

Operational security mechanism

Update on the direction for the Operational Security Mechanism rule change

Key points

- This project is addressing two significant issues.
 - 1. The regular use of interventions to ensure the system is secure as inverter-based resources connect and thermal generation exits the system. This regular use leads to inefficiencies and reduces the effectiveness of the intervention's framework.
 - 2. A need to ensure the future requirements of the power system are met by providing incentives for new entrants and existing participants to make investment decisions that would see system security provided in the longer term.
- After carefully considering the proposed approach in the draft determination and stakeholder feedback to date, the Commission considers the draft determination proposal to introduce an operational tool to enable the procurement and scheduling of security services to support the secure operation of the NEM would be costly and complex to implement.
- Therefore, we need to change the approach and move quickly to deliver simpler and more timely solutions.
- We are proposing this solution to address the need for power system security sooner. This would involve building on existing tools to allow direct procurement of assets to provide system security more quickly and easily. Specifically, this will include considering:
 - aligning the existing system strength and inertia frameworks, and if Network Service Providers (NSPs) choose to meet their obligations under these frameworks through contracts with third parties, how such contracts could be scheduled in operational timeframes;
 - \circ improving transparency and efficiency of the directions process; and
 - o enhancing the Network Support and Control Ancillary Services (NSCAS) framework.
- These solutions focus on addressing limitations with the current long-term procurement of security services and supporting the power system through the transition.
- Taken together, these solutions would address the needs of the power system today, and support power system security through the transition.
- We are committed to continuing our ongoing collaboration with AEMO, AER and stakeholders to obtain input and progress the rule change in a timely way.
- We intend to release a directions paper in mid-2023 for consultation and we encourage all interested parties to make a submission following its release, before finalising the OSM rule by the end of 2023. We will also be reconvening our technical working group for this rule change in the coming weeks.

The Commission has considered stakeholder feedback on the OSM draft determination

The Australian Energy Market Commission (AEMC or the Commission) released a <u>draft</u> <u>determination</u> for stakeholder feedback on the OSM rule change in late 2022. This outlined a design for a mechanism that would allow AEMO to procure, schedule and optimise system security services in operational timeframes. This aimed to deliver system security more efficiently today and in a transitioning system, as well as preparing the system for the future by providing signals for investment in equipment that could deliver system security services.

In submissions to the draft determination, stakeholders broadly supported taking action to ensure a more efficient and transparent approach than directions to managing system security. However, submissions raised material concerns regarding both the fundamentals and the detail of the draft rule. The more substantive concerns were as follows.

- Operational procurement of a service that is difficult to define would be unlikely to provide clear and predictable long-term investment signals for participants. It will be important to provide greater clarity and certainty to the market and investors about how security measures will be delivered, to ensure system security is supported throughout the course of the transition. Without such a clear signal it is unlikely that investment in these services would occur.
- Relatedly, whether the proposed arrangements with a 'pay as bid' (where parties are literally paid the price they bid at) would provide sufficient incentives to deliver system security in an economically efficient way. These concerns were that pay as bid, rather than marginal pricing or longer-term contracts, could prevent investment given that there would not be effective investment signals to incentivise entry.
- The proposed operational procurement and scheduling arrangements would interact with the energy spot market, potentially significantly, altering energy market signals and decreasing its efficiency through the introduction of 'aheadness' (where units are committed ahead of real time) unit commitment decisions for a subset of the market. Questions were also raised about the effectiveness of how this would leverage and interact with the existing system strength framework.
- Market power concerns are likely to be difficult to manage where there are limited
 participants in system configurations, particularly with ongoing retirements of synchronous
 generators. This could flow through into potentially higher costs for consumers as the
 market power safeguards outlined in the draft determination may have been inadequate.

After carefully considering the proposed approach in the draft determination and stakeholder feedback to date, the Commission considers the draft determination proposal to introduce an operational tool to enable the procurement and scheduling of security services to support the secure operation of the NEM would be costly and complex to implement. Therefore, we need to change the approach and move quickly to deliver simpler and more immediate solutions.

