



EnergyAustralia

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Transition to Metering Competition in Victoria – Options Paper

1. Introduction

EnergyAustralia welcomes the opportunity to comment on the Department of Environment, Land, Water and Planning's (the Department) Options Paper for a transition to metering competition in Victoria. We are one of Australia's largest energy companies, with over 2.5 million household and business customer accounts in NSW, Victoria, Queensland, South Australia and the Australian Capital Territory. We also own and operate a multi-billion dollar portfolio of energy generation facilities across Australia, including coal, gas and wind assets with control of over 4,500MW of generation in the National Electricity Market.

Competition in metering is one of numerous complementary Power of Choice initiatives that will deliver benefits for customers by granting them greater control over their energy consumption. EnergyAustralia supports these initiatives and is now working towards their implementation in 2017. This includes the development of new market procedures and, more significantly for customers, innovative retail products and services.

Unfortunately, given the history of the smart meter roll out in Victoria, much of the focus has been on the meter itself, rather than the services they enable. Meters are only an enabler to delivering products and services to customers, whether that is new tariffs, consumption data, improved network management, solar or battery integration. The take-up of these services will be driven by consumers and retailers (or other third party providers) who are best placed to respond to consumer demand.

Competition in metering encourages a customer-focussed approach and the delivery of a broader range of benefits than is likely under a mandated, network monopoly model. Customers benefit when retailers compete to offer products that meet their needs. Therefore, we support the commencement of arrangements to facilitate metering competition in Victoria as soon as possible; any delay simply denies the realisation of further benefits to Victorian customers.

We also support national consistency in meter specification. In our view, delivering the Victorian-specific functionality imposes additional (unnecessary) costs and it is not clear they are outweighed by the benefits. The Victorian Auditor General concluded that *'costs are forecast to increase and benefits remain decidedly uncertain. In contrast, while a few benefits*

*have accrued to consumers, benefits realisation is behind schedule and most benefits are yet to be realised.*¹ We view this as the consequence of a mandated, distributor-led rollout.

A separate Victorian metering standard also undermines the service offering of retailers and metering providers. It is costly to develop, provide and maintain different standards across retail offerings and metering configuration. We expect some retailers and metering providers will simply choose to concentrate their activities elsewhere (which is not a good outcome for Victorian customers) and could result in insufficient capacity to meet customer demand.

The imposition of technical standards and specific technologies over and above a basic level of functionality also inhibits innovation as it tends to reflect views about the optimal technologies available at a specific point in time. These can be easily superseded through technological change.

Victorian customers are now saddled with technologies that weren't identified or delivered through a competitive market and are not necessary to take advantage of recent and future technological developments. Safety concerns are valid, but are best addressed through specific regulations that target the potential for harm, irrespective of who is responsible for metering services. Therefore, EnergyAustralia encourages the Victorian Government to look beyond the meter and consider what model for metering most efficiently delivers services to Victorian customer. Option 1 does this most effectively.

Outcomes under competitive metering could take different forms. For example, retailers may replicate many of the functions currently prescribed in Victoria at the time of installation or could install meters that are capable of delivering additional functions at some future point and with little incremental cost. However, metering functionality will ultimately reflect customer preferences and will be delivered at least cost.

Options 2 and 3 are least preferred as they would effectively lock in the Victorian specification – and its additional costs – beyond a time when incumbent meters start to fail. This would prolong its effects, undermining the development of more innovative retail services in Victoria that will become available in other jurisdictions. Victorian consumers have already paid more for smart meters than they needed to and locking in the Victorian specification ensures this continues. Option 4 is preferable to Options 2 and 3 but is still problematic. It defers customer benefits but leaves the possibility of a transition to effective competition and innovation at the end of the current network revenue determination period.

The remainder of this submission discusses these points in more detail and answers specific questions from the Department's Options Paper.

2. Preferred option – Option 1: Competition in metering with the national minimum services specification

EnergyAustralia sees little policy or commercial justification for maintaining a separate metering standard in Victoria and therefore recommends the Victorian Government implement Option 1 in line with the national approach. The Government should confirm this as soon as possible to allow retailers and metering providers to include Victoria in their plans head of the introduction of competition in metering on 1 December 2017. All market participants are building Option 1 so the other options maintain the distinction between Victoria and other jurisdictions, which imposes additional cost.

¹ Victorian Auditor General (2015), *Realising the Benefits of Smart Meters*

In our view, Option 1 complements other regulatory and market initiatives that are providing customers with greater visibility and control over their energy consumption. This includes specific measures such as customer access to data and the implementation of more cost reflective network tariffs, in addition to measures to promote the use of and competition in behind-the-meter products.² Proceeding with Option 1 will allow retailers to provide similar meter-based offers for new products and services to customers in all states at the same time.

