



1 August 2017

Neville Henderson
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

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Dear Mr Henderson

AEMC RELIABILITY PANEL – REVIEW OF THE FREQUENCY OPERATING STANDARD

Origin Energy Limited (Origin) welcomes the opportunity to comment on the review of the frequency operating standard (FOS) presented by the AEMC Reliability Panel.

Origin is supportive of a staged approach being undertaken by the Reliability Panel when evaluating changes to the FOS. We recognise that there are a number of reviews currently underway that have the potential to significantly alter the way frequency control is provided to the NEM. The findings of the AEMC Frequency Control Frameworks Review, AEMO's technical advisory group on ancillary services, and increased technical standards for new generators should inform and guide the Reliability Panel in its deliberations. Taking into consideration the findings of these reviews will provide a level of certainty to stakeholders who will have had the opportunity to participate in, and contribute towards, the development of these policies.

Origin previously stated in its submission to the AEMC's Emergency Frequency Control Scheme (EFCS), that there is a need for a protected events category where non-credible contingency events are identified and assessed on an economic basis. We maintain this position and believe that where an assessment of a protected event results in net economic benefits to the consumer, AEMO should use a combination of market mechanisms and the EFCS to maintain the NEM in a satisfactory operating state.

One input into this economic assessment is the Value of Customer Reliability (VCR) which provides some insight into a consumers' willingness to pay for higher levels of reliability. The last survey was undertaken by AEMO in 2014 and there have been multiple events over the last few years that have highlighted an increasing awareness of reliability for the consumer including the SA Black Event, high demand days from extremes of weather and load shedding events. Given this, an update of the earlier survey would therefore now be timely.

Origin believes that consistency in policy making should be maintained and for that reason it is appropriate that electrical islands in the NEM are aligned with AEMO's sub-regions as defined in the SRAS process. This provides participants with clarity on the electrical island boundaries and has the added benefit of aligning with TNSP network boundaries. The AEMC's System Security Frameworks review highlighted the need for a minimum level of inertia to be maintained during an electrical islanding event to ensure that the region can continue to operate after the loss of interconnection. Origin is supportive of a FOS that allows an electrically islanded region to maintain secure and stable operation. This includes ensuring generation plant are within their generator performance standards and not subject to adverse frequency conditions that would cause units to be damaged or trip offline.

Finally, it may be worthwhile for the Panel to examine how new technologies can affect the operation of frequency control services in the NEM and what impact these will have when setting the FOS. This could include consideration of how fast frequency response (FFR) can work alongside existing FCAS markets (both Regulation and Contingency) to arrest frequency declines before it reaches the extreme frequency excursion tolerance limit. The Panel should utilise the findings of the AEMC's Frequency Control Frameworks Review when considering these issues and the impact FFR may have on limiting frequency fluctuations and determining the normal operating frequency band.

Should you have any questions or wish to discuss this information further, please contact James Googan on james.googan@originenergy.com.au or (02) 9503 5061.

Yours sincerely,



Steve Reid
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