

20/05/2021

Mr Harrison Gibbs Project Leader, Australian Energy Market Commission GPO Box 2603, Sydney 2001 NSW

Dear Mr Gibbs,

SA Water response to Settlement under low operational demand Consultation Paper

Thank you for the opportunity to comment on the Australian Energy Market Commission (AEMC)'s Settlement under low operational demand 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 <u>andrew.wilkins@sawter.com.au</u> or (08) 7424 1877.

Kind regards,

Andrew Jackson

Manager, Energy Services and Water Trading

Phone: (08) 7424 1045

Email: <u>andrew.jackson@sawater.com.au</u>

AEMC

Settlement under low operational demand

STAKEHOLDER FEEDBACK TEMPLATE

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in the consultation paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper.

SUBMITTER DETAILS

ORGANISATION: SA Water Corporation

CONTACT NAME: Andrew Wilkins

EMAIL: andrew.wilkins@sawater.com.au

PHONE: (08) 7424 1877

DATE 20/05/2021

PROJECT DETAILS

NAME OF RULE Settlement under low operational demand

CHANGE:

PROJECT CODE: ERC 0327

PROPONENT: Infigen Energy Pty Ltd

SUBMISSION DUE 20 May 2021

DATE:



CHAPTER 3 – ASSESSMENT FRAMEWORK

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1.	Is the proposed assessment
	framework appropriate for
	considering Infigen's rule
	change request?

In the consultation paper, the AEMC identifies four criteria to assess the proposed rule against:

- Effective and proportionate risk management
- Minimises uncertainty and market changes
- Minimises regulatory and administrative burden
- Providing efficient market signals

SA Water believes these criteria, are equally important and together are sufficient to determine if the proposed approach adequately contributes to the achievement of the National Electricity Objective.

2. Are there other relevant considerations that should be included in the assessment framework? SA Water notes the key difference with the criteria in the NEM settlement under low, zero and negative demand conditions rule change is the exchange of "Administrative certainty" in place of "Providing efficient market signals." SA Water is of the opinion that given the highly related nature of these consultations, they should both use the same criteria for assessment of the proposed rule changes.

CHAPTER 4 - DETAILS OF THE RULE CHANGE REQUEST AND ISSUES FOR CONSULTATION

Question 2: Section 4.2.4 – Risks posed by low operational demand

1.	Does the issue of low
	operational demand give rise
	to any barriers to entry,
	inequities in cost or
	competitive disruptions,
	outside the issues identified
	already?

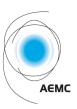
SA Water accepts there is a very real risk that the market would not be able to be settled under current rules should there be zero operational demand. SA Water also accepts that there has been an acceleration in the deployment of solar, particularly rooftop solar that could result in a zero operational demand occurring ahead of the ESOO forecast of 2024. SA Water accepts that the risk remains real.

SA Water agrees that at low demand levels there is a risk of unintended consequences arising from the current settlement mechanism due to over recovery from participants arising from the payment to participants who have net negative operating load.

 Are there any additional issues around inefficient bidding or market incentives posed by low operational demand? We do not believe there are any additional, related issues that need to be addressed through this consultation.

Stakeholder feedback

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3. Are any of the consequences identified by Infigen or the AEMC already being realised as the risk of low operational demand becomes more imminent? In particular, has this increased the costs on market participants or discouraged new market participants?

SA Water believes that all participants in the market are aware of the potential consequences of these extreme low demand events, including the potential for over-recovery due to negative customer operational demand in some circumstances. We agree that these risks are already present and are likely increasing costs for some market customers in specific circumstances. However, at this stage we do not believe that these have been a barrier to the entry of new market participants.

Question 3: Section 4.3 - Proposed solution

- 1. Is Infigen's proposed solution the most appropriate way to respond to the issue that it has identified in its rule change proposal?

 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. We believe that the solution proposed in the Integrating energy storage systems into the NEM is the most appropriate mechanism for addressing the concerns raised by Infigen and AEMO.
- 2. Are there any cross-border impacts or other issues that have not been identified that require consideration?

No comment.

3. Are any stakeholders aware of a commercial solution to the problem raised?

3. Are any stakeholders aware of SA Water is not aware of a commercial solution.

Question 4: Section 4.3.1 – Implementation constraints

1. Given the time required to build, test and implement a settlement rule change, is an additional rule likely to be beneficial before *Integrating energy storage systems* into the NEM rule takes effect?

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.

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.

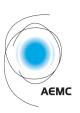
Stakeholder feedback

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Nil.

1. Information on additional

issues



Question 5: Section 4.4 – Alternative solutions				
1. Is a threshold of 150 MWh a workable solution? If not, is there a threshold that is a workable solution?	SA Water does not see that any additional complexity is added to a solution by increasing the threshold to 150 MWh. We believe that any increase in threshold increases the probablilty of intervention in the settlement process occurring.			
2. Do any of the proposed solutions provide a better outcome for non-energy cost recovery in low operational demand?	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 our 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 solutions from AEMO and Infigen while going some way to minimising those impacts from the original proposal still fall 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.			
3. Are there any alternative solutions not explored previously that offer a more robust solution to non-energy cost recovery in low operational demand?	As noted in the consultation paper, SA Water has proposed alternate solutions to the settlement methodology. 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 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.			
4. Are there any non-system or commercial solutions that would address the issues described?	No comment.			
Question 6: Section 4.5 – Expected costs, benefits and impacts				
 Do stakeholders consider there to be any other costs, benefits or impacts resulting from Infigen's proposed solutions? 	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.			
benefits or impacts resulting from Infigen's proposed	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			