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Frequency control rule changes Directions Paper

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group) thanks the Australian Energy Market Commission (the AEMC) for the opportunity to provide comments in response to the AEMC's Frequency control rule changes Directions Paper (the Paper).

Background on the MEA Group

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Millar Wind Farm in South Australia, followed by the Mt Mercer Wind Farm in Victoria. In early 2018 we acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

MEA Group agrees this is an increasingly complex reform with the potential to significantly impact future market design and the interaction with existing and planned future services such as inertia and primary frequency response. For that reason, MEA Group would encourage the AEMC to consider a broad range of options for the provision of this service (and similar services) prior to a final determination.

MEA Group also note the Australian Market Energy Operator (AEMO) has been engaged to provide the AEMC with a Fast Frequency Response (FFR) Implementation options report (Report) due for submission in February 2021. MEA Group provides the following responses subject to its review of AEMO's Report.

Finally, we note recent changes to mandatory Primary Frequency Response (PFR) have shown initial results, however we recognise the need for further work to create enduring frequency control arrangements that will facilitate the transition of the National Electricity Market (NEM). Developing these future arrangements will help to realise the long-term aspirations of consumers. For this reason, we have not provided responses in respect of the AEMC's questions relating to mandatory PFR.

QUESTION 1: PROBLEM DEFINITION AND REFORM OBJECTIVE — FFR RULE CHANGE

What are stakeholders' views on the problem definition and reform objective for FFR as set out in section 4.5.3 of the directions paper?

MEA Group supports measures which seek to maximise utilisation of latent FFR capacity in the NEM, as well as incentivise additional investment in these capacities, should be supported in so far as it is in the long-term interests of maintaining least-cost, reliable operation of the grid.

However, we believe the problem could be more broadly defined as the continued retirement of synchronous plant that provide inertia, and therefore system strength in the context of the increasing penetration of variable renewable energy technology connecting to the power system. The problem definition as proposed by the AEMC in the Paper could potentially exclude some of the options suggested by consumer groups such as Brickworks or Monash University.

Addressing the regulatory reform objective, we agree there are currently no existing market or regulatory arrangements that explicitly provide for effective utilisation of FFR services, the same for which could be assumed for the provision of inertia. Whether this constitutes a “missing market” is unclear, however we agree the establishment of a new FFR market is one way of ensuring this service can be appropriately priced and procured.

QUESTION 2: FFR PROCUREMENT

In relation to the discussion of potential procurement arrangements for FFR services in section 4.7.1 of the directions paper:

- What are stakeholders' views on the pros and cons of establishing new FCAS market arrangements for FFR services versus revising the existing arrangements to incorporate FFR within the fast raise and fast lower services?

MEA Group supports the creation of new Frequency Control Ancillary Service (FCAS) markets to support the implementation of FFR into the NEM. We believe Option 1 would be preferable to allow the unlocking of latent capacity in the NEM (as well as stimulate new investment in these capacities), at the same time not adversely impacting current Fast Raise and Lower service providers.

On balance, this approach is preferable to Option 2, which would more likely have an adverse impact upon existing Fast Raise and Lower service providers through the process to distinguishing participants within the FCAS categories (i.e. by creating tiers within the R6 and L6 categories). As noted in the Paper, Option 1 would provide a more transparent base upon which to report on the outcomes of newly implemented FFR services in the NEM.

MEA Group also agree that the establishment of a new FFR market would likely see greater economic benefits through the reduced reliance upon contingency 6R/L FCAS, which we see as a significant benefit. Furthermore, if the establishment of an FFR market will assist AEMO to manage increasing levels of Rate of Change of Frequency (RoCoF) during contingency events, then we see this is another significant benefit that should be taken into consideration when assessing this rule change request. We also believe the relative ease with which this reform could be introduced (e.g. limited impact on existing MASS framework/procurement process) as opposed to the other options raised is another benefit associated with this proposed arrangement.

MEA Group is cautious of the establishment of a new FFR FCAS market, and the impact of this new market potentially has on any future markets for inertia (both synthetic and synchronous). We believe this broader reform process needs to be considered by the Energy Security Board to ensure there is a coordinated approach and that all forms of technology are appropriately rewarded.

- Do stakeholders agree that the existing arrangements for contingency FCAS provide an appropriate model for FFR market arrangements?

Yes. The existing arrangements have proven their effectiveness over several years of operation and the additions of FFR services under a similar arrangement would be more readily palatable to industry stakeholders. MEA Group consider that this approach is more palatable as it represents an incremental change as opposed to a step change in the operating environment.

We believe further clarity may be required in respect of how the proposed FFR market would interact with any current or longer-term arrangements for the provision of PFR requirements for generators across the NEM (noting that PFR and regulation FCAS are both utilised under system normal operation whilst contingency frequency control (Contingency FCAS) is utilised for N-1 operation). We note this is one of the technical aspects that AEMO has been asked to provide feedback on in their Report.

- What are stakeholders' views on how each of the proposed procurement arrangements for FFR would interact with the arrangements for the existing contingency services?

In view of our preference for Option 1 being the establishment of a new FCAS category under the MASS, this would result in minimal changes to the existing FCAS categories. We also believe this approach allows clear price discovery for the provision of the FFR service.

QUESTION 3: FFR PRICING ARRANGEMENTS

In relation to the discussion of potential pricing arrangements for FFR services in section 4.7.2 of the directions paper:

- What are stakeholders' views on the pros and cons of maintaining the existing FCAS pricing arrangements for FFR services?

