



25 January 2024

Mr Victor Stollman
Project Leader
Australian Energy Market Commission

Submitted electronically at: www.aemc.gov.au/contact-us/lodge-submission

Dear Mr Stollman

**Stanwell Corporation Limited Response to
Clarifying Mandatory Primary Frequency Response Obligations for Bidirectional Units
Draft Determination**

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Australian Energy Market Commissions' (AEMC's) Clarifying Mandatory PFR Obligations for Bidirectional Plant Draft Determination (Draft Determination).

Stanwell is a major provider of electricity to Queensland, the National Electricity Market (NEM) and large energy users throughout Australia. We own and operate two coal-fired power stations, providing reliable and affordable energy, with a pipeline of renewable generation and storage technologies to reduce our emissions intensity and create future opportunities for our people and communities. In addition, Stanwell's retail business, Stanwell Energy, services the ongoing energy requirements of some of Australia's biggest industrial and commercial customers along the eastern seaboard of Australia.

This submission contains the views of Stanwell in relation to the Consultation Paper and should not be construed as being indicative or representative of Queensland Government policy.

Introduction

As we noted in our submission to the AEMC's August 2023 Clarifying Mandatory PFR Obligations for Bidirectional Plant Draft Determination Consultation Paper (Consultation Paper) on this matter, we do acknowledge the role that Primary Frequency Response (PFR) plays in ensuring the ongoing security and stability of the power system¹. However, Stanwell has consistently opposed the mandatory provision of PFR, and has strongly advocated for an efficient, enduring solution that incentivises and adequately compensates the efficient volume of PFR provision.^{2,3,4,5}. In addition, our response to the Consultation Paper raised

¹ Stanwell Corporation, [Stanwell Corporation Limited Response to Clarifying Primary Frequency Response Obligations for Bidirectional Units Consultation Paper](#), August 2023, page 1.

² Stanwell Corporation, [Primary Frequency Control - Response to the AEMC Consultation Paper](#), October 2019, page 2

³ Stanwell Corporation, [Mandatory Primary Frequency Response - Response to AEMC Draft Determination](#), February 2020, page 3

several concerns with the proposed changes in relation to the application of mandatory PFR to bidirectional units when charging or enabled for frequency control ancillary services (FCAS)⁶.

While Stanwell does appreciate that under the Draft Determination, bidirectional units would not be required to provide mandatory PFR when idle or solely enabled for contingency FCAS, the majority of the concerns we and a number of other market participants raised in response to the Consultation Paper have not been adequately addressed by the AEMC. As such, Stanwell continues to strongly oppose the proposed requirements for bidirectional units to provide mandatory PFR while not generating in response to energy market targets, even as an interim measure while an enduring market design is created.

We again implore the AEMC to reject AEMO's unjustified insistence that mandatory provision of PFR continue in perpetuity and that bidirectional units be treated differently to other technologies in the delivery of this system service. Stanwell strongly encourages the AEMC to instead engage meaningfully with stakeholders to develop an efficient, enduring solution for the ongoing provision of PFR, as well as other important system services such as inertia.

Key issues

Overall, the key issues that Stanwell identified in its submission to the Consultation Paper are still applicable to the Draft Determination. While the AEMC has acknowledged several issues identified by Stanwell and other stakeholders in the Draft Determination, the responses provided by the AEMC do little more than restate its previous positions on these matters, with little additional explanation or justification provided to dispel those concerns.

Stanwell's concerns with the proposed changes in the Draft Determination can be summarised as:

1. Mandatory provision of PFR does not meet the National Electricity Objective (NEO) as this does not promote efficient investment in, or efficient operation and use of electricity services for the long-term interest of consumers in relation to cost and the safety, security and reliability of the national electricity system.
2. There is a lack of justification for the proposed change.
 - AEMO as the proponent has not provided any information as to what has materially changed since September 2022 when the issue of bidirectional units providing PFR when charging or enabled for FCAS was last addressed by the AEMC.
 - Experience has already confirmed that frequency can be tightly controlled with only a portion of the market providing PFR.

