



EnergyAustralia

LIGHT THE WAY

15 July 2019

Mr Sebastian Roberts
General Manager - Transmission & Gas
Australian Energy Regulator
GPO Box 520
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Lodged electronically: AERinquiry@aer.gov.au

Dear Mr Roberts,

ElectraNet – Main grid system strength contingent project application

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EnergyAustralia is one of Australia's largest energy companies with around 2.6 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, solar and wind assets with control of over 4,500MW of generation capacity in the National Electricity Market (NEM).

We welcome the opportunity to comment on ElectraNet's system strength contingent project application to the AER. Whilst we recognise that this project has gone through various approval stages of the AER process we have some broader concerns with the overall project transparency and level of detail provided.

A system strength gap in South Australia (SA) was declared in December 2016 and then confirmed in September 2017¹. We acknowledge that the modelling and technical requirements in developing a solution is complex, but we would question that given the substantial period of time (approaching 2 years) that has passed why a non-regrets option could not have been operational sooner than the current timeline of approximately 3 years after a gap was identified.

EnergyAustralia continues to advocate for improved transparency around network and non-network solutions and we believe that there were opportunities to improve the level transparency and ongoing information that has been provided to industry stakeholders over the last 2 years. During ElectraNet's consultation on the SA to New South Wales (NSW) interconnector (SAET) Regulatory Investment Test for Transmission (RIT-T) we requested ElectraNet to provide clarity around what level of inertia is assumed to be delivered from the synchronous condenser solution. What was provided (and subsequently used in the final market modelling for the interconnector) is not consistent with the final solution detailed in the contingent project application put to the AER. In the SAET market benefits modelling ElectraNet assumed in the base case that only 2 low inertia synchronous condensers² would be installed which resulted in the requirement for

¹ <https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/National-Transmission-Network-Development-Plan>

² The contingent project application details that 4 high inertia synchronous condensers should be installed.

at least 2 additional synchronous units³ to be online at all times, increasing the cost of the base case. This has resulted in the market benefits to consumers of new interconnector being potentially overstated. Additionally, with the 4 high inertia synchronous condensers being installed the non-network solution market benefits would also have likely increased vs a network solution.

While ElectraNet were not required to complete a RIT-T for the synchronous condenser solution it is our view that the Economic Evaluation Report⁴ was lacking in enough detail to understand the most efficient solution. For example:

- What level of directions and/or contracting of generators would be required if only 3 synchronous condensers were installed? There is no analysis of the value of each additional synchronous condenser or whether this is efficient use of capital.
- What is the fixed vs variable cost options to cover the period until the potential new SA-NSW interconnector is operational? Does the completion of new interconnection render some of the synchronous condensers unnecessary?
- Has ElectraNet considered any additional non-network options (other their initial attempts to contract services from generators in the interim) to meet the short to medium-term system strength requirements?

We would encourage further clarity to be provided on the above points.

With the increasing penetration of variable renewable energy AEMO is going to continue to face operational power system security challenges across the NEM. Caution should be taken to ensure that network options are not seen as the only solution to these challenges as synchronous generators (and other non-network options) are also able to provide these services (through contracting) providing AEMO with tools to manage both system security and reliability challenges.

Customers bear all the risk that network solutions are in fact required for the life of the asset and therefore caution should be taken to ensure that customers do not pay in perpetuity for what is no longer required. Overall EnergyAustralia continues to support complete transparency around network investments to ensure that network spend is in the best interest of customers.

If you would like to discuss this submission, please contact Andrew Godfrey on 03 8628 1630 or by email Andrew.Godfrey@energyaustralia.com.au.

Regards

Sarah Ogilvie
Industry Regulation Leader

³ For example, 2 Torrens B units – or equivalent.

⁴ <https://www.electranet.com.au/wp-content/uploads/2019/02/2019-02-18-System-Strength-Economic-Evaluation-Report-FINAL.pdf>