The Commission considers that a focus on simplicity and flexibility, rather than complex mechanisms for operational procurement could result in greater benefits, and less costs, for consumers. There are two main reasons for this:

- There are benefits to waiting for a greater understanding of the engineering and technical capabilities of the system before introducing complex market changes. Our understanding is still developing about system security needs through the transition (including our ability to define services rather than relying on asset configurations), and how new technologies will contribute to security. The Commission considers significant progress is likely in coming years on these matters.
- We already have security frameworks that are comprehensive and allow for procurement of services system strength, inertia and NSCAS. A simple yet effective approach is to ensure these frameworks are set up to enable procurement of security services to support the

transition, and that they can be scheduled in real time. Building on existing frameworks is likely to put in place arrangements quicker.

The revised OSM direction reflects stakeholder feedback and further consideration of the proposed approach

The Commission is committed to working towards a net-zero grid and a net-zero economy. To achieve this, we need solutions that focus on supporting the power system through the transition.

The OSM rule change will now focus on long-term procurement through the existing security planning frameworks to address security needs in the transition, rather than operational procurement. We intend to:

- Align the existing inertia framework with the recently evolved system strength framework to ensure they recognise the full benefits of investment options, including if NSPs choose to meet their obligations by entering into non-network contracts with third parties how these parties could be scheduled in operational timeframes.
- Enhance the NSCAS framework to ensure it is fit for purpose.
- Improve the directions process both in terms of its transparency and efficiency, with a specific focus on re-visiting the recommendations from the 2019 <u>Investigation into</u> <u>intervention mechanisms and system strength in the NEM</u> review that have not yet been implemented.

This approach ensures that the opportunities identified in the OSM rule change process continue to be progressed while also addressing several issues identified with the approach proposed in the draft. This includes:

- the importance of providing appropriate long-term investment signals to encourage investment and to encourage learning about the power system
- avoiding complex interactions with the energy spot market
- market power concerns.

The Commission also considers that the new direction could better contribute to meeting the NEO by focusing on ensuring a smooth and efficient transition to a new operating environment. This supports efficient investment and operation of the power system by ensuring that the existing security frameworks provide the most efficient investment options that are in the best interests of consumers.

The proposed approach builds on the existing security frameworks that are in place to provide what the system needs each day, by procuring these services in the planning timeframe and then having operational tools to manage these in real time. We are seeking to build on these existing arrangements to put in place simpler and more flexible solutions compared with the draft determination tool. Such solutions can adapt as the needs of the power system, and our understanding of it, develops in the longer term. This ensures we are delivering the best approach based on the information that we know today, while also preparing us to meet the system needs of the future.

The Commission greatly appreciates the time stakeholders have committed to providing detailed and constructive feedback throughout the OSM rule change process. The comments raised have been valuable in helping the Commission understand the proposed option in more detail and determine a way forward. The Commission looks forward to continuing its engagement with AEMO, AER and stakeholders going forward on this project.

The timeframe for a final determination has been extended

Given the change of direction, the Commission has extended the timeframe for a final determination to 21 December 2023. This will allow for engagement with stakeholders on the new direction to inform the proposed solutions. The Commission is committed to:

- continuing to consult collaboratively with market bodies, particularly AEMO and the AER, and stakeholders in developing the proposed options.
- releasing a directions paper in mid-2023 for consultation and we encourage all interested parties to make a submission following its release.
- finalising the OSM rule by the end of 2023.

We will reconvene our technical working group for this project to assist us in developing our directions paper.

In the meantime, we encourage stakeholders to get in touch with us to provide any feedback they may have on this direction, or to ask us any questions. Please reach out to Amy Wiech at amy.wiech@aemc.gov.au in the first instance.

The Commission is also aware that a key issue for Transmission Network Services Providers (TNSPs) relates to providing further guidance on system strength contractual arrangements that TNSPs may enter into to meet their obligations under the system strength framework. We are working with the AER on this issue to consider what guidance could be provided on this matter.