Section #: Contestable Supply of Metering

Last Revised: October 2, 2004

Issue Statement: Should the Provision of Metering become Contestable for Non-Wholesale LDC Customers?

Glossary Terms:

Contestable Supply of Metering: When a local distribution company (LDC) loses its monopoly over metering (i.e. metering other than the default meter service cease to be a regulated distribution function) and third parties can obtain the legal responsibility for metering and are not prohibited from wooing the LDC's customers.

Legal Responsibility for Metering: To have the legal right or obligation, subject to relevant regulations, to:

- Decide how and where the meter will be deployed;
- Have access to the meter;
- Provide adequate security and protection for the meter;
- Charge another party for using the meter;
- Be responsible for applicable (Owner, Contractor) Measurement Canada requirements with respect to meter
- Sell and receive the proceeds from the sale of the meter

Meter Supply Contracting: When the LDC chooses to contract out a portion or all of the services related to choosing, installing or maintaining customer meters.

Self-selection: Customers eager to have smart meters are allowed to request that their smart meters be installed earlier than an LDCs deployment schedule.

Options:

The following options were analyzed. Options to have meter contestability without a default meter service provider were discussed in the group but quickly dismissed because the large customer representative in the working group specifically stated that they were not in favour of being required to own their meters but would like to have the option to own them. This meant that an entity (likely the LDC) would still have to take on the role of a default meter service provider in a contestable model.

Option 1:

- Mandate that all LDCs provide any customer >50kW with the option of owning his own meter
- LDCs would be responsible to be the default meter service provider for all customers in their territory

• A customer who chooses to own his own meter would be responsible for purchasing the meter (basic or enhanced functionality) and to contract with a registered meter service provider (MSP) to provide meter installation and maintenance

Option 2:

- Allow an LDC to choose to sell all or part of its territory's customer meters to a third party monopoly
- The third party monopoly would be responsible for owning, installing, maintaining and reading the meters along with managing the meter data to hand-off to LDC
- The third party would likely have plans to leverage the infrastructure to obtain a higher ROI than the LDC would be able to obtain
- The third party may be able to leverage the services across more than one LDC and reduce costs

Option 3:

- Allow LDCs to choose for themselves whether or not they would like to set up contestability within their service territory to allow non-wholesale participant customers the option of owning their own meters
- LDCs would be responsible to be the default meter service provider for all customers in their territory

Option 4:

- Legal responsibility for metering remains with LDC (i.e. meter service remains a regulated distribution function)
- Large customers (>50 kW) are allowed to select enhanced functionality for metering and can request an earlier installation date for meters within specified guidelines
- Performance standards are established for LDCs with respect to turnaround on requested installations
- The LDCs have the latitude to engage in Meter Supply Contracting as they do currently and the LDCs continues to have the Legal Responsibility for Metering as they do today.
- Small customers would remain with the LDC's standard offer for metering
- All customers would be free to select a competitive supplier for services above and beyond metering services (e.g. direct load control)

Background:

There are 3 industry groups that are supportive of contestability of meter supply in order to achieve certain goals.

1. Customers >50kW:

This customer segment would like to have the ability to choose its own meter functionality and not have it dictated by LDCs. They also feel that LDCs do not have the capability for mass meter deployment based on their experience to date in requesting interval meter installations. Requests have been met with

considerable delays and in some cases refusals due to lack of LDC resources. They feel that making metering competitive will bring in more responsive MSPs that will be able to better fulfill needs in this customer segment. Large customers are not generally predisposed to owning the meter. Rather, they seek alternative MSP arrangements to meet needs which may not be accommodated by LDCs.

2. IMO:

The IMO is supportive of a viable and robust MSP sector. They believe that by opening up the retail market to meter supply contestability, more MSPs could enter the market, compete for business which would result in more innovation, lowering prices, and greater value to consumers.

3. Metering Service Providers:

MSPs would like to see the retail market open up to contestable supply of metering and should be opened up not only for electricity, but for natural gas, and other pipe commodities such as water/wastewater. They feel that this would facilitate one meter service provider at a facility or home and would drive down the cost for the customers.

