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Submitted via email: [consultations@electranet.com.au](mailto:consultations@electranet.com.au)

Dear Mr Klingenberg

### **Baroota substation upgrade: RIT-T Project Specification Consultation Report**

The businesses listed on the side bar (the Generators) appreciate the opportunity to comment on ElectraNet's Regulatory Investment Test for Transmission (RIT-T) Project Specification Consultation Report (PSCR). The Generators understand the purpose of this PSCR is to identify a credible option to ensure a revised N-1 reliability standard is met at the Baroota connection point in South Australia from December 2017.

The Generators are concerned the proposed reliability upgrade to ensure continuing supply under a contingency situation imposes a \$25 million impost on all South Australian consumers for the benefit of a small and declining load located at the end of the electrical network. Imposing this large economic cost on all South Australian consumers for an investment that would be largely unutilised requires more appropriate justification.

Declining demand in South Australia and across the NEM more generally has created an uncertain environment for network planning. The assumptions underpinning the 2010 economic assessment justifying the 2017 reliability upgrade have not materialised as peak demand has declined, raising doubts about the economic justification and commercial viability of the proposed upgrade.

The Generators consider a robust cost benefit analysis is now required in order to justify if the upgrade should be undertaken, the results of which should be published, prior to the completion of the Project Assessment Draft Report (PADR). This work should include a sensitivity analysis and weighting of the probability of supply failure and observed level of Unserved Energy (USE) across the entire load duration curve and not merely limited to select periods of peak demand.

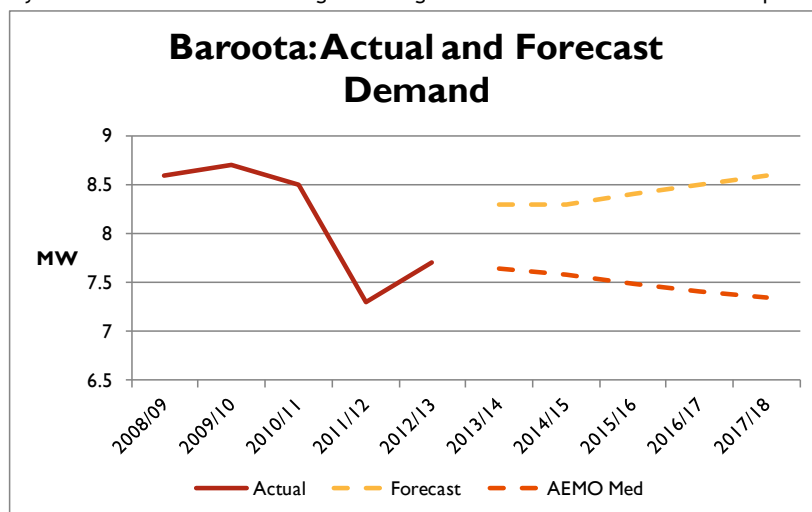
#### ***Historical decisions should not be pursued if circumstances change***

The Generators consider the demand forecasts underpinning the decision to increase the reliability standard at Baroota have materially changed. The demand forecasts justifying the reliability upgrade have declined since the Australian Energy Market Operator conducted the analysis in 2010 at the request of the Electricity Supply Commission of South Australia (ESCOSA). The 2010 analysis forecast a 15 percent increase in peak demand from the previous record peak of 8.6MW in December 2009 to 10MW by 2017. The observed maximum peak demand over the intervening period has, however, recorded a 10 percent decline to 7.7MW in 2013.

AGL Energy  
Alinta Energy  
CS Energy  
Delta Electricity  
EnergyAustralia  
Energy Brix  
ERM Power  
GDF SUEZ  
Australian Energy  
Hydro Tasmania  
Macquarie  
Generation  
Origin Energy  
Snowy Hydro  
Stanwell

The observed decline in demand at Baroota is consistent with AEMO’s 2014 National Electricity Forecasting Report for South Australia indicating an average 1.3 percent decline in demand between 2009 and 2013. There is, however, a discrepancy in the demand forecast at Baroota and South Australia between SA Power Networks and AEMO. The PSCR forecasts a 0.87 percent increase in demand while the NEFR forecasts an average 0.62 percent decline in demand for South Australia under a medium growth scenario. There is no clear explanation provided by SA Power Networks as to why Baroota would expect consistent load growth over the forecast period whilst demand in South Australia is forecast to decline.

Graph 1: Historical load at forecast at Baroota. SA Power Networks is forecasting and average 0.87% load growth per year over 20 years while AEMO is forecasting an average 0.62% contraction over the same period under medium economic growth.



The Generators support the principle under the Electricity Transmission Code (ETC) that:

*The manner in which the standard is met should be as efficient, technically and economically, as possible....<sup>1</sup>*

The process to codify the change in the reliability standard to N-1 or for continual supply in the 2012 code review does not give effect to economic efficiency under the changed conditions of declining demand. The code review did, however, contemplate changing the timing of an augmentation to ensure economic efficiency where demand increased faster than forecast.<sup>2</sup> This requirement, however, is not symmetrical in the sense that the timing of the augmentation could be deferred due to declining demand.

The combined impact of declining demand and the location of Baroota on the electrical network raises serious equity considerations where all consumers in South Australia would incur the cost of funding the upgrade at Baroota without accruing any benefit. This is compounded by the likely low level of asset utilisation for the upgrade where, for the most part, it is not required.

**Support economically derived reliability standards**

The Generators support economically derived reliability standards where consumers can determine a level of reliability that they are willing to pay for or reflect a willingness to accept interruption to supply. We note the Australian Energy Market Commission and Australian Energy Market Operator

<sup>1</sup> ESCOSA 2012, ‘Review of the Electricity Transmission Code: Final Decision,’ Adelaide, February 2012. p. 7.  
<sup>2</sup> Ibid. p. 32

have undertaken work streams to determine a nationally consistent approach to reliability standards and value of customer reliability.

Economically derived reliability standards provide flexibility in the planning process enabling augmentations to be either brought forward or deferred. Where the Baroota reliability upgrade is no longer justifiable, the Generators consider the augmentation should be deferred until such time that analysis clearly demonstrates an investment in a second 10MVA transformer, for example, is justifiable.

Should you have any questions or wish to discuss this information further, please contact Ashley Kemp on (02) 9503 5500 or [ashley.kemp@originenergy.com.au](mailto:ashley.kemp@originenergy.com.au).

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'Steve Reid', with a stylized flourish at the end.

Steve Reid  
On behalf of the listed generators