

14 February 2021

Mr Ed Chan
Australian Energy Market Commission
Submitted electronically via aemc.gov.au

Dear Mr Chan

Review of the Regulatory Framework for Metering Services – Consultation Paper (EMO0040)

SA Power Networks welcomes the opportunity to provide a submission to the Australian Energy Market Commission (AEMC) Consultation Paper on reviewing the regulatory framework for metering services. Effective and efficient delivery of metering and associated services is critical to the long-term interests of electricity customers.

The current competition in metering framework has not delivered value for customers

The reforms introduced in the AEMC's [*Expanding competition in metering and related services*](#) rule determination (competition in metering) have fallen significantly short of AEMC and industry expectations. Customers have incurred significant additional costs but have not received many of the intended benefits.

Our feedback from South Australian customers and electrical contractors is that they are bewildered at the complexity, inefficiency and the degradation in customer service outcomes delivered by the competition in metering framework. The metering sub-group of SA Power Networks' customer-led Connections Working Group is providing a submission to the AEMC focussing on these customer impacts.

Inclusion of basic network data as part of the standard metering service will deliver customer value

One of the key sources of value anticipated from the competition in metering reforms was anticipated to be the utilisation of meter data and services by Distribution Network Service Providers (DNSPs) to more efficiently manage their networks for customers.

Indeed, our analysis of the limited additional technical data we have procured has led us to identify several serious safety hazards (potential electrical shocks arising from neutral displacements) at customer installations. Wider availability of this data would enable DNSPs to identify similar issues at other customer installations and enable remedial action to be initiated.

The limited data obtained has also confirmed the potential value of such data in allowing SA Power Networks to better manage and optimise the Distributed Energy Resource (DER) hosting capacity of its network. Improved network visibility is key to enabling customers to connect more solar and export energy through the network.

However, although SA Power Networks has been able to negotiate access to a limited amount of metering data from some Metering Coordinators (MCs) for small-scale trials, we have not achieved a

workable arrangement for ongoing access to data to use operationally. Impediments to this outcome arising from the current framework include:

- Lack of standardisation of data services, formats, and interfaces between different MCs.
- No workable framework for establishing an efficient price for data services and no ongoing price certainty. Initial offers from MCs have differed widely.
- In our trials, data access was terminated when the customer churned to another retailer. This was due to restrictions in the commercial agreement between the retailer and the MC and we note that in this instance it was a large National Electricity Market (NEM) retailer with many customers. Accordingly, the current competition framework has not provided certainty for ongoing DNSP data access.

SA Power Networks considers that the following amendments governing data access would result in improved outcomes for customers:

- Inclusion of basic network data as part of the standard meter reading service — Expanding the metering data that is currently provided to DNSPs as part of the normal daily meter reading cycle from just customer billing data to include some basic technical data (5-minute readings of voltage, current, real and reactive power for each active phase). This basic technical data will enable improved safety outcomes for the community, more efficient network planning and investment, greater visibility of the Low Voltage (LV) network and more accurate DER impact assessments. We understand that such basic data could be provided with little marginal cost to MCs.
- A workable framework for negotiated provision of more advanced technical data or services — Specifying additional metering data and metering services that the MC must be capable of providing. This could, for example, provide the same network data as above but synchronised every five minutes via an Application Programme Interface (API). DNSPs could negotiate a fee for these data/services via a light-handed regulatory regime similar to the negotiating framework specified in the National Electricity Rules (the Rules).
- Agree standard data formats and service levels for network data — To minimise the costs of data delivery and processing by third parties (including DNSPs) an independent body or a representative industry working group should develop a well-defined set of standards that specify the data formats and delivery performance standards for MCs and their Meter Data Provider (MDP).

Expanding the range of mandatory data MCs provide to DNSPs as part of the standard metering service will not present any risk to competition in metering services. However, it will provide an incentive for MCs to minimise the costs of data provision that are ultimately borne by customers.

