



Enhancing operational resilience in relation to indistinct events

Draft determination for enhancing operational resilience of the NEM in relation to indistinct events

The AEMC has made a more preferable draft rule that clarifies that AEMO has the power to act and issue directions in order to prepare the power system for the impact of indistinct events in the operational timeframe.

Making the power system more resilient to abnormal conditions

Indistinct events are events that can impact multiple generators or transmission lines in an unpredictable and uncertain manner, such as major storms, widespread fires and cyberattacks. As power system technology evolves and as storms and bushfires become more intense and frequent, 'indistinct' events are becoming an increasing threat to maintaining a secure supply of electricity to customers. AEMO already has broad powers to act and issue directions once an event affects the power system. AEMO can also manage the risks of credible (or distinct) contingency events, which involve the likely failure or removal from service of specific generating units or network elements, in advance of such events occurring.

However, the AEMC's review of the South Australian Black System Event identified a need for perceived ambiguity in existing frameworks to be addressed to enable AEMO to effectively manage risks from indistinct events, in advance of those events impacting the power system. Following that review, the COAG Energy Council submitted a rule change to the AEMC that sought to action that recommendation, which is the subject of this rule change request.

The Commission's draft determination and draft rule

In response to the request, the Commission has made a more preferable draft rule (draft rule) that makes clear that AEMO has the power to act and to issue directions in order to prepare the power system for the impact of indistinct events in the operational timeframe. Under the draft rule, AEMO is able to manage the risk of indistinct events similar to the risk of other contingency events, including reclassifying non-credible indistinct events as credible when abnormal conditions such as storms increase the likelihood of the event impacting the power system.

The key elements of the draft rule include the following:

- **Standing Indistinct events:** Adopting the rule change request's proposal to clarify that standing indistinct events can be managed as protected events through the existing protected events mechanism, accomplished by amending the definition of contingency events.
- **Condition dependent indistinct events:** The draft rule would provide AEMO with the flexibility to determine necessary actions to manage condition dependent indistinct events — that is, reclassified credible contingency events caused by abnormal conditions. AEMO would also be required to set out in the reclassification criteria the relevant abnormal conditions and actions it would typically take to manage indistinct events once reclassified as credible contingency events.
- **Transparency and governance:** The draft rule would see AEMO undertake targeted consultation to establish, review, or amend the criteria for reclassifying contingency events, as well as the likely actions it would take to manage them. AEMO's existing reporting requirements would also be expanded to include reclassified contingency events and additional reporting obligations would apply when AEMO uses its discretion to manage credible indistinct events. Additionally, the AEMC would review the performance of the

contingency event framework within five years of implementation of the final rule.

The Commission has maintained the delineation between the type of contingency events that apply in the operational timeframe and those in the planning timeframe (such as Schedule 5.1 for network planning) in the context of Chapter 5 of the NER. These draft rules are intended to apply in the operational timeframe to help AEMO manage system security while not impacting how network service providers plan and operate their networks.

Benefits of improving existing arrangements

The improved arrangements for credible contingency events allows AEMO to explicitly address circumstances where there is an unpredictable and uncertain impact on all elements of the power system. This will strengthen the resilience of the power system and will provide AEMO with the ability to more proactively manage the risks associated with abnormal conditions.

Amending the current framework in the manner suggested under the draft rule will provide AEMO with the ability to better manage system security while avoiding the cost and potential complexity of introducing a new, parallel framework solely for indistinct events. This will help to keep the system secure, while minimising costs to consumers, particularly as the generation mix is transitioning and extreme abnormal conditions become increasingly frequent as the climate changes.

Background: the rule change request

On 26 May 2020, the AEMC received a rule change request from the Council of Australian Governments (COAG) Energy Council to amend the National Electricity Rules (NER) in order to implement an operational mechanism for AEMO to enhance the power system's resilience to indistinct events.

This followed a recommendation made by the AEMC in its review of the South Australian black system event (the BSE review). In the BSE review, the AEMC found that the existing system security framework may be ill-suited to managing indistinct events and recommended introducing a framework for protected operations as a new operational tool for AEMO to enhance the resilience of the power system to indistinct events.

This is the third and final rule change flowing from the AEMC's 2019 review of the black system event in South Australia.

Consultation

The Commission welcomes stakeholder feedback and engagement. The closing date for submissions is **6 January 2022**.

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