The main opposition to contestability comes from LDCs:

For LDCs, the meter is their cash register and is used to clear the market. It is central to their operations and would result in significant business risk if problems arose from making it contestable. In addition, it is the LDC's responsibility to connect consumers to the grid. The meter is the final part of that connection. Adding a third party would add complexity in business processes because of additional interface points. LDC's would also be wary of being left with the "high cost" "hard to access" meters as default suppliers of metering. Many LDC's currently use third parties under contract to provide certain metering services and feel that this is a preferred option to meter service contestability that still allows LDCs to effectively manage their business risks.

Other Jurisdictions:

The information that was available to the working group about the experiences of other jurisdictions was anecdotal in nature. There was little quantified analysis available to the working group to validate the experiences of other jurisdictions or Ontario's wholesale market. The anecdotal evidence in US jurisdictions has been that competitive supply of metering has not lowered costs to the consumer. The switching rate of customers away from the LDC had been very low, and many third parties that owned meters are contracting services from the LDC. It has resulted in slower deployment and penetration of smart meters as LDCs have been reluctant to invest in their own metering fleet. In contrast, there is a view in Ontario that competitive supply of metering in the wholesale market has reduced costs considerably.

Implementation Issues:

LDC Issues:

- Metering costs are currently embedded in the rates. LDC's would have to adjust their rates if a third party is to provide metering service to consumers.
- Allowing a third party to provide the service adds another billing line item which may be viewed as contrary to the most recent changes required by the Government to bill prints in its attempt to minimize the number of line items.
- Allowing a third party to provide metering service to consumers would require
 collection of metering costs and pass through arrangements to the third party. OEB
 rate approvals may be required for separate meter provision charge.
- Settlement issues regarding late payments, and unpaid bills would need to be worked out (e.g. who gets paid first in the event that customer provides only partial payment?).
- Who purchases or pays for the existing assets that will be declared stranded once new metering requirements are in place.

Customer Issues:

- Most small customers do not differentiate between the supplier of electricity and the supplier of the meter. Separating the functions could add confusion at a time when the industry is already seen as confusing.
- Some customers would like to have specific metering services or metering functions made available which are outside of the "standard" offering of the LDC (power quality monitoring, etc.).
- Customers who purchase power from "Agents" or "Retailers" may wish to have the meter provided by the same entity.
- Customers may be upset if they perceive that adding new meter suppliers is a new cost. (For example: Customers always paid for industry debt but were unaware of the fact until it became a new line item on the bill).
- If a party other than the distributor owns the meters, this may become a barrier for the customer to switch retailers

Retailer / Aggregator Issues:

- Some Retailers or Aggregators may wish to have specific meters that are outside of the standard offering of the LDC.
- Retailers and Aggregators have expressed interest in obtaining customer usage data closer to real-time. Owning and reading the meter would give them this opportunity.
- Retailers may wish to own the meter and control the communications platform for metering in order to piggy-back other services such as load control.

Vendor Issues:

- Some vendors would want to sell both the product and the service as systems integrators
- Vendors may not wish to take on the risk of customer non-payment for settlements because of lost or inaccurate meter data. Contracts with LDC's would become important to ensure liability for "lost data" is appropriately apportioned.

Vendors have stated in their submissions that they would prefer to deal with fewer rather than more purchasers. Adding more meter providers would be contrary to these statements as long as LDC's are forced to provide services to "default" consumers.

IMO Issues:

- IMO issues are mainly tied to wholesale metering, and would likely only be involved if it is felt that adding more meter providers would increase availability of MSP services to the Wholesale Market Participants.
- IMO may be concerned if settlement issues from private meter companies cause delays in clearing the Market.

OEB Issues:

- OEB would need to establish and enforce a Metering Code that establishes an MSP's responsibilities.
- OEB would need to be granted regulatory authority over meter service providers in order to regulate costs and timely provision of service.
- OEB would need to assess the impact (positive and negative) of private suppliers on existing LDC rates.
- Enabling customer choice in the meter service provision would further fragment the metering technologies deployed in the province and reduce economies of scale.

Summary of Discussion / Analysis:

The working group agreed that innovation, customer responsiveness and efficiency are goals that should be achieved in the metering area. The question is what is the most cost effective way to achieve these improvements and still be able to achieve provincial targets for smart meter implementation?

