



Ms Anna Collyer
Chair
Australian Energy Market Commission
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**Review of the Regulatory Framework for Metering Services –
Consultation Paper (EMO0040)**


Dear Ms Collyer

The Energy and Technical Regulation Division (the Division) of the South Australian Department for Energy and Mining thanks you for the opportunity to comment on the Review of the Regulatory Framework for Metering Services – Consultation Paper.

The Division considers this an important review to ascertain the effectiveness of the first three years of the metering reforms, and to identify if improvements are necessary to enable a greater uptake of smart meters.

Despite the uptake of smart meters in South Australia being steady, as shown by figure 3.2 in the Commission's paper, the total number of type 4 meters in the state was only around 196,000 in January 2021, compared to over 867,000 type 6 meters. The Division considers uptake would be much lower if not for the high rate of solar photovoltaic installations in South Australia that require a meter upgrade.

This point is supported by data from the Australian Energy Regulator's (AER's) retail energy market performance update for quarter 3, 2019-2020 which shows that consumer requests (following solar installation) were the key driver of meter installations, making up over a third of meter installations.

The Division notes that smart meter installations due to retailer-led roll outs are the smallest proportion of installations as measured by the AER. Not only is this the lowest category for South Australia, but for this category South Australia was below all other states. We consider the total number of smart meters installed would be much higher if retailer rollouts were more advanced.

We consider that following the 2017 reforms much of the onus of a successful take-up of smart meters lies with electricity retailers. Evidence suggests that in general electricity retailers have not been able to develop and implement successful campaigns to facilitate the roll out of smart meters. The Commission is encouraged to explore why retailer led rollouts of smart meters are not occurring, particularly in South Australia.

Noting the lack of electricity retailer led roll out, the Commission should also carefully consider whether triggers for smart meter installations need to be tightened. Triggers the Commission could consider include annual energy use or age of meter. There are significant emerging challenges in the energy markets and smart meters have a critical role in helping to address these challenges.

Minimum operational demand is an emerging challenge that must be managed in South Australia. The Australian Energy Market Operator (AEMO) has been analysing low demand conditions and advised that without action, low demand conditions could represent a real risk of the supply of electricity being disrupted to all or part of the South Australian community. A report from AEMO highlighted several challenges arising from the increasing and unmanaged supply of electricity to the grid from rooftop solar. Emergency back stop mechanisms involving management of distributed energy resources (DER) and enabling flexible load response could assist mitigate the impact of this emerging challenge.

The Division considers smart meters to be an important tool in assisting with issues associated with minimum operational demand. Smart meters enable customers to make more informed choices about how they use energy and facilitate demand management value propositions for customers. In short, they can facilitate a shift of demand from peak periods to low demand periods.

As you would be aware, the South Australian Government is implementing South Australia's Energy Solution to address the risks raised by AEMO. In late 2020, South Australia introduced the Smarter Homes reforms which include a new technical standard which requires that certain generating systems connecting to the South Australian distribution network be capable of being remotely disconnected and reconnected. The standard contributes to increasing the ability of the distribution network to host DER and secure operation of the power system.

The new standard requires that all new prescribed electricity generating plants are capable of being remotely disconnected, and later reconnected, by a relevant agent registered with the Technical Regulator. Where components of a designated electricity generating plant are replaced, this also requires that plant meet the remote disconnection and reconnection requirement. A smart meter may be one technology by which a relevant agent may undertake this direction.

The Division had expected increased instances of time of use tariff offerings following three years of the metering reforms. The implementation of these types of tariff offerings are critical to provide customers with incentives to ensure greater consumption is moved to low demand times.

Latest data from the AER shows that time of use, or flexible tariffs, represent under four percent of all retail tariffs in South Australia as of the first quarter of 2020-21. The Division questions whether the slow roll out of smart meters is impacting the offering of such tariffs.

The Smarter Homes package therefore also introduced a new requirement on retailers operating in South Australia to have a standing offer which includes a tariff structure that incentivises electricity use in low demand periods, such as a time of use structure. The requirement was implemented under section 22 of the National Energy Retail Law. These amendments require that all electricity retailers authorised to sell to small customers in the South Australian region must offer a standing contract to customers with interval meters which includes a prescribed tariff structure (or an approved market offer).

A further requirement under the Smarter Homes package related to the technical components of a smart meter. As you are aware smart meters are one technology that may be capable of remotely curtailing DER. While the minimum services specification sets out a list of services that a meter must be capable of providing, they do not focus on the technical components that must be included (such as the number of elements).

These technical components are often left to others to determine, as well as other national standards that industry must comply with (for example, AS/NZS 3000 which details the Wiring Rules).

Smart meters can have more than one metering element and contactor and are therefore able to measure and operate several separate circuits independently of each other. Through the appropriate number of elements and contactors, the meter can be wired to allow separate operation and measurement at a customer level.

