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Mr Matthew Martin
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Dear Mr Martin

ALLOCATION OF CAPACITY CREDITS IN A CONSTRAINED NETWORK

The Australian Energy Market Operator (AEMO) welcomes the publication of the consultation paper, *Allocation of capacity credits in a constrained network*, by the Public Utilities Office (PUO) and the opportunity to provide this submission.

AEMO supports a transition to a constrained network access regime in the South West Interconnected System. AEMO agrees that consequential changes to the Reserve Capacity Mechanism (RCM) are required.

AEMO notes that:

1. Changes are required to the processes for certifying and accrediting capacity to properly account for network constraints. Failure to do so may increase the risk that there are sufficient accredited capacity resources to meet the Reserve Capacity Requirement, but that they are located such that network constraints restrict the flow of energy to satisfy customer demand in high demand conditions, resulting in supply interruptions for end customers.
2. The implementation of the proposed RCM design changes in time for the 2020 Reserve Capacity Cycle¹ will be challenging. In addition to the time required for detailed design of a new process for constrained allocation of Capacity Credits, the following will be required:
 - establishment of a framework for developing the various model inputs for this process, particularly the framework for defining and developing network constraints;
 - the development of the various model inputs according to the new framework, including considerable work for development of the constraints; and
 - the publication of the new capacity allocation model and its inputs, in advance of its commencement, to provide transparency and predictability for market participants on the updated capacity allocation process.

Elements of the design of energy and ancillary service arrangements may need to be in place at the time of implementing constrained capacity allocation rules to allow new investors to make informed investment decisions within RCM timeframes. For example, registration rules need to be in place when a participant applies for capacity certification.

¹ This timing was described in the previous PUO discussion paper titled *Improving access to the Western Power network*.

AEMO does not foresee any operational problems arising due to a mismatch between the first Capacity Year of the constrained capacity allocation and the commencement of new spot market and dispatch arrangements, provided there is sufficient capacity margin to ensure reliability is maintained.

3. Considerable effort is required to fully develop the PUO's conceptual approach for capacity allocation. Key areas that require consideration include:
 - development of efficient, transparent, predictable and auditable processes within a revised annual RCM schedule;
 - timely publication of information to promote transparency and assist decision making by market participants;
 - the full range of constraints to be applied in RCM network models, which may include thermal limits, ancillary service quantities and other system security limits;
 - screening of new facilities before development of RCM network models;
 - the risk of divergence between AEMO's demand forecasts (used in the RCM) and those developed by Western Power (which inform network planning);
 - the duration and processes for capacity priorities;
 - how to capture the locational characteristics of demand side management capacity, which may be through either the market registration process or standing data; and
 - how the RCM (and broader constrained access) design contemplates the changes necessary to deal with known and developing industry challenges (e.g. increasing levels of non-synchronous generation and distributed PV generation).
4. In respect to detailed design:
 - The viability of capacity priorities requires further examination. The allocation and recording of capacity priorities, and the proposal for financial reimbursement of capacity priority holders via the Wholesale Electricity Market (WEM) settlement process, could be administratively complex and may lead to inappropriate incentives for market participants. The proposed financial reimbursement process would break the current link between Capacity Credits, capacity payments and capacity obligations.
 - The current capacity certification process provides an appropriate degree of screening of new applications. To allow time for the development of the RCM network model, this would require increasing the time between the certification and assignment processes.
 - AEMO considers that the 'flexible offer' approach described should be considered in detail during the detailed design process. AEMO considers this approach would be less cumbersome than the alternative iterative accreditation process described in the paper.
 - The revised approach to allocating capacity in the RCM will supersede the current concept of Constrained Access Entitlement in the WEM Rules. Clause 4.1.34 of the WEM Rules requires AEMO to conduct a review of the Constrained Access Entitlement methodology by the end of the 2018 calendar year. The proposed implementation timeline for changes to the RCM means there is little merit in AEMO reviewing the Constrained Access Entitlement. AEMO will consult with the PUO and market participants regarding this review.

5. AEMO will be required to seek approval of its Allowable Revenue by the Economic Regulation Authority (ERA), with AEMO's next proposal for the 2019-2022 review period required to be provided to the ERA by 30 November 2018.² AEMO anticipates that the detailed design and rule change processes may not be sufficiently progressed at this time to allow AEMO to include RCM implementation costs in this proposal. This may require AEMO to include these costs in a supplementary Allowable Revenue proposal when there is sufficient certainty of detailed design and rule change progression.

Due to its pivotal role as the independent market and system operator, AEMO is keen to support the PUO and other stakeholders through the design and implementation of new RCM arrangements. If you would like to discuss any matters raised in this submission, please contact Stuart Featham, Manager, WA Market Development, on (08) 9469 9905.

Yours sincerely



Cameron Parrotte
Executive General Manager, Strategy & Innovation

² As required by clause 2.22A.2 of the WEM Rules.

