

Our Ref:
Your Ref:
Contact Officer: Mark Wilson
Contact Phone: (08) 8213 3419

Audrey Zibelman
Chief Executive Officer
AEMO

by email: 2020PSFRR@aemo.com.au

Dear Ms Zibelman

Re: Draft Stage 2 Report, 2020 Power System Frequency Risk Review

I am writing to you in relation to AEMO's draft stage 2 report as part of the 2020 Power System Frequency Risk Review.

The Draft Report makes a number of recommendations, including reviewing and modifying of control schemes. It also recommends a protected event for South Australia to manage the reducing effectiveness of under-frequency load shedding in periods with low load or high distributed PV generation. We support the Power System Frequency Risk Review (PSFRR) and the declaration by the Reliability Panel, where appropriate, of a protected event. These processes provide transparent assessments of power system security risks and options for addressing those risks.

Both the 2018 and 2020 Integrated System Plans include the planning assumption that two gas synchronous units must be on at all times to maintain system security in South Australia in the event of the loss of the Heywood interconnector (referred to as the '2 unit constraint'). However, the loss of the Heywood interconnector is a non-credible contingency and should therefore be within the scope of the 2020 PSFRR. This '2 unit constraint' was also adopted for the Regulatory Investment Test (RIT-T) for the South Australian Energy Transformation (SAET) and in our SAET RIT-T determination, we stated that the assumption that two synchronous gas units be on line at all times to manage the loss of the Heywood interconnector needs to be considered as part of AEMO's 2020 PSFRR.

The draft stage 2 report has not recommended that 2 units of synchronous generation be on at all times to manage the loss of the Heywood Interconnector. The report states that:

Future studies indicate, that in the event of a loss of the Heywood interconnection between Victoria and South Australia while importing, the RoCoF in the South Australian island may exceed levels considered acceptable to minimise the risk of cascading failures.

And:

Work is presently being undertaken by ElectraNet and AEMO to reassess power system operational limits post commissioning of the four synchronous condensers, with a view to replace current planning assumptions with necessary arrangements after the synchronous condensers are commissioned. The analysis is expected to be completed in early 2021.

We acknowledge that AEMO will be undertaking further work that may impact on the planning assumptions associated with assuming 2 units of synchronous generation are on at all times. However, the loss of the Heywood interconnector is a non-credible contingency and is within the scope of the 2020 PSFRR, including the assumption that 2 units of synchronous generation be on at all times to manage this risk.

We are of the view that the National Electricity Rules require AEMO to review the assumption that 2 units of synchronous generation be on at all times to manage the loss of the Heywood interconnector as part of its 2020 PSFRR. This will also ensure interrelationships with other identified system security issues such as RoCoF are addressed to ensure the most efficient consideration of power system security risks in South Australia.

If you have any queries, please contact myself (03) 9910 9492 or Mark Wilson on (08) 8213 3419.

Yours sincerely

A handwritten signature in black ink, appearing to be 'CS', with a long horizontal stroke extending to the right.

Clare Savage
Chair
Australian Energy Regulator

Sent by email on: 11.12.2020