



Our Ref: D20010019

Mr Ben Hiron
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AUSTRALIAN ENERGY MARKET COMMISSION
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Dear Mr Hiron

ERC0274 – MANDATORY PRIMARY FREQUENCY RESPONSE DRAFT DETERMINATION

The Energy and Technical Regulation Division (the Division) of the Department for Energy and Mining welcomes the opportunity to comment on the Australian Energy Market Commission's (the Commission) draft determination on the *Mandatory primary frequency response* rule change proposal.

Declining frequency performance has been a concern in South Australia for many years now. The Division has previously advocated for more timely activation of primary frequency control, as well as for the introduction of a new, faster frequency control service.

It is clear from the submissions that there is no debate about the deterioration in frequency control nor the prospect that it will continue to worsen; these issues have been examined in extensive detail over recent years. Unfortunately, two years on from wide endorsement of the Commission's assessment that frequency performance under normal operating conditions should be addressed as a priority¹, we are faced with the need for an immediate 'temporary fix' while a longer-term design is yet to be advanced.

The Division's reading is that there continues to be a very high degree of acceptance of the immediacy with which action to lessen frequency variability during normal operations should be pursued, and of the need to put in place a framework that is designed for, and appropriately rewards, the current and future generation fleet of diverse technologies and capabilities.

The Division supports the immediate introduction of a mechanism to ensure primary frequency response (PFR) is available, and welcomes the establishment of a primary frequency response deadband in the Rules. The proposal to mandate PFR provision as an interim measure while a long-term PFR mechanism is implemented is an acceptable response to the current pace of change, which is creating myriad challenges to ensuring the overall resilience of the power system and testing existing market frameworks. The Division is acutely aware of the impacts that these changes are creating and recognises that, in this instance, a regulatory-based response may be the most appropriate. While many have argued against obtaining PFR by regulatory intervention, the Division recognises certain inherent advantages of a broad, mandatory obligation, in particular, in satisfying the need for wide geographical distribution of the PFR and avoiding market concentration issues. However, it is not clear to the Division that the suggested alternatives, including voluntary trial, bilateral contracting (suggested by the Commission in the FCFR Draft Report) or the suggested staged

¹ Frequency Control Frameworks Review, Draft Report, March 2018, p iv

implementation of the mandatory obligation, are not equally feasible as interim options. These alternatives would have the benefit of offering specific insights that may be masked by a broad-based approach; for example, by revealing information crucial to the design of the longer-term mechanism, such as quantum, quality and price.

The Division welcomes the Commission's commitment to a clear timeframe for the development and implementation of a longer-term PFR mechanism that achieves the system security objectives and rewards providers for the quality of their PFR. As procurement of the PFR service via either regulatory or market mechanism will require a primary frequency control deadband, the Division encourages the Commission to review whether the final rule should exclude the proposed deadband from the sunset provisions.


The draft Rule provides for the Primary Frequency Response Requirements (PFRR) developed by AEMO to stipulate different parameters for different plant types and for variations and exemptions. The Division considers that this should sufficiently accommodate the NEM's diversity of plant and attendant technical and cost implications of a mandatory PFR requirement. Nonetheless, the Division encourages the Commission to ensure that the final Rule does not adversely impact or penalise battery energy storage systems by imposing a disproportionate burden in addition to the expected impact on FCAS revenues. Grid-scale batteries operating in South Australia have demonstrated the high-quality frequency response available from new technologies, even while current frameworks do not explicitly value these enhanced capabilities. These technologies offer fast-acting, accurate and bi-directional responses that are of significant benefit to frequency control in the NEM.

The Division supports the draft rule clarifying that a generator providing PFR is not in breach of its dispatch obligations. However, many concerns have been raised about the proposed changes to the causer pays contribution factors, suggesting further attention is warranted. The Division suggests these would be more appropriately considered as part of the separate rule change request *Removal of disincentives for primary frequency response* (ERC0263) under which they were raised.

Finally, the Division suggests that the final determination should ensure that the effects of the interim PFR obligation are documented, analysed and reported, to inform the development of the longer-term mechanism. The Rules were recently amended to oblige AEMO to report on frequency performance. It may be prudent to review whether that existing obligation is sufficient to encompass this new requirement or express provision is required to ensure the impacts of PFR implementation, including in terms of frequency outcomes and also matters such as changes in FCAS markets, are understood.

If you have any further queries, please contact Sally Gartelmann on 08 8429 3296.

Yours sincerely



Vince Duffy

EXECUTIVE DIRECTOR, ENERGY AND TECHNICAL REGULATION DIVISION

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