31 August 2018

ElectraNet
52-55 East Terrace
Adelaide SA 5000

Lodged via email to: consultation@electranet.com.au

Friday,31 August 2018

RE: South Australian Energy Transformation; PADR and RIT-T process

ENGIE in Australia & New Zealand (ENGIE) appreciates the opportunity to comment on the ElectraNet's *SA Energy Transformation RIT-T Project Assessment Draft Report*. ENGIE's main focus is on the scenarios, assumptions and risk of not achieving stated and customer benefits.

1. Policies implemented

The selection of various policies in the scenarios appears to be inconsistent. The state based renewable energy schemes in Victoria and Queensland are locked into all scenarios (i.e. assume 100% certainty that there is no other outcome possible). However, reliability issues in the National Energy Market (NEM), some of which the National Energy Guarantee (NEG) reliability obligation is designed to address, are not included in the study which is relevant given that state based renewable energy schemes may exacerbate reliability issues.

The former South Australian Government's response to reliability issues provides strong evidence that governments will act when considered necessary.

It is strongly recommended that the reliability elements of the NEG be included in the analysis. Such elements may be implemented under COAG arrangements or by individual states to address local issues.

Impact on RIT-T modelling: Once reliability policy is included, the claimed benefits of the network augmentation are likely to be reduced.

2. Modelling assumptions

There were several significant developments in the modelling assumptions made by Australian Energy Market Operator since the PADR and RIT-T work was undertaken by ElectraNet. The more significant developments are as follows.

- The solar PV and battery penetration projections were prepared by the CSIRO and used in the eSOO. These are substantially different to ISP assumptions used previously.

  Impact on RIT-T modelling: The benefits of the augmentation are likely to be reduced as a consequence.

- Generating and storage technology costs are undergoing a major review by AEMO and the CSIRO with input from GHD. Preliminary information suggests that these will be substantially different for some technologies. The technology cost updates are expected to be available early 2019.

  Impact on RIT-T modelling: The claimed benefits of generator and storage deferral will be impacted due to changes in capital costs.

It is recommended to include these important and material changes to assumptions in the RIT-T and if necessary, delay the finalisation of the RIT-T work.

3. Modelling results

Failure to provide detailed modelling results severely impedes a meaningful review of this study by participants. It is unreasonable for participants to repeat the PADR/RIT-T study and modelling for a variety of reasons, including cost, time required and level of expertise in transmission development needed.

Therefore, the modelling results should be released as part of the consultation as a matter of priority. It is imperative that the modelling methodology and implementation is appropriate and sound in order to assess a $1.4B project such as the one recommended.

4. Risks and uncertainties

As evidenced by the recent political changes in relation to the NEG, policy uncertainty remains. Under such uncertainty, it is prudent to minimise capital exposure to ensure that customers are not burdened with meeting costs of long lived assets without receiving the claimed benefits. That is, the cost of the network augmentation is locked in at build time while the benefits are highly uncertain over the project life. The selection of scenarios to assess policy uncertainty is questionable as the selected set doesn't cover the range of uncertainties.

Impact on the study: The assignment of probabilities to the scenarios that bias the result to a high NPV is considered far too subjective to underpin a $1.4B expenditure.

5. Transmission augmentation in North Western Victoria

In the AEMO 2018 Integrated System Plan, a renewable energy zone (zone 13) was identified in North Western Victoria spanning the NSW/Victoria border.

The Victorian Annual Planning report 2018 and the Western Victoria Renewable Integration RIT-T July 2018 identified network limitations and potential augmentations in this region. The Western Victorian Renewable generation RIT-T is due December 2018.

ENGIE understands that some discussions are occurring between AEMO, Transgrid and ElectraNet in relation to network augmentation.

ENGIE suggests that it would be highly desirable to assess elements that are synergistic between the regions and could deliver greater benefits to customers than considering these projects apart. Such a holistic approach may result in an altered route for the interconnector to also include parts of Victoria.

6. Some benefits claimed may not be achievable

There is a need to provide some quantity of local frequency control and inertia in SA. Some gas fired generators currently providing these services is scheduled to retire in the near future. To deliver local frequency control and inertia, plant must remain economically viable.

One claimed benefit of the interconnector is a reduction in gas fired generation in SA and reduction in prices. Both of these outcomes reduce the gross revenue of a gas fired generators. At the same time gas prices are increasing. Should the pool price, and hence revenue to some of the local gas fired generation reduce as a result of the network augmentation, such plant may become economically unviable.

In the event that this plant is required to remain in service, additional arrangements may be needed to supplement the loss of pool revenue to enable dispatch. The specific source of any additional funding remains unclear (AEMO direction, RERT, NEG reliability etc). Such additional costs are likely to be recovered from customers and must be factored into the network augmentation benefit analysis.

Impact on the study: Additional information on the economic viability of local plant must be made available in order to demonstrate that the claimed benefits are in fact achievable and are not reduced by additional cost to customers.

7. Negative environmental impacts

The claimed price reduction benefit is primarily due to fuel substitution from SA gas fired generation to NSW black coal and Victorian brown coal fired generation. As a direct consequence NEM wide carbon dioxide emissions may increase. Insufficient modelling details were provided to facilitate detailed analysis of the annual impacts.

However, on introduction of a price on carbon dioxide price or adoption of an emission intensity mechanism, fuel substitution will be driven in the other direction (from coal to gas).

In order to compare the modelled options, the cost of these additional emissions needs to be valued and not left as an externality.

Impact on the analysis: If this is done, the additional emission costs will reduce the claimed benefits.

In summary, ENGIE makes the following suggestions.

- A number of changes to the assumptions and a wider range of scenarios to capture the full range of uncertainty is recommended.
- It is strongly suggested to delay the RIT-T assessment to include the new material in early 2019. In this way consistency between the eSOO, the ISP and RIT-T would be achieved. A holistic approach and common assumptions would also provide higher confidence in delivering the lowest cost to consumers.
- Given the changes in PV and battery penetration assumptions and profile, the introduction of the NEG reliability elements at a NEM or state level diminish urgency of the Murraylink augmentation.
- To leverage potential benefits and lower the cost to consumers, it is advocated to assess this project in conjunction with the Western Victorian RIT-T (currently being undertaken by AEMO).

ENGIE trusts that the comments provided in this response are of assistance to ElectraNet in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 0417343537.

Yours sincerely,

David Hoch
Regulatory Strategy and Planning Manager