



Enhancing reserve information draft determination

The Commission's draft determination is not to implement an operating reserve market but to improve transparency of energy availability

The draft determination is not to implement an operating reserve market, following analysis of the issues, stakeholder feedback to the directions paper and recent reforms. While an operating reserve market could provide greater visibility of market participants' reserve decisions helping to manage risks, the Commission considers that it would not offer any material performance improvements relative to the current arrangements, and would introduce significant additional costs for the market.

There was near unanimous agreement in response to the August 2023 [directions paper](#) on the Commission's decision not to implement an operating reserve market.

In the absence of an operating reserve market, this draft determination focuses on improving the current arrangements focused on transparency of energy availability to better assess when reserves are needed during the transition.

We are also proposing that the detailed issues associated with regional and sub-regional frequency control ancillary services (FCAS) be considered through a separate rule change process.

The Commission's draft rule would improve current market arrangements

The Commission is making a draft rule that would further support the current arrangements to value reserves during the transition. The draft rule would publish information on the energy availability including:

- **State of charge:** the energy availability of batteries (i.e. state of charge in MWh) would be published close to real-time, aggregated by region, and the following trading day by dispatchable unit identifier DUID (to align with existing post-trading day publications).
- **Daily energy constraints:** the energy constraints of other scheduled plant types (hydro, gas and coal) would be aggregated by region and published daily (at the start of each trading day).
- **Maximum storage capacity:** storage participants would need to provide their maximum storage capacity (MWh) to the Australian Energy Market Operator (AEMO) in their bid and offer validation data.

This information, with the exception of maximum storage capacity, is already provided to AEMO through supervisory control and data acquisition (SCADA) by battery participants and through energy constraint information provided to AEMO by other scheduled plant types. The draft rule does not place onerous reporting obligations on either AEMO or market participants. It is designed as an improvement to further support any increased need for reserves as we transition and address how energy availability may continue to play a prominent role in the national electricity market (NEM), particularly as more storage assets enter the system.

The Commission considers that this information would support more efficient commercial and operational decisions, potentially leading to better provision of reserves through the transition. For participants, this information could assist in the efficient provision of reserves over shorter and longer durations. For example, information showing that a region has a low level of reserve duration (in MWh) available from flexible energy constrained sources (i.e. batteries) could:

- signal to storage providers that there is a high value in charging (even at relatively high energy prices) in order to meet the energy needs and account for potential uncertainties

later in the day

- signal to other capacity (such as gas generators) that there is a high value in turning on to provide flexible headroom to be available for uncertain events and provide energy over longer durations over the course of the day.

In response to the directions paper, most stakeholders supported this change.

Stakeholders noted that increased transparency could lead to improved risk management and operational decisions. This was also supported by AEMO and the Australian Energy Regulator (AER), noting it could lead to more efficient bidding practices and is an important first step towards broader consideration of energy-limited plant.

While the Commission considers that increasing the information on energy availability would assist the provision of reserves in both short and long timeframes as we transition, we recognise that there are trade-offs. This includes the potential risk of undesirable bidding outcomes associated with increased supply-side information transparency. The Commission is therefore interested in stakeholder views on whether there remains the potential for any perverse and unintended outcomes if information on energy availability is published at an aggregated level and implementation for state of charge information occurs on 1 July 2027.

We consider regional and sub-regional FCAS raises a number of different issues that should be looked at through a dedicated rule change

As demand becomes more variable due to the increasing uptake of consumer energy resources (CER), as well as more variable energy sources are connected (such as wind and solar), there may need to be adjustments to support frequency stabilisation in a region following a rapid and unexpected change in variable renewable energy (VRE) output.

The AEMC has had a substantial work program over the past several years that has reformed the frequency arrangements to be fit for purpose given the changing system and also introduced the [indistinct event framework](#) to help AEMO identify and manage weather-related events.

One additional suggestion that has come to light in this rule change is the potential need to manage frequency due to rapid and unexpected changes in VRE output in a more cost-effective way by accessing FCAS through regional and sub-regional frameworks. In early 2023, Powerlink provided a [submission](#) to the Commission's 2021 Operating reserves [directions paper](#), suggesting that regional and sub-regional FCAS procurement could be formalised within the Rules.

The Commission sought wider stakeholder feedback on this suggestion in its [2023 directions paper](#). We received a diverse range of feedback, with particular concerns that changes to the FCAS frameworks at a regional/sub-regional level might impact the global FCAS market, with questions around market power and cost recovery.

Some stakeholders also considered that given the materiality of this change, it is not considered an incremental improvement and should therefore, if implemented, be assessed through a dedicated rule change to avoid any perverse or unintended outcomes.

The Commission has investigated the Rules around regional and sub-regional FCAS and considers:

- the Rules currently enable AEMO to procure FCAS at a regional level and do not limit this to any specific event
- the Rules are not clear on whether the provisions for regional FCAS procurement extend to a sub-regional level.

In response to stakeholder views and further analysis, we consider regional/sub-regional FCAS raises a number of different issues that would be better looked at through a separate rule change process. We are therefore not proposing at this time to amend the Rules to specify when regional or sub-regional FCAS should be procured. If a rule change was submitted on these issues, then we would consider it at the time.

How to make a submission

We encourage stakeholders to make a submission.

Due date: Written submissions responding to this draft determination must be lodged with

the Commission by **5pm, 8 February 2024**.

How to make a submission: Go to the Commission's website, www.aemc.gov.au, find the "lodge a submission" function under the "Contact Us" tab, and select the project reference code ERC0295. If you are not able to lodge a submission online, please contact us and we will provide instructions for alternative methods to lodge the submission.

You may, but are not required to, use the stakeholder submission form published with this draft determination.

Tips for making submissions are available on our website.¹

Publication: The Commission publishes submissions on its website. However, we will not publish parts of a submission that we agree are confidential, or that we consider inappropriate (for example offensive or defamatory content, or content that is likely to infringe intellectual property rights).²

For more information or to request a one-on-one discussion, please contact the project leader:

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¹ For more information see <https://www.aemc.gov.au/our-work/changing-energy-rules-unique-process/making-rule-change-request/our-work-3> .

² For more information see <https://www.aemc.gov.au/contact-us/lodge-submission> .