DNSPs should be permitted to provide Metering Provider (MP) services to MCs

We welcome the AEMC reviewing options for increasing the pace of the roll out of smart metering to customers, subject to an analysis of the costs and benefits ultimately to customer service. In our view, one of the options that should be evaluated is allowing DNSPs to provide the MP service role to MCs upon their request (or some other basis), as part of regulated distribution services. Although DNSPs have the capability to perform this role and do so for legacy meters, the AER's Distribution Ring-Fencing Guidelines currently prohibit DNSPs from providing this role (e.g. meter install and repairing) for smart meters, even if requested by a MC.

Consideration should be given to the potential greater efficiencies DNSPs can bring to installing and repairing meters by drawing on their existing work crews who are based in depots geographically



dispersed throughout their networks, and the synergies between these and other distribution services such as connections work. These efficiencies will be most pronounced in rural and remote regions where other parties may lack sufficient scale to install and attend to meters in a timely and cost-effective manner. Customers in rural and remote regions in particular are experiencing poor service (high cost and delays in meter installation) since competition in metering commenced.

In summary, where an MC wants a DNSP to perform the MP role, the DNSP is willing to do this, and this will provide an improved outcome for the customer, regulation should not prevent this.

The focus of this and other reviews into new energy services should be guided by the NEO

We urge the AEMC to carefully review the experiences that customers and industry have had with the competition in metering framework. These experiences highlight the risks to good customer service that result when overly simplistic regulatory delineations are made between the electricity services that should be regulated or opened-up to competition. This is particularly the case for services that can be most efficiently provided together with other distribution services.

As the AEMC examines potential reforms to competition in metering and considers the regulatory frameworks for other new and emerging electricity services, we caution against presuming that competition will always deliver the best outcomes for customers. The focus of these reviews should be on considering the regulatory frameworks that can best achieve outcomes in customers' long-term interests consistent with the National Electricity Objective (NEO).

Finally, we also encourage the AEMC to undertake a further review of the competition in metering framework in another three years to determine whether any reforms implemented from this review, and indeed the underlying framework, are working in customers' best interests.

Our comments here are further detailed in the Attachment to this letter.

If you wish to discuss any aspect of our submission, please contact Mr Grant Cox on 08 8404 5012.

Yours sincerely



Mark Vincent
GENERAL MANAGER STRATEGY AND TRANSFORMATION



1. Background

1.1 Expanding competition in metering and related services

The AEMC introduced new rules to provide for competition in metering services on 1 December 2017.¹ The rules made retailers responsible for appointing MCs when a new or replacement meter was required, with such meters needing to be advanced or smart meters (ie type 4). DNSPs remain responsible for legacy meters (type 5 and type 6). There was a transitional changeover in South Australia which allowed SA Power Networks to continue to install some meters until March 2018 to allow retailers additional time to develop systems and processes and procure additional resources.

MCs have overall responsibility for all aspects of metering installations and must appoint a MP for each customer connection point to provide, install, and maintain the meter installation and must also appoint a MDP who is responsible for the collection and processing of metering data.

The AEMC's 2015 rule determination outlined five expected customer benefits to be delivered from the reform², including:

- better information,
- cost-reflective pricing,
- better network service,
- better retail service, and
- new products and services.

1.2 Scope of the AEMC's Metering competition review

The AEMC committed to a review three years after the commencement of the metering framework, which would consider:

- whether small customers should be able to appoint their own MC instead of just retailers, and
- whether some form of access regulation to metering services and meter data is required.

The scope of the current review has expanded beyond that originally anticipated by the AEMC, with the purpose of the review now to determine:

- whether the reforms introduced under the 2015 rule determination have met expectations,
- whether amendments are required to improve the efficiency and effectiveness of the regulatory framework for metering services, and
- whether the regulatory framework enables the implementation of other key policy reforms under which metering services will play a role³.

SA Power Networks welcomes this scope expansion, and considers that the AEMC should closely review how the competition in metering framework has fared against each of the five expected customer benefits listed in section 1.1 above.

During development of the competition in metering framework, DNSPs including SA Power Networks expressed strong concerns that there were key risks associated with the framework that had the

¹ AEMC, [Expanding competition in metering and related services](#), Final determination (November 2015), p. XV.

² AEMC, [Expanding competition in metering and related services](#), Final determination (November 2015), p. 35.

