07/11/2024

Ms Anna Collyer
Chair, Australian Energy Market Commission
GPO Box 2603, Sydney
2001 NSW

Dear Ms Collyer,

Consultation on Real-time data for consumers rule

Thank you for the opportunity to participate in the Australian Energy Market Commission (AEMC)'s Consultation on the proposed rule change for Real-time data for consumers.

SA Water is South Australia's leading provider of water and sewage services, providing regulated water and wastewater services to more than 1.7 million people throughout the state. Wholly owned by the Government of South Australia, we have been working to ensure a reliable supply of safe, clean water and a dependable sewerage system for more than160 years.

To support the provision of regulated water and wastewater services, SA Water is one of the largest individual users of electricity in South Australia, operating facilities across more than 1,900 connection points across a wide spectrum of electricity loads. Our unique position as an essential but flexible consumer of electricity has driven us to take innovative approaches to securing a low-cost, sustainable electricity supply, resulting in SA Water registering as a market customer and an integrated resource provider, offering generation and energy storage services to the market.

As such, we are a leader in demand management and optimisation in the National Electricity Market, realising significant electricity cost reductions, delivered through scheduling our consumption of electricity at times when generation is abundant relative to demand, and prices are therefore low.

Providing customers with access to real-time data is a key foundational capability that is required to deliver outcomes for all consumers, similar to those SA Water is already achieving. We acknowledge the significant work already done by the AEMC in the Review of the regulatory framework for metering services and commend the findings of that review; that ensuring access to real-time data enables consumers to maximise the value of smart meters.

SA Water views that providing consumers with access to their own data in real time is a fundamental capability required to enable an effective market that can achieve the National Energy Objectives. Where feasible, an equitable, technology agnostic right to access real-time data in a manner that meets the needs of the consumer should be provided to all customers, while ensuring appropriate privacy and cybersecurity safeguards.

The AEMC consultation paper raised twelve questions, including three relating to the benefits of the change and seven relating to how the change should be made if it is beneficial. Our responses to these questions are attached below.

If you have any queries about this submission, please contact Mr Andrew Wilkins, Energy Markets Specialist at andrew.wilkins@sawater.com.au or (08) 7424 1877.

Kind regards,

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Manager, Energy Strategy

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Responses to AEMC consultation paper questions

1. **What are the benefits of improving access to real-time data?**

   a) **What are the anticipated use cases of real-time data?**

   Our existing access to real time data at some sites enables SA Water to manage demand response far more accurately than through estimating demand based on rated capacity of loads on a site. As a result, SA Water has delivered significant savings through the implementation of demand response at those sites where we have been able to access live meter data. SA Water would be far better positioned to respond to changing market conditions if a right existed to access this data at all our sites, enabling an effective two-sided market where consumers are able to influence their pricing by managing the volume of load during high pricing events.

   During the operation of the Retailer Reliability Obligation reliability gap period in the SA region earlier this year, SA Water, as both a Financially Responsible Market Participant and as an end consumer, met a portion of its obligations using load curtailment. Improved access to real-time data on loads would have enabled SA Water to more confidently manage the trading load in the market during this period, enabling a higher level of accuracy and thus confidence in the magnitude of the load curtailment achieved, and likely increasing the volume of curtailment that we were able to offer should a compliance trading interval have been triggered.

   We also view that a right to access to real time data also greatly reduces barriers to consumer participation in aggregated services such as frequency response services, as the real-time measurement of responses can be provided by the consumer to the relevant market participant to demonstrate delivery of a service. Real time data access also has the potential to enable new capabilities such as management of trading load against the grid greenhouse gas emissions intensity, assisting end consumers to achieve their sustainability objectives by managing consumption to low or zero emissions generation periods.

   Finally, visibility of consumer data enables customers to more actively manage network tariff arrangements, including management of site loads to remain within negotiated maximum demand profiles or creating the potential to develop and participate in new innovative network tariff arrangements that could dynamically respond to changing local network conditions.

   b) **What is the value of the benefits that flow to consumers?**

   Our experience suggests that the benefits from real time data access enable significant savings for end consumers. We believe that market modelling of a demand responsive consumer base would be required to reasonably estimate the full value of benefits unlocked by the proposed rule change across the National Electricity Market. However, this is likely to only estimate the benefits unlocked from existing arrangements and not those released through further product innovation. As such, SA Water sees this reform as a key enabler to a more equitable market for consumers, and one that facilitates the flow of benefits from other market participants to consumers in the form of lower overall end consumer electricity prices.

