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Reliability Panel PO Box A2449 Sydney South NSW 1235

EnergyAustralia Pty Ltd ABN 99 086 014 968

Level 33 385 Bourke Street Melbourne Victoria 3000

Phone +61 3 8628 1000 Facsimile +61 3 8628 1050

enq@energyaustralia.com.au energyaustralia.com.au

Dear Panel Members

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## AEMC Reliability Panel 2016, System Restart Standard, Draft Determination, 25 August 2016

EnergyAustralia is one of Australia's largest energy companies with over 2.5 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own and operate a multi-billion dollar energy generation portfolio across Australia, including coal, gas, and wind assets with control of over 4,500MW of generation in the National Electricity Market.

EnergyAustralia appreciates the opportunity to respond to the Draft Determination of the System Restart Standard (Standard).

We recognise the fundamental importance of the Standard in procuring enough System Restart Ancillary Services (SRAS) in order to ensure that the grid can be re-energised in an efficient timeframe following a black system event. We also recognise that these services come at a cost that ultimately ends up being paid for by end-use customers. Therefore the goal of efficiently restoring a secure and reliable system has to be balanced against these potentially significant costs.

For this reason we support the focus by the Reliability Panel on determining a Standard based on robust cost-benefit analysis in order to seek the lowest cost solution to procuring an efficient amount of SRAS required to cope with any black system event. We note that at the time the draft determination was made no such black system event had occurred that has required the use of SRAS. Therefore the Standard was based on various hypothetical scenarios and technical assumptions.

In making a final determination on the Standard it would be appropriate for these assumptions and outcomes to be further reviewed in light of the black system event in South Australia on 28<sup>th</sup> September 2016.

Inputs such as the Value of Customer Reliability (VCR) and the restoration curves provided by AEMO to the Reliability Panel are central to setting the Standard and they must be appropriate for this purpose. We understand that there was concern expressed from providers of SRAS that the restoration curves used in determining the Standard were too optimistic and may not match the real life performance of the generating units under system restart conditions.

AEMO are likely to have a very strong understanding of the likely capabilities of the various SRAS sources it has contracted with previously. However, given the pivotal nature of this input into the Standard there should be continued efforts to work with likely providers of SRAS to ensure these restoration curves are correctly modelled. The restorations curves should be assessed as to their suitability and accuracy in light of these events and may require variation.

Following our previous engagement with AEMO on the review of VCR in 2014, we consider that VCR is presently set at an appropriate value.

The draft determination assumes SRAS values for the tendering process are indicative of the future prices for sourcing these services. However in practise there are massive information asymmetries in this process. We understand that where the Standard is yet to be defined, it makes it very difficult to predict future SRAS prices, as well as the incentives for market participants in tendering to provide these services. These issues highlight the need for the Reliability Panel to ensure that the inputs they use are as robust as possible and that the relevant participants are engaged with as part of finalising the Standard.

SRAS is often portrayed as an insurance scheme for the power system; however it has arguably been previously based on conservative assumptions. One factor, not included in the Standard, which plays a role in assisting with recovery from a black system is the presence of interconnection, particularly for regional black system events. While the Reliability Panel's work in reviewing international black system events demonstrates that the failure of interconnectors is often a key cause of these events, they may also play a major role in providing restart services beyond SRAS. The standard assumes these are not available which may be extremely conservative in effectively assuming a NEM-wide blackout. This is also contrary to the experience of the 28<sup>th</sup> of September where interconnection was a key input into system restart.

Additionally we also note that SRAS contracted generation is not the only source of restarting the power system. In the event of a black system event capable generators, beyond those specifically contracted to provide the service, may have a financial interest in restarting the system. While SRAS procurement may be necessary to ensure an efficient level of SRAS is available, over supply of SRAS will increase costs for consumers and for limited benefit.

We consider that, ultimately, responsibility for maintaining power system security lies with AEMO. Key inputs into the draft determination were provided by AEMO based on their understanding of the technical requirements of the power system. However we also note that the consequences of a sustained black system event will rest on the consumers who rely on the grid.

We support the proposed Standard in that it seeks to ensure the system can be restarted in an efficient time, if completely blacked, which minimises overall costs to consumers. Against this, we reiterate that experiences from the black system event in South Australia should be examined to consider if the assumptions used in and conclusions from the draft determination are still appropriate. Where variations are required, we would consider that a supplementary draft determination may be appropriate to ensure stakeholders have an opportunity to be consulted on proposed changes.

If you would like to discuss this submission, please contact Chris Streets on (03) 8628 1393.

Regards

## **Melinda Green**

Industry Regulation Leader