



29 August 2023

Mr. Victor Stollmann  
Australian Energy Market Commission  
Level 15, 60 Castlereagh Street  
Sydney NSW 2000

Via electronic lodgement

Reference: **Consultation paper ERC0364 - Clarifying mandatory primary frequency response obligations for bi-directional plant**

Dear Mr. Stollmann

We welcome the opportunity to make this submission on the AEMC's consultation to the rule change request by AEMO proposing to clarify the mandatory Primary Frequency Response (PFR) obligations of scheduled bi-directional plant.

We acknowledge the importance of maintaining appropriate frequency response to the security of the power system.

ACEnergy disagrees that AEMO's proposal for bi-directional units being required to provide PFR when neither charging nor discharging is of net benefit to the power system. Bi-directional units are optimally suited to respond to fast events, such as contingency FCAS. By being subject to the proposed requirements, bi-directional units will be penalised by having to utilise stored energy during non-economic times and consequently the availability of energy to respond to contingency FCAS events will be reduced. This should impact the ancillary services market by increasing the price of contingency FCAS and wholesale energy prices as the availability of units capable of responding would diminish. Consequently, this would reduce the overall benefit bi-directional units can provide to the power system.

Placing obligation on bi-directional units to provide PFR when not charging or discharging is analogous to placing similar obligation on synchronous machines when not dispatched.

The obligation for providing suitable PFR should continue to be placed on units that are discharging, and could be introduced for units that are charging, helping to stabilise the power system during their participation. This is equal with the traditional role of generation systems.

Our responses to the specific questions posed by the consultation paper are on the next page.

Your sincerely,

A handwritten signature in black ink, appearing to read 'JP'.

Joel Prata  
Head of Grid



Question 1:

Inclusion of scheduled bi-directional units in the mandatory PFR when discharging is appropriate as it aligns to the obligations of generators.

Questions 2 and 3:

Bi-directional units have a role in providing PFR during their normal operation while charging or discharging. This is aligned with PFR obligations of generators. There is no justification to mandate bi-directional units to respond to PFR when not charging or discharging.

Question 4:

Requiring bi-directional units to provide PFR when charging is appropriate. As it is expected that bi-directional units will charge at periods when low-cost generation is prevalent, and such generation sources do not necessarily provide PFR, it is appropriate that bi-directional units contribute to PFR while charging.

Question 5

This proposal is deleterious to the overall market by reducing the capability for bi-directional units to respond to FCAS events and requiring charge or generation in non-economic times.