Anna Collyer

Australian Energy Market Commission

Submission made online at www.aemc.gov.au

7 November 2024

Dear Ms Collyer,

Subject: ERC0399 Consultation Paper - Real-time data for consumers Rule

SA Power Networks welcomes the opportunity to provide feedback on the AEMC's Consultation Paper on the *Real-time data for consumers* rule change (the Rule Change) proposed by Energy Consumers Australia (ECA).

We support the rule change as proposed by ECA, noting that providing real-time access to data from smart meters will reduce the upfront costs of installing CER and lower the barriers to entry for participation in demand flexibility, delivering increased network utilisation and lowering network unit costs for all customers. However, we consider that the implementation of the Rule Change will need to balance the potential costs and complexities of uplifting metering device capabilities whilst ensuring that the reforms bring genuine benefits to customers throughout the energy transition.

Costs and benefits of providing real-time access to smart meter data

We support providing customers and their authorised representatives with real-time access to data from smart meters at no direct cost. In doing so, a material portion of the costs involved with the installation of a solar PV system, a battery system or any other exporting device could be removed, by removing the need to install an additional site export meter. This site-level power data could instead be retrieved directly from the smart meter, driving down the installation costs of CER over time.

Open access to real-time data will also lower the costs of home energy management system (HEMS) technology by removing the need for additional site-level metering and fostering a competitive HEMS market. We note that additional circuit-level metering is likely to still be required to enable device-specific monitoring for a HEMS deployment, but the Rule Change nonetheless poses a genuine opportunity to drive down HEMS installation costs and foster an emerging market.

We consider widespread adoption of HEMS technology to be critical to Australia's energy transition, enabling all customers to participate in demand flexibility and respond to more cost-reflective pricing. SA Power Networks is seeking to demonstrate the future integral role of HEMS technology via our *Energy Masters* ARENA pilot, through which we have partnered with a leading HEMS provider, energy retailers and the South Australian Government to demonstrate a data-driven and customer-focused energy future across 500 homes in South Australia. We would be happy to engage with the AEMC as learnings from this pilot emerge, particularly regarding the use cases for real-time smart meter data access from a real-world HEMS implementation.

Whilst we foresee significant benefits arising from the implementation of the Rule Change, we recommend that the AEMC carefully consider the timing of the proposed changes. The Rule Change could potentially represent a material uplift in metering specifications, requiring both hardware and software changes to metering products. Given the coincident timing with the *Accelerating smart meter deployment* rule change, we consider that the eventual implementation of the Rule Change,

accounting for development and production timeframes for metering providers to uplift their products, may not occur until a material portion of the current legacy metering fleet has already been replaced with a smart meter. Replacing a modern, recently installed smart meter with a new product enabling real-time data access is unlikely to be economic, and hence we consider that the benefits of the Rule Change may not fully materialise until a significant number of currently or soon-to-be installed smart meters are replaced again at their end-of-life, potentially 10 or more years away.

Technical standards for data provision

We strongly support ECA's recommendation of implementing an open standards-based, interoperable approach to providing real-time data access. To maximise the benefits of the Rule Change, real-time data access should be made available both from the local port and a remote, internet-based option via open standards-based communications protocols, supported by testing and certification requirements to ensure that metering interfaces can be truly "plug and play."

We also support the establishment of a definition for "real-time" data within the Rules but would caution the AEMC against taking the current 'standard' of 5-minute data as being sufficient. We recommend that the minimum frequency to enable *all* use cases should be considered, including participation in the 1-second 'Very Fast' Contingency FCAS market. Best utilising a smart meter as the site-level metering source for CER or a HEMS will require data at sufficient resolution to enable all products that a customer may wish to opt-in to; from basic tariff optimisation through to providing advanced FCAS services via a virtual power plant.

Given the Rule Change seeks to enable a consistent level of access for both customers and their authorised representatives, the definition of "real-time" should be established such that advanced CER and HEMS are able to fully utilise this data to optimise a homes response for the wider benefit of the energy system.

DNSP access to real-time data

The Consultation Paper questions whether there is a need for DNSPs to have access to real-time data beyond advanced power-quality data (PQD). We understand that the provision of advanced PQD to DNSPs is not within scope of the Rule Change, instead being considered in the parallel *Accelerating smart-meter deployment rule change*. We consider that there may be other data streams that can be provided in real-time from smart meters to DNSPs for the purpose of best operating the network, such as 'last-gasp' data produced upon a customer or network outage and voltage excursion 'event' data. Provision of these datapoints in real-time at no direct cost to the DNSP would improve our ability to locate the cause of network outages and detect neutral integrity faults earlier, improving restoration times for customers and reducing shock risks.

We look forward to continuing to engage constructively with the AEMC and other stakeholders to accelerate the transition to a customer-led energy system. Should you have questions on any aspect of our submission, please contact Liam Mallamo, Future Networks Engineer, at liam.mallamo@sapowernetworks.com.au.

Jessica Morris

Chief Customer & Strategy Officer