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Australian Energy Market Commission
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Submitted electronically

Primary Frequency Response Rule Changes – ERC0274

Alinta Energy welcomes the opportunity to provide a submission to the AEMC's Primary Frequency Response draft determination.

Alinta Energy is an active investor in energy markets across Australia with an owned and contracted generation portfolio of nearly 3,000MW, including 1,700MW of gas-fired generation facilities and 1,070MW of thermal generation facilities. As several of Alinta Energy's generation assets currently provide frequency response in the NEM Alinta Energy is directly impacted by the draft determination.

Context

We recognise that the NEM is undergoing significant transition, which is impacting its frequency control frameworks. However, Alinta Energy considers that mandatory primary frequency control is contrary to the market-based philosophy which underpins the NEM. In addition, the exceptional tight dead band proposed (±0.015) Hz is untested in the NEM and represents a significant departure from standard operating practice.

Nonetheless, Alinta Energy is cognisant of security concerns and is supportive of the 2023 sunset clause which allows for a long-term markets-based incentive mechanism to be determined. Alinta Energy looks forward to contributing to this forward markets workplan as soon as possible.

Proposed Dead band Setting is untested in the NEM

The decision to mandate frequency control to a (±0.015) Hz dead band setting is unreasonably tight and is physically untested in the NEM. As previously outlined, implementing such a narrow dead band would introduce several risks that may have unintended implications to the secure and reliable operating state of the NEM.

The lack of thorough risk assessment, quantifiable technical analysis and consideration of alternative frequency dead band settings is of concern. As such, Alinta Energy considers that there should be a progressive reduction in dead band settings commencing with (±0.050) Hz. This more prudent approach will allow participants and AEMO to progressively

monitor the performance of frequency of the NEM as it adheres to a new dead band setting.

Exemption Clause

The draft determination acknowledges that some generators may not be inherently capable of providing PFR and may need to seek an exemption. As such, Alinta Energy broadly supports the drafting of the exemptions framework outlined in clause 4.4.2B:

1. *the capability of the generating system to operate in frequency response mode;*
2. *the costs that are likely to be incurred in augmenting the generating system to be able to operate in frequency response mode, relative to the turnover derived from, and operating hours of, the generating system in relation to its operation in the national electricity market;*
3. *the stability of the generating system when operating in frequency response mode, and the potential impact this may have on power system security;*
4. *the ongoing costs of operating the generating system in frequency response mode; and*
5. *any other physical characteristics of the generating system which may affect its ability to operate in frequency response mode, including (but not limited to) dispatch inflexibility profile, operating requirements, or energy constraints.*

Alinta Energy is strongly of the view that exemptions should only be based on technical and economic grounds, and that exemptions should not be granted based on technology types or generator size. In addition, to ensure neutrality and arm's length governance process, exemptions should be operated by the AER, consistent with the AER's other licencing and exemptions granting roles.

Sunset Clause

The NEM currently does not reward the essential physical services it needs in order to provide long term reliability and security services at minimal cost to consumers, mandating primary frequency control indefinitely further embeds this. As such, Alinta Energy strongly supports the 2023 sunset clause. Crucially, this three-year period will provide suitable time to fully develop a markets-based solution which will provide a sustainable and long-term markets-based resolution to addressing frequency concerns within the NEM efficiently.

Alinta Energy looks forward to positively contributing to the work of determining the efficient frequency control envelope and subsequently designing and optimising a market-based response to procure the defined frequency requirement. A market-based solution will deliver the appropriate frequency response at lowest price, which is in the long-term interest of consumers in the NEM.

However, Alinta Energy would caution that the sunset clause must be strictly adhered to as past previous "short term solutions" in the NEM have been known to be extended indefinitely and ultimately become entrenched in the NEM's design, for example the Long Notice RERT framework.

Forward Work Plan

Alinta Energy notes that the forward workplan, whilst set out clearly, is exceptionally tight:

DATE	ACTION
26 March 2020	The AEMC publishes the final determination and final rule, *Mandatory primary frequency response* Commencement date for the transitional rules set out in schedule 3 of the Amending Rule.
9 April 2020	AEMO publishes a draft *Interim primary frequency response requirements*
(+ 20 business days) 7 May 2020	Close of submissions on the draft *Interim primary frequency response requirements*
4 June 2020	AEMO publishes the *Interim primary frequency response requirements* Commencement date for the substantive elements of the rule, *Mandatory primary frequency response*, as set out in schedule 1 of the Amending Rule.

The assessment of frequency control services is a highly specialised engineering service. Many generators require the same small pool of external consultants for the provision of these services. Given the exceptionally tight timeframes, there is a high likely hood any delay to the pre-defined schedule will push back other key rule change milestones.

In Alinta Energy's experience, generation plant operation and maintenance work follows a long-term operating plan often set years in advance. As such, the requirement for generators with a nameplate capacity greater than 200MW, to complete a self-assessment within 60 business days from commencement of the PFRR appears short. Scheduling engineering feasibility studies, undertaking risk assessments, doing testing and physically making any required changes to generation plant takes significant time.

For these reasons Alinta Energy would encourage consideration of operational flexibility being built into the forward work plan to account for any delays.

Compensation for Services Provided

Alinta Energy is of the view that the absence of ongoing compensation for frequency services provided in the form of a markets-based mechanism must be addressed by the AEMC. The draft determination correctly identifies that some generators can provide primary frequency control at little cost, whilst others require substantial installation of specific technology to do so.

In addition, the provision of frequency control involves costs on plant and general wear and tear. The provision of these services deteriorates the operating life of units and unavoidably requires an additional level of maintenance costs. These vary greatly depending on the dead band frequency ultimately set.

Again, Alinta Energy would encourage the AEMC to consider interim compensation solutions. For example, an ancillary tendering arrangement similar to SRAS or NSCAS services removes many of the risks contained with a mandatory obligation, and additionally allows generators to introduce competitive tension into the process and would guarantee delivery under an expedient timeframe.

Conclusion

Alinta looks forward to participating in the ongoing consultation process and would encourage consideration of the points raised above.

If you have any queries in relation to this submission, please contact me via email: anders.sangkuhl@alintaenergy.com.au or by phone 02 9375 0992.

Yours sincerely,

[signed]

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