

Comments on: Implementation Plan for Smart Meters in Ontario

The plan to install smart meters across Ontario is an excellent long term vision which will lead to more responsible energy use, stimulate innovative opportunities and, in turn, reduce the overall demand for energy during critical peak times.

Bluewater Power favors a solution entailing a minimum standard 'default' 'smart' meter that would record hourly interval and be read remotely. The default meter would be offered with a default TOU price structure. Most consumers actively participate in time dependant pricing via their long distance telephone service, a default two tier TOU energy price would not be a hard concept for consumers to grasp. Mindful of the fact that energy is a means to an end and for many low-volume consumers that end is the fundamental needs of everyday life, Bluewater Power encourages the Province to adopt a solution that does not burden low-volume consumers with costly features that they would not be in a position to take advantage of. Presumably, one would be most likely to curtail or shift load that is somewhat discretionary (i.e. luxury), because of this Bluewater Power believes that features that are geared to individual benefit should be paid for by the benefactor.

Section 3 – Essential Elements of an Implementation Plan

3.1 Procurement Strategy

The theory of economy of scale is appropriate in this situation however, as we have seen time and time again, in reality the savings are just not significant. Other costs such as administrative bureaucracy would likely outweigh the savings. Alternatively, by creating a minimum standard, both in hardware and software, the Province could set a fixed standard allowance per meter for all the requirements. The fixed allowance would reflect the theoretical economy of scale but would allow for innovation and diversity of providers. This allowance would be a ceiling where LDC could then work aggressively to 'beat' the fixed price. The key to innovation is the standard.

3.2 Implementation priorities

Priority must be given to the areas that are under constraint (downtown Toronto) but not at the exclusion of widespread end users who are eager to adopt smart metering (self-selection). It will be critical to have small 'wins' early in the rollout, however, it is important that the 'wins' are sustainable. Puget Sound for example, had a very successful (300k) early voluntary uptake on TOU; however those customers were exposed to high prices prior; unlike our customers. Once the market price dropped people opted out and went back to a fixed price and a standard meter. The whole program was shut down less than 2 years after it was initiated.

A >50kW target is also an option, however, this could cause a supply 'crunch' for 'complex' type meters and would possibly quash novel options that will develop over time. The >50kW will likely be the segment that is most likely to utilize additional features and many of these features will only become apparent with experience.

3.4 Process driver

Bluewater Power would endorse the OEB as being best able to play the role of overseeing the rollout and implementation of this initiative. We would envision this process would be similar to Market Readiness, including a self-certification aspect.

Section 4 – Cost recovery

4.1 Meter charge

Bluewater Power favors a structure where the Regulator sets a Provincial standard allowance for metering systems and metering functions. The allowance would remain bundled into the distribution rate. The allowance would cover the costs of a standard interval meter, communications, data processing, data storage, maintenance, and compliance testing. If a customer wishes to upgrade their meter the LDC would provide a depreciated value credit to the customer. The customer would be free to shop around for a MSP (accredited) and purchase the meter from the competitive supplier, provided it met the provincial standard. Any additional features would be billed via a separate line item on the regular power bill.

4.2 Third tranche

The third tranche should not be used as a method to fund the purchase or installation of smart metering. This money could however be used to educate people on the merits and purpose of smart metering and to develop programs for people to take advantage of smart meters. In the Bluewater service area the entire third tranche would fund less than 10% of the required meter installations (based on \$200/meter installed average). The third tranche will have a much greater and early impact if it is focused on local DSM/DR programs in conjunction with the smart metering initiative.

4.4 Third party

The opportunity of third party funding exists in the option for a MSP or retailer to participate in the upgrading of the standard meter.

General comments

Bluewater Power believes statements that imply smart metering will be less expensive to own and operate than traditional meters are erroneous. Any redundancies that are a result of the initiative will be trivial in comparison to the additional IT resources and infrastructure required. In addition the concept of using interval meter data for system optimization will only be realized if additional resources are spent to make those opportunities possible, the interval meter data in and of itself will not.

Section 5 – Meter Functions

5.1 Measurement

Bluewater Power favors the Australian approach where the regulator mandates a minimum requirement and any additional features should be market driven. The key to this initiative are standards, open protocol and compliance. Bluewater Power favors the minimum meter functionality as being capable of recording hourly consumption periods and being capable of remote interrogation. Metering functionality is important but equally important is the 'back office' infrastructure. Communication protocol must be standardized and capable of being

passed via a wide range of mediums. The protocol must be open and ideally be based on an existing standard (i.e. XML EBTs). The billing engine must be capable of receiving the hourly data, blocking it into limitless combinations of consumption sums and applying different rates. It is critical that the standard default meter does not limit or impede any future market based innovation.

5.3 Data storage

Bluewater Power favors a solution that would use existing technology and existing standards; for example XML is the standard for retailer communication, this format is already used for metering data EBTs and can be stored and retrieved efficiently.

5.4 Bi-directional communication

Bi-directional communication will have bigger benefit to individuals then to society as a whole; therefore if bi-directional communication is desired then it should be paid for by the benefactor. The customer may desire bi-directional communication in order to remotely control household appliances, an LDC may desire bi-directional communication for remote disconnects and a retailer might desire bi-directional communication for the purpose of load control to manage contracts. In each case there is a clear benefactor, the party that will benefit should pay for the option. The minimum standard meter should/could be capable of adding this feature as an aftermarket upgrade.

Section 6 – Ownership

General comments

Bluewater Power favors a solution that requires the LDC to be the meter provider of last resort, as well as the default provider. Bluewater Power would encourage competition for meter services provided LDCs are not excluded from the opportunity to offer competitive services to the market on a level playing field. As the default meter service provider and the billing agent there would be very little saving to the LDC if a customer opted for a private MSP. The LDC would still be required to receive data, maintain records, track compliance and provide recovery service if the private MSP failed. Therefore, a level playing field is created where a third party MSP is required to pay the host LDC a fee representing the cost of its back office services. Otherwise, the host LDC is saddled with costs and no means of recovering them.