Dear AEMC,

GridBeyond would like to take this opportunity to respond to the consultation paper on Primary Frequency Response for Bi-Directional Plant (ERC0364). GridBeyond is a world leading Irish business providing intelligent Energy-as-a-Service to tackle the challenges businesses face as they move towards a Net Zero future. We manage over 1.5 GW of load, over 60 MW of battery storage, across over 400 client sites. We operate in the energy markets of Europe, North America, Asia and Australia. We are a leading demand aggregator Ireland, and have provided capacity to the Irish grid through controlling Industrial demands for 10 years.

GridBeyond supports AEMO and AEMC's goal to ensure power system security now and well into the future. We recognise that power systems in Australia are changing rapidly and this change will have a material impact on frequency control.

However, GridBeyond is concerned that the proposed changes will have a negative impact on battery investment in Australia. Investment in batteries in Australia is already facing challenges securing funding at a time when other countries are investing heavily. For example, the United States have allocated billions of dollars for battery investment.

Mandating PFR on batteries over 5MW may restrict revenues for battery owners, potentially reduce the life span of battery assets, and create a higher barrier to entry for battery acquisition.

GridBeyond welcomes the assessment of these concerns and welcomes any steps taken to retain or bolster the appeal of battery investment in Australia alongside any initiatives to protect system security.

## **Consultation Question and Answers**

- 1(a) What are stakeholders views on the proposal to clarify the scheduled BDU's be required to provide PFR when discharging?
- 1(b) Is it consistent with the Commission's final determination for Mandatory Primary frequency response rule for scheduled bidirectional units to be included in the mandatory obligations?

No comment.

2(a) What are stakeholders' views on AEMO concerns in relation to the long-term provision of PFR?

GridBeyond is supportive of long-term provision of PFR to support system security, however

2(b) What are stakeholders' views on the role of bi-directional units in providing PFR?

GridBeyond has concern that the proposed changes will have a negative impact on battery investment in Australia. Mandating PFR on batteries over 5MW may restrict revenues for battery owners, potentially reduce the life span of battery assets, and create a higher barrier to entry for battery acquisition. These factors may disincentivise investment in batteries.

3(a) Do stakeholders agree with the Commission's preliminary position that the proposal to require bi-directional units to provide PFR while discharging aligns with previous determinations for scheduled semi-scheduled generators to be required to provide PFR while generating?

GridBeyond has concern that this may impact potential revenue from battery assets and provide a disincentive to future investment.

4(a) Do stakeholders agree with AEMO's proposal that scheduled bidirectional units should be required to provide PFR when charging?

GridBeyond has concern that this may impact potential revenue from battery assets and provide a disincentive to future investment.

- 4(b) Do stakeholders agree with AEMO's assessment of the costs and benefits of the change? Yes.
- 4(c) What are stakeholders views on the cost impacts for batteries providing PFR while charging?

GridBeyond has concern that this may provide a disincentive to future investment.

5(a) What are stakeholders views on AEMO's proposal that scheduled bidirectional units be required to provide PFR when enabled for market ancillary services?

GridBeyond has concern that this may provide a disincentive to future investment.

- **5(b)** Do stakeholders agree with AEMO's assessment of the costs and benefits of this change? Yes.
- 5(c) What are stakeholders views on the impacts for a battery in providing PFR while:
  - enabled for regulation services?
  - enabled for contingency services?

No comment.

6(a) What are stakeholders views on the Commission's proposed amendments to promote consistent and predictable PFR?

No comme

- 6(b) Are stakeholders aware of any other incremental changes that would help promote consistent and predictable PFR while aligning with the existing mandatory PFR obligation and the incoming Frequency performance payment arrangements?
- 7(a) Do stakeholders consider that there are any further implementation costs that should be considered by the Commission when assessing extending the mandatory PFR obligations to scheduled BDUs while discharging?

No comment.

8(a) What are stakeholders' views on the implementation considerations identified for BDU's to be required to provide PFR while charging and providing FCAS?

No comment.

8(b) What are stakeholders' views on the implementation considerations for the other incremental changes identified by the Commission to support predictable and consistent provision of PFR?

No comment.

9(a) Do you agree with the proposed assessment criteria?

GridBeyond recommends including criteria that assesses how the proposed changes will impact future investment of batteries in Australia.

9(b) Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

As above.

We are available to discuss any of the points made above in more detail should you require.

Kind Regards,

Mark Lee

Mark and Regulatory Manager, GridBeyond