

October 28th, 2021

Attn: Ben Hiron, AEMC

RE: ERC0263 Primary Frequency Response Incentive Arrangements

Dear Ben,

Fluence is a leading global provider of energy storage products and services and digital applications for renewables and storage, and a joint venture of the U.S.-headquartered AES Corporation and Germany-headquartered Siemens AG. Our solutions are built on the foundation of industry-leading technology platforms that are optimised for different application groupings, and Fluence leads the energy storage industry with over 3,400 MW of grid-scale storage projects deployed or awarded in 29 markets globally.

Fluence is an active supplier of Battery Energy Storage Systems (BESS) in the Australian market with our 30MW / 30 MWh solution installed at AusNet Services' Ballarat transmission station. In addition, Fluence recently acquired AMS – the NEM's leading supplier of algorithmic bidding software for semi-scheduled renewable generators and scheduled BESS, with over 4,500 MW of solar, wind and storage projects currently using Fluence's trading platform to facilitate bidding into the NEM and California's CAISO power market.

Fluence welcomes the opportunity to provide comments on the AEMC's Primary Frequency Response Incentive Arrangements draft determination. Fluence would like to acknowledge and appreciate all stakeholders including the AEMC for providing Fluence with an opportunity to contribute to the consultation process.

In principle, Fluence supports measures that improve frequency performance. However, continuing mandated Primary Frequency Response (PFR) without developing a robust, incentive-based PFR framework may not be adequate to sustain a rapidly transitioning power system. It is unclear if relying on a double-sided causer pays mechanism can support efficient operation and investment in resources to provide essential system services. In the draft determination, AEMO will be responsible for developing the details of the mechanism. Fluence is concerned there may not be enough consideration of economic signals to investment in new capacity that will be required as traditional generators retire.

Kind regards,
Lara Panjkov

Market Applications Manager

Lara Panjkov

Mandated PFR must not be the end-state

Fluence recognises there is a real and immediate need for action to improve the current system frequency control frameworks in the NEM and agrees that system frequency has been deteriorating over recent years. Battery storage has been critical to manage frequency stability and restoration, particularly for its superior speed and accuracy of response. Investment and innovation in the energy sector will flourish when market design principles focus on achieving outcomes and producing adequate price signals, rather than procuring ad hoc services and imposing short-term requirements.

Continuing mandated PFR without developing a robust, incentive-based PFR framework may not be adequate to sustain a power system that is transforming more rapidly than expected. We acknowledge that GHD has recommended Pathway #1 of continuing a mandatory narrow-band Primary Frequency Control. However, GHD has also acknowledged that there may be “a need to establish stronger market arrangements that provide a greater level of certainty for system operation and send the right price signals to the market for provision of future PFR capacity (reserves), particularly in the lead-up to the retirement of a large number of the NEM’s coal fired generating fleet at the end of this decade, and beyond.”¹ AEMC and AEMO must consider scenarios where this transition is faster than expected and must be prepared that soon “a PFR-FCAS type market...will be necessary.”

PFR is a service that should be remunerated. Providing valuable system services are a key revenue stream for battery proponents, and critically, adequate revenue streams that can support investments that bring fast-responding technologies like battery storage into the NEM at the needed volumes. Ancillary service markets for PFR should be strongly considered, if not now then over the coming years. The speed and accuracy of PFR should also be considered. Assets that are able to provide superior performance, could be awarded performance scalars to reflect the value of response.

A double-sided causer pays mechanism may not be fit for purpose

We agree with AEMC that mandatory PFR may not provide certainty that sufficient resources will be available to maintain a secure operating state or provide incentives for participants to provide the most valuable services. Fluence understands that a double-sided causer pays mechanism intends to mitigate this issue.

It is not clear if positive performance payments will be enough to incentivise sufficient system sizing to support heavier cycling required by PFR, and to support price signals to build more resources to support a flexible power system. It is unclear if there will be material value for holding reserves to

¹ [Enduring Primary Frequency Response - GHD](#)

increase performance payments. If there are not adequate signals to invest in assets that can efficiently provide PFR, frequency performance may be adversely impacted, particularly as thermal generators retire. The mechanism is to be developed by AEMO, who may not be best placed to ensure that the structure sends sufficient investment signals.