

30 January 2012

Mr. Tim George  
Executive General Manager  
Planning  
AEMO

Mr. Rainer Korte  
Executive Manager  
Network Strategy & Regulatory Affairs  
ElectraNet

By email to [planning@aemo.com.au](mailto:planning@aemo.com.au) and [appleby.simon@electranet.com.au](mailto:appleby.simon@electranet.com.au)

Dear Messrs George and Korte,

### **South Australia-Victoria (Heywood) interconnection upgrade**

Alinta Energy welcomes the opportunity to make a submission to the Electranet and Australian Energy Market Operator (AEMO) Regulatory Investment Test for Transmission (RIT-T) for the interconnector between South Australia and Victoria.

Alinta Energy is an active investor in the energy retail, wholesale and generation markets across Australia. Alinta Energy has over 2500MW of generation facilities in Australia (and New Zealand), and maintains retail energy customers in Western Australia, South Australia and Victoria with a strong commitment to growth.

Alinta Energy maintains an active interest in gas and electricity market developments as it pursues its forward growth strategy.

### **Discussion**

Alinta Energy owns and operates a number of power stations in South Australia including Playford B and Northern Power Stations. These stations underpin much of Alinta Energy's power generation strategy and support Alinta Energy's growing retail business in South Australia and Victoria. As a consequence, Alinta Energy is particularly sensitive to congestion impacts and the risks arising from inter-regional trade.

While an efficient level of congestion will invariably remain present across the network and in a regional market structure inter-regional trade will also present specific risks, Alinta Energy is of the view these may be excessive in the NEM at present.

Issues of congestion and interconnector capacity will undoubtedly be canvassed in the Transmission Frameworks Review and the work soon to be commenced by the Productivity Commission. As it pertains to the RIT-T being undertaken by AEMO and Electranet, Alinta Energy has three specific interests.

1. The extent to which the current network configuration creates intra-regional congestion which should be addressed.
2. The extent to which interconnector limits are maintained independent of any proposed upgrade.
3. As broad a range of network and non-network options as possible be assessed under the RIT-T so as to ensure that the most economically valid proposal, if any, is progressed.

In this regard, we support the current work being undertaken by AEMO and Electranet and agree that it can address the three issues raised above.

#### **Network limitations within South Australia**

The Project Specification Consultation Report provided that:

- power transfer capability from Victoria to South Australia is frequently restricted by voltage stability limits in south-east South Australia, particularly during high demand conditions and when there is high generation in south-east South Australia;
- power transfer capability from South Australia to Victoria is frequently restricted by the thermal capability of the South East 275/132 kV transformers in South Australia (for example bound for 204 hours in 2010); and
- the 275 kV transmission lines between the Heywood and South East substations are rated up to about 45% higher than the transformer section of the interconnector flow path. The current capacity limitation affects the extent to which electricity can flow across the interconnector, including the level of wind generation.

Alinta Energy is particularly concerned by the thermal and voltage stability limits in South-East South Australia. There is no question that Alinta Energy believes action to address these issues is justified independent of any Heywood interconnector upgrade.

The recent Annual Planning Report indicated that a number of potential solutions have been identified to alleviate constraints, a positive development. Some of these options were low cost and Alinta Energy encourages these options to be progressed as a matter of priority.

Further, these intra-regional South Australian issues appear to form a pre-condition to the development of any upgrade proposal and as such can be implemented as a 'no regrets' option.

Over the last 12 months, Alinta Energy has observed flow constraints on the Murraylink interconnector which is impinging on transfer capability between South Australia and Victoria, particularly during periods of high wind generation levels. This is driven by thermal constraints around the Robertstown transformers and the growth in wind generation capacity in the mid North of the state.

Therefore, we suggest AEMO and ElectraNet evaluate intra-regional issues affecting South Australia separate to the case for various interconnector options. Interconnector options may or may not be economically justifiable in their own right following the RIT-T process and should be assessed accordingly, while the matters above require discrete consideration and are likely to justify action in advance of the date when, for instance, a Heywood option becomes feasible.

#### **Maintenance versus upgrade**

Alinta Energy endorses the assessment of various upgrade options but notes that a more tangible issue is maintenance of existing interconnector capacity.

Once a certain level of interconnector capacity has been economically justified, it would seem appropriate to maintain that capacity to facilitate inter-regional trade and provide appropriate business certainty.

Alinta Energy appreciates that the RIT-T may demonstrate that an upgrade of capacity (for instance from 460MW to 650MW) may eventually be economically justifiable; however, it is unclear what appetite for an upgrade would exist if the existing interconnector was operated close to or at its current maximum capacity especially at times of high demand. Therefore, the progression of works to maintain existing capacity remains critical moving forward.

#### **Broad range of options**

Alinta Energy supports a thorough economic assessment of all feasible options to support, maintain and/or increase interconnector transfer capability provided in accordance with the RIT-T principles. In short, AEMO and ElectraNet should consider as many technically feasible options as possible in its cost benefit analysis.

Alinta Energy understands there is some concern that widespread support for an upgrade may obscure a range of non-network or options which don't support an upgrade per se.

Alinta Energy is aware that Infigen will be proposing an option to improve capability from South Australia into Victoria via a special control scheme. Alinta Energy understands the

proposed scheme is similar in principle to the Basslink Network Control Special Protection Scheme already in operation.

Alinta Energy supports further assessment of this option as part of the RIT-T process.

### **Conclusion**

Alinta Energy welcomes the work being undertaken by ElectraNet and AEMO and supports the extensive consultation process which has been commenced. Going forward Alinta Energy:

- concludes that the network limitations that affect generators in and around South-East in South Australia must also be overcome to ensure the current and any possible upgraded interconnector capacity is not limited by intra-regional constraints;
- believes network limitations issues in and around the South-East and Robertstown transformers in South Australia remain the first order priority and would not support an outcome from this RIT-T process that did not address this problem regardless of any decisions on upgrading the interconnector;
- can see no reason why network limitations issues in the South-East should be dependent on the viability of a potential interconnector upgrade but understand the value of joint progress where a interconnector upgrade is justifiable in its own right in the near term; and
- encourages AEMO and ElectraNet to consider all credible options including any low-cost non-network options such as special control schemes.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "J. Lowe".

**Jamie Lowe**

Manager, Market Regulation