

SOUTH AUSTRALIAN ENERGY TRANSFORMATION PUBLIC FORUM FEEDBACK SUMMARY

The following provides a summary of the key feedback themes from public forums and deep dive sessions held by ElectraNet to help inform submissions on the Project Assessment Draft Report released on 29 June 2018 as part of the South Australian Energy Transformation project, as follows:

- Public Forum, Adelaide, 18 July 2018
- Public Forum, Sydney, 16 August 2018
- Deep Dive Session, Sydney, 16 August 2018
- Deep Dive Session, Adelaide, 17 August 2018

| Feedback Theme | Response |
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| <p>Why is the gas price so important in the assessment? What price outlook has been assumed?</p> | <p>The greatest single category of benefit identified in the assessment is derived from fuel cost savings as gas fired generation in particular (as the dominant source of dispatchable plant in SA) is displaced by cheaper fuel sources. The extent of this saving depends on the gas price outlook.</p> <p>Gas price assumptions have been informed by the Integrated System Plan (ISP) and drawn from independent expert advice from EnergyQuest on the plausible range of possible future gas prices.</p> |
| <p>How would a new SA-NSW interconnector benefit customers in SA and NSW? How are the benefits distributed?</p> | <p>A new interconnector would deliver to both states the benefits of:</p> <ul style="list-style-type: none"> • Downward pressure on energy prices through improved sharing of reserves • Unlocking the development of renewable energy resources • Improved security of supply through access to more diverse supply sources. <p>As an illustration of this, the Regulatory Investment Test for Transmission (RIT-T) modelling has identified approximately \$1bn of net benefits would be delivered across the market in present value terms, with avoided fuel costs as the greatest single category of benefit.</p> <p>Separate independent modelling by ACIL Allen shows the interconnector would have a downward impact on wholesale and retail prices across both regions over the period to 2050, with initial net annual savings of up to \$20 and \$30 per household in NSW and SA respectively, after taking into account the expected cost of \$9 and \$5 respectively.</p> |
| <p>How have non-network solutions been scoped and assessed? Why have only grid scale solutions been assessed?</p> | <p>An independent assessment was undertaken by consultants Entura to develop an optimised non-interconnector solution based on responses and market pricing received from proponents.</p> <p>A grid scale solution is needed in order to meet the identified need of the RIT-T assessment.</p> <p>Further detail is being released to enable stakeholders to make a more informed assessment of the non-interconnector solution.</p> |

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| <p>How have system strength and inertia requirements been considered in the assessment? What impact does a new interconnector have on these requirements?</p> | <p>The base case for the assessment assumes the minimum requirement for system strength in SA is met through new synchronous condensers with inertia capability, and that additional synchronous capability is available so that the high cap on non-synchronous output imposed by AEMO applies.</p> <p>The effect of a new interconnector is to add further benefit by removing this cap on non-synchronous generation and alleviating the constraint on the rate of change of frequency (ROCOF) currently operating on the Heywood Interconnector.</p> |
| <p>How have deeper network constraints been modelled? How does this impact on the assessment?</p> | <p>A full network model has been used to model existing network limitations, including deeper network constraints.</p> <p>While the benefits of the preferred option stand by themselves, additional benefits would be expected with deeper network upgrades in NSW in line with those recommended in the ISP.</p> |
| <p>How have early generating plant retirements been modelled? What is the impact on generating plant in SA and the contract market?</p> | <p>The modelling assumes generators will retire at the end of their nominal technical life (50 years for a coal fired plant) as in the ISP. It also assumes generators can only reach this point with major refurbishment 10 and 20 years prior to this. If this is found to be uneconomic, the model will assume generators retire early at year 30 or 40.</p> <p>The modelling predicts Torrens Island Power Station B will retire early once a new interconnector comes on line. This capacity is effectively replaced by increased import capability. No other generator retirements in SA are predicted in the modelling. The RIT-T modelling has not directly assessed the impact on the wholesale contract market.</p> |
| <p>How is the transmission investment deferral benefit calculated?</p> | <p>The modelling has applied assumptions from the ISP over the level of future transmission investment that would otherwise be required to unlock renewable generation in identified Renewable Energy Zones as the traditional generating fleet retires, and captures the avoided network investment as a benefit. The assessment also shows the preferred option to be economic, even without this additional benefit. These assumptions will be further refined in the final analysis.</p> |
| <p>How has the development of potential renewable energy sources been modelled under the options considered?</p> | <p>Renewable Energy Zones identified by the Australian Energy Market Operator (AEMO) are assumed to develop progressively under the assumptions of the ISP based on criteria which include the quality of the resource, proximity to the network and regional diversity of resources.</p> <p>The potential for additional investment in renewable resources has been assessed through the generator development profiles modelled for each option and scenario assessed. These assumptions will be further refined in the final analysis.</p> |
| <p>To better inform submissions stakeholders would appreciate further supporting information on:</p> <ul style="list-style-type: none"> • Cost profile of non-network solutions • Key outputs of the modelling, figures and charts • Functional specification of transmission lines | <p>ElectraNet is releasing further data and information in these areas to help inform submissions.</p> <p>In view of the remaining timeframe, ElectraNet has also extended the deadline for submissions to 31 August 2018.</p> |