AUSTRALIAN ENERGY REGULATOR

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28 September 2020

Steve Masters
CEO
ElectraNet

By email: Masters.Steve@electranet.com.au

Dear Mr Masters

Re: Request for assurance on updated cost benefit analysis for PEC

Thank-you for your letter dated 14 September requesting the AER accept that ElectraNet has demonstrated that there has not been a material change in circumstances as described in cl. 5.16.4(z3) and (z4) of the National Electricity Rules (NER).

As you are aware, we made a determination in January 2020, under cl. 5.16.6 of the NER, that the preferred option (referred to as Project Energy Connect or PEC) satisfied the regulatory investment test for transmission (RIT-T). Before we can approve a contingent project application for this project, we must also remain satisfied the RIT-T process has been successfully completed.

Our January 2020 determination was based on estimated costs of $1.53 billion for PEC. In our determination we indicated that in the event that updated cost estimates affect estimated net market benefits, we would expect ElectraNet to consider whether there has been a material change in circumstances. This reflects an obligation in the NER which requires the RIT-T proponent to reapply the RIT-T if, in the reasonable opinion of the RIT-T proponent, there has been a material change in circumstances such that the preferred option identified in the project assessment conclusions report (PACR) no longer maximises the net economic benefit. Given the estimated costs of the preferred option have increased significantly, ElectraNet has assessed whether there has been a material change in circumstances and whether the outcome of the RIT-T, as set out in the PACR, remains valid.

To determine whether it is required to reapply the RIT-T under cl. 5.16.4(z3) of the NER, ElectraNet has undertaken an updated cost benefit analysis (CBA) using the same methodology adopted in the PACR and previously reviewed by the AER to test whether, in its reasonable opinion, PEC remains the preferred option. This methodology has been reviewed by Oakley Greenwood.

We can confirm that the updated CBA has incorporated relevant inputs and assumptions from the 2020 Integrated System Plan (ISP). We consider that adopting the relevant inputs and assumptions from the ISP is not unreasonable given these inputs and assumptions have been considered through the 2020 ISP process and that the ISP Rules now require all future RIT-Ts for actionable ISP projects, such as PEC, to use ISP inputs and assumptions. ElectraNet's updated CBA also addressed concerns identified in our RIT-T determination about minimum gas generation output assumptions in South Australia (SA). These new minimum gas generation assumptions have been subject to some stakeholder consultation.

The updated modelling results indicate that PEC is likely to remain the preferred option, but that the net economic benefits remain finely balanced and there is a significant zone of uncertainty. It is difficult to precisely estimate the net economic benefits with a high degree of confidence and there are a number of reasons for this.

First, the majority of the project's benefits are associated with avoiding fuel costs associated with gas fired generators in SA. As a result, the analysis is sensitive to gas price forecasts that are themselves subject to significant uncertainty. This uncertainty has been amplified by the impact of COVID 19. Further, while ElectraNet has addressed concerns raised in our RIT-T determination about minimum gas fired generation usage in SA, we have some reservations with application of this input to the TIPS B gas generator. However, as these inputs and assumptions are consistent with the 2020 ISP, we consider that it is not unreasonable for ElectraNet to adopt these inputs and assumptions in its updated CBA.

Second, there is some uncertainty about how much storage (in this case large scale batteries) can contribute to managing system security risks in SA in the absence of PEC. We had anticipated that the assumed reliance on gas fired generation being run at all times in SA for system security purposes would be considered in AEMO's 2020 'Power System Frequency Risk Review' (PSFRR). Relevantly, we expected the 2020 PSFFR to identify and assess the most cost effective way of managing these system security risks, including scope for additional storage to reduce gas generation requirements. However, AEMO has advised that this review will not be finalised until the end of 2020, and it is not clear whether this risk will be considered as part of this review. In the meantime, the assumption that gas fired generation has to run at all times has been adopted in the 2020 ISP. We therefore consider that it is not unreasonable for ElectraNet to rely on this assumption in its updated CBA.

Third, the updated CBA includes new system security measures to manage the loss of distributed PV during low demand periods that were not included in the 2020 ISP. The measures include a new large scale battery and further limits on imports into SA through the Heywood interconnector in the absence of PEC. While these system security measures were not included in the 2020 ISP, they reflect AEMO's advice and on this basis their adoption by ElectraNet in its updated CBA analysis is not unreasonable. However, it would also have been desirable for AEMO's 2020 PSFRR to have been completed to inform the basis for the inclusion of these new requirements and to consider alternative solutions.

In addition to these uncertainties, we consider that the estimated benefits of PEC are likely to be overstated. In particular, ElectraNet has included avoided transmission costs of $62 million in the updated CBA associated with the VNI West project. The updated CBA includes probability weighted benefits of avoiding the 500kV segment of 'KerangLink' between Dinawan and Wagga Wagga, by upgrading the relevant 330kV segment of PEC (the preferred option). The inclusion of a 500kV section of PEC does not reflect the preferred option considered in the RIT-T, nor the 2020 ISP. Therefore, we consider that it is not reasonable to include these benefits in the updated CBA for the purposes of assessing whether there has been a material change in circumstances. However, these additional benefits are small in relation to the overall net benefits and are unlikely to alter the conclusion that PEC is the preferred option.

Finally, ElectraNet has assumed estimated capital costs for PEC in its updated CBA that exclude some costs ($67 million) as these costs have already been incurred. The estimated cost benefit analysis results appear to be more favourable than if the full project costs were included in the updated CBA. We expect the estimated capital costs used in the updated CBA and the estimated capital costs to be recovered from consumers in the subsequent contingent project applications to be consistent to ensure that the updated CBA reflects the expected consumer impact of PEC.

For the reasons set out above, the AER considers that the updated cost benefit analysis provides a not unreasonable basis for ElectraNet's opinion that PEC remains the preferred option. We expect both ElectraNet and TransGrid to submit full and complete contingent project applications for PEC as soon as possible.

If you have any queries, please contact me on (03) 9910 9492.

Yours sincerely

Clare Savage
Chair
Australian Energy Regulator

Sent by email on: 28.09.2020