³ AEMC, Consultation Paper, Review of the Regulatory Framework for Metering Services (December 2020), p. 5-6.

potential to undermine the AEMC's intended outcomes. Some of these risks, such as the difficulty for DNSPs in accessing metering data and services under commercial negotiation, remain. For example, one large NEM retailer bars MCs from providing DNSPs access to any additional (ie non billing) technical information that smart meters collect, despite the Rules permitting this access. The AEMC recognised these concerns at the time and proposed that its three-year review should consider the case for potentially regulating access to metering services and meter data.

Prior to publishing its Consultation Paper, the AEMC conducted initial consultation with stakeholders including DNSPs, to establish whether expectations of the competition in metering framework have been met. The Consultation Paper notes that the general sentiment from stakeholders is that smart meters and smart meter data are being underutilised in the NEM. The Consultation Paper highlights the many uses and services that smart meters can provide or facilitate to benefit customers. Under the current framework customers are not receiving the full benefit that smart meters can provide.

2. The current state of metering

2.1 Introduction of competition in metering in South Australia.

South Australian customers, the electrical contracting industry, SA Power Networks and retailers went through considerable pain and incurred significant additional costs when competition in metering was introduced. The deterioration in customer service that resulted is partly observed through the significant increase in metering related complaints raised by customers to the Energy and Water Ombudsman of South Australia (EWOSA)⁴:

- Complaints increased from an average of 25 per month for the last six months of 2016 (ie prior to the full introduction of competition in metering) to an average of 182 per month for the six months ending August 2017 (ie immediately after the transitional period when SA Power Networks still installed some meters).
- Even by 2020, three years after the introduction of competition in metering, the number of complaints still averaged 73 per month in the first six months of the year.

2.2 Roll out of smart meters in South Australia

Prior to the commencement of the competition in metering framework in South Australia some retailers were carrying out pro-active smart meter rollouts. However, the volume of meters installed under these rollouts has gradually decreased and now ceased, suggesting that the framework has not facilitated any acceleration in the rollout of smart meters, and in fact, may have led to quite the opposite.

SA Power Networks is aware that customers can still wait considerable time to have their smart meters installed or to replace faulty meters. We also note the fines that the AER has recently imposed on some retailers for failure to install smart meters within a reasonable timeframe. We believe that there should be stronger requirements on retailers and MCs for replacing faulty meters including family failures.

We also disagree with the suggestion in the Consultation Paper that customer choice of metering related services has been driving installation of smart meters. Our experience is that the installation of smart meters is being driven by customers needing new meters consequent to requesting either a

⁴ See AEMC Consultation paper Metering services review, 3 December 2020 page 28.

new network connection or the installation of a solar PV system, rather than by additional services that smart meters provide specifically. We are unaware of any evidence to suggest that customer choice in metering services is driving any material take-up of smart meters.

2.3 Issues with the current framework and processes for smart meter installs

Currently, there are issues with the coordination of the attendance of MPs to install a smart meter to coincide with work SA Power Networks is required to complete for a new connection or upgraded connection. Previously, the work to install the new service or upgrade an existing service was performed by the same SA Power Networks crew that installed the meter, which was efficient for the customer. Competition in metering introduced a more convoluted process for customers and for all the parties now involved to install new meters and complete the network connections work. It created additional failure points in the process and significantly increased the administration and coordination required, compared to the previously integrated customer service process provided in South Australia by the DNSP.

The introduction of competition in metering has resulted in installers and electricians (PV installs and new connections) charging significant additional costs to customers reflecting their increased time to coordinate the installation of smart meters. All retailers employ different processes. These hidden costs were not effectively considered when competition in metering was introduced.

We are aware of instances where electricians conducting electrical installation upgrades have bypassed engaging with retailers for a new smart meter and have relocated the existing meter. This practice by some electricians is to avoid the high costs and delays in the installation of a smart meter.

Our feedback from customers and electricians is that they are still bewildered at the complexity, inefficiency, and the degradation of the provision of services under the competition in metering framework. The metering sub-group of the SA Power Networks' Connections Working Group⁵ recently completed a survey of solar and electrical contractors in South Australia in preparation for its submission to this AEMC review. One of the findings of that survey advocated for a return to SA Power Networks undertaking the metering installation work or for a single point of contact to coordinate all parties involved for a better outcome for customers.

