

Our Ref: D19/76177
Your Ref: EPR0057
Contact Officer: Kevin Fincham
Contact Phone: (07) 3835 4677
Date: 24 May 2019

Mr John Pierce
Chair - Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Dear Mr Pierce,

AEMC review of the system black event in South Australia

We welcome the opportunity to respond to the Australian Energy Market Commission's (AEMC) issues and approach paper regarding its South Australian black system review. As required under the COAG Energy Council's terms of reference for the AEMC, the Issues and Approach paper identifies and draws on many of the findings in our Compliance Report relating to the pre- and post-Event periods. Having set out our views in that report, we will not repeat that commentary in this submission. Broadly, we support the scope and focus of the review as well as the assessment framework that the AEMC proposes to adopt. We intend to participate actively as the review continues.

Further, while our investigation was focussed on compliance issues surrounding the 2016 South Australian Black System Event, we recognise that the AEMC's review will focus on fundamental questions regarding the effectiveness of existing power system frameworks and the arrangements for enhancing power system resilience.

As noted in our Compliance Report, we are in the process of developing a series of rule change requests to address a series of framework clarity issues. We expect to lodge these proposals in July 2019.

In particular, the rest of our submissions sets out some commentary on specific issues relating to:

- contingency classification; and
- arrangements for enhancing power system resilience.

Contingency classification

We support the AEMC's conclusion that clarity surrounding the roles of market participants and the transparent provision of information are integral in the identification and mitigation of risks to the power system. We understand that the AEMC intends to focus on the transparency requirements of reclassification decisions at a later stage of this process which would be in line with the findings of our Compliance Report.

The AEMC in its consultation paper seeks views on the extent to which the Australian Energy Market Operator (**AEMO**) should have regard to the views of market participants in order to make classification decisions.

In our submission, AEMO should have regard to the views of market participants with respect to reclassification decisions without being bound by them. AEMO has the responsibility of managing power system security and is in the unique position to be able to gather information from a variety of sources—including market participants—to form a holistic picture and assess the risk particular conditions pose to the power system. The importance of the central role of AEMO is highlighted by the circumstances that triggered the 2008 rule change on reclassification of contingency events. Those events inform the need for AEMO to consider information from a variety of sources—not relying solely on the advice of individual market participants. Nonetheless, market participants have the relevant expertise and access to information that AEMO may not have, and are often best placed to assess the potential risk of abnormal conditions to their equipment. In our view it is advantageous for AEMO to consider the information and insight of market participants, but it remains AEMO's role to make the ultimate assessment of risk conditions.

With regards to wind turbine feathering, we note that high wind speeds can potentially cause a loss (including feathering reductions) in wind farm output or the failure of transmission assets. That is, high wind speeds can result in failure or removal from operational service of one or more generating units or transmission elements and thus constitute a contingency event. While managing for feathering via dispatch may be appropriate to maintain reliability, it does increase the risk of a network limit breach in the case of the simultaneous loss (within a short period of time in terms of dispatch intervals) of multiple wind turbines.

Finally, on the potential for further guidance to AEMO on considering the consequences of reclassification decisions, our view is that the real time consideration of the consequences of reclassification on market outcomes adds unnecessary complexity to the reclassification process. Any reclassification procedure should be transparent, evidence based and based on an ex-ante approach to decision making. The AER's "Industry practice application note for asset replacement planning" provides guidance on quantifying a range of risks (in terms of a dollar value) and may be instructive in developing a methodology for such an ex-ante reclassification process.¹ This process will then allow for a single, clearly defined approach to decision making and will avoid decision making based on conflicting objectives.

Arrangements for enhancing power system resilience

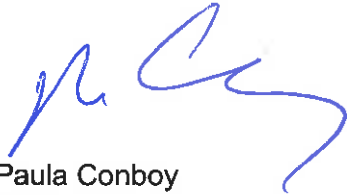
As part of its review, the AEMC will also consult on arrangements for enhancing power system resilience. This includes questions about the conceptual framework for considering resilience and related metrics for making this assessment. The AEMC notes that power system resilience is a relatively new and as yet un-formalised concept, and focuses on resilience in the context of high impact low probability (**HILP**) events.

We are currently in the process of investigating methodologies to develop a value of customer reliability (**VCR**) for long duration, widespread power outages—which tend to be the result of **HILP** events. The typical methodology for the development of a **VCR** involves surveying customers to assess their willingness to pay to avoid an outage over a range of—typically short—durations. Since customers rarely experience outages of longer durations, this methodology may not be appropriate for determining the **VCR** of long duration events. To this end, we have recently established a **HILP** subcommittee which will consider issues such as how to define and classify these outages, and which methodology is best suited to developing the appropriate **VCR**.

¹ <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/industry-practice-application-note-for-asset-replacement-planning>

We thank the AEMC for the opportunity to submit on this process. If you have any questions about our submission, please feel free to contact Kevin Fincham (07 3835 4677).

Yours sincerely,



Paula Conboy
Chair
Australian Energy Regulator

