

20 September 2018

Mr Matthew Martin
Director, Wholesale Energy Markets
Public Utilities Office
Department of Treasury

Sent via email: PUOSubmissions@treasury.wa.gov.au

Level 45
152 St Georges Terrace
Central Park
Perth WA 6000

Postal Address:
PO Box 7096
Cloisters Square
Perth WA 6850

T 08 9469 9800

Dear Mr Martin

IMPROVING RESERVE CAPACITY PRICING SIGNALS – DRAFT RECOMMENDATIONS REPORT

The Australian Energy Market Operator (AEMO) welcomes the opportunity to provide this submission in response to the draft recommendations report, *Improving Reserve Capacity pricing signals – a proposed capacity pricing model*, published by the Public Utilities Office (PUO).

AEMO supports the PUO's objective to introduce greater price sensitivity of capacity to improve the underlying supply and demand fundamentals. AEMO recognises that there are several aspects of these proposals that will require further consideration in the implementation phase to ensure the objectives of the reform to the Reserve Capacity Mechanism (RCM) are achieved. These considerations are summarised below.

General principles

Reliability vs optimal capacity mix

The report explains the roles of energy, capacity, and ancillary service pricing in supporting the optimal capacity mix in the WEM. AEMO supports the report's conclusion that the RCM should remain focussed on power system reliability, rather than be changed to specifically target the optimal capacity mix. AEMO believes that the development of ancillary services and markets, which are being considered in different work streams of the current reform programme, is important to achieve this outcome.

Focus of RCM – system peak vs ramping

AEMO agrees with the report's explanation that system peak demand may not be the period of highest risk to availability adequacy. Periods leading up to system peak may pose the highest adequacy risk, especially where fast-ramping capacity is required when there are lower levels of total system demand and/or high proportion of generation from solar PV. Aspects of the RCM, including the Relevant Level Methodology and Planning Criterion, have been designed to recognise this.

The report suggests that price differentiation of various forms of capacity would be the only way to resolve the need for fast-ramping capacity leading up to the afternoon peak demand through the RCM. AEMO considers that performance standards and accreditation requirements in the RCM need to be refined to ensure that capacity can meet the electricity system's reliability requirements (such as start-up times that are within specified limits to achieve full capacity output), which is the core objective of the RCM. Further changes to the

AEMO SUBMISSION – IMPROVING RESERVE CAPACITY PRICING SIGNALS DRAFT RECOMMENDATIONS – SEPTEMBER 2018

RCM would be required in this area to help achieve the goal of improving the operation of the RCM.

Demand Side Programmes

Further to our May 2018 submission to the PUO's consultation paper¹, AEMO continues to support technology neutrality and price equivalency for provision of the same service in respect of the function and design of the RCM.

The proposed approach requires Market Participants to submit Reserve Capacity Security (RCS) for each of their Demand Side Programmes (DSPs) for each Reserve Capacity Cycle. Practically, this means that AEMO may hold RCS for a specific DSP for up to four² different Capacity Years at any given time. For the 66 MW of DSM Capacity Credits assigned for the 2019-20 Capacity Year, this could be up to \$9.9 million³. This could be a substantial amount of capital for a DSP provider, so it is important to ensure that the reliability benefit is at least equal to any resulting costs passed on to consumers.

AEMO agrees that some form of random testing of DSPs is required. However, AEMO notes that DSPs displace generation from the energy market when dispatched. The detailed design must consider how to avoid disrupting efficient dispatch of generation when random testing of DSPs occurs.

Closure notice

AEMO agrees that a binding closure notice would provide certainty to the market and help send appropriate investment signals, but the timing of the notice relative to RCM processes could raise practical difficulties. Providing a closure notice before the capacity procurement process could be useful information to guide investment decisions; however, the capacity price (which would be more volatile under the proposed price formula) is not known until the capacity procurement processes are completed and may be a material factor in a decision to retire a generating unit. AEMO encourages transparency of the process in a manner similar to the proposed approach in the National Electricity Market⁴, which would provide positive flow-on benefits for the forecasts presented in the WA Electricity Statement of Opportunities.

AEMO looks forward to engaging with the PUO to consider how this aspect of the design would operate, noting that it may be complex to implement. Considerations include the governance arrangements and consequences for a market participant associated with non-compliance and the potential market impact of a failure to provide the required closure notice.

Implementation

AEMO agrees that implementation in time for the 2018 Reserve Capacity Cycle is not feasible and understands that the PUO intends to progress the changes to the capacity pricing model in time for the 2019 Reserve Capacity Cycle. Implementation for the 2019 Reserve Capacity

¹ Available at: http://www.treasury.wa.gov.au/uploadedFiles/Site-content/Public_Utility_Office/Industry_reform/Improving-Reserve-Capacity-pricing-signals-submission-AEMO.pdf.

