Hydro Tasmania
The power of natural thinking

8 August 2017

John Pierce
Chairman
Australian Energy Market Commission (AEMC)
PO Box A2449
SYDNEY SOUTH NSW 1235

By online submission

Dear Mr Pierce

Managing power system fault levels – Draft Determination (ERC0211)

Hydro Tasmania welcomes the opportunity to provide a submission on the AEMC's managing power system fault levels.

System strength is an emerging aspect in the National Electricity Market as the generation mix changes. Hydro Tasmania is supportive of system strength being maintained, as otherwise the ability of generation equipment to meet technical performance standards will be impacted, potentially leading to voltage instability and limiting the performance of network based protection systems. In Tasmania system strength has been successfully managed via the use of network constraints. As system strength is more of a localised consideration, Hydro Tasmania believes that it is appropriate that network service providers be obliged to manage system strength. Hydro Tasmania is supportive of the proposed elements outlined in the Draft Determination and makes the following specific comments:

- The draft rule requires AEMO to maintain and publish a register of the registered generator minimum short circuit ratios. Hydro Tasmania supports AEMO publishing the short circuit ratio as this would provide transparency of the system strength information to industry.
- Hydro Tasmania is supportive of AEMO developing guidelines to determine short circuit ratios. We believe that the guidelines should outline a clear methodology and provide the opportunity for engagement with industry on the implementation. This should include network service providers and generators providing input on dispatch patterns and operational considerations. Hydro Tasmania considers it important that the methodology leads to effective outcomes which do not place onerous requirements on participants and are reflective of efficient market operation.
- The introduction of a requirement for new connecting generators to "do no harm" to the existing minimum level of system strength is a prudent approach to ensure system strength is maintained.
- The transitional arrangements suggest interim guidelines for short circuit ratio determination, and in the case of Tasmania the proposed distances for grouping of generating systems may need to be reconsidered.
- The Basslink interconnector does not transfer the electrical properties of the alternating current including inertia and fault level. System strength in Tasmania is therefore reliant on

local provision. Given the unique nature of the Tasmanian system, Hydro Tasmania suggests that AEMO should accommodate the local TNSP setting requirements for fault level.

Please contact John Cooper (john.cooper@hydro.com.au or (03) 6230 5313) if you have any questions.

Yours sincerely

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