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Submission: Please find attached Ausgrid's submission in response to the supplementary draft Electricity Reliability Standards.



28 October 2016

Dr Peter Boxall, AO
Chairman
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Lodged online.

Dear Dr Boxall,

Electricity transmission reliability standards

Ausgrid welcomes the opportunity to provide a submission in response to IPART's supplementary draft report on electricity transmission reliability standards in NSW and in particular on the reliability level recommended for the Inner Sydney area.

A submission to IPART's draft report¹ was provided by Ausgrid in July 2016 and clarification was sought on three areas of uncertainty. These areas were

- The application of the flexibility provisions embodied in clause 5 of the draft recommended standards.
- A description and example of the application of the standard.
- Clarification of the standard's intended operation for asset replacement projects.

The first two areas equally apply to the supplementary draft report. With regards to the standard's intended operation for asset replacement projects, it is understood from the draft supplementary report that the calculation of expected unserved energy, for the purposes of compliance with the standard, would not change for a brand new network compared to an aged and unreliable network².

The supplementary draft report states that IPART will require Transgrid to demonstrate compliance with the reliability standard by using life-cycle average failure rates. This has the effect that the standard would not interact directly with the replacement decision for aged transmission assets, unless the replacement is triggered by capacity constraints.

¹ IPART, Electricity transmission reliability standards, an economic assessment – Draft Report, May 2016

² IPART, Electricity transmission reliability standards, unserved energy allowances for Inner Sydney and Broken Hill, Molong, Mudgee, Munyang and Wellington Town – Supplementary Draft Report, September 2016 - page 25

It is noted in Box 3.2 of the supplementary draft report that Transgrid should 'also provide information on changes to asset conditions that may impact reliability'. This provision is supported by Ausgrid as average asset failure rates are not a good predictor of future performance for an aged electricity network. The use of average failure rates that included all failure records from an assets life, and not just the most recent failure data, was criticised by the Ministerial Inquiry into the Auckland Power Supply Failure of 1998³. This inquiry found that a risk assessment by the network operator "critically underestimated the failure risk"⁴ and that the likelihood of a double cable outage was 10 to 12 times higher⁵.

Ausgrid notes that the report makes the distinction in approach between assessment of license compliance and the RIT-T process which allows a number of other assessment criteria to be considered in application of RIT-T.

The approach in the supplementary draft report is consistent with how the current deterministic reliability standard interacts with replacement projects, but may be a source of confusion when the standard is expressed in terms of an allowance for expected unserved energy. For this reason the final report should be very clear on the intended application of the standard and its limited direct interaction with transmission replacement projects.

If you would like to discuss this submission further or arrange a meeting with Ausgrid representatives please contact Ping Tan on (02) 9269 4689.

Yours sincerely,

Matthew Webb
Manager Network Risk and Planning, Ausgrid

³ Auckland Power Supply Failure 1998: The Report of the Ministerial Inquiry into the Auckland Power Supply Failure – Part 3

URL: https://web.archive.org/web/20081017013227/http://www.med.govt.nz/upload/23701/part_three.pdf

⁴ Auckland Power Supply Failure 1998 Inquiry Page 138 – finding number 5

⁵ Auckland Power Supply Failure 1998 Inquiry Page 134