

8 February 2024

Shannon Culic
Operating Reserves Project Lead
Australian Energy Market Commission
Sydney NSW 2000

Dear Ms Culic,

Enhancing reserve information – Draft Determination

AEMO welcomes the opportunity to provide a submission to the AEMC's Draft Determination on the Enhancing Reserve Information rule change. AEMO notes the challenges of operating today's power system with increasing uncertainty in forecasts and the availability of reserves as previously outlined in our submission to the AEMC's Directions Paper in August 2023.

AEMO supports the intent of AEMC's Draft Determination to enhance the provision of information to the market. We consider the publication of daily energy availability aggregated by region and continual state of charge of all batteries aggregated by region to be both prudent steps to allow participants to i) better manage energy-limited portfolios and ii) respond to energy limitations in the market to reduce reliability risks and associated costs in the long-term interests of consumers.

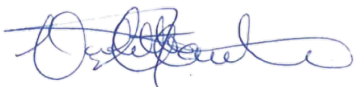
We further welcome the AEMC's considerations regarding Operational Forecasting and agree with the AEMC's characterisation that AEMO currently provides information to industry with substantial breadth and depth. We note here that stakeholders may be interested in the recently prepared AEMO course on Operational Forecasting: <https://aemo.com.au/en/learn/industry-courses/nem-operational-forecasting-overview>. We also note that the AEMO Operational Forecasting team may be contacted for further information at op.forecasting@aemo.com.au.

AEMO is currently coordinating a significant number of changes to NEMDE and market systems. AEMO supports Schedule 1 and Schedule 2 for the proposed rules 3.7G(b), 3.13.4, and 3.7G(d). For the implementation of the proposed new rule 3.7G(c), AEMO notes that this requires the creation of a new business cycle that AEMO does not already have. AEMO further considers there would be value in ongoing publication of total remaining energy availability throughout the day.

As a result, AEMO proposes a different rule to this effect, outlined in Attachment 1, to be implemented by 1 July 2027. This coincides with Schedule 2 for the publication of state of charge of batteries and would support coordinated and efficient implementation.

Further details are included below. Should you wish to discuss any of the matters raised in this submission, please contact Kevin Ly, Group Manager – Reform Development & Insights kevin.ly@aemo.com.au.

Yours sincerely,



Violette Mouchaileh
Executive General Manager, Reform Delivery

Attachments: 1. Detailed considerations of draft determination

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Attachment 1 – AEMO’s detailed considerations of draft determination

Proposed changes

1. By 1 July 2027: AEMO real-time publication of state of charge, aggregated by region

New Rule 3.7G(d) AEMO must publish, as close as practicable to real time, but at least once in each trading interval, the state of charge (in MWh) of all batteries, aggregated by region.

AEMO supports this amendment to the NER and is able to implement it within the stipulated time frame, noting this information is already currently provided by participants through SCADA.

To comply with the proposed rule, AEMO would publish the actual state of charge after each Dispatch run via the participant data model DISPATCHREGIONSUM table.

2. By 1 July 2025: Participants to include Maximum storage capacity in Bid Validation Data

Amended Schedule 3.1: including ‘maximum storage capacity of the scheduled bidirectional unit (MWh)’ in the Bid Validation Data.

AEMO supports this amendment to the NER and is able to implement it within the stipulated time frame, noting interaction with the current implementation of the IESS rule change.

To comply with the proposed rule, AEMO would adopt a similar approach to the publication of existing bid validation data, which is available in the PARTICIPANT_REGISTRATION tables in MMS.

3. By 1 July 2025: AEMO to publish total daily energy availability for energy-constrained plant, aggregated by region

*New Rule 3.7G(c)
At the commencement of each trading day, AEMO must prepare and publish for that trading day, the combined total daily energy availability (in MWh) aggregated by region comprising: (1) all scheduled generating units; and (2) all scheduled bidirectional units to the extent they comprise a pumped hydro production unit, that are subject to energy constraints*

AEMO does not support as written, since this will require the creation of a new (daily) business cycle that AEMO does not already have.

AEMO instead proposes that AEMO publish this information after each dispatch run and each half-hour pre-dispatch run. That is, ongoing publication of total remaining energy availability for all scheduled generating and bidirectional units that are subject to energy constraints.

AEMO’s proposed edits to the draft rule are as follows:

To come into effect 1 July ~~2025~~ 2027:

~~At the commencement of each trading day,~~ After each time the dispatch algorithm is run, and through the pre-dispatch process with a resolution of 30 minutes, AEMO must prepare and publish for that trading day, the ~~combined remaining total daily~~ energy availability (in MWh) aggregated by region comprising:

(1) all scheduled generating units; and

(2) all scheduled bidirectional units to the extent they comprise a pumped hydro production unit,

that are subject to energy constraints

Noting that 'trading day' assumes the 24 hour period commencing at 4:00 am (EST) and finishing at 4:00 am (EST) on the following day.

This amendment is being proposed for the following benefits:

- i) it aligns with what AEMO's Control Room is seeking internally for visibility
- ii) in-train reforms are considering energy-limitations for batteries and additionally calculating some of this information for non-battery energy constrained plant.

To note, this would not be a publication of any assessment of reserves which is being considered through the PASA Redevelopment project.

AEMO proposes this comes into effect by 1 July 2027 which would align with Schedule 2 of the draft determination for the publication of the state of charge of batteries and would support coordinated and efficient implementation.

If the AEMC proceeds with Rule 3.7G(c) as written, reporting would likely occur as a new column in the existing Pre-dispatch Region Solution table. From a systems perspective, this change is small but not trivial, and as a result, AEMO would request that this change be implemented at least 12 months following Final Determination.