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Our Ref: 64922 - D19/20599  
Contact Officer: Lisa Beckmann  
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18 February 2019

Rainer Korte  
Executive Manager, Asset Management  
ElectraNet  
52-55 East Terrace  
ADELAIDE SA 5000

Dear Mr Korte

### **Re: System strength gap in South Australia**

I refer to your economic evaluation report for the SA system strength remediation project, dated 30 January 2019 as well as your written request for the AER to provide:

1. Confirmation that an equivalent economic evaluation to a regulatory investment test for transmission (RIT-T) has been undertaken, including an assessment of credible options showing a transmission investment is justified; and
2. A determination that the proposed investment satisfies an economic evaluation equivalent to a RIT-T.

### **Confirmation that an equivalent economic evaluation to a RIT-T has been undertaken**

The AER has determined that ElectraNet's economic evaluation report performed a reasonable economic assessment that is equivalent to the RIT-T and proportionate to the nature of the identified need. For clarity, if the identified need was not driven by a pressing regulatory requirement and could be met by a broader range of credible options, we would typically require the economic evaluation to provide a more in-depth analysis of market benefits, including how different market benefits vary across different reasonable scenarios.

In forming its view, the AER reviewed ElectraNet's assessment and took into account its consultation process. ElectraNet's assessment entailed comparing the following credible options to meet the identified need:

1. A base case where AEMO would continue to source system strength services under the generator directions framework at current annualised costs of approximately \$34 million

per annum (sensitivity tested between \$30–40 million per annum). I understand ElectraNet sourced information from AEMO to derive this figure. ElectraNet also considers this to be a conservative estimate as it expects the cost of generator directions will continue to rise, and because it excludes the broader impact of intervention pricing on the wholesale market.

2. A credible option where ElectraNet would source system strength services from existing synchronous generators in SA at ongoing annual generator contract costs of \$85 million over the 10 year assessment period. I understand that this estimate is based on tender pricing. ElectraNet estimates that the present value of the net economic benefit of this option relative to the base case is -\$428 million.
3. A credible option where ElectraNet would install a number of high inertia synchronous condenser units at an indicative capital cost of \$140–180 million (ElectraNet assumes \$160 million for its net benefit calculation, but also conducts sensitivity testing) by end 2020, with annual operating costs estimated to be 1% of the total capital costs. ElectraNet estimates that the present value of the net economic benefit of this option relative to the base case is \$38 million.

ElectraNet also consulted with AEMO to conduct a qualitative assessment that explored other potential options and determined that no other options are technically and economically feasible. Potential options considered included: new generation, conversion of existing generation, demand-side solutions, and network reinforcement.

### **Determination that the proposed investment satisfies the economic evaluation**

The AER has also determined that the high inertia synchronous condenser credible option identified in the economic evaluation report reasonably satisfies the economic evaluation.

Relative to other credible options, the high inertia synchronous condenser option has the highest net present value of economic benefit across the National Electricity Market, and therefore is the equivalent of a preferred option under the RIT-T.

For completeness, while the AER has made this determination on the basis that ElectraNet's economic evaluation is sufficiently equivalent to a RIT-T, and the proposed investment satisfies that evaluation, this is not determinative of whether ElectraNet's \$140–180 million estimated capital costs represent efficient and prudent costs that reasonably reflect the capital expenditure criteria. The AER will decide on this matter when it undertakes a contingent project assessment.

If you have any queries in relation to this letter, please contact Lisa Beckmann on 02 6243 1379.

Yours sincerely



Paula W. Conboy  
Chair  
Australian Energy Regulator

Sent by email on: 18.02.2019