We advocate for retailers to adopt a single consistent process for customers, electricians and solar installers when requesting a smart meter, irrespective of who the retailer is for the site. This should reduce some of the inefficiencies in the current meter installation process.

Many MPs have procedures that are based on the most common meter installation types but struggle to deal with the full range of metering installation configurations. Their standard procedures are unsuited and unsafe for some installations in South Australia. Further, their procedures, and the range of meter installation variations, lead to customer inconvenience and otherwise avoidable costs.

Where a metering installation is not what the MC considers as typical, they will often seek to push the additional costs onto the unsuspecting customer. Some MCs have slow and inefficient processes

⁵ The SA Power Networks Connections Working Group (CWG) is an independently chaired industry group established in August 2019 to advise SA Power Networks on ways to improve the customer experience in the connections process and provide a forum for customer views to be considered and discussed. The group consists of representatives from the renewable and solar industry, energy consultants, electrical contractors, and key industry bodies, such as NECA and MEA.

which have become well-known for causing repeated cancellations and delays. This results in additional cost and frustration for customers, their electrician and SA Power Networks.

2.4 Lack of access to meter data for DNSPs

One of the key sources of value anticipated from the competition in metering reforms was expected to be the utilisation of meter data and services by DNSPs to more efficiently manage their networks for customers.

Indeed, our analysis of the limited additional technical data we have procured has led us to identify several serious safety hazards (potential electrical shocks arising from neutral displacements) at customer installations. Wider availability of this data would enable DNSPs to identify similar issues at other customer installations and enable remedial action to be initiated.

The limited data obtained has also confirmed the potential value of such data in allowing SA Power Networks to better manage and optimise the DER hosting capacity of its network. Improved network visibility will be a key to enabling more solar to connect and export energy through the network.

However, although SA Power Networks has been able to negotiate access to a limited amount of metering data from some MCs for small-scale trials, we have not achieved a workable arrangement for ongoing access to data to use operationally. We understand this is consistent with the experience of other DNSPs. Impediments to this outcome arising from the current framework include:

- Lack of standardisation of data services, formats, interfaces, etc between different MCs.
- No workable framework for establishing an efficient price for data services, no ongoing price certainty – initial offers from MCs differed widely.
- In our trials, data access was terminated when the customer churned to another retailer. This was due to restrictions in the commercial agreement between the retailer and the MC and we note that in this instance it was a large NEM retailer with many customers. Accordingly, the current competition framework has not provided certainty for ongoing DNSP data access.

3. The future state of metering

3.1 The metering framework must incentivise efficient customer focused processes

The AEMC must create a regulatory framework that supports efficient and effective processes for the installation and maintenance of smart meters, and promotes the efficient rollout of meters. The framework should ensure that customers receive all the benefits that can be provided by smart meters.

We welcome the AEMC reviewing options for increasing the pace of the roll out of smart metering to customers, subject to an analysis of the costs and benefits. One of the options that should be evaluated is allowing DNSPs to provide the MP service role to MCs upon their request (or some other basis), as part of regulated distribution services.⁶

⁶ The AER's Distribution Ring-Fencing Guidelines currently prohibit DNSPs from providing this role (e.g. meter install and repairing), even if requested by a MC.

Consideration should be given to the potential greater efficiencies in installing and repairing meters that DNSPs can bring, by drawing on existing work crews located in regions dispersed throughout their networks, and the synergies between these and other distribution services such as connections work. These efficiencies will be most pronounced in rural and remote regions where other parties may lack sufficient scale to install and attend to meters in a timely and cost-effective manner. We understand that customers in rural and remote regions in particular are experiencing poor service (high cost and delays in meter installation) as a result of MCs' work practices. It appears MCs typically delay meter installs until there are of sufficient number in a given area to minimise the costs of sending a technician, given that unlike DNSPs they do not have a standing presence of work-crews and depots in diverse locations.

3.2 Enable access to meter data by DNSPs

The local DNSP is not a competitive entity with a commercial interest in metering services. Australia's electricity networks are part of the nation's critical infrastructure, and DNSP access to meter data can support the safe and efficient operation of the network in the long-term interest of the community.

