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BY COURIER

August 04, 2006

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

Dear Ms. Walli:

EB-2005-0511 – Hydro One Remote Communities – Response to Board Directives

Attached are Hydro One Remote Communities ("Remotes") responses to the Directives contained in the Ontario Energy Board's May 10, 2006 Decision in the above matter.

On page 3 of the Decision, the Board directed Remotes to complete and file the full TRC testing results for its Conservation and Demand Management program. Remotes has completed an analysis using TRC benefits and costs of its 2006 program spending based on projected costs and on the expected uptake for the program. The results of this analysis showing a Benefit to Cost ratio of 1.47 is attached as Schedule A.

On page 6 of the Decision, the Board noted that Remotes faces special challenges in implementing a smart metering program, and required Remotes to file a report on the feasibility of smart meters in its service territory and its plans for smart metering. This Report is attached as Schedule B.

Sincerely,

A handwritten signature in cursive script, appearing to read "Susan Frank".

Susan Frank

Customer Education Program

The Customer Education Program consists of community workshops/meetings to discuss energy conservation. The workshops will be held jointly sponsored with the Ontario Power Authority.

The workshops will offer conservation tips and hands on demonstrations, and will feature exchanges for energy efficient equipment, mainly light bulbs, Christmas lighting and motion detectors.

The TRC value for this program is based on calculating the net present value of the investment (by each technology) using Remotes' avoided costs as filed, and the assumptions in the Board's assumptions and measures guide.

Pilot Program

The pilot program is focussed on 4 communities and is done in conjunction with Pathfinders (INAC and NRCan) and the local band council. To date, the program has focussed on baseline energy studies and getting community buy in. Home visits, including the installation of energy efficient equipment, are planned for the fall. Equipment exchanges currently planned include lights and motion detectors, though other equipment may be used depending on the community.

TRC Program Benefits

	Customer Education	Pilot Program	Total
Number of Customers Reached	99	700	799
Number of light bulbs	297	3,359	3,656
TRC benefit	\$14,800	\$223,205	\$238,005
Number of motion detectors	99	653	752
TRC benefit	\$23,374	\$168,392	\$191,766
Number of Christmas lights	500	500	1,000
TRC benefit	\$5,491	\$5,491	\$10,982
Savings in year (kWh)	13,149	110,851	124,000
Savings over life of technology (kWh)	420,916	2,609,513	3,030,429
Total TRC benefit of Program	\$43,665	\$397,088	\$440,753

Name of the Programs:

Community Pilot & Education

Schedule A

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

Remotes' customer education program and its pilot project involve the distribution of CFLs, Motion Detectors and Xmas lights. Programs are in partnership with INAC (Pathfinders) and the OPA's aboriginal program. Costs include educational components

	Lightbulbs	Motion Detectors	50% mini
Base case technology:	139 kWh	696 kWh	13.5
Efficient technology:	35 kWh	487 kWh	1
Number of participants or units deli	3656	752	1000
Measure life (years):	4	10	20

TRC Results:

TRC Benefits (\$):	\$ 440,753.39
TRC Costs (\$):	\$ 300,000.00
Utility program cost (less incentives):	\$ 300,000.00
Participant cost:	\$ -
Total TRC costs:	\$ 300,000.00
Net TRC (in year CDN \$):	\$ 300,000.00

Benefit to Cost Ratio (TRC Benefits/TRC Costs): 1.47

Note: cost includes educational & promotional components of programs

Results: (one or more category may apply)**Conservation Programs:**

Pilot communities with lighting exchanges and motion detectors.

	lifecycle	in year
Energy saved (kWh):	3,030,429	124,001
Other resources saved :		
Natural Gas (m3):		
Other (specify):		

Background Summary

Hydro One Remote Communities (Remotes) is an integrated generation and distribution company, and is licensed to serve 20 isolated, off-grid, communities in Northern Ontario. The company is 100% debt financed and is operated on a break-even basis. The federal and provincial governments both have programs in place to support the high cost of generating electricity in the far north. As a result, most of remotes customers pay electricity rates that are below the cost of service.

Remotes does not believe that the Smart Meter systems recommended for grid connected customers are appropriate to its service territory. Remotes notes that the smart metering plan was developed with three primary objectives, to assist customers in reducing usage during peak periods on the grid, to support customer billing based on a fluctuating price for electricity, and to offer customers better information on their usage.

Remotes believes that the first two objectives do not apply in an off-grid context, and that implementing a technology to meet them would pose significant challenges, as outlined in more detail below. Remotes does, however, believe that the third objective—to offer customers better, more timely information—is appropriate to its business, with significant potential benefits for its customers and its business. Remotes therefore plans to pilot alternative “smart meter” technologies that would meet the objective of improving customer information to help customers reduce their energy usage by improving the information available to them.

Load Shifting in Remote Communities

Remotes owns and operates 18 diesel generating stations, with 59 diesel generators in service. The generating systems were designed to match a single generating unit to the community load, and to operate that unit at its optimal capacity. This approach maximizes fuel efficiency, as the amount of electricity generated is the amount required. It also reduces maintenance costs, because maintenance on generating units is required based on the number of hours each unit runs. Operating two units at a time effectively doubles the maintenance costs. The generating systems do not incorporate peaking units.

Remotes does not believe that encouraging customers to use electricity in off-peak hours would reduce the cost of generation in its service territory, as its system is not designed to incorporate peaking units. Moreover, as the peak load is primarily related to seasonality rather than time of day, customers may not be able to change the time of use easily.

Required Smart Metering System Service and Information Flow

The Board’s Smart Meter Implementation Plan requires that distributors provide daily feedback to customers on their previous day’s energy usage. This communications infrastructure is required to support Time of Use and Critical Peak Pricing.

Remotes notes that the communications infrastructure required to support these information flows does not exist in its service territory and would be costly to create. Remotes notes that an investment in radio

technology and a regional repository would be required in each community to gather the meter information. Phone service and satellite communications to and from the communities have been unreliable in the past. Remotes does not, therefore, believe the reliable transfer of data from the communities to a centralized collection computer and to Remotes' customer information system would be feasible. As noted above, Remotes does not plan expect to implement an hourly pricing regime, as its costs do not vary by hour and because, by Regulation, its customers do not pay rates based on the cost of service.

The Benefits of Improved Information to Customers

Remotes expects that its customers would benefit from improved information about their usage, and notes that Hydro One's recent Real Time Monitoring pilot project supports this view. Hydro One's pilot tested four hundred participants and control customers over a 2.5 year period. The study isolated the effect of the provision of more frequent feedback with no further advice or consultation about possible conservation activities.

Overall, the average reduction in energy consumption across the study sample was 6.5%. The customer satisfaction surveys performed along with the study showed very positive attitudes to the real-time monitors. The study also predicted that an overall average reduction of between 7% and 10% would be feasible if other conservation and price measures were combined with the real time monitor. The report also pointed to another pilot project that showed electricity savings in the range of 20% when a real time monitor was used in conjunction with a smartcard meter for prepayment of electricity.

Alternative Metering Technologies Pilot Project

Remotes plans to implement a pilot project to test alternative smart meter technologies that offer customers information that will allow them to adjust their consumption.

Remotes also anticipates that piloting meter technologies with an in-home display, prepaid cards or automatic disconnection features could have a collateral benefit of lessening other issues associated with bill collections and customer arrears.