

Guidelines for identifying reviewable operating incidents

When determining whether a power system operating incident is of significance under clause 4.8.15(a), and hence reviewable, NEMMCO should apply the following guidelines:

1. Under clause 4.8.15(a)(1)(i): Apply the definition of a non-credible contingency in clause 4.2.3 and define a multiple contingency event as reviewable when the events, including any inappropriate automatic or manual operation of a transmission element, occur within 30 minutes of each other and the residual impact of an earlier contingency interacts with a later contingency.
2. Under clause 4.8.15(a)(1)(ii): Apply the definition of “black system” in Chapter 10 of the Rules. For this purpose a major supply disruption affecting a significant number of customers is considered as one resulting in loss of at least 60% of the predicted regional load with the exception of:
 - regions with minimal load (for example the Snowy region): and
 - the Queensland region, where the loss of 60% of the load (excluding the pot line loads) in any of the Northern Queensland, Central Queensland or Southern Queensland areas is also considered to be a major supply disruption.
3. Under clause 4.8.15(a)(1)(iii): Define as reviewable all incidents where the frequency is outside the operational frequency tolerance band (currently set by the Panel at 49 to 51 Hz on the mainland and 47.5 to 53 Hz in Tasmania).
4. Under clause 4.8.15(a)(1)(iv): Define all incidents where the power system is insecure for more than 30 minutes as reviewable operating incidents.
5. Under clause 4.8.15(a)(1)(v): Define all incidents where there is load shedding due to a clause 4.8.9 instruction as reviewable operating incidents.
6. Under clause 4.8.15(a)(3): A reviewable operating incident includes incidents that satisfy one or more of the following descriptions:
 - (a) the power system is not in a satisfactory operating state for more than 5 minutes (excluding issues resulted to potential oscillatory or transient stability);
 - (b) NEMMCO’s on-line oscillatory and transient stability monitoring systems detecting a potential instability for 30 minutes, continuously;
 - (c) incidents on a distribution network that affect the security of the transmission system including:
 - faults of extended duration within the distribution network where these have had a material impact on the transmission system; and
 - loss of multiple embedded generating units the total capacity of which exceeds the capacity of the largest generating unit within any region including an affected generating unit;
 - (d) incidents that result in the operation of under frequency or over-frequency protection and control schemes including:
 - automatic under frequency load shedding; and
 - automatic tripping of a generating unit due to over-frequency; or

- (e) where the AEMC Reliability Panel requests NEMMCO to review and report on an incident under clauses 4.8.15(b) and (c)¹, after considering whether:
- the incident represented a threat to system security; and
 - the benefits to the NEM are likely to exceed the cost to NEMMCO and the affected participants.

¹ The Panel considers that the following parties should be able to apply to the Panel for it to request NEMMCO to investigate an incident:

- a registered participant, or group of registered participants;
- a participating jurisdiction, or group of participating jurisdictions; or
- NEMMCO (for clarification).