

SA Interconnector Feasibility Study Stakeholder Forum

20 April 2010

Record of questions and responses

1. Scenarios & Modelling

Is carbon priced?

Yes, the scenarios address this

Are aggressive demand management scenarios considered?

Yes, the scenarios address this

Do the generation scenarios assume no constraints within the State?

Correct. The DRET scenarios assumed standardised transmission connection costs to facilitate the generation development modelled.

Is the study considering constraints in the Eastern States?

Yes. The model considers network limits in Victoria.

Is the surplus capacity in SA offset by shortfalls interstate?

Yes. The modelling is considering market wide demand-supply balance.

Why exclude scenario 5 (reflecting BAU)?

Scenario 4 produced similar outcomes.

Why was there no excess renewable generation in the South East?

The modelled generation costs were lower in the north for wind and geothermal (due to higher quality resources) so that excess generation was an issue here rather than the SE.

Were the incremental costs of network augmentation applied to generation developments in the scenarios?

Yes. DRET applied a \$/km approach. The feasibility study will value the augmentations required.

Did the scenarios include developments in Victoria

Yes. Considered in modelling inputs

Why is this SA study proceeding? Is similar work planned in other regions?

The NTS identified 4 major augmentation options for increased inter-regional transfer capacity, and flagged further investigation of SA options given emerging constraints. AEMO intend working towards an evolving suite of interconnect expansion options.

2. Augmentation Options

Do the incremental options assume generation in the SE?

The network studies assume no new generation - existing generation only

What are the costings of transmission options?

The work is still underway. A third Heywood transformer could be expected to cost in the vicinity of \$40-50m

What is the reactive option proposed at Davenport? Does this take into account future renewable generation developments?

Capacity of 100 MVAR is proposed. This is based on existing generation levels only

Does the study consider import and export capabilities?

Yes. Ideally the study will identify common options to address both.

What is the ballpark cost of the Greenfield options?

The SA-Vic option could cost in the realm of \$1.5 – 2.5bn for an AC link.
The cost of a DC equivalent would be in the order of \$1.5bn.

Would the shorter option 4 cost less?

Yes, but the relative benefits need to be considered.

Are geothermal connection options on Eyre Peninsula considered?

Geothermal development was included, but connection options were not scoped in detail (connection costs are captured in average costing)

Will the study indicate when options are needed?

Yes. This should come from the market modelling, which will consider benefits versus costs and timing. The modelling will provide a general development sequence and transmission expansion plan. The modelling may reveal an optimal sequence of development involving incremental options first.

The decisions will take a long time and large costs are involved

Agreed. Investment would also be spread across affected states.

Are the options in proportion to the need?

Yes, given the study canvasses both incremental and additional interconnect options. It might be expected that cheaper projects would get up first, based on maximising the NPV path over the 30 year timeframe.

What was the driver for the interconnect options through North West Victoria?

The options are representative only of potential possibilities. This general route was also influenced by the level of wind generation potential in this area.

Is the study considering all network investment needed?

The study costs all transmission investments required to meet a given load profile. It needs to consider all options and the relative merits of staged incremental upgrades versus large up front investments.

What is the likely timing of the 3rd transformer at Heywood?

This is likely in next 5 years, perhaps.

How are incremental and new interconnection options compared?

Different options will have different costs and different benefits - for example the scale of benefits associated with a small expansion will differ to that of a new interconnector. If the modelled benefits are found to come close to the estimated costs (ie within 80%) there would be reason to further investigate promising options.

Do any options give firmer capacity?

Looped network solutions are inherently stronger than point to point options. This is captured in the market modelling.

Some current network limits are non thermal - will the identified options involve such limits?

The market modelling looks mainly at thermal limits. Dynamic limitations are considered a second order issue, and would need to be considered in more detailed studies (in relation to greenfields options).

Is the study considering the full limitations of the local 132kV network around Robertstown?

Yes. These limits are represented in the network model.

3. Next Steps

How will the current Regulatory Test constrain or limit the options considered?

The study is not applying the RIT-T. A more thorough, detailed analysis would be required for this. The RIT-T could be used to justify such a project, but all benefits need to be fully quantified, which is very challenging.

What is the process moving and timeframe moving forward?

The results will inform the 2010 NTNDP and 2011 APR, and identify projects worth further investigation. Any second phase assessment will take longer - detailed economic evaluation would likely occur in 2011.

Once concluded, how often would the exercise be repeated?

The results would be reviewed annually in the NTNDP, and built on over time.