Integrated System Plan Group, AEMO.

Re: Missing Transmission Link for Qld/NSW

This brief submission outlines a short, new transmission link between Qld and NSW to provide increased power flows between the states and add resilience.

The problem:

Although the Queensland-NSW interconnector (QNI) has been upgraded, it is still subject to constraints in both directions. Furthermore, the coastal DC link has low capacity. All too often, power flow is reduced well below the maximum to avoid voltage collapses at Kogan Creek and loss of certain parts of the NSW network. Hot weather has also degraded the maximum flow. This is often reflected in the power price being higher than in an unconstrained situation. In the event of a major breakdown of generation, then the possibilities of load shedding or even blackouts would occur.

Solution:

To avoid this problem and to provide much greater resilience to Queensland and especially South East Queensland, a high voltage transmission link between Stanthorpe Qld and Tenterfield NSW will alleviate the reduced power flows between the states.

Some advantages of this link are:

• The length of the link is only 60 km (and possibly shorter depending on route)

• Stanthorpe is connected by high voltage transmission to Warwick and thus to Brisbane.

- Tenterfield is fed separately from Armidale (Tamworth) and Lismore (east coast) and is strategically placed for power transmission to or from Queensland.
- This proposed link connects to REZ in different climatic areas.
- North East NSW is expanding in population and hence power requirements will increase.
- This link will also assist in FCAS delivery, arbitrage and lower energy costs.

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