

31 October 2019

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

By online submission.

Dear Mr Pierce

**Primary Frequency Response Rule Changes: Consultation Paper.**

Hydro Tasmania appreciates the opportunity to make a submission in response to the AEMC's Primary Frequency Response (PFR) Rule Changes Consultation Paper.

Hydro Tasmania is Australia's largest producer of renewable energy. Our retail business, Momentum Energy, sells energy and energy services to businesses and residential customers on mainland Australia and provides retail services to the Bass Strait islands. We generate electricity from hydropower, wind and gas. Our system has a total capacity of more than 2,600 megawatts and includes 30 power stations. We are also currently examining options to enhance Tasmania's contribution to the National Electricity Market (NEM) through the Battery of the Nation initiative with TasNetworks. The management and control of power system frequency is a key issue of interest for Hydro Tasmania.

As AEMO, the AEMC, the AER and ESB have noted, maintaining system security has become more challenging in recent years due to the transformation of the energy sector. Hydro Tasmania notes that there has been a degradation of frequency control performance in the NEM over recent years, which reduces the resilience of the power system. Given the importance of this issue, frequency control has been considered extensively through a number of reviews and work programs including the AEMC's frequency control frameworks review, AEMO's frequency control trial in Tasmania and various reviews, and the ancillary services technical working group. While these forums have noted some of the emerging issues of frequency control in a transforming NEM with some enhancements already implemented, challenges remain and further solutions are likely to be needed.

The AEMC is considering three rule changes through this consultation paper. The issues raised in all three rule changes are interrelated and therefore need to be considered in a holistic and technologically neutral manner. Some aspects of one rule change, for example, could be redundant or inefficient if other proposals are introduced. Hydro Tasmania therefore welcomes the AEMC considering the three rule changes together and supports the detailed consideration of the interrelationship between the various aspects of the proposed changes to ensure an efficient outcome is implemented.

### Proposals for Mandatory Primary Frequency Response

There is likely to be a need for a balance between market approaches and the requirements to ensure the system is operated in a resilient manner. Hydro Tasmania preference is for market based approaches to provide the signals and incentives for market participants to respond to. This includes providers of primary frequency control being remunerated for the provision of this service. In light of these issues, Hydro Tasmania considers it prudent to implement the changes proposed by AEMO if accompanied by a suitable capability incentive while further work is done to implement a longer term market based solution.

Hydro Tasmania proposes that the AEMC consider how a capability incentive could be calculated in combination with AEMO's proposed approach. For example, a relatively simple approach would be to calculate the capability incentive proportional to each generator's PFR contribution (as standard dead band and droop settings are intended). Such an approach would incentivise the provision of PFR from participants but would not impose new costs upon customers as mandatory PFR would likely improve the quality of system frequency leading to a potential reduction of regulation FCAS requirements compared to today. It would also help to ensure all regions can participate in the global regulation FCAS markets, in particular Tasmania, further increasing the efficiency of the market.

Hydro Tasmania has considered the approaches outlined in AEMO's and Dr Peter Sokolowski's rule changes. On balance Hydro Tasmania considers that AEMO's proposal of an allocation of requirements in a Primary Frequency Response Requirement (PFRR) specification document has several advantages including:

- AEMO's PFRR will cover all participants capable of offering PFR in the NEM and is key for sharing the load across all.
- Provide the option for exemption for Participants with existing plant not able to meet the PFRR economically or technically as well as a pathway for compensation for implementation costs.
- Such a specification document would include detailed information on the application, implementation, testing and modelling related to PFRR.

Dr Peter Sokolowski's proposal is to introduce a mandatory PFR requirement that is implemented through changes to Schedule 5.2 of the NER. One of the main disadvantages of this proposed rule change is that the mandatory requirements will not be retroactive. This may lead to discouraging investment in upgrading older units that cannot easily meet the new minimum standards leading to a less efficient outcome.

### Proposal to address disincentives to the provision of Primary Frequency Response (PFR)

Hydro Tasmania agrees to the proposed changes to clauses 4.9.4, 4.9.8 and S5.2.511 in the NER in relation to the removal of disincentives to PFR. These proposed changes will clarify the interaction of compliance with dispatch instructions and operation of plant in a frequency response mode. This will mean that operating in a frequency response mode will not constitute a breach of a generator's requirement to comply with its dispatch instructions.

Hydro Tasmania partly agrees with the proposed changes to clause 3 of the NER in relation to the allocation of regulation service costs - causer pays. In particular Hydro Tasmania does not believe that the proposed change to CI 3.15.6A (k)(5)(iii) is needed as positive behaviour should already be captured by the procedure. In addition, if the implementation is carried out in a way similar to how market enablement is treated [CI 3.15.6A (k)(5)(ii)] it will effectively remove the ability for better individual units to compensate for lower performing units in a portfolio.

It is noted that AEMO is intending to commence a review of the 'causer pays' procedure. Hydro Tasmania supports a thorough review of the 'causer pays' procedure as we have identified some areas

that could be improved to enhance its operation and the efficiency of the system more broadly. One area for example is the over allocation of regulation costs to Tasmanian generators compared to their performance relative to other generators in the NEM. In undertaking consultation on PFR, Hydro Tasmania encourages the AEMC to work with AEMO in considering aspects of PFR that may impact causer pays to ensure there is effective coordination between the AEMC's rule change process and AEMO's proposed review.

Hydro Tasmania would welcome the opportunity to discuss this submission further with you. Should you have any queries or require further information please contact Mathew Creese, Manager Operational Contracts, by phone on 0439 995 285 or via email [Mathew.Creese@hydro.com.au](mailto:Mathew.Creese@hydro.com.au).

Yours sincerely



John Cooper  
Regulatory Manager