

August 13, 2004

Mr. Peter H. O'Dell
Acting Board Secretary
Ontario Energy Board
P.O. Box 2319, 26th Floor
2300 Yonge Street
Toronto, Ontario, M4P 1E4

Dear Mr. O'Dell:

Re: Implementation Plan for Smart Meters in Ontario (RP-2004-0196)

We are pleased to enclose the joint written Submissions on behalf of the Coalition of Large Distributors comprised of Enersource Hydro Mississauga, Hamilton Hydro Inc., Hydro Ottawa Limited, PowerStream Inc., Toronto Hydro-Electric System Limited and Veridian Corporation (collectively the "Coalition") in response to your request for written comments concerning the subject Ontario Energy Board Staff Discussion Paper. The Coalition members have elected this method of commentary consistent with the stated preference of the Ontario Energy Board for expressions of shared interest.

The Coalition is pleased to participate in the subject consultation and is fully supportive of the Government of Ontario's and the Ontario Energy Board's demand side emphasis as reflected in the smart metering initiative. The Coalition is also supportive of mechanisms which will provide greater price transparency and more accurate price signals to incent consumer behaviour. We would stress the essential need to evaluate the cost effectiveness and prudence of smart metering investments relative to the anticipated benefits based both on the U.K. experience cited in the Staff Discussion Paper and other empirical evidence. However, we will further elaborate on those issues in the Coalition's specific comments.

For ease of reference we have organized our comments consistent with the format of the Staff Discussion Paper:

A handwritten signature in black ink that reads "Chris Buckler". The signature is fluid and cursive, with the first name "Chris" and the last name "Buckler" clearly legible.

Chris Buckler
Vice-President, Customer Service and Regulatory Affairs
Enersource Corporation

On behalf of the Coalition of Large Distributors

August 12, 2004

Implementation Plan for Smart Meters in Ontario

Re: RP-2004-0196

INTRODUCTION AND PAPER OVERVIEW

Before the smart metering technical requirements can be finalized, the specific DSM programs requiring smart metering as well as the new rate structures must be determined. This process is important to ensure cost effectiveness of smart metering in Ontario, and should be included as an explicit task in the OEB implementation plan. The decision, for example, on whether preset TOU, or dynamically configurable TOU, and what type of information feedback to the consumers would be necessary to drive energy usage behaviour has major impacts on the complexity, hence risk, and the cost of mass smart metering implementation.

Another task that should be explicitly included in the scope is the thorough testing of the smart metering technology, particularly the communications technologies for meter management and data retrieval. Testing should include the smart metering functionality, performance adequacy, and reliability. Functionality and reliability are important for all utilities, but performance as it pertains to throughput is particularly critical for the large utilities. Thorough testing is vital to mitigate the risk of smart metering deployment across the province.

ESSENTIAL ELEMENTS OF AN IMPLEMENTATION PLAN

We agree a procurement strategy is required to bulk order the different types of meters as required and address technological issues and supplier availability. Bulk procurement has cost savings in quantities as well as the potential for provincial product standardization and verification program.

Compatibility with existing LDC billing and settlement systems must be ensured.

We agree with the roll-out priorities as discussed in the paper and recognize the requirement to assess the customer classes which would realize the most benefits and initiate our focus in this direction.

The roll out of customer classes should be a working group study and determination, and the time recommendations should reflect LDC feasibility of implementation.

Customer Class / Rate structure will dictate technology and rollout.

Coalition of Local Distribution Companies Discussion Paper on Smart Metering

The Coalition of Large Distributors agrees with the OEB paper that this province wide project will not succeed without a champion and a coordinated effort of at least the largest LDCs to the benefit of all LDCs. The creation of a new entity should not be required and would simply result in additional administrative costs.

COST RECOVERY

LDC's must have certainty regarding the regulatory treatment of expenditures to implement all DSM and DR activities. Of primary importance is a cost recovery framework for lost revenue resulting from smart meter implementation.