2. **What are the costs of improving access to real-time data?**

   a) **What are the types of costs that would be incurred to improve access?**

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   b) **What is the magnitude of these costs?**

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   c) **Who would incur these costs?**

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d) Do the benefits of improving access to real time data outweigh the costs?

SA Water views that providing consumers with access to their own data in real time is a fundamental capability required to enable an effective market that can achieve the NEO. The existing information asymmetry resulting from consumers not having real-time access to this information causes distortions in the market which are ultimately paid for by consumers. As such, the cost of not having access to real time data is already borne by all consumers and the additional costs incurred in providing this access would offset the benefits gained by removing the market distortions.

3. Do metering parties currently have a competitive advantage?

a) Do you agree with the proponent that metering parties have a competitive advantage in providing services not related to their core functions of settlement, billing and maintenance?

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b) How would any competitive advantage impact the costs of new energy services to consumers?

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4. Do DNSPs need more than PQD to improve network planning and operation?

a) Do the benefits of improving DNSP access to real-time data outweigh the costs?

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b) What are the use cases for DNSPs and other network planners to have access to real-time data other than advanced PQD?

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5. Who should have a right to real-time data in the NER?

a) Should consumers, their authorised representatives or any other party, including DNSPs, have a right to access real-time data?

Yes, all consumers and their authorised representatives, including DNSPs, should have a right to access their real-time data.

6. How should real-time data be defined?

a) Do stakeholders agree with the proposed definition of real-time data and customer power data?

Yes, we agree with the definition proposed by ECA that real-time data be defined in the NER as data received instantaneously.

b) What should be defined and/or further expanded in AEMO procedures?

AEMO procedures should expand the technical requirements for delivering real-time data, providing service standards that can be assessed to determine if real time access to customer meter data is being provided. Such factors may change over time as the energy markets evolve but might include measures such as the latency, frequency, data gap size or service outage lengths and accuracy standards which access provision can be assessed against.

c) Should data be validated or not?

While customers continue to have an existing right to access validated meter data through market systems, we believe that validation processes would introduce latency that affects the ability for consumers to gain real value from real-time data. As such, we do not believe that real-time data should be validated.

7. How should real-time data be accessed and shared?

a) Do parties, other than metering service providers, need to locally connect directly to the meter to access real-time data? If so, what changes are needed to enable this?

SA Water is of the view that a local connection to the meter is likely to be the primary mechanism that most consumers would gain access to meter data. However, we believe the rule should provide for a technology agnostic right so that alternate solutions can be developed that provide this service in alternate or innovative ways that meet consumer needs.

b) Are there alternative data sharing arrangements that should be enabled by a rule change, if made?

As above, the rule change should strive to be technology agnostic to allow for innovation. For example, in the case of large, sophisticated consumers, access to real time data may be more usefully provided through a data product rather than a physical feed, subject to the capability to meet real-time data outcome specifications. SA Water views that so long as the real-time data is provided in a manner that meets the needs of the consumer, the rule should facilitate a range of solutions.

8. Who should bear the costs of accessing real-time data?

a) Should all consumers bear the cost of accessing real-time data?

Yes, we believe all consumers already pay for the cost of not being able to access real-time data and that the simplest mechanism is to provide that access generally and share the cost across all consumers. We feel it would be inequitable for lower socio-economic customers to have to pay extra to access data that would enable them to lower their overall costs if this were something that higher socio-economic customers could readily access.

b) What would be the benefits of a dispute resolution framework and how should it operate?

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9. What changes would be required to ensure interoperability?

a) Would changes to the minimum services specification requirements be the most effective way to ensure interoperability of real-time data?

SA Water supports the AEMC's previous recommendation for an outcomes-based approach for ensuring interoperability of devices using real time data. We remain concerned that specifying standards in the minimum services specification might be overly prescriptive and prevent future technology innovation.

b) Would any other changes be required to facilitate interoperability, for example, changes through device standards?

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10. Do existing arrangements sufficiently protect consumer privacy and maintain cyber security for any real-time data framework?

a) Would any additional consumer privacy and cyber security protections be required if a real-time data framework were implemented?

Additional Protections for consumer privacy should be required for authorised representatives of consumers accessing meter data, give the sensitive nature of this data. Real time data should be classified as confidential customer information.

Similarly, cybersecurity safeguards should be established to minimise, mitigate or eliminate potential impacts to the NEM from malicious actors leveraging the interfaces established through this proposed rule.

b) Do you consider other work programs could provide any additional protection required, such as the Roadmap for CER Cyber Security?

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11. What other changes would be required to enable a real-time data framework?

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12. Do you agree with the proposed assessment criteria?

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