



## VIA COURIER & ELECTRONIC MAIL

December 3, 2004

Mr. John Zych  
Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street  
26<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Mr. Zych:

**Re: IMO Comments on Smart Meter Draft Implementation Plan**

The Independent Electricity Market Operator (the "IMO") is pleased to provide its submissions in response to the Ontario Energy Board's (the "Board") request for stakeholder comments on the Smart Meter Draft Implementation Plan. The IMO appreciates the extension granted by the Board to enable the IMO to complete its assessment of the draft plan.

In its submission of August 13<sup>th</sup>, 2004, the IMO noted its strong support for consumer participation in electricity markets and the potential for the smart meter proposal, complemented by effective retail rates and regulatory framework, to enable greater participation from a wide range of consumers in the electricity markets. The IMO repeats and refers the Board to its earlier submission, and offers the following additional comments in response to the draft implementation plan:

- i. the IMO submits that the smart meter standards and communication protocol should be designed to enhance the linkages between wholesale and retail systems;
- ii. the IMO would welcome the opportunity to help facilitate effective implementation;
- iii. the IMO should be assigned the responsibility to identify and communicate Critical Peak Periods to Ontario electricity consumers;

- iv. early deployment of smart meters in priority areas is preferred; and
- v. the administration of certain non-commodity service charges on a time of use basis may be desirable, but the complexity and cost of doing so at this time renders it inadvisable.

**I. Smart meter standards and communication protocols must enhance the linkages between the wholesale and retail markets and systems.**

Interval smart meters can enhance the linkages between wholesale and retail systems and facilitate wide-base consumer participation towards more efficient utilization of energy resources and operation of the integrated power system. The IMO observes that the draft implementation plan proposes to adopt a one-way communication standard for data transmission from customer sites to the distributor. Among the key benefits of deploying a smart meter is the increased ability to track consumption and corresponding price, and facilitate real-time response to changes in prices and market conditions. The current one-way communication proposal will limit consumers' ability to adjust their usage coincidentally, in response to changes in price. A real-time response mechanism will more effectively establish linkages between the wholesale and retail markets and systems. Further, the ability to facilitate aggregation of load, within and across geographic areas, which can collectively respond to real-time prices and participate in initiatives to help manage reliability (e.g., demand response, ancillary services, etc.) should be a desired outcome of a provincial wide smart meter plan. The benefits of the deployment of the smart meter program will be substantially enhanced if consumer response programs can be made more automated (e.g., demand response, load shifting, etc.). That automation requires two-way communication capability between the customer and market systems.

The IMO submits that the Board should give greater weight to this key functionality requirement, to ensure that, at a minimum, all General Service applications greater than 200 kW are fitted with interval smart meters that have the capability of providing real time usage and price information to the customer. This added functionality will enhance real-time linkages between the wholesale and retail markets and systems, facilitate more effective aggregation within and across geographic areas, enable customers to respond in real-time to ongoing changes in prices and market conditions, and facilitate participation in reliability management initiatives.

**II. The IMO would welcome the opportunity to help facilitate effective implementation.**

The IMO observes that the draft implementation plan proposes to initiate the deployment of smart metering systems for General Service customers greater than 200 kW starting January 2005. The IMO supports this initial focus on larger General Service customers. This will help to facilitate early participation in demand response and energy management initiatives. Early uptake and wide-based participation in such initiatives will be critical in helping to shape the way forward, as well as contribute to bridging the gap between electricity demand and available supply, particularly over the short-term

given the government's policy on coal-fired generation. Accordingly, the IMO would welcome the opportunity to share its metering expertise and to work with all impacted parties to ensure that the implementation is done in as effective a manner as possible and that the enduring processes are as efficient as possible.

### **III. The IMO should undertake to identify and communicate the Critical Peak to Ontario electricity consumers.**

The IMO supports the proposal to establish and notify electricity consumers in advance of "critical peak periods", as well as the creation of critical peak pricing that reflects the cost of electricity and associated services during these periods and encourages consumers to limit their consumption. The IMO already tracks this type of information and, working with the Board and stakeholders, is prepared to enhance its established communications protocols for issuing Public appeals and also undertake the messaging and advance communications necessary to encourage conservation during these periods. This approach has the advantage of not creating potentially confusing multiple paths for such communications.

### **IV. Smart Meter Early Deployment in Priority Areas is Preferred**

As noted earlier, the IMO supports early deployment of smart meters for General Service customers greater than 200 kW, especially those customers that are located in priority areas. The IMO considers priority areas as those zones that are most in need of additional supply, specifically areas currently experiencing or expecting to experience inadequate generation and transmission capacity over the short-term. These areas are identified in the IMO's Outlooks. The deployment of smart meters in these areas will help to facilitate the implementation and encourage early uptake of demand response and energy efficient initiatives which will help to reduce system operational costs, defer infrastructure investments, reduce the strain on the existing power system, and maintain reliability of supply to affected customers.

### **V. Administration of certain non-commodity service charges on a time of use basis may be desirable but the complexity and cost of doing so at this time renders it inadvisable.**

The IMO submits that there may be merit in unbundling non-commodity charges to reflect their time of use and to adhere to cost causality principles if this can be done and administered efficiently and cost effectively. Some charges can be identified on a time of use basis while others are not so identifiable. While this may be a desired outcome, the IMO believes that practically, it may be unnecessarily onerous to accomplish and that the cost and resources required to administer the changes may exceed any benefits that might accrue. For example, in some instances the cost of certain service is not symmetrical with the level of usage or the amount consumed (e.g., ancillary services such as voltage support, black start). As such, it would be very difficult to apply user-pay principles. In other cases, such as congestion charges, the cost for services provided can be more easily identified and unbundled according to time of

usage. On balance, the IMO recommends that the unbundling of non-commodity services to establish time of use rates should be deferred until more detailed analysis can be carried out to determine which non-commodity services are suited for such rate treatment.

In summary, the IMO appreciates the opportunity to provide additional comments on the smart meter initiative and the extension granted by the Board to enable it carry out a comprehensive assessment of the draft implementation plan.

Please contact me at (416) 506-2858 should you have any question about the IMO's submissions in this matter.

Respectfully submitted,

***Original signed by***

Carl Burrell  
Senior Analyst  
Corporate and Legal Affairs  
Independent Electricity Market Operator