Often, a new smart meter is wired in the lowest cost manner and the installation process includes aggregating all distributed solar generation at the site, together with the customer's general load. Customers with controlled load have this separated from other essential load, however, in general, load associated with smart appliances is aggregated with essential load.

Customers' sites could be configured to have flexible loads (such as hot water systems) and general loads (such as the customer's lights, fridges, etc.) separated from distributed generation (such as solar generation). This would allow demand management activities to occur without affecting a customer's essential load.

From 28 September 2020 in South Australia, a meter installed at a connection point must be capable of separately measuring and controlling an electricity generating plant and controllable load from the essential load. The meter installation is required to comply with the Guideline determined by the Technical Regulator. Consideration of these types of arrangements more broadly may overcome similar issues being experienced in other jurisdictions.

Further, it is worth noting that in November 2019 Energy Ministers agreed to introduce demand response capability requirements for air conditioners, electric resistive storage water heaters, devices controlling swimming pool pump units and electric vehicle charger/discharger controllers. This work was led by South Australia on behalf of the Energy Ministers' Equipment Energy Efficiency program. The net benefits of the measure were modelled to be in the range of \$1,430 million to \$2,800 million net present value, with the most likely value around \$1,870 million, at a benefit/cost ratio of 2.9. This is equivalent to a net benefit of nearly \$200 NPV for each Australian household.

While South Australia supports a national approach to implementation of demand response capable appliances, national progress does not match the growing significance of minimum demand and peak demand challenges in South Australia. South Australia will shortly commence consultation on proposals for early implementation of the Energy Ministers' decision in South Australia.

As noted in the Commission's paper there have been a number of implementation issues since the *Competition in Metering* rule change commenced, many of those relate to customer experience and installation times. These issues may have had an ongoing impact on consumers, with smart meters now being thought of more negatively than they should.

It is worth noting that in South Australia jurisdictional regulations were required to overcome these implementation issues, prior to the national rules commencing.

Despite significant lead-in time for the commencement of the new rules, electricity retailers did not appear to have been adequately prepared for their enhanced role under the framework. This resulted in severe delays, and in some cases loss of supply of electricity, for customers requiring a replacement meter or metering for a new connection to the network. Where a delay in providing a meter meant that a new connection couldn't be energised, customers were severely impacted by not having access to electricity at their premises.

Further, if a meter was not installed the customer did not have the ability to receive payment for any electricity they may export to the grid following installation of their solar PV, or not be able to take advantage of accessing the new services that smart meters can provide, and potentially paid higher energy bills as a result.

While voluntary agreements were initially reached between the State Government and a number of major retailers to establish installation timeframes, as well as agreed compensation to customers for any delays, these agreements failed to resolve the issues being experienced by customers.

As a result, amendments to local regulations were required to introduce timeframes on retailers that ensured that customers were provided metering installation services within an acceptable timeframe. The regulations were made as a transition to the national rules.

As noted by the Commission, the Energy and Water Ombudsman of South Australia (EWOSA) was inundated with complaints following the commencement of the metering reforms in late 2017. While their most recent annual report notes that there has been a gradual decline in these cases since March 2018, electricity metering competition cases were still significantly higher in June 2020 (78 cases) compared to November 2017 (19 cases) before metering competition was introduced.

These negative consumer experiences attracted media focus in South Australia, and had the government, EWOSA and the Essential Services Commission of South Australia (ESCOSA) not acted to alleviate the issues associated with the implementation of the national framework, they may have been much worse and more prolonged.

A further matter which historically has led to negative feedback by consumers in South Australia is where, in certain situations, the local Distribution Network Service Provider (DNSP) has been required to attend a site to de-energise, then re-energise, a home due to a meter changeover.

Given the cost this additional visit would incur, effectively doubling up on the required site visits, and the potential for delays to occur in changing a meter, we query whether the Commission could consider if amendments to the framework could be made to overcome, or improve, this issue while still maintaining all necessary safety precautions.

We understand that on occasions a contractor is used by the DNSP, who could be the same individual who attends as the Meter Provider. We query whether all Metering Providers could be trained to undertake all tasks, rather than the DNSP being required to attend. While recent feedback suggests it is not as big an issue as it once was in South Australia, it may be an area the Commission can look into as advice suggests it still may be an issue NEM-wide.

Finally, while the matter is raised within the Commission's paper, it is worth noting that issues associated with multi-occupancy metering arrangements have been raised in South Australia. The Division's advisory service has advised that correspondence has been received from customers living in multi-occupancy sites where the customer has been told that a standard smart meter does not exist that fits in their meter box. As a result, the customer has been told that they must upgrade the meter board (which they

would bear the cost) or have a smart meter installed that does not support off-peak controlled load.

The South Australian Government thanks the Commission for the work undertaken on this review.

Should you have any questions in relation to this submission, please contact Mr Chris Leverington, Senior Policy Officer, Energy and Technical Regulation Division, on (08) 8429 3298.

Yours sincerely



Vince Duffy

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