We note that Option 1 will effectively be a new and replacement policy. Few retailers and their customers will be willing to absorb the significant exit fees that apply in Victoria (in the range of \$500 to \$600).³ This will alleviate some of the concerns that the Options Paper expresses about the 'loss' of network benefits but will delay the benefits of a competitive metering environment for Victorian customers.

From a customer perspective, smart meters enable retailers to develop products that build on more granular data and improve customers' understanding of their consumption patterns. Retailers are developing alternative pricing models (to allow customers access to wholesale prices or to respond to cost reflective network tariffs, for example), more accurate bills and bill predictions, and unusual consumption alerts.

Over the longer term, smart meters will optimise customers' use of solar, battery and other behind-the-meter technologies, and facilitate more efficient consumption through smart, connected homes, offices and factories. Competition in metering is an important element of an effective retail market as it complements the strong commercial incentives for retailers and meter providers to deliver all the benefits of smart meters that customers want.

Competition in metering with a minimum specification grants retailers the flexibility to install functionality that supports or optimises other technologies – load management, solar, batteries, etc. – where an individual customer uses or expects to use that technology. Furthermore, this functionality would truly reflect customer preferences rather than specific network requirements. An example is direct load control, which is a function we have found some customers dislike but which is standard under the Victorian specification. Under competitive metering, a retailer would likely only install this function if customers wanted to manage their energy consumption in this way. However, the Victorian specification imposes the cost of the entire package of functions on all customers, irrespective of whether they currently have or are even considering these technologies.

Outcomes under competitive metering could take different forms. For example, retailers may replicate many of the functions prescribed in Victoria at the outset or could install simple meters that are capable of delivering additional functions at some future point and with little incremental cost. Ultimately, however, metering functionality will reflect customer preferences and will be delivered at least cost.⁴

Network benefits under contestable metering

Customer needs and preferences are the starting point under a competitive metering model, rather than network requirements. The Options Paper implies that applying the national

² An example of the latter is the Australian Energy Regulator's process to develop a new national ring-fencing guideline for electricity distribution businesses. Its objective is to promote competition in the market for contestable services such as metering, solar and battery storage.

³ We expect the Victorian Government will not consider removing these exit fees as they are the recovery of sunk network costs and would ultimately be recovered from customers through some other mechanism.

⁴ The current pricing for single phase residential meters appears to range from approximately \$100 to \$150.

specification in Victoria will result in a loss of significant network benefits and that Victorian customers will ultimately suffer from reduced service quality as a result. We do not expect this will occur or that metering competition will undermine the safe, reliable and efficient provision of network services.

Similarly, the Victorian Auditor General recommended the Department monitor the Australian Energy Market Commission's proposal, and engage with the Australian Energy Regulator to introduce metering competition in a way that 'preserves' AMI benefits.⁵ Firstly, we note the Victorian Auditor General's conclusions that the network efficiency benefits are significantly lower than forecast and could fall below expectation over the full life of the program. In fact, the major network efficiency of the smart meter rollout – reduced manual meter reads – has largely been achieved and will continue under a competitive rollout.

Secondly, this suggestion that network benefits will be lost fails to account for the commercial incentives on respective parties. A lower *minimum* specification doesn't mean these network benefits or specific meter functions are lost. Rather, they will be realised through commercial transactions. Similarly, retailers will offer functionality above the minimum specification when it reflects customers' preferences.

For example, the Options Paper suggests that retaining the Victorian meter specification means there is the 'potential to retain the benefits of the Victorian smart meter rollout', an example of which is the immediate detection of supply outages. This fails to take account of the customer-focused incentive on retailers to ensure their customers have access to reliable supply and to configure meters accordingly. This may not necessarily be the last gasp technology inherent in the Victorian specification but will reflect customer requirements and expectations.

The Government should assess the incremental improvements of last gasp functionality to determine whether its costs do not negate the customer benefits of having supplied restored slightly earlier. The quantification of benefits should take account of customer requirements rather than a face-value comparison of metering specifications.

More generally, retailers have an incentive to capture the full range of benefits, including any that improve the safety and reliability of network services and for which networks are prepared to pay; the latter are the 'societal benefits' to which the Options Paper refers on page 17. Networks can procure these services or purchase data (such as electricity current and voltage data) and recover their cost when they can demonstrate to the Australian Energy Regulator they promote efficient network operations. The commercial incentive for retailers to provide networks access to these functions could be set up via network tariffs.