⁴ Stanwell Corporation, [2020 Energy Security Board Post 2025 Market Design - Response to Consultation Paper](#), October 2020, page 18

⁵ Stanwell Corporation, [Submission to Primary Frequency Response Incentive Arrangements Draft Determination](#), November 2021, page 2

⁶ Stanwell Corporation, [Stanwell Corporation Limited Response to Clarifying Primary Frequency Response Obligations for Bidirectional Units Consultation Paper](#), August 2023

- AEMO as the proponent has not provided any evidence of the benefits of the proposed change other than a high-level conceptual preference.
 - The potential costs of the proposed changes on owners/operators of bidirectional units in both the investment and operational timeframes have not been properly explored nor quantified, with no guarantee that the incoming Frequency Performance Payments (FPP) will adequately compensate market participants.
3. The proposed change moves the market further away from an enduring solution.
- AEMC considering this request continues the trend of incremental movements away from an enduring market-based solution. As noted in our submission to the Consultation Paper, the lived experience of mandatory PFR confirms participants' views prior to its introduction that frequency control can be achieved without universal provision. This confirms that there should be some workable form of market based PRF procurement, whether that is contractual or a real-time market.
 - Given that frequency is currently tightly controlled and PFR is being provided in excess of requirements, resources would be better directed at other priorities (e.g., an enduring solution).

These issues are expanded upon in the remainder of this section.

The proposed changes do not contribute to the NEO

Stanwell still strongly believes that both the imposition of mandatory PFR and the additional obligations proposed for bidirectional units do not appear to be consistent with the NEO. As we stated in our submission to the Consultation Paper, our position is that:

- Appropriating a volume of PFR beyond that required to maintain frequency performance is not efficient;
- Utilising high-cost PFR when low-cost PFR could satisfy the requirement is not efficient;
- Requiring batteries to provide services beyond those required by other technologies does not promote efficient investment in the technologies required to support the decarbonisation of the network (e.g., firming, intertemporal renewable energy shifting); and
- Acknowledging there will be costs resulting from this change without demonstrating commensurate benefits is not in the long-term interest of consumers.

Lack of justification for the proposed changes

Stanwell does not believe that the AEMC has provided an adequate explanation as to what has changed since previous rule determinations regarding the PFR requirements for bidirectional units that justify the changes set out in the Draft Determination. This is particularly applicable to the requirement to provide of PFR when charging or enabled for FCAS, but not generating. In our submission to the Consultation Paper Stanwell provided very clear quotes from the March 2020 MPFR Rule Determination and subsequent September 2022 PFR Incentive Arrangement Rule Determination⁷, specifically stating that

⁷ Stanwell Corporation, [Stanwell Corporation Limited Response to Clarifying Primary Frequency Response Obligations for Bidirectional Units Consultation Paper](#), August 2023, pages 6-7

bidirectional units should not be required to provide PFR other than when they are dispatched into the energy market to generate electricity.

In the Draft Determination the AEMC has stated that “*the Commission’s reconsideration of the PFR obligations for bidirectional units is consistent with previous determinations where a desire to eventually reconsider the obligations of batteries was foreshadowed*”⁸, however “eventually” is not “immediately”. It is Stanwell’s position that the Draft Determination has not provided any further meaningful explanation for the change in its stance than was provided in the Consultation Paper, confirming our view that resources are better directed towards the creation of an efficient, enduring market-based solution.

In terms of the proposed changes being necessary to ensure continued adequate frequency control into the future, neither AEMO nor the AEMC have addressed the fact that most of the improvement in frequency control was achieved with only 47 per cent of covered capacity providing PFR in mid-December 2020.⁹ There does not appear to have been material improvements in frequency control subsequent to then despite further capacity implementing settings changes over that period, and provision from existing sources remains well below “universal”¹⁰.

