

20/05/2021

Mr Edward Orum  
Project Leader, Australian Energy Market Commission  
GPO Box 2603, Sydney  
2001 NSW

Dear Mr Orum,

**SA Water response to NEM settlement under low, zero and negative demand conditions Consultation Paper**

Thank you for the opportunity to comment on the Australian Energy Market Commission (AEMC)'s NEM settlement under low, zero and negative demand conditions consultation paper.

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 than 160 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 1,800 connection points across a wide spectrum of electricity loads. The combination of high energy usage required to provide water and wastewater services and the large geographical spread of our customer base mean that SA Water has been dependent on and will continue to be reliant on the efficient operation of the National Electricity Market (NEM) to support the delivery of essential services to our customers at the lowest possible price.

Our unique position as an essential but flexible consumer of electricity has driven us to innovative approaches to securing a low-cost electricity supply over the last decade, resulting in SA Water taking spot exposure via a retail arrangement in 2013 before becoming a full market customer in 2017. As such, we are now a leader in demand management and deliver significant cost reductions through scheduling our consumption of electricity at times when generation is abundant relative to demand and prices are therefore low.

Under the Water Industry Act 2012, SA Water is subject to economic regulation by the Essential Services Commission of South Australia (ESCOSA) for the provision of regulated water and wastewater services. In each regulatory period SA Water is set a cap by ESCOSA for the maximum allowable revenue that can be recovered for the provision of those services. Any activity required to provide the regulated services that is not foreseen at the time a determination is made by ESCOSA, is not incorporated into the allowable revenue cap. Where an activity is required that was not foreseen, SA Water must fund that activity directly and is only able to recover the costs of undertaking that activity in the next regulatory period, and only if a materiality threshold is met.

Our Zero Cost Energy Future initiative, investing over \$300 million in solar photovoltaic panels and energy storage to keep water service charges as low and stable as possible, further ties SA Water to the ongoing efficient future of the NEM. Through this strategic generation investment we have sought to reduce our net electricity costs, generating electricity to meet the needs of our major sites and selling any excess electricity into the market to offset electricity purchases at other sites and purchases at times where our generation assets are unable to support our full demand.

The settlement of the electricity market during periods of low, zero and negative demand presents a significant challenge for the Australian Electricity Market Operator (AEMO) and electricity market participants, but we recognise that resolving this issue effectively is critical to the long-term function of

the market. As such, we provide a response to the AEMC consultation paper in the attachment to this letter.

If you have any queries about this response, please contact Mr Andrew Wilkins, Energy Lead at [andrew.wilkins@sawter.com.au](mailto:andrew.wilkins@sawter.com.au) or (08) 7424 1877.

Kind regards,

A handwritten signature in black ink, appearing to read 'AJ', with a stylized flourish extending from the bottom right.

Andrew Jackson

**Manager, Energy Services and Water Trading**

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## Attachment – Responses to Questions

Question 1	
1	<p>In the consultation paper, the AEMC identifies four criteria to assess the proposed rule against:</p> <ul style="list-style-type: none"> <li>• Effective and proportionate risk management</li> <li>• Minimises uncertainty and market changes</li> <li>• Minimises regulatory and administrative burden</li> <li>• Administrative certainty</li> </ul> <p>SA Water believes these criteria, along with the additional criterion identified below are equally important and together are sufficient to determine if the proposed approach adequately contributes to the achievement of the National Electricity Objective.</p>
2	<p>SA Water notes the key difference with the criteria in the Infigen rule change is the exchange of "Administrative certainty" in place of "Providing efficient market signals." We believe that having efficient market signals that guide market participants in making decisions that support the ongoing function of the market is an important criterion that should be included in the list of criteria for determining if both proposed rule changes adequately contribute to the achievement of the National Electricity Objective.</p>

Question 2	
3	<p>SA Water accepts there is a very real risk that the market would not be able to be settled under current rules should there be zero operational demand. SA Water also accepts that there has been an acceleration in the deployment of solar, particularly rooftop solar that could result in a zero operational demand occurring ahead of the ESOO forecast of 2024. While noting the conservative nature of the forecasts from modelling commissioned by AEMO, SA Water accepts that the risk remains real.</p>
4	<p>We do not believe there are any additional, related risks that need to be addressed through this consultation.</p>

**Question 3**

<p><b>5</b></p>	<p>The revised solution proposed by AEMO following their initial consultation results in a distortion of the NEM, exposing market customers and generators to risks of settlement allocations that do not reflect actual behaviours during the period.</p> <p>As noted in the consultation paper, AEMO have indicated that they believe the two alternate solutions that SA Water have proposed are either more complex and costly than their proposed solution or are infeasible to implement in the required timeframe. Assuming the constraints identified by AEMO previously are appropriately tested, we accept that the implementation of an interim solution to settlement under low, zero or negative demand is required, however we believe that the complexity of the change required to be made by AEMO must be balanced against the scale of impact it has upon market participants particularly where it limits the ability for participants to directly manage financial risk.</p>
<p><b>6</b></p>	<p>SA Water prefers a solution which accurately settles the market under the prevailing conditions at the time, allowing market participants to respond to actual market signals, rather than being unable to manage their position due to the use of historical averages over a specified period. As outlined in the cover letter, our approach to demand response is predicated on our ability to identify signals in pricing in the market and respond by adjusting or curtailing our activities to those circumstances. The proposed solution by AEMO while going some way to minimising those impacts from the original proposal still falls short of this objective. SA Water's preferred solution remains one in which a real-time signal and response are maintained, at the cost of increased complexity and cost of deployment.</p> <p>Given our regulatory environment, SA Water's preference is for long lead-time changes that implement a final, well designed solution that we can plan for in our regulatory cycle rather than the implementation of stop-gap measures to address a short-term deficiency in the market, which then require re-work when a permanent solution is identified. This will allow SA Water to make a single, planned change in our systems for managing our exposure to the market and accounting for the settlement of the costs across the components of our business.</p> <p>Notwithstanding this position, SA Water believes that if any change away from settlement methodologies using real-time prices and volumes does occur due to AEMO system limitations, they should be identified as transitional and replaced as soon as practicable to limit any potential distortions in the marketplace. We note the pending Integrating energy storage systems into the NEM rule change that will address the issues raised in this proposed rule change and the likely timing of this change and believe this needs to be considered as a significant factor when considering the criteria against which this rule change is assessed.</p>