

1 February 2021

Mr Jai Thomas
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Dear Mr Thomas,

PROPOSED CHANGES TO THE METERING CODE

The Australian Energy Market Operator (AEMO) welcomes the opportunity to provide this submission in response to the *Consultation Paper – Proposed Changes to the Electricity Industry (Metering) Code 2012* (Consultation Paper) and the accompanying draft amendments to *Electricity Industry (Metering) Code 2012* (Metering Code).

The proposed changes to the Metering Code allow for the implementation of a weekly settlement timeline and are a necessary step for the delivery of the Energy Transformation Strategy. AEMO fully supports these amendments. Further, the proposed changes allow for the introduction of five-minute settlement in the WEM at a later date. The introduction of five-minute settlement will improve the accuracy of settlement under the new market arrangements.

This submission includes some minor comments on the proposed amendments to the Metering Code. AEMO has also taken this opportunity to raise some broader matters in relation to metering and settlement that it believes require further consideration to support AEMO's planning and expenditure proposals.

Commencement dates

To manage the commencement of the new market arrangements, the defined term "New WEM Commencement Day" was introduced into the WEM Rules. This term is defined as "the date and time specified by the Minister as the New WEM Commencement Day, as published in the Government Gazette."

While AEMO continues to target 1 October 2022 for WEM commencement, to ensure a consistent approach for the Metering Code amendments, AEMO recommends that the term "weekly settlement commencement" is updated to refer to a date specified by the Minister in the Government Gazette rather than stating the date of 1 October 2022.

AEMO is committed to delivering the Taskforce decision to introduce five-minute settlement on 1 October 2025. Based on AEMO's experience implementing five-minute settlement in the NEM, implementation in the WEM will be a significant undertaking with a high degree of IT system complexity and substantial cost. During the first half of 2021, AEMO will commence planning for this activity as part of the 2022-2025 Allowable Revenue and Forecast Capital Expenditure process (AR6) due to be submitted to the Economic Regulation Authority by 30 November 2021.

Accordingly, AEMO recommends that the term "five-minute settlement commencement" is changed to refer to a date specified by the Minister in the Government Gazette rather than stating

the date of 1 October 2025. This will provide the flexibility to amend the commencement date if required by the detailed planning or because of unexpected changes prior to commencement.

IT System Enhancements

AEMO understands that the rules and regulations for New WEM Commencement Day will maintain the current arrangements for meter data provision and settlement. Specifically, Western Power must provide AEMO with data “for each interval meter” which will continue to be used for WEM settlement. For the introduction of five-minute settlement, AEMO understands Western Power will be required to provide AEMO five-minute data for generators and contestable customers, otherwise thirty-minute data will be used for non-contestable customers.

AEMO’s current IT systems and infrastructure were designed to accommodate the historic volume of interval meters in the WEM, approximately 47,000. When AEMO was engaged in relation to Western Power’s roll out of advanced metering infrastructure (AMI), it was identified the rollout would significantly increase the number of interval meters in the WEM (an additional 491,700 interval meters by 2022¹). Following an assessment of IT system impacts, AEMO determined that the increased data volumes would introduce unacceptable risk to IT system operability and AEMO’s ability to operate and settle the WEM.

To mitigate the need to remediate AEMO’s IT systems in the short-term, AEMO understands Western Power has used provisions in the Metering Code to deem the AMI interval meters to be accumulation meters. As a result, Western Power is not required to provide interval energy data for these meters, and they are not included in WEM settlement.

AEMO notes that remediation of AEMO’s hardware and software to accommodate increased meter data volumes will have time, cost, and resource impacts – at a time when AEMO’s implementation efforts are focussed on the core scope of the WEM Reforms and the DER Roadmap. Further, AEMO is balancing delivery of the timelines for WEM Reform and the need to minimise future regret costs of moving to five-minute settlements. Due to the timelines for new WEM commencement and the magnitude of the changes required for five-minute settlements, a significant uplift will be required in the future to update AEMO’s IT systems to facilitate five minute settlements.

Any investment or additional scope/effort should seek to accommodate all known future business requirements and assess cost and benefit trade-offs (e.g. as is being explored through the DER Roadmap). Therefore, AEMO welcomes further discussion and engagement with Energy Policy WA on the current and future requirements for settlements and metering such that AEMO’s project planning and funding requests are sufficiently informed. AEMO recommends this include a discussion on whether steps should be taken to negate the need for AMI meters to be deemed as accumulation meters, and if so, the appropriate timeframes for these steps.

DER Roadmap

As Distributed Energy Resources (DER) become active participants in the WEM, including providing network support services, metering and telemetry at the customer level becomes increasingly important. AEMO is in the early stages of considering these requirements in

¹ As per <https://www.westernpower.com.au/our-energy-evolution/grid-technology/advanced-metering-infrastructure-the-future-way-to-meter-electricity/>

collaboration with the Energy Transformation Implementation Unit (ETIU) through the DER Roadmap actions, which will consider and demonstrate options prior to implementation.

AEMO strongly supports the enhanced metering requirements under the Metering Code to measure bi-directional flows at any given interval as a step forward to supporting DER participation in the WEM. To further support DER participation in the WEM AEMO anticipates there may be value in utilising meter data provided by AMI meters to provide greater confidence in the performance of aggregated DER where it is participating in the market. For example, one aspect that is being explored is separate metering of controllable devices (via the meter or a telemetry device), for use in settlement of market and network support services.

The DER Roadmap is working towards a 'go-live' date of July 2023 for the active participation of DER in the WEM. AEMO recommends that the metering requirements of the DER program are considered as part of the engagement with Energy Policy WA proposed above.

If you would like to discuss any matters raised in this submission, please contact me on 0434 605 360 or martin.maticka@aemo.com.au.

Yours sincerely



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