We believe there should be a review of the minimum specifications of the services that must be provided by MCs as standard. We consider that basic technical data that is already captured or able to be captured with minimal marginal cost and which promotes the safe and reliable operation of the distribution network should be included in the standard metering service and made available to DNSPs at the same time and at same intervals as the billing data.

At a minimum, this should include instantaneous 5-minute readings of voltage, current, real and reactive power with directionality (ie export or import) for each active phase and provided as part of the standard meter reading service. This data is valuable for the efficient planning of the power system, particularly as networks work to integrate increasing amounts of DER, and can deliver improved safety outcomes for customers by enabling DNSPs to detect certain safety risks like degraded neutral at the customer premises.

All meters should also have a minimum capability to support a standard set of more advanced data and services (e.g. near-real-time data feeds or status enquiry, or 'ping'). We propose that such additional metering services or meter data, beyond the basic technical data set, could be accessed via commercial arrangements.

The AEMC's Power of Choice report⁷ acknowledged that:

*"The metering arrangements need to consider the overall efficiency of the market, including the impacts on retailers, LNSPs and consumers, rather than being efficient for their own sake"*³

We have found that under the current framework, there is no competition between MCs for the provision of meter data to support network services, providing no competitive check on the costs of obtaining metering data from MCs. For example, if a DNSP requires data from a specific customer's site it must deal with the incumbent MC, and has no option to seek a more competitive offering from another MC.

Our understanding is that the incremental cost of providing the proposed minimum basic data set as part of the standard meter reading service is likely to be very low. The provision of such basic technical

⁷ AEMC 2012, *Power of choice review - giving consumers options in the way they use electricity*, Final Report, 30 November 2012, Sydney pg 83

data 'free of charge' would not disadvantage the MC in providing the services, since the customer is fully funding the provision of the services through their metering charge – as is the case today with the provision of metrology data via the B2B hub. As all MCs would be required to provide the same basic services, no MC would be at a competitive disadvantage. Normal competition between MCs in the provision of metering services to retailers would, however, provide an incentive to minimise any cost of providing this basic technical data.

By including a well-defined basic data set as part of the standard metering service, DNSPs would have the ongoing certainty of access they require to invest in operational systems that rely on this data.

The format of additional data provided should be standardised, established by an independent body or an industry representative group, which will minimise cost and effort for both MCs and DNSPs. Whether the data is provided in a separate channel along with the billing data or in a separate file would need to be agreed by stakeholders to minimise the costs.

We propose that there could be three tiers of metering data or metering services:

Tier 1 – basic technical data, the provision of which would be mandatory as part of the standard daily meter read, including:

- Voltage, current, real and reactive power including directionality (ie export or import)
- 5 minute interval preferred, or aligned with the interval of billing data
- Provided at least every 24hrs along with billing data
- No charge to DNSP, amortised with other service costs

Tier 2 – additional standard data and services not included as part of tier 1, that all meters must be capable of providing, which could be activated as required under commercial arrangements and subject to a fee, e.g.:

- the capability for the provision of same data as Tier 1 but updated on a more frequent basis than the normal daily read cycle, e.g. provided every five minutes and synchronised via an Application Programming Interface (API)
- On-demand meter enquiry service ('ping')

Tier 3 – additional data and services not included as part of tier 1 or tier 2, which would not be required to be available at every meter installation, but could be activated under commercial arrangements if agreed between a DNSP and MC, e.g.

- Near-real-time outage notification ('last gasp')

Tiers 2 and 3 could be provided under a light-handed regulatory regime such as a negotiating framework to ensure that the price for the service / data would be reflective of the incremental cost of providing the service / data.

The provision of Tier 1 service / data would deliver immediate benefits to customers by:

- improving network planning (eg reduce augmentation costs) and DER hosting capacity; and
- improving safety outcomes, as this data would enable DNSPs to detect neutral displacement issues. As highlighted above a neutral displacement issue leads to electric shocks in customers' premises and in the worst case can result in serious injury.

The provision of Tier 2 and Tier 3 service / data could enable networks to further improve the hosting capacity of the network for DER, enable more advanced dynamic voltage management capabilities and reduce service restoration times after outages.