



## New AEMC rule implements a general power system risk review

The Australian Energy Market Commission (AEMC) has made a final rule aimed at better identifying emerging risks to the security of the power system. This implements an annual review that will involve Australian Energy Market Operator (AEMO), in collaboration with network service providers (NSPs), identifying and assessing risks to power system security. This will promote better and more timely identification and assessment of emerging risks from all sources, promoting the long-term interests of consumers as the generation mix transitions. The rule implements a recommendation from the AEMC's black system event review.

### The Commission's final determination and rule

The final determination and rule seeks to replace the current power system frequency risk review (PSFRR) with a broader 'general power system risk review (GPSRR)'.

The final rule requires AEMO, to review, in respect of a prioritised set of risks, determined by AEMO:

- non-credible contingency events, the occurrence of which AEMO expects would be likely to involve uncontrolled increases or decreases in frequency, alone or in combination, leading to cascading outages, or major supply disruptions, and
- other events and conditions (including contingency events) the occurrence of which AEMO expects, alone or in combination, would be likely to lead to cascading outages, or major supply disruptions.

In relation to the risks identified, the Commission expects that only a limited number of priority risks will be assessed in depth through each GPSRR. The annual GPSRR will be a tool to monitor risks over time and is not intended to present an assessment of all potential system risks in detail. The GPSRR will be based on a high-level look at risk arrangements, iterating over time. This means that the selection of risks should be prioritised on a case by case basis reflecting what risks may be more material at a particular point in time. AEMO is also expected to leverage off existing arrangements to ensure resources are managed efficiently and are focused on priority matters.

In relation to the process for the GPSRR, the final rule requires AEMO to:

- undertake the GPSRR no less than annually
- consult with, and take into account the views of, relevant NSPs (both transmission and distribution) in the conduct of the GPSRR, and
- publish and consult on an approach paper at the commencement of the review specifying the priority risks to be assessed, the approach and methodologies for assessing each risk, information inputs and assumptions used, and approach to interacting with NSPs.

The final rule requires NSPs to cooperate with AEMO and provide all information and assistance reasonably requested to enable AEMO to undertake the review. As part of the initial consultation, and for the purposes of the approach paper, NSPs would provide AEMO with their views and findings from their annual planning reviews. At this initial stage NSPs are not expected to perform major system modelling exercises or provide computer models. However, for the purposes of the assessment of the prioritised risks, and in the preparation of the final report, NSPs must provide all information reasonably requested by AEMO. This could include providing AEMO with options for mitigating the priority risks and providing any computer models that may be reasonably required.

In relation to the coordination and integration of planning processes, the final rule requires:

- NSPs in their annual planning reviews to:

- take into account the outcomes from the most recent GPSRR, and
- consider the operation of, and any known or potential interactions between, any emergency frequency control schemes or emergency controls on their network; and protection systems or control systems of plant connected to their networks including consideration of whether they are fit for purpose for the future operation of the network, where the NSP expects that such operation or interactions would be likely to lead to cascading outages or major supply disruptions
- AEMO to consider and have regard to the outcomes of the GPSRR in conducting the Integrated System Plan

The rule requires AEMO to complete the first GPSRR by 31 July 2023, following the completion of the last PSFRR by 31 July 2022. This will allow the 2023 GPSRR to draw on NSPs' consideration of emergency control schemes and protection systems in the 2022 annual planning reviews, but avoids the introduction of new obligations on NSPs midway through their 2021 annual planning reviews. The implementation date is therefore 10 January 2022.

### Benefits of the Commission's final rule

The Commission considers that the final rule will contribute to the achievement of the National Electricity Objective (NEO) with respect to the efficient operation and use of electricity services in the long term interests of consumers of electricity, and with respect to the safety and security of the national electricity system. The GPSRR will increase the transparency of emerging system security risks that may need to be managed, helping AEMO, NSPs and market participants better understand the nature of new risks and monitor these over time. The need for a comprehensive risk review is now greater than ever, given the changing impacts on the risk and resilience profile of the power system as the generation mix transitions. The final rule is likely to promote better and more timely identification and assessment of emerging risks from all sources, promoting the long-term interests of consumers as the costs of cascading outages or major supply disruptions can be significant.

### Background

In its Review of the South Australian Black System Event report (BSE review), the Commission recommended expanding existing frameworks to enhance prompt identification of risks to system security from all sources by implementing a GPSRR. Following the BSE review, the Council of Australian Governments (COAG) Energy Council submitted a rule change request on 26 May 2020 to implement this recommendation.

### Rule making process

The Commission initiated the rule change request on 4 January 2021. The Commission decided to fast-track the process. As such no consultation paper was published upon initiation. On 4 February 2021, the Commission published a draft determination and draft rule. Four submissions were received.

On 22 April 2021 the Commission extended the time to make a final rule. This extra time was necessary due to the complexity of the issues and allowed for further time to consider issues raised by AEMO in response to the draft determination, including through further information consultation with interested parties.

For information contact:

Senior Adviser, **James Tyrrell** + 612 8296 7842

Graduate Adviser, **Patrick Loughrey** + 612 8296 1659

Media: Media and Content Manager, Kellie Bisset 0438 490 041

03 June 2021