

SP AusNet Submission
Smart meters regulatory review
Capacity control and verifying bills

Submitted 8 February 2011

About SP AusNet

SP AusNet is a major energy network business that owns and operates key regulated electricity transmission and electricity and gas distribution assets located in Victoria, Australia. These assets include:

- A 6,574 kilometre electricity transmission network indirectly servicing all electricity consumers across Victoria;
- An electricity distribution network delivering electricity to approximately 575,000 customer connection points in an area of more than 80,000 square kilometres of eastern Victoria; and
- A gas distribution network delivering gas to approximately 504,000 customer supply points in an area of more than 60,000 square kilometres in central and western Victoria.

SP AusNet's purpose is to provide our customers with superior network and energy solutions. The SP AusNet corporate values are :

- **Safety:** is our way of life. Protect and respect our people and our community.
- **Passion:** to bring energy and excitement to what we do. Be innovative by continually applying creative solutions to problems.
- **Teamwork:** to support, respect and trust each other. Continually learn and share ideas and knowledge.
- **Integrity:** to act with honesty and to practise the highest ethical standards.
- **Excellence:** to take pride and ownership in what we do. Deliver results and continually strive for the highest quality.

For more information visit: www.sp-ausnet.com.au

Contact

This document is the responsibility of the Network Strategy and Development Division, SP AusNet. Please contact the officer below with any inquiries.

Peter Ellis
Network Market Service Manager
SP AusNet
Level 31, 2 Southbank Boulevard
Melbourne Victoria 3006
Ph: (03) 9695 6629

SP AusNet understand that the Commission sees some potential customer issues with the services provided by smart meters. However these services are largely undefined in any detail and will develop with time. Further these services have the capability, as shown by the government cost/benefit study, to provide significant overall communal benefits.

In the following submission SP AusNet has provided some comments on the matters raised by the Commission, but consider that it is premature to consider the smart meter regime at the level of detail to which the Commission has addressed its Issues for Comment questions. SP AusNet consider that whilst the Commission has legitimately raised a number of matters with potential “adverse” customer impacts, that these must be considered in conjunction with a broader look at the processes to best extract the benefits of smart meters and smart meter services.

This is a large exercise and to a large extent is being currently undertaken under the auspices of the National Smart Meter Program (NSMP) in the Interchange Information Exchange Committee’s Business Process and Procedures WG (BPPWG) under the management of AEMO. A balance consideration of the meter parameters and process controls is unlikely to arise from this restricted Commission paper and consultation. The Commission’s outcomes from this consultation would be best seen as contributing to this NSMP/BPPWG exercise. In Item 1 of this submission SP AusNet have stressed the need for the Commission to recognise the broad issues required to be tackled to improve the customer experience of smart meters. In Item 2 SP AusNet has given only restricted comments on the specific “Issues for comment” as we consider that these can only be considered in the broader context of the overall processes.

1. Supply Capacity and Load Control - General comments

Whilst we understand the Commission attempting to establish some principles for the potential usage in the future of the advanced service features of the AMI meters, we consider that the proposal to establish a regulatory framework now, and at the level of detail which the Commission appear to be considering, is premature and inappropriate.

Whilst it is appropriate that the Commission consider the customer protection parameters for the use of the additional advance functionality, it would appear from the list of detailed questions that the Commission are contemplating a quite detailed outcome with very specific usage rules. This is inappropriate as this micro-regulation will potentially restrict the use of the advance functionality to achieve real industry cost savings and ultimately benefit all customers. The Commission should rather be looking at the broader customer protections which are currently in place and to ensuring that these are properly articulated and are providing the level of protection appropriate for any new services to be introduced whether as a result of smart meters, or any other technology changes.

Whereas the AMI meter functionality is clearly defined, the service offerings which utilise the functionality in smart meters are far less certain. There are conceptually generic industry uses of this functionality in the industry and government planning but the specific uses and service options are far from defined. The industry through the NSMP are currently working on establishing the rules and processes for the utilisation of the smart meter functionality including supply capacity and the load control functionality. However this process is still a work in progress

Further whereas the smart meter enabled services are to an extent defined, those related to the growing potential use of non meter based communication to switch customer load are not. Hence unless the Commission (and other Regulators) establishes broad high level mechanisms and measures for customer protection, then the detailed obligations will need to be changed whenever a new service or change of service offering is put on the table.

The issues which the Commission appear to have in mind and about which they appear to have based their “Issues for comment” listings can only be derived by analysis of these questions.

It would appear that the Commission main broad concerns are:

- Will customers potentially enter supply capacity and load control contracts without proper understanding of the consequences?
- Will the financial incentives match the “costs” (supply impacts) to the customer of the service offering?
- Putting aside the special needs of life support customers are there other potential customer protections which need to be in place?

SP AusNet considered that these concerns can be best met by the Commission and the government ensuring that:

- customers have the necessary information available to them, and be exposed through sufficient publicity and education to this information, to enable them to relate potential supply capacity and load control service offerings to their own situations so they can understand the possible impacts and possible cost savings, and make the necessary judgements before taking up these type of service offerings. The assessment of the necessary actions should be informed by the past and current widely recognised adverse responses to smart meters and time of use tariffs largely because this important aspect has been less than satisfactorily handled to date.
- customers are provided with sufficient specific detail of any service offering and the “tools” to assess their situation against this offering as part of the industry approach to the customer. The assessment of the necessary actions for improvement and strengthening should be against the current marketing obligations. Will they as currently drafted provide the necessary support for customer decisions?, or are more specific and tailored obligations required for smart meter service offerings?