Alternatively, networks might consider other (lower cost) mechanisms for acquiring data, such as installing separate network devices to co-exist with meters. We understand this can be done easily and at little cost, without jeopardising the safety or reliability of either network services or meter functionality.⁶

Network devices can be placed on a meter board and do not interfere with the competitive meter. They do not necessarily need to meter consumption but can produce voltage, current, and other metrics that enable the networks to them to monitor safety. They can also be configured for remote re-energisation and de-energisation.

⁵ Victorian Auditor General (2015), op. cit., page 49

⁶ We understand the cost is approximately \$100 plus installation, and would be included in a network's Regulated Asset Base. It could be installed at the same time and the competitive meter to avoid an additional installation charge.

The key point is that networks will procure or install particular solutions that are capable of achieving the outcomes listed in page 17 – and any other services to improve network operations additional to those listed – when the benefits outweigh the cost. The Australian Energy Regulator can then verify this when networks seek to recover those costs through regulated revenue.

These commercial arrangements will require some lead time; networks will need to determine which services they require and then negotiate with retailers and metering providers to reach mutually acceptable terms. However, the industry is already moving in this direction due to national initiatives, while the transition in Victoria will be gradual while substantial exit fees remain in place.

There is no basis for introducing an access regime to manage these processes. These regimes are costly to establish and administer and tend to generate a net benefit when there is clear evidence of market failure. Therefore, we share the Australian Energy Market Commission's view that implementation of an access regime in a market that is clearly not a natural monopoly is costly and unnecessary.⁷

Safety concerns are legitimate given the Victorian Government's inclusion of safety features in the metering specification. However, they can be directly targeted through specific safety regulations administered by Energy Safe Victoria. Governments across the National Electricity Market retain control over the regulation of energy safety and are supporting competition in metering in this way. Compelling commercial incentives also reinforce safety regulation to ensure that meters are safety installed and operated.

Operational implications of a consistent metering specification

Finally, consistent regulation and technical standards promote efficiencies across retailing and metering. Consistency reduces administrative and compliance costs and encourages the broad development of service offerings; this means Victorian customers would have access to the same innovative retail services that will also emerge in other jurisdictions. From our perspective, it would also provide consistency when dealing with networks across all NEM jurisdictions with proposed national procedures as the basis for these interactions.

3. Relevance and appropriateness of the Victorian specification: Options 2 and 3

EnergyAustralia understands the Victorian Government and distribution networks' reluctance to depart from the Victorian specification. It represents a significant investment – and cost to consumers – the benefits of which are starting to emerge. Similarly, Victorian networks have developed systems and processes based on this specification and the functionality that it provides. Networks have been able to recover implementation costs even where they have exceeded initial estimates and now earn a regulated return on metering assets.

Our concern, however, is that this specification doesn't reflect a genuine customer perspective but instead, appears to have been configured to capture network benefits that would flow through to customers at some point. As discussed above, network benefits are only one element of the broader value that smart meters generate.

⁷ See Section E of Australian Energy Market Commission (2015), *Expanding competition in metering and related services, Rule Determination*, 26 November 2015

Distribution businesses installed and now maintain Victorian meters at significant cost, while customers are yet to enjoy significant benefits. This reflects the nature of the mandated rollout and the fact that regulation can only seek to replicate competitive outcomes.

The Victorian specification generates some network benefits but as the Victorian Auditor General notes, they remain theoretical to some degree, may not be realised in full at any point and have come at significant cost.

The question is whether some other less costly mechanism would have delivered these and indeed, other network benefits. We do not say this to be critical of the initial decision to have a network-led rollout with a Victorian-specific specification and service levels. This reflected the state of competitive metering at the time but there has been significant evolution in metering services and a thorough process to determine a national specification since that initial decision.

As our support for Option 1 indicates, competition in metering creates incentives for retailers and networks to identify and transact for the delivery of network benefits, while also delivering additional customer benefits.

Specification of technical standards

Regulators generally have insufficient information and imperfect foresight about how markets might evolve and cannot create the same incentives to encourage innovation or reduce costs that apply under competition. This was the case in Victoria where a decision was made to mandate certain technologies and functions. This reflected views of the optimal technologies in the market at that time and assumptions about customer attitudes and retailer offerings in the Victorian retail market. This includes the receptiveness of customers to more innovative pricing, such as time-of-use tariffs

Our fundamental concern with the mandated Victorian specification is that it locks in particular features and functions, the value of which to customers is not guaranteed over time and could have been achieved at significant lower cost through competitive processes. Mandated service standards tend to reflect views of optimal technologies and requirements at a point in time and almost by definition, fail to account for technological change. Furthermore, mandated technologies are only valuable to customers if technology in other areas is sufficiently advanced.

