order to avoid making costly changes to the existing customer billing system that affect all Networks' customers, RPP TOU rate calculation and special billing for the 500 pilot participants will be processed separately and the information will be fed back to the normal billing engine for issuance of bills. After September 2007, pilot participants will return to the regular RPP (non-TOU) rates and get the usual billing arrangements.
- A special RPP TOU pilot project web site will be set up for pilot participants to sign in and view their own energy consumption profile by RPP TOU prices for the previous week. The energy profile information will be updated on a weekly basis. Information is not updated on a more frequent basis (such as daily) in order to keep the pilot project cost to a minimum. According to Professor Dean Mountain, providing weekly feed back to pilot participants is reasonable.
- About half of the pilot participants will get the real time in-home display monitors to help them manage their electricity consumption with RPP TOU rates. The in-home display monitors will be able to display the RPP TOU rates. Pilot participants will be allowed to keep the in-home display monitor after expiry of the pilot study. The real time in-home display monitors used in the pilot will be compatible with smart meters as well as RPP TOU rates.
- About half of the pilot participants will not get the in-home display monitors. To encourage customer participation for the pilot, a sign-up bonus will be considered for these customers.
- Selected pilot participants with central air conditioning will also be asked whether they are willing to participate in the Networks' SmartStat Program¹. Participants in the load control program will get a smart thermostat for which they can remotely manage their thermostat settings.

¹ Networks introduced the SmartStat residential load control program in July 2006. This program is designed to achieve summer peak demand reduction by controlling central air-conditioning temperature set-points using web-enabled programmable thermostats.

- A special 1-800 phone line will be set up for the pilot project. Networks' staff from the pilot project team will handle questions from pilot participants pertaining to their consumption profiles and RPP TOU bills.
- Pilot participants will be asked to fill out 2 questionnaires during the study period, one questionnaire at the beginning of the pilot and the other questionnaire at the end of the project to provide further information (such as appliance and equipment usage, actions taken to change the consumption patterns during the pilot) to help the project team better understand the reasons for potential changes in the hourly electricity consumption patterns.
- After the completion of the pilot study, detailed load shape analysis will be undertaken by the Hydro One Load Research Team applying similar methodology used to derive load profiles in the cost allocation informational filings for EB-2005-0317. Hourly interval data will be normalized using weather normalization methodology approved by the Board in RP-2205-0020/EB-2005-0378. Professor Dean Mountain of McMaster University will review the methodology used for the impact analysis and the results of the final report.

Benefits of the Pilot Project

- Results from this RPP TOU pilot study will be useful for load research, load forecasting, CDM program planning and for identifying any potential issues pertaining to future RPP TOU program implementation.
- Networks intends to share the pilot results with the Board. If deemed useful and assuming results from other LDC RPP TOU projects are available, province-wide RPP TOU impact analysis can be performed using LDC-specific load shapes recently prepared for 80 LDCs in their cost allocation informational filings for EB-2005-0317.

Budget for the Pilot

- The pilot project will be fully funded by Networks' 3rd tranche CDM budget which was already approved by the Board in its decisions for RP-2004-0203/EB-2005-0198. The incremental cost for the pilot project is estimated to be about \$120,000, which include spending for the following items:
 - Incremental cost of bill preparation for 500 customers for 5 months;
 - Remuneration for Professor Dean Mountain of McMaster University to provide general project guidance;
 - Setting up and maintaining a special RPP TOU web site for customers to review their electricity consumption profiles;
 - Handling charges for shipping real time in-home display monitors to selected customers;
 - Cost for undertaking 2 customer surveys;
 - 1-800 telephone line handling calls from pilot participants;
 - Project communication materials with customers;
 - Financial incentives for customer to participate in the pilot project
- Cost for the real time in-house display monitors and smart thermostats are already covered by existing Hydro One's CDM programs using the 3rd tranche funding.