The government decision to rollout smart meters was based on a perception that there was a need to facilitate the next generation of customer service offerings and distribution network and energy supply provisions based on the functionality offered by smart meters.

Therefore it is not sufficient for the Commission to assume an opt out option will work in every circumstance. If one of the key benefits of smart meters of reducing plant costs, whether distribution or generation costs, is to be realised then ultimately there may not be capacity in place for mass numbers of customer to return to service offerings which do not incorporate some form of load control.

2. Supply Capacity and Load Control – Specific matters

SP AusNet has given some consideration to the specific questions raised by the Commission however the following brief comments are based on only preliminary deliberation of the potential usage of supply capacity and load control. As outlined above the service offering and industry usage of the supply capacity and load control functionality is far from defined.

Potential uses are:

- Emergency management to enable customers limited access to power rather than suffer full power outages
- Management of customers with payment difficulties to enable limited supply to be maintained rather than disconnection
- Distribution load management or retailer energy management to reduce costs in exchange for some inducement (or as part of a broad policy approach to community cost or emissions reductions)
- Capacity management to ensure connection capability or ratings are not exceeded

However details of these uses will be developed by the NSMP, by the broad industry in other forums (eg emergency management forums), and by individual businesses. Each of these uses, and potentially variation on these uses, will likely produce different answers to the Commission's specific questions regarding supply capacity and load control functionality parameters. Further, ongoing operational experience with these functionality uses will provide feedback regarding customers responses to the "signals" presented by the parameter settings.

- i) Cutoff limits: Very dependant on the uses outlined above, and for some of these will need to be developed with experience and will need to be flexible to enable a match to the specific scenarios involved
- ii) Off period: For some of the potential uses above the supply capacity based switching or load switching action is a "reminder" to the customer that they have exceeded to contracted, agreed, or imposed power limits and for them to take the necessary action to adjust their load within the limits. The off time in these uses at least will need to be sufficient for the customer to do this load switching.
- iii) On period: If the on period is too long then the broad load level outcome sought by these uses will not be achieved.
- iv) Turn off numbers: As the aim is to provide a necessary or contracted load reduction then forcing a turn on based on numbers then the broad load level outcome sought by these uses will not be achieved.
- v) Health and safety risks and life support customers: For a number of the uses the load reduction is in lieu of loss of supply. The aim is to allow customer sufficient power for a number of "essential" appliances.
- vi) Third parties: It is not clear to SP AusNet whether the NSMP process is adequately covering the risk of third parties load switching to the detriment of customer directly or to the broad distribution network. No discussion re an obligation "mechanism" has been suggested.
- vii) Customer education: As stated above in Item 1 this is a critical aspect of ensuring customers can adequately assess the "disadvantages" AND their specific upsides of these services
- viii) Manual override: Allowing manual override will for most of the uses put the load reduction aims at risk
- ix) Contract arrangements Contract provisions are a matter currently covered by regulation.

3. Reading at Meter Changeover

It is unclear in the Commission's paper as to the issue which the DPI is suggesting exists and which can be solved by the distributor taking one of the suggested actions.

At the time of the meter exchange, whether as part of the AMI rollout or for a ad hoc forced or customer requested meter exchange, the distributor has an obligation to take a meter reading and to provide that reading to the customer's retailer. Whilst the Retailer Code appears to not oblige the retailer to include this reading on the customer's bill it would appear that providing this is necessary for the customer to make any sense of their bill total consumption compared to their meter readings.

Either of the options (read card or reminder to read the meter) would suggest to customers that this point in their billing presents a special risk. This is not the case and we consider that rather than emphasise the risk, the DPI's and Commission's aim should be to provide customer education and reassurance that this change does not present a special risk. This

reassurance could be done in association with a clear statement of what readings will appear on the customer's next bill after the meter exchange.

The leaving of a card has some directly associated costs, and is also more likely to raise customer concerns resulting in increased industry customer call handling.

4. Start reading on smart meter bills

Under recent changes to the Distribution Code, distributors are required to provide the "total accumulated energy usage reading" (index read) at the end of the billing period. Retailers will therefore have this information to put on the customer bill, and of course the index read at the end of one billing period is the index read at the start of the next billing period.

However as emphasised by industry these index reads are not the basis of customer billing. The customer bill will be derived from the interval data mapped against the customer's tariff. Although not clear in the meter Functionality Specification, in SP AusNet's meters the midnight index will be stored and this index delivered whenever in the calendar day the meter is read. With interval data the retailer will be able to end a bill period at any date AND time. Unless the retailer bill period ends at midnight when the index read "snapshot" was taken, the difference between the current index read, and the index read on the customer's last bill, will not correspond to the aggregated interval data. Further any substitutes of interval data (although hopefully infrequent for remote reading) will cause a mismatch on the calendar day of the substitutes (and in the associated billing period).

The use of interval data for billing (and the associated potential time based tariffs) does necessitate some changes to how customers view their bills and how they consider and hopefully manage their load. Whilst it may be reassuring to try and synthesise a data approach which matches the current customer experience with consumption read based billing, this ultimately will not help customers to take advantage of the benefits of interval data. The emphasis by the Commission and the government should be on information and education of the way forward and not on maintaining current practices. This will only result in customer concerns when the result does not match their "old" expectations and increased industry costs of enquiries and complaints which ultimately result in cost increases to customers.