MEA Group would be supportive of utilising the existing pricing arrangements for FFR services – that is payment for enablement and payment for activation throughout the contingency event based on the plant's registered FFR capacity.

- What are stakeholders' views on the potential pros and cons of incorporating performance-based multipliers into the pricing arrangements for FFR services?

Given the proposal is for a ramp window of 0 to 2 seconds with sustained output through to 6 seconds we do not see the need for a multiplier arrangement. Those participants that can provide this service are more than likely capable of being enabled for the duration of the required timeframe (0 to 2 seconds).

QUESTION 4: FFR COST ALLOCATION

In relation to the discussion of arrangements for the allocation of costs associated with FFR services set out in section 4.7.3 of the directions paper:

- What are stakeholders' views on the arrangements for the allocation of costs for FFR services?

MEA Group believes it would be appropriate to allocate costs in accordance with the existing FCAS arrangements, provided Option 1 was implemented by the AEMC.

- Would it be appropriate for the cost of FFR services to be allocated in a similar way to the existing arrangements for the allocation of contingency FCAS costs?

MEA Group is supportive of an incremental approach to implementation of FFR services and, as such, believes that costs should be allocated in a manner consistent with current practice.

QUESTION 5: ISSUES FOR CONSIDERATION - FFR

Are stakeholders aware of any additional issues that the Commission should take into account in developing market ancillary service arrangements for FFR?

One of the key considerations for this reform is its interaction and impact upon any future inertia market. It is important from a consumers' perspective to ensure the lowest cost solution is implemented. On that basis, we encourage the AEMC to proceed with significant caution.

QUESTION 6: VALUATION OF INERTIAL RESPONSE

In relation to the potential arrangements for the valuation of inertial response described in section 4.8.1 of the directions paper:

- What are stakeholders' views on the valuation of inertial response as part of the contingency services, including the proposed new FFR contingency services?

MEA Group has always supported a technology neutral approach when remunerating essential services and energy participants across the NEM. However, it is becoming increasingly difficult to maintain this approach when there are clear attributes that different participants can and cannot provide.

As the transition continues across the NEM toward a distributed mix of technologies and participants (demand and generation), we believe it is necessary to ensure there is a diverse array of technology and service provider, and not repeat the mistakes of the past by placing too much emphasis on a single fuel type or participant category. We believe this will lead to a more resilient power system capable of withstanding indistinct events that may be completely unforeseeable.

For this reason, we agree that the establishment of an FFR market should proceed without being capable of including inertia which is measured in MW seconds. We also believe this market framework should be captured in the ESB's 2025 market design framework for essential system services.

· What are stakeholders' views on the current governance arrangements for contingency services; where the detailed service specification is determined by AEMO and documented in the MASS? (Is it appropriate for the NER to provide further guidance on how inertial response should be considered in the MASS?)

We think it would be appropriate for the NER to provide further guidance on how inertia response should be considered in the MASS.

QUESTION 7: PRICE RESPONSIVE DEMAND FOR CONTINGENCY SERVICES

In relation to the discussion of arrangements for incorporating price responsiveness into the procurement of contingency services in the NEM set out in section 4.8.2:

· What are stakeholders' views on the potential pros and cons associated with the implementation of a "demand curve" approach to procurement of FCAS?

Fundamentally the concept appears to be sound. However, the benefit to consumers would have to be clearly demonstrated with oversight by the Australian Energy Regulator (AER) as the Paper outlines. Conceptually, having additional reserves available at times when reserves are plentiful, appears to be a sound basis upon which to operate the power system.

· What are stakeholders' views on the priority of such a change to the market frameworks?

Noting our comments to the above we do not envisage this change to be a high priority in the context of all the regulatory disruption currently underway in the NEM.

· If such an approach was to be implemented, what are stakeholders' views on the appropriate governance arrangements, including the potential oversight role for the AER?

MEA Group agree that oversight by the AER would be prudent given the potential costs that may accrue to consumers. Reaching the right balance between power system security and an overly cautious and costly approach should remain a key objective for the system operator.

QUESTION 8: INTERACTION BETWEEN MANDATORY PFR & FFR ARRANGEMENTS

What are stakeholders' views in relation to the potential interactions between new FFR arrangements and the Mandatory PFR arrangement?

MEA Group is wary that the intersectionality of current FCAS arrangements and mandatory PFR, as well as the FFR contemplated in this Paper, may result in some confusion as to the intent for those services, with possible adverse and unexpected outcomes. For instance, utilisation of a FCAS Contingency service (such as Option 1 for the FFR service in this Paper) during system normal (N) conditions would send mixed signals to stakeholders. Ensuring service categories are employed for their purposes is important to ensure the transparency and long-term efficacy of market design.

QUESTION 9: IMPLEMENTATION AND STAGING FOR FFR

In relation to the discussion of the implementation arrangements for FFR services as set out in section 4.8.4:

· What are stakeholders' views in relation to the process for the implementation of FFR arrangements in the NEM?

MEA Group is supportive of the approach outlined.

· What are stakeholders' views on the potential need for interim or transitional arrangements as part of the transition to spot market arrangements for FFR?

MEA Group is supportive of the cautious approach outlined and that the approach should seek to explore the areas of concern raised by AEMO.

If you would like to discuss any aspect of this submission, please do not hesitate to contact me.

Yours sincerely



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