All Victorian customers are paying for this functionality, irrespective of whether it reflects their current and future needs or whether it generates network benefits. Many customers may be unwilling to allow load limiting, remote load management or local access to a metering system via a registered device but they are paying for this functionality.⁸

The prime example is the Zigbee transceiver, which enables a home area network. There were few opportunities to utilise this when it was installed because of the absence of complementary developments in appliances and infrastructure, or the absence of a genuine customer appetite for this functionality. Customers would typically reveal these preferences through a market transaction.

The choice of this technology also presupposes that it would be at the centre of communications with respect to energy market offerings. However, this is no longer the case; it has been superseded by wi-fi and other mobile technologies. Most 'smart' products within a

⁸ These are three of the notable differences between the Victorian Minimum functional specification and the proposed minimum national smart meter services.

home will operate through direct control inside a house using wireless or data obtained through the market, rather than through Zigbee. It does not necessarily create an obstacle but simply imposes an unnecessary cost.

Operational implications of maintaining the Victorian specification

A policy decision to maintain the Victorian specification, either through Option 2 or 3, would effectively lock Victorian customers into this model beyond the commencement of metering competition in other jurisdictions. This is a timeframe that is likely to extend beyond the life of some incumbent Victorian meters (around 15 years from initial installation). Market participants would need to maintain systems and processes to support both models and customers whose meters needed replacement would again face substantial exit fees for a further 15 years. This imposes additional costs and may discourage the rollout of innovative retail products and services in Victoria that will emerge through competitive processes in other jurisdictions.

It is also unclear how metering providers (and manufacturers) will respond to having to provide a different specification in Victoria when expected replacement volumes are low. The Victorian Government may want to consider the cost (e.g. the potential loss of scale economies) and any other implications of maintaining a separate specification, particularly when other jurisdictions are implementing metering competition in a consistent way. It is likely there will be less support or complementary infrastructure for Victorian meters and a lesser incentive to maintain inventories, thereby threatening their supply during some periods. Smaller providers could struggle to generate scale economies if they are only providing meters for some relative small proportion of the estimated 100,000 Victorian meters that will be installed / replaced annually.

Safety considerations

The Options Paper rightly focuses on the safety elements of the Victorian specification and questions how they might be managed if Victoria adopted the national specification. We view safety as a separate issue from customer functions quality standards (although they will interact to some degree) and suggest it is best addressed through specific safety regulations.

4. Other matters

The Options Paper expresses concern about the 'initial disruption' that a transition to competition in metering with a nationally consistent specification could create. As we have explained, the large regulated exit fees in Victoria mean the transition would effectively apply only to new connections and replacement meters. This implies a relatively soft opening; it gives sufficient time to all parties to develop the necessary contractual arrangements and procedures and to harmonise their operations. The national procedures for metering competition are the template for how Victoria would operate under competitive metering.

We do not support Option 4 as it gives no certainty to any market participant about whether and when Victoria might transition to competition in metering (and under what specification).⁹ It offers no indication as to when the Government might resolve these key questions. Unlike Options 2 and 3, however, it does not necessarily lock Victorian customers into a costly, network-focused framework for another 15 years (i.e. the expected life of Victorian meters).

⁹ The Government should also consider the effect of regulated exit fees and whether the remaining written down value of Victorian metering assets could be recovered through some less restrictive mechanism to facilitate metering competition.

The Options Paper suggests the start of the next electricity network revenue period as a possible commencement date if the Government decides to proceed with metering competition. We believe this is too distant and that the market requires certainty as soon as possible. Market participants would continue to operate different systems and processes, and the difference between a monopoly and competitive model in terms of cost and product innovation would become increasingly apparent.

We recognise Option 4 may have some intuitive appeal given the significant capital invested in the current model and some risk aversion of the part of the Government and the Victorian networks to an alternative model. However, retention of the networks' control over meters – a service that is clearly contestable – and maintenance of the Victorian specification simply delays the customer benefits of competition in metering, undermining the delivery of the innovative service offerings that smart meters enable. The benefits to customers include not only innovative product and service bundles and new technology, but a lower overall cost of supply. We expect the cost of metering in a regulated monopoly is significantly higher than will be the case when managed by retailers who operate in competitive markets.

Regardless of which option the Government chooses, we recommend it notify the market as soon as possible to give all participants sufficient time to incorporate the necessary changes to their systems and procedures. Retailers require certainty to develop their product offerings while networks require certainty to undertake effective network planning, given the long lives of network assets.

Should you require further information regarding this submission please me on (03) 8628 1242 or Geoff Hargreaves on (03) 8628 1479.

Yours sincerely

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