It is clear that there is an efficient level of PFR required to achieve and maintain an effective system frequency control that is less than what is currently being provided under mandatory PFR. At a minimum, this undermines any assertion that the proposed changes are necessary at this time, as opposed to developing a true market-based approach for PFR that will ensure both the quantity procured and the price at which it is procured is efficient. As Stanwell has previously pointed out this would enable the lowest-cost PFR providers to satisfy AEMO’s requirements, clarifying and minimising the cost of PFR provision in the face of the continued withdrawal of thermal capacity and investment in renewable energy and storage.

Potential cost of proposed changes has still not been adequately assessed

It is Stanwell’s view that the market bodies have still not properly assessed the potential costs of the proposed changes, or if the upcoming FPP will, at a minimum, offset those costs to the owners and operators of bidirectional units. In the Draft Determination the AEMC notes that stakeholders provided varying views on the potential costs of these changes that ranged from minimal to significant. The AEMC goes on to conclude that “*the provision PFR when charging is unlikely to result in material incremental costs*”¹¹ with no analysis or evidence provided to support that conclusion. This assertion appears unsupported when bi-directional units are likely to spend at least as much time charging as discharging given round-trip losses.

⁸ AEMC, [Draft rule determination Clarifying MPFR for scheduled BDUs](#), November 2023, page 20

⁹ Australian Energy Market Operator, [Mandatory Primary Frequency Response Implementation Report](#), December 2020, page 8

¹⁰ Australian Energy Market Operator, [Mandatory Primary Frequency Response Implementation Report](#), May 2023, page 7

¹¹ AEMC, [Draft rule determination Clarifying MPFR for scheduled BDUs](#), November 2023, page 20

While the AEMC has headed concerns raised by stakeholders in relation to the cost impacts of providing PFR when idle, it appears that no consideration has been given to the implications of providing mandatory PFR when enabled for FCAS, or when generating or charging. As we noted in our submission to the Consultation Paper, the proposed changes would likely increase the price at which these units are willing to offer FCAS services and reduce the volume of energy available to provide services at higher-value times (e.g., ramping into evening peak).¹²

Need for an efficient enduring mechanism

As noted earlier in this submission and in previous submissions, Stanwell is one of many market participants that has consistently advocated for an efficient, enduring incentivisation and compensation solution for the provision of an efficient volume of PFR. The Draft Determination is yet another step farther away from what Stanwell and other stakeholders have been requesting for nearly five years now.

Stanwell once again recommends the market bodies examine the development of a market-based approach for the provision of PFR to ensure both the quantity procured and the price at which it is procured is efficient. This work is best undertaken while system frequency is stable with ample sources of PFR and would enable the lowest-cost PFR providers to satisfy AEMO's requirements, clarifying and ultimately minimising the cost of PFR provision as the energy transition progresses.

Conclusion

Stanwell does not support the continued efforts of market bodies to further expand mandatory PFR provision and does not support the draft rule progressing as presented in the Draft Determination. We do not believe that the Draft Determination justifies the proposed changes or sufficiently addresses concerns raised by Stanwell and other stakeholders in response to the Consultation Paper. Previous rule determinations were very clear about bidirectional units' mandatory PFR obligations and given the current abundance of PFR in the market there is no need to rush through the proposed changes when the market bodies should be working with stakeholder to develop an efficient, enduring solution for the provision of PFR.

Stanwell welcomes the opportunity to further discuss the matters outlined in this submission. I can be contacted directly on mobile at 0400 651 302 or email ian.chapman@stanwell.com.

Yours sincerely



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Manager Market Policy and Regulatory Strategy

¹² Stanwell Corporation, [Stanwell Corporation Limited Response to Clarifying Primary Frequency Response Obligations for Bidirectional Units Consultation Paper](#), August 2023, page 8