## **Chatham-Kent Hydro Inc**

**Submission to the** 

**Ontario Energy Board** 

Re. Letter dated December 21, 2004

RP-2004-0196

**Smart Meter Initiative** 

Submitted January 10, 2005 Mr. Dave Kenney President Chatham-Kent Hydro Inc 320 Queen St Chatham, Ontario N7M 5K2 Phone 519-352-6300 (277) Fax 519-352-9860 Further to the request for additional information regarding two-way communications, Chatham-Kent Hydro submits the following comments to the questions outlined in the December 21, 2004 letter;

1. What are the drawbacks and benefits of mandating a two-way communication network?

Benefits: Chatham-Kent Hydro believes that bi-directional (two-way) communication systems will provide the opportunity for further efficiencies. Bi-directional communication will be the tools LDC's may use to provide customers with real time pricing signals, and load control systems that will assist LDC's in achieving the load reduction targets established by the Minster of Energy. Bi-directional communication will also eliminate the need for redundant communication systems required to add load management devices to those customers that choose to participate in control programs, and will make trouble shooting communication problems easier as much of the diagnosis can be performed from a console rather than a field visit.

The benefits of mandating bi-directional communication are that all customers in Ontario will be treated equally; distributors will all have the communication tools to assist them in meeting the Minister's objectives and will not be required to further justify bi-directional communications to assist them in achieving other efficiencies.

Drawbacks: The drawbacks of mandating distributors to install bidirectional communications are that some may choose systems that are not efficient, and some may not wish to use the communication system for load management and other enhanced services.

Chatham-Kent Hydro believes that the difference in the cost of a bidirectional communication system to a one-way communication system is minimal; therefore cost is not a drawback.

2. In the event of Province wide two-way communication, should electricity distributors be responsible for operating the communication network?

Distributors should not only be responsible for operating the communication network but in Chatham-Kent Hydro's opinion they will prefer to, on a local or regional basis. The ability to use the communication network to provide other services without added costs or bureaucracy to customers will provide distributors with another means to improve service and add other non-metering type of service products. Two-way communications will enable distributors to monitor power quality and be used for outage management. Some distributors may not choose to offer these services, and if they are

operating their communication system, they will have more flexibility to provide the added services that they or their customers may choose to offer or receive.

If the question of province wide two-way communications suggest a central communication operator, Chatham-Kent Hydro believes that geography and the variety of infrastructure throughout Ontario, may create excessive costs and operational issues. A local distributor or regional operated communication system will be able to take advantage of the geography and infrastructure in their part of Ontario. For example: A wireless system would be an efficient option in southern Ontario and may not be in other parts of the province.

3. If not how should a communication operator or operators be selected?

This should be a decision made by the distributors who may choose not to operate their own communication system. The decision should be based on economics and service. A regional communication system, where one distributor in a region of Ontario can act on behalf of several distributors may be practical and efficient for wireless communication systems. This may result in cost sharing of infrastructure required to operate the system by using shared towers and licenses.

4. How would the rates for communication operators be set or collected.

If the distributor is the communications operator the rates charged to the customers should be reviewed and approved by the Ontario Energy Board, as they do for other costs. The costs should go through a prudence review, allocated to the appropriate rate class and then the rate designed.

If there is a regional operator that will be managing the communications for numerous LDCs, that operator should have their rates approved by the Ontario Energy Board. The approval process should be similar to rate approval process that the Independent Electricity Operator must go through in setting their rates.

On an interim basis, until all customers have the smart meters, the costs for communication should be allocated and recovered from all customers. The societal benefits of having smart meters installed will be enjoyed by all customers.

5. If there were a two-way communication network, would an open data protocol aid the development and availability of end devices and services?

Yes an open data protocol would aid in the development and availability of end devices and services.

This would be similar to what has evolved in the SCADA world where all devices have multiple protocols available.

The drawbacks to open data protocol is from a security and corruption of data perspective as there is the potential for third party access to data and a potential for viruses which will require additional protection to protect the data from possible intrusion.