² AEMO may hold RCS until November of Year 4 of a Reserve Capacity Cycle. As an example, RCS that is provided for the 2019 Reserve Capacity Cycle may not be returned until November 2022, when RCS would still be held for three other Reserve Capacity Cycles (2020, 2021, and 2022).

³ Assuming a BRCP of \$150,000 per MW and no change to the formula used to calculate RCS.

⁴ A Rule Change Proposal is currently being considered by the Australian Energy Market Commission that would require all generators to provide three years' closure notice. AEMO would be required to publish this information and use it in developing forecasts. For further information, see <https://www.aemc.gov.au/rule-changes/generator-three-year-notice-closure>.

Cycle would require drafting of the required changes to the Wholesale Electricity Market Rules (WEM Rules) and associated Market Procedures to be complete before the Certified Reserve Capacity (CRC) application period commences on 1 May 2019. It is prudent to ensure that potential participants in the 2019 Reserve Capacity Cycle are given adequate lead time to assess the changes to the WEM Rules and Market Procedures prior to submitting their applications⁵.

Appropriate staging of the implementation is important, with transitional provisions in the WEM Rules where required. AEMO considers that the project should be broken into two tranches for staged implementation:

1. Capacity Credit assignment – changes to the processes detailed in clause 4.20 and Appendix 3 of the WEM Rules.
2. Settlement – changes to IRCR and refund calculations, as well as the Capacity Credit allocation process.

The table below summarises the system changes and expected timing for these two tranches, assuming the changes are required for the 2019 Reserve Capacity Cycle.

	Indicative size of system changes required	Timing
Tranche 1	Medium	No later than August 2019
Tranche 2	Large	Before 1 October 2021

AEMO is currently working on the settlement system to implement *RC_2017_06: Reduction of prudential exposure in the Reserve Capacity Mechanism*, which is expected to be completed by the end of 2019. Therefore, it is advisable that changes to the settlement system code and procedures do not begin until 2020. AEMO expects that the Market Rule changes affecting the settlement calculations will not commence until October 2021, allowing around 18 months to implement complex settlement changes. The revisions to the RCM identified in the draft recommendations report form a part of broader changes in the Government's WEM Reform Program. While the RCM pricing may appear to be a discrete project, when implementing these changes, the design and implementation of the broader market changes need to be considered.

Operational and fee impacts

The implementation of a more complex RCM pricing regime has the potential to increase operational costs, particularly in relation to settlement, both for AEMO and for Market Participants. In general, increasing complexity of the Market Rules results in more complex systems, which cost more to develop and operate.

Under the proposal, existing Facilities will be subject to a time-limited price band as a transitional measure with respect to capacity prices that may differ from the floating price calculated in accordance with the new formula. In addition, new capacity can choose to lock in a price for up to five years⁶ or accept the floating price. This is likely to result in different capacity

⁵ AEMO does not expect Market Participants to be required to change their systems in time for the CRC process for the 2019 Reserve Capacity Cycle.

⁶ Noting that a price lock-in would only apply if insufficient capacity was bilaterally traded to meet the Reserve Capacity Requirement.

prices applicable to individual Facilities for each Capacity Year, which may lead to complex settlement outcomes. If all prices are not publicly available, Market Participants will be unable to verify AEMO's IRCR and refund calculations.

Similarly, the Capacity Credit allocations process will become more complex. Currently, bilateral Capacity Credit allocations are between Market Participants, but the introduction of multiple prices will require a shift to Facility-based allocations.

Further consideration is required about the way IRCR, refund calculations and bilateral Capacity Credit allocations will operate under a price calculation that is likely to effectively result in multiple prices for each Capacity Year. This is potentially complex and is expected to require AEMO to publish additional data (e.g. an aggregate capacity price per trading interval) to assist Market Participants in understanding the calculations.

Delivering these requirements will require AEMO to consider options and trade-offs between system automation and manual processing. AEMO will seek to design and deliver these changes in a cost-effective manner. AEMO will work closely with the PUO and Market Participants to facilitate this and will ensure that all WEM stakeholders are consulted about the proposed approach and potential market fee impacts.

Conclusion

The draft recommendations report outlines a series of amendments to the RCM that address longstanding issues with the RCM, and the proposed approach refines the capacity pricing amendments that commenced on 1 October 2017. AEMO looks forward to assisting with the implementation of these reforms. If you would like to discuss any matter raised in this submission, please contact Stuart Featham, Manager, WA Market Development, on (08) 9469 9905.

Yours sincerely

Cameron Parrotte
Executive General Manager, Western Australia