

7 November 2024

Anna Collyer
Chair
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

Submitted via: <https://www.aemc.gov.au/contact-us/lodge-submission> (ERC0399)

Dear Ms Collyer,

Real-time data for consumers: Consultation Paper

Erne Energy welcomes the opportunity to provide a submission to the AEMC's consultation paper on the rule change for real-time data for consumers, proposed by Energy Consumers Australia¹ in response to the Accelerating smart meter deployment rule change proposal (ERC0378) draft determination², the subsequent Discussion Paper³ and the AEMC Review of the Regulatory Framework for Metering Services (EMO0040)⁴.

In our submission to the Draft Determination for the Accelerating smart meter deployment rule change⁵, we raised concerns that industry access to consumers' electricity use data from smart meters was being prioritised over giving consumers access to their own electricity use data. While the Draft did provide additional protections to consumers by ensuring retailers were required to give consumers a short notice period before applying a time-varying tariff, in the absence of consumers having access to their own smart meter data, consumers would not be able to make an informed decision about whether a time-varying tariff was in their best interests.

The subsequent directions paper allowed for a delay of three years (rather than 30 days) between the installation of a smart meter and the retailer applying a new tariff. This extended time between installation and the application of a new tariff will allow smart meters to be deployed without delay, while the Energy Consumers Australia rule change is progressed. Once the Energy Consumers Australia rule change is final, consumers will have the time needed to access their own data, determine their seasonal electricity use and then make an informed decision whether any new retailer tariff will leave them better or worse off.

Real-time data will support consumers either directly or via their agent better understand:

- their energy use
- identify inefficient appliances
- understand the degree of load flexibility they may have
- provide an immediate insight into whether they are using electricity at a time of high price

This latter point is important given the prevailing industry desire to impose cost-reflective tariffs on consumers.

¹ https://www.aemc.gov.au/sites/default/files/2024-10/ERC0399%20Pending_rule_change_request.pdf

² https://www.aemc.gov.au/sites/default/files/2024-04/draft_rule_determination_-_accelerating_smart_meter_deployment.pdf

³ https://www.aemc.gov.au/sites/default/files/2024-08/directions_paper_-_erc0378_accelerating_smart_meter_deployment_-_ner_and_nerr.pdf

⁴ <https://www.aemc.gov.au/market-reviews-advice/review-regulatory-framework-metering-services>

⁵ https://www.aemc.gov.au/sites/default/files/2024-06/erne_energy.pdf

Consumer access to real-time data underpins drive to consumer-side flexibility as promoted through the unlocking CER benefits through flexible trading rule change (ERC0346) and the integrating price-responsive resources into the NEM rule change (ERC0352).

Aggregators working with consumers (the consumer agent) are likely to need data on a real-time basis and certainly on a 5-minutely basis to demonstrate delivery of a service as contracted and for settlement.

AEMO already has access to metering data as the settlement body and it is unclear what benefit AEMO would have operationally in having access to real-time consumer data. Given the number of consumers in the NEM and the aspiration to ensure the majority of consumers have a smart meter, ingesting real-time, or even 5-minutely, meter data from 10 million consumers (not including any secondary meters offering real-time data) and utilising it real time for operational purposes would be computationally complex and likely take longer than “real-time” significantly reducing any benefits in comparison to the likely costs to AEMO (and hence consumers) to enable that function.

Access to real-time data should be free for consumers. Consumers already pay for the cost of installing the meter either directly or via their electricity bill and should not be expected to pay again for access to their own real-time data. There is a significant disconnect between allowing competitive metering providers to monetise consumer data, but then expecting consumers to pay for their own data.

Given the Retailer is paying the competitive metering provider for the consumption data for their customers, it is unclear how many times a competitive metering provider should be able to be paid for providing the same consumption data. While providing real-time data may come at an additional cost, ensuring that all future smart meters that are deployed meet an industry standard that supports the provision of real-time data to the consumer, will significantly reduce the cost. That is, there may be an initial cost for ensuring all deployed smart meters comply with a real-time data requirement, but once meters comply there should be no further cost.

Where the Retailer is the consumer agent there should be no additional charge for real-time data. The Retailer has the option to negotiate with a range of competitive metering providers and can ensure they secure beneficial terms. Where the consumer’s nominated agent is not the Retailer, the nominated agent should receive the real-time data for free. Any other party, such as a DNSP who wants real-time demand data for operational purposes, or a researcher, should pay to access the data. For a distribution network planning, historic data, rather than data in real-time, is likely to be sufficient for the DNSP.

Consumers have little or no choice in the type of smart meter they receive, even if they requested the smart meter. The Retailer determines the provider of the smart meter and so the consumer has no opportunity approach multiple providers of smart meters to secure their own real-time data on favourable terms. Competitive metering providers are a monopoly provider of meters and data in relation to consumers (in much the same way as a consumer can only be connected to one distribution network).

Even the arrangements for secondary meters under the unlocking CER benefits through flexible trading rule change (ERC0346) are unlikely to give the consumer a choice of metering provider, since the provider of the secondary meter will likely determine which competitive metering provider it will use (or opt for the lower device level meter, where the consumer should have the choice between providers). It will, however, be important to ensure that any secondary meter is also subject to real-time data sharing requirements under this rule change, since the secondary meter will identify real-

time use of flexible resources. This secondary meter is likely to have to be real-time to 5-minutes for settlement of the provision of flexibility services.

Given there is a local port on smart meters, this could be enabled provide consumer access to their real-time data. The consumer only needs to “read” the data from the smart meter and does not require any ability to “write” to the meter. Ensuring that any port on the smart meter is read only, via a cable, USB wireless dongle or via wireless, will prevent any tampering of the consumption data needed for settlement.

It is not clear whether the type 4 specification for smart meters is sufficient for “real-time” or 5-minute data and a new specification and standard for smart meters may be needed. Data format and communication standards are needed, which needs to be backward compatible with already installed smart meters. Given Victoria, with a high penetration of smart meters, uses Zigbee it may be prudent to retain that requirement for all other smart meters outside Victoria. Any communication standard needs to be open source, secure and not proprietary (e.g. Zigbee).

Since real-time data is typically only useful in real-time, it is not clear what benefit storing the data for prolonged periods would be. A degree of retention of real-time data would be necessary to support consumers and their agents to be able to reassess their energy use over longer periods. Given the suggested 3 year waiting period between the installation of a smart meter and the imposition of any cost-reflective tariff⁶, it may be prudent to require real-time data to be stored for a minimum period of 3 years. This would support consumers and their agents to review energy use data once notified by their Retailer that a cost-reflective tariff is likely to be applied.

There may be value in retaining anonymised real-time consumer data for research and modelling purposes. This would create a data set that could be used by academics and AEMO when modelling electricity use and system behaviour. The CSIRO National Energy Analysis Centre (NEAC) might be an appropriate host for such a data set⁷.

We support the proposed definition for real-time data of “data received instantaneously” and would also support the more pragmatic definition of “data should be received within no more than 300 seconds (5 minutes)”.

Many thanks for the opportunity to provide a submission to the Consultation Paper on real-time data for consumers. Please contact me if you need further information.

Yours Sincerely



Dr. Jill Cainey MBE

⁶ https://www.aemc.gov.au/sites/default/files/2024-08/directions_paper_-_erc0378_accelerating_smart_meter_deployment_-_ner_and_nerr.pdf

⁷ <https://research.csiro.au/neac/>