

NEED/OPPORTUNITY STATEMENT (NOS)



Supply to Broken Hill-Contingent Project

NOS- 000000001754 revision 0.0

Ellipse project no(s):

TRIM file: [TRIM No]

Project reason: Reliability - To meet connection point reliability requirements

Project category: Prescribed – Augmentation - Contingent

Approvals

| | | |
|------------------------------------|------------------|--|
| Author | Jay Esson | Network Modelling & Performance Engineer |
| Reviewed /Endorsed | Jahan Peiris | Network Modelling & Performance Manager |
| | Garrie Chubb | Investment Support Manager |
| | Anwar Kurukchi | Project Portfolio Sponsorship Manager |
| Approved | Andrew Kingsmill | Manager/Network Planning |
| Date submitted for approval | 12 January 2017 | |

1. Background

This contingent project has been established to ensure reliability of supply to Broken Hill.

The reliability standard for the upcoming regulatory period finalised by IPART on 22 December 2016 adds an unserved energy allowance requirement to the standard of redundancy currently in place. The expected unserved energy value for Broken Hill is recommended at 10 minutes. TransGrid may be required to provide additional capacity to supply Broken Hill in the event that the total 220 kV and 22 kV load at Broken Hill exceeds the capacity of the backup gas turbines owned by Essential Energy and expected unserved energy exceeds the unserved energy allowance for Broken Hill of 10 minutes in the reliability standard.

Should additional capacity be required, TransGrid will consider both network and non-network solutions. Should a network solution be the most economic option, TransGrid will need to trigger a contingent project to provide this capacity.

2. Need/opportunity

TransGrid proposes this project as a contingent project with the following triggers:

- > Notification from Essential Energy of available capacity of backup generation at Broken Hill that would result in expected unserved energy exceeding 10 minutes at average demand.
- > Successful completion of economic evaluation demonstrating that a network investment is the most efficient option to meet the applicable electricity transmission reliability standard.
- > TransGrid Board commitment to proceed with the project subject to the AER amending the revenue determination pursuant to the Rules.

3. Related needs/opportunities

- > Need 1649 – Reliability of Supply to Broken Hill

4. Recommendation

It is recommended that options be considered to address the identified need/opportunity.