There is a concern that the potential savings of advanced metering and automated meter reading may be overstated especially when there has been no research to accurately quantify the true costs of implementing these technologies. Modification, upgrade, or outright replacement of billing systems, settlement systems, meter data management systems and supporting infrastructure for smart metering, as well as the increased operating costs for these systems, will be substantial and merit inclusion in the cost recovery provision.

Cost recovery through the rate base is favoured as the investments in smart metering are being made in the context of all customers having a smart meter by 2010. As such, investments in systems and resources leading up to this end state are for the benefit of all customers and costs should be shared equally. However, due to the large annual investments in smart meters needed for each of the next six years, re-basing should occur yearly.

Meter charge

Recovery of smart metering charges through a distinct meter charge on the customer's bill is not supported due to the customer confusion and dissatisfaction that will be created, the complexity and cost of administering these charges separately and the fact that the system benefits are socialized.

The ability of LDC's to realize operational savings as a result of smart meter implementation is highly questionable. At present, alternative service provider (ASP) delivered daily meter readings for smart meters are 10 to 15 times more expensive than the standard bi-monthly manual readings that most LDC's currently employ to bill customers.

Third tranche

It is imperative that LDC's are kept financially whole throughout the process. Smart meter investments should be eligible for DSM funds as part of the 3rd tranche of ROE beginning March 1, 2005 but the \$225M available province-wide represents a small fraction of the total investment required for smart metering.

METERING FUNCTIONS

A provincial technical standard is fundamental to any mass deployment. In addition, compatibility amongst products must be ensured and sole sourcing must be avoided. Essential features should include interval data (hourly intervals minimum) with AMR technology and manual read capability as a backup. This granularity in data will provide flexibility in rate design and also a level of detail that is valuable in load studies helping to identify congested areas and areas requiring further investment.

Additional issues:

- Allowing a mixture of TOU and interval meters will unnecessarily complicate all aspects of the process administration.
- The Directive, as written, can only permit interval meters and not TOU meters in order to respond to Critical Peak Pricing (CPP).
- The ability to communicate with all meters on a daily basis is a huge challenge that may be cost prohibitive relative to the achieved system capacity savings.
- A consistent data format is an essential requirement from the outset of the smart meter program.
- Data storage requirements and the on-going management of same is going to increase significantly. Adequate time must be allowed for the specification, development, testing, and implementation of the meter data management system. These are going to require significant upgrades or replacement of existing systems with the corresponding costs, which need to be taken into account and recovered.
- The incremental cost of bi-directional communication should be studied further.
- Bi-directional communication may be optionally implemented by a utility based on individual cost justification.

OWNERSHIP

Retail Meter ownership should remain a non-contestable function of the local distribution company (LDC). The electricity meter is a part of the distribution system asset and it is the LDCs only means for determining the charges for electricity consumed. The LDC should have full responsibility and ownership of these devices.

If the meters are owned by different parties:

- Administration inefficiencies would be introduced because now the LDC has to deal with numerous “meter owners” coordinating new installs, meter changes, trouble calls, billing disputes, etc...
- Planned meter maintenance would be difficult to implement in an efficient manner if the meters have different owners.
- The meters could potentially be re-configured hence compromising the utility’s ability to use the meter data for billing, settlement, load forecasting and potentially demand-side-management.

Coalition of Local Distribution Companies Discussion Paper on Smart Metering

- As currently being realized in the IMO wholesale market, meter contestability has caused significant issues under *The Electricity and Gas Inspection Act* that have not yet been resolved. These same issues would apply to the far larger and more complex retail market.

OTHER CONSIDERATIONS

There are a number of issues that must be addressed by Measurement Canada in order for all parties involved to make concrete business decisions regarding the deployment of Smart Meters in Ontario. For example:

- The regulation of telemetering as it pertains to AMR is of a particular concern to distributors. The approval period for these types of devices must be taken into account as it pertains to the implementation timeline.
- The re-verification requirements for existing meters and new smart meters are other areas of concern to distributors.

On the installation side of the equation, there are a number of LDC resource issues that need to be addressed. Two of the most prominent are the resources to perform the install and secondly the resources to process the information in a reasonable time frame.

Finally, a pilot will aid the LDC's in evaluating actual resource requirements and possible new work procedures.