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Wednesday, 27 November 2019

Mr Matthew Holmes  
Australian Energy Market Operator  
GPO Box 2008  
Melbourne Victoria 3001

Dear Mr Holmes

**RE: Amendments to the Regulation FCAS Contribution Factor Procedure and the Market Ancillary Services Specification Consultation**

ERM Power Limited (ERM Power) welcomes the opportunity to respond to the Australian Energy Market Operator's (AEMO) Amendments to the Regulation Frequency Control Ancillary Services (FCAS) Contribution Factor Procedure and the Market Ancillary Services Specification (MASS) Consultation.

**About ERM Power**

ERM Power is an Australian energy business for business. ERM Power provides large businesses with end to end energy management, from electricity retailing to integrated solutions that improve energy productivity. Market-leading customer satisfaction has fueled ERM Power's growth, and today the Company is the second largest electricity provider to commercial businesses and industrials in Australia by load<sup>1</sup>. ERM Power also operates 662 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland, supporting the industry's transition to renewables.

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**Amendments to the Regulation FCAS Contribution Factor Procedure**

We understand that the proposed change to the procedure relates to a rule change request currently subject to consultation by the Australian Energy Market Commission (the Commission). We note that in the event that the Commission does not make a rule or makes a substantially different rule to those proposed by AEMO, the consultation process will have to be amended significantly. Given this is the case, we question the reasoning to commence this consultation prior to publication of any Draft Determination regarding the proposed rule changes.

The current regulation FCAS contribution factor procedure, commonly referred to as the causer pays factor calculation, should automatically capture any deviations from a scheduled generator or load's reference trajectory which assists with the control of power system frequency, such as that provided by primary frequency response, and allocate a positive (helpful) contribution factor to that generating unit or load. It is therefore unclear to ERM Power why the proposed change to the procedure is required as in our view no disincentive to the provision of primary frequency response in the current calculation procedure exists. We note that any generator or load which is activated for the provision of primary frequency response would automatically alter active power output, or consumption, based on measured local power system frequency outcomes whenever system frequency deviated outside that generator or load's, control system deadband. We also note that within that control system deadband no response to system frequency outcomes would occur.



In the amended regulation FCAS contribution factor procedure, AEMO has proposed that any generator, or load, registered for the provision of primary frequency response would automatically be allocated a zero contribution factor for any dispatch interval<sup>1</sup>. It is unclear at this stage how AEMO proposes to monitor the performance of the generating unit or load to determine that the required helpful deviations from target for a primary frequency response registered generating unit or load actually occurred. In addition, as indicated above, a generating unit or load activated for primary frequency response would only provide a service when the system frequency moved outside the generating unit or load's control system deadband. Within this deadband, the generating unit or load would not respond to system frequency and could be generating or consuming active power that was negative (unhelpful) for power system frequency outcomes. In this deadband frequency range, AEMO proposes that the generating unit or load registered for primary frequency response would still receive a default zero value whereas all other generating units or loads in the frequency range would be subject to the usual causer pays factor calculation. It is also unclear to ERM Power how a generating unit or load which could respond to power system frequency in one direction only, such as by reducing output or consumption only, would be providing helpful deviations in support of system frequency outcomes in the opposite direction.

We do not believe AEMO's proposed amendment represents an equitable and efficient outcome. Any generating unit or load responding negatively or positively to power system frequency outcomes should be treated equally with regards to the determination of the regulation FCAS contribution factor procedure. We are concerned that allocating a default zero value, based on a registration process as opposed to actual measured performance, will artificially lower the contribution factor for a primary frequency response registered generating unit or load whilst artificially increasing the net contribution factor paid for by consumers.

ERM Power therefore does not support the proposed amendment to the regulation FCAS contribution factor procedure.

Whilst not forming part of this consultation, we believe one of the most important changes that AEMO should make to improve the provision of primary frequency response with regards to the regulation FCAS contribution factor procedure would be to amend the reference trajectory from "previous dispatch target to current dispatch target" to "initial value to current dispatch target". This will ensure that a generator contributing helpful primary frequency response in the previous dispatch interval is not penalised in the current dispatch interval for deviating from its previous dispatch target. We urge AEMO to consider and implement this important change as part of this consultation.

### **Amendments to the MASS**

We support the proposed change to recognise the level of frequency response provided by a generating unit, or load, enabled for the provision of contingency FCAS following a system frequency event during the period that power system frequency remains in the normal operating band. We believe this change to the MASS should occur regardless of the outcomes of AEMO's currently proposed rule changes. We believe recognition of service provision should apply to all three contingency services: fast, slow and delayed for both raise and lower contingency services.

In general, we are supportive of calculating the provided response on an event basis, however, we believe this should be based on the total of observed response not just this proposal where response is based on the crossing of a nominated control system deadband setting. In considering Figure 1 in the MASS Issues Paper, we believe the event time should be defined as the time at which the contingency event occurred, not the time at which frequency first crossed the boundary of the Frequency Normal Operating Band (FNOB) or the provider's nominated control system deadband setting. We recommend that the contingency provider's response be calculated based on its deviation away from its initial output, or consumption, at the time of the event.

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<sup>1</sup> Section 6.4 (b) AEMO amended regulation FCAS contribution procedure



This calculation methodology should apply to all generating units or loads enabled for contingency FCAS response irrespective of any primary frequency response registration status.

We acknowledge AEMO's view that this may require additional pre-event data than is currently recorded. In determining this requirement, we believe that this should be based only on the length of data required to enable the calculation to be achieved. In this respect, we believe AEMO should provide the length of data it believes is reasonably required and the justification for these requirements. In considering this, we believe AEMO should consider the frequency rate for the provision of data for the fast services, as this frequency rate will have a direct cost implication for current providers; a lower frequency rate could result in a significant reduction in costs. Stakeholders would then provide comment regarding the technical and economic costs of providing the required data.

We do not support AEMO's view that allowing the inclusion of response within the normal operating band should be restricted to verification of the provision of services only; the inclusion of this hitherto excluded response should be able to be used by providers in determining the amount of response that can be provided. AEMO's proposed alternative seeks to maintain the status quo of the provision of additional service at no cost.

We are disappointed that this review of the MASS has failed to consider what we believe is the most significant barrier to the improvement of current power system frequency outcomes. AEMO currently restricts the provision of regulation FCAS in the MASS such that it may only be provided by providers via signals from AEMO's automatic generator control (AGC) system. We believe this is an unwarranted restriction of service provision. We believe that the MASS should be revised as soon as practically possible, preferably as part of this consultation, to allow the provision of regulation FCAS via primary frequency response or AEMO's AGC signals or a combination of these two.

Please contact me if you would like to discuss this submission further.

Yours sincerely

[signed]

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