Options that eliminate the LDC monopoly would likely drive more innovation as third parties may choose to experiment in new market offerings while the LDC's regulator would likely demand investment in proven technologies to limit risk.

For Options 1 and 3, the LDC would remain the default meter service provider. Although the working group did not have any analysis that showed the additional costs for LDCs to become default meter service providers in a contestable meter supply model, it was felt that due to the need for redundant processes, systems, inventory along with new interface points with third parties, costs to the customer would go up significantly. From the benefit point of view, the working group did not have any analysis that showed that benefits from innovation and customer responsiveness would be sufficient to justify the additional LDC costs for these options and anecdotal evidence of experiences in the US showed that customers did not receive the anticipated benefits of lower costs.

Option 2 could result in better use of the new infrastructure by a third party and the proceeds from the sale of the monopoly could be used to pay for stranded assets. Any sales of LDC assets related to the implementation of this option would require OEB approval as all LDC asset sales require OEB approval. In addition, all union staff would

need to be transferred with the sale of the assets to the third party service provider (under the Ontario Labour Relations Act (section 69(2))

From an implementation timeline perspective, both options 1, 2 and 3 would require that new regulated entities be setup and that federal laws such as the LMB-EG01 Act be changed in order to eliminate the LDCs legal responsibility for metering. With the already tight timelines imposed by the provincial targets, the working group felt that setting up new regulated entities and modifying regulation would delay a much needed early start to the initiative. As well, with more entities involved in the procurement and installation processes there was a greater likelihood that economies of scale would not be achieved and the price per point for smart meters would go up.

By keeping legal responsibility for metering with the LDC whose costs are already regulated by the OEB as in option 4, LDCs could have performance standards imposed on them related to metering service provision. Although possibly less effective than competitive pressure on costs, benefits could be achieved without LDC divestiture (e.g. through meter supply contracting).

The retailer representative in the working group suggested regardless of which option is proposed, that the costs associated to the meter and related activities should be unbundled and accounted for as a separate line item on the customer's bill. A move towards unbundling of these costs would:

- Provide customers with a clear understanding of the associated charges which is part of the government's initiative in respect to the smart meter implementation.
- Be a catalyst for consumers to take action to conserve energy in other words use the benefits of the functionality afforded to them by the meter they are being charged for
- Provide an opportunity for market evolution. Cost transparency would allow other entities to be able to see the costs associated with meter services and would allow them to determine whether there was a competitive offer or package of value added services that they could offer customers.

Recommendations:

Option 4 is recommended (i.e. metering service remains a regulated distribution function). To address possible issues related to the non-contestability of meter service such as the early installation of smart meters for consumers looking for the expeditious deployment of smart metering functionality, general service customers >50kW will be allowed to self select to have their meters installed prior to their deployment schedule but after the communications infrastructure for their area has been decided and subject to meter availability. Self selecting customers will not incur any additional charges for self selection except if they request enhanced meter functionality or off-hours installation. LDC will be mandated and held to compliance to provide a 4-6 week turnaround on meter requests (subject to meter availability tied to procurement strategy) except for extraordinary circumstances. Early installation will also be contingent on the customer meeting all conditions required for the LDC to be able to access the meter location and

perform the installation. Conditions include, but are not limited to: clearing of path to the meter by the customer; LDC access to meter room; LDC entry to the building; customer agrees to power outage and conditions of service are satisfied. The OEB should define performance standards as part of the changes to existing regulatory guidelines on service quality indicators. In the event that LDC non-compliance to requests becomes problematic, the OEB should revisit the issue of contestability as a possible solution.

As a result of the mass deployment approach recommended for general service <50kW and residential customers, self selection will not be an option for these customer segments.

The recommended option would not restrict LDCs in engaging in Meter Supply Contracting including leasing arrangements subject to their collective bargaining agreements and guidelines for leasing arrangements.

With respect to the issue of unbundling meter charges and accounting for them as a separate line item, this issue was determined to be out of scope for the working group and will be passed on to the OEB's Smart Metering Initiative - Costing working group for their consideration.

Dissenting Opinions:

None