Regulatory Review – Smart Meters
Essential Services Commission
Level 2, 35 Spring Street
MELBOURNE VIC 3000

19 May 2010

To the committee responsible for Regulatory Review – Smart Meters,

Submission in respect of Essential Services Commission 2010, *Regulatory Review – Smart Meters*, April

With regard to the above-mentioned regulatory review, please find below a summary of comments against a number of 'Issues for comment' highlighted in the Issues Paper published by the Essential Services Commission:

s3.2.1 Reviewing the bill

Verifying accuracy of the bill
- Whatever the tariff structure used, customers must be able to check applicable tariffs to confirm what they are being charged is correct.
- With regard to the introduction of Time of Use (TOU) tariffs, the deregulated nature of the retail market implies the unbundling of retail and network tariffs must be enforced i.e. the retail and network tariffs must be separate.
- The Commission should also consider standardised terminology and naming across network and retail tariffs, so customers can compare alternative retailer offers.
- Improvement in consistency of the billing process itself is also required to reduce instances of non-billing, where sites are not billed at all across successive quarterly periods.

Experience in the >160 market sector where interval meters have been used for some time shows customers can really drown in data; the availability of raw data in itself is not an issue. The issues have been and still are concerned with:
- Accuracy: monthly bills can contain errors; data gaps, incorrect tariffs and incorrect consumption figures even though interval meters are recording and reporting data.
- Understanding: raw data (particularly the interval data) cannot be aggregated easily at desktop level. Development of system infrastructure should include (web based? Government/ESC-sponsored?) tools that can import and present data on a daily/weekly/periodic basis for comparison across different time periods, and to verify billed information.

Estimated and substituted data on bills
- Clear guidelines are required regarding estimated bills as this is an issue in the <160MWh market sector. The prevalence of estimated bills and subsequent re-billing is not an efficient business process for customers.
- A similar comment to the above applies to substituted data, clear guidelines are needed.

s 3.2.2 Managing daily consumption and costs

Customer billing cycle
- A default arrangement of monthly billing should be considered by the Commission. This improves cash flow to retailers and should reduce any risk of customer default due to the financial impact on them of large quarterly bills.
- Monthly billing should also reduce the impact on customers of non-billing by retailers; hopefully upgraded retailers' systems would pick up instances of sites not billed for two successive months rather than two or more quarters.
- Some customers (and retailers) might prefer an option of bi-monthly or quarterly billing, especially where electricity bills are relatively low as an example. The Commission could recommend that a retailer and customer can <u>mutually agree</u> an alternative billing cycle to the default arrangement if they so wish.

Graphical information on the bill
- Existing bills from retailers show a simple graphical comparison in any case, usually to the same quarter in the previous year.
- The requirement here is whether:
    - The 'smart meter system' itself includes a facility (e.g. web portal) to access, interrogate and compare usage data on a periodic basis selected by the customer (daily, weekly or whatever) or,
    - The retailers' billing system is upgraded to offer this capability to each customer.
- The Ontario smart price pilot example appears to represent a desirable model to follow.

Unbundling tariffs and charges on the bill
- Having separate network and energy tariffs is desirable, as in Victoria's deregulated energy market customers will be able to compare energy tariffs between retailers and against market trends.
- Again as mentioned above under s3.2.1 above, in the event of unbundling then standardised terminology and tariff band definitions must be introduced.

Access to historical billing data
A two-year availability period is sufficient as a default measure. Commercial customers and retailers should be able to agree other arrangements if they so wish.

Access to metering data
- Access to interval ('metering') data is essential for understanding usage patterns, although some means of aggregating and presenting data within the 'smart meter system' must be available to customers for this to be of any use.
- Commercial customers with multiple sites will require access to meter data for all sites. Retailers or distributors must be obliged to provide data to customers or their nominated third party.

- Security is viewed as a significant issue in the context of a wireless network. The smart meters in themselves must be protected so network hackers cannot access and corrupt meter firmware/software, or remotely disconnect the meter.
- The retailer is the mandated face of the electricity supply industry for most customers. However, if distributors are responsible for smart meters and associated system architecture then there is some logic in arguing that they are responsible for interval data provision to a customer or that customer's nominated third party.
- Access to data for the customer or their nominated third party by website download is probably the most cost effective means of distribution.

s 3.2.3 Shopping around for a better offer

As mentioned elsewhere, standardised terminology and tariff structures is viewed as essential in order to be able to compare retail offerings, whether domestic or commercial. The industry itself may view this as too restrictive a request that would stifle competition. However the alternative, with limited or no standardisation risks creating a structural inability to compare retail offers; de facto an uncompetitive market since customers would not be able to make and exercise a genuinely informed choice.

s 3.3, 3.3.1, 3.3.2 and 3.3.3 Remote disconnection and reconnection issues

- Again security considerations come to the fore. Any computer network is capable of being hacked, and as part of such a network smart meters are vulnerable – even if remote disconnection is an unintended consequence of a hack.
- System architecture must be such that it treats disconnection as an abnormal, non-routine event, and retailer-distributor requests for disconnection prompts a specific sequence of multiple steps to ensure that appropriate checks are made regarding customer status.
- Some thought should be given to having a physical safeguard, for example key-operated switches for disconnection to become effective. This could also offer some protection against the wrong customer being disconnected.
- Disconnection/reconnection in the event of property sale/purchase should not be an issue – the retailer/distributor only needs to be notified of the date and time of transfer. Interval meters are capable of recording consumption either side of an agreed date and time of transfer.
- As no other practicable means appears readily available, supply information will have to be provided to new customers by the distributor. If necessary this should be by means of a sticker placed in the meter box.

Yours faithfully

Ian Hill
Category Manager – Strategic Sourcing
Government Services Division
Department of Treasury and Finance