



DIRECTLINK JOINT VENTURE

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Mr Warwick Anderson
Acting General Manager, Access Branch
Australian Energy Regulator
470 Northbourne Avenue
CANBERRA ACT 2600

Dear Warwick

Re: Application for Conversion to a Prescribed Service and a Maximum Allowable Revenue to June 2015

Country Energy has advised us that it has written to the AER to confirm with you that Powerlink intends to bring forward to 2006 the installation of the second transformer at the Molendinar transformer. In this letter, we describe how this confirms our previous advice to you on the alleviation of constraints in the Gold Coast transmission network—especially that set out in our letter of 5 July 2005—and the extent to which Directlink can avoid the upgrade of Line 966.

Network constraints in northern NSW

BRW's modelling has demonstrated a number of unacceptable operating conditions in the northern NSW 132 kV network. These conditions either exist or will emerge over the next five years for outages of the 330 kV Line 89 under peak load conditions as follows:

- overloading of the Armidale to Koolkhan 132 kV line (Line 966)—this condition already exists and has been acknowledged by TransGrid;
- overloading of the Koolkhan to Lismore 132 kV line (Line 967)—for an outage of the Coffs Harbour to Lismore portion of 330 kV Line 89 following establishment of the 330 kV Coffs Harbour substation in 2006; and
- voltage collapse at Koolkhan beyond 2009-10.

The injection of network support from Queensland via Directlink to the northern NSW network can relieve these constraints. In its report contained with our conversion application¹, BRW confirmed the level of injection required at Lismore to relieve these conditions under peak load conditions.

¹ Burns and Roe Worley, *Directlink, Selection and Assessment of Alternative Projects to Support Conversion Application to ACCC*, 22 September 2004, tables 4.3.1(a) and (b).

Southward capacity with the installation of the second Molendinar transformer

The installation of the second Molendinar transformer in 2006 will release an additional 90 MW of southward capacity to Directlink through the Gold Coast transmission network. This capacity puts beyond doubt Directlink's ability to provide network support to northern NSW, relieve the network conditions list above, and avoid the upgrade of Line 966 until at least 2012.

It is anticipated that continued network development in the Gold Coast will maintain and enhance the Gold Coast network's southward beyond 2012. BRW assumed this in its modelling after consultation with TransGrid and Powerlink, and it means that Directlink will continue to have sufficient southward capacity so that it can provide the required level of network support to northern NSW until the end of 2016-17. Directlink support alone will not avoid the onset of voltage collapse beyond this time and the new Dumaresq to Lismore 330 kV would be required from 2017-18. For the avoidance of doubt, under this scenario, an upgrade of Line 966 would not be required at all.

Southward capacity between Mudgeeraba and Terranora

As you know, Directlink's ability to provide network support into NSW is also dependent upon the capacity of the network between Mudgeeraba and Terranora. At our meeting with ACCC staff on 16 May 2005, we discussed this issue and that the need to upgrade the transfer capacity between Mudgeeraba and Terranora is driven by load growth in the Tweed region. Importantly, maintaining an N-1 supply to Terranora will also maintain the transfer capacity for Directlink at the level required for it to support the northern NSW network.

As we confirmed in our letter of 5 July 2005, Powerlink and Country Energy have reached agreement for the emergency ratings of the existing 110 kV lines to be used under contingency conditions. This immediately increases the capacity available to Directlink through these lines and allows more time for Powerlink and Country Energy to develop and implement to next round of upgrading or augmentation.

I trust that this letter draws together the material that has been presented to the AER over recent months and confirms Directlink's ability to alleviate critical network constraints in northern NSW, avoid the upgrade of Line 966, and defer the need for the new Lismore to Dumaresq line until 2017-18.

Yours sincerely



Dennis Stanley
Directlink Joint Venture Manager