

Australian Energy Market Commission

RULE DETERMINATION

NATIONAL ELECTRICITY AMENDMENT (ENHANCING OPERATIONAL RESILIENCE IN RELATION TO INDISTINCT EVENTS) RULE 2022

COAG Energy Council

3 MARCH 2022

DETERMINATION

INQUIRIES

Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

E aemc@aemc.gov.au
T (02) 8296 7800

Reference: ERC0304

CITATION

AEMC, Enhancing operational resilience in relation to indistinct events, Rule determination, 3 March 2022

ABOUT THE AEMC

The AEMC reports to the Energy Ministers' Meeting (formerly the Council of Australian Governments Energy Council). We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the Energy Ministers' Meeting.

This work is copyright. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

SUMMARY

- 1 The Commission has made a more preferable final rule (final rule) to amend the contingency event framework to ensure AEMO has the operational tools to better manage threats to power system security. The contingency event framework has been amended to reflect new and unexpected challenges arising from the rapid transition underway in the energy sector and the changing climate. This ensures AEMO is able to take action to mitigate any credible threats to the power system, even if the assets at risk and impacts cannot be explicitly identified ('indistinct events'). This increased discretion is balanced by amendments to strengthen the transparency and governance arrangements to promote the long term interests of consumers by making sure the arrangements are clear and easily understood and the risks effectively balanced.
- 2 It is important that AEMO has the flexibility to manage threats to power system security which cannot be easily defined. The rapid transition of the energy sector as old generators retire and new technologies connect, including inverter-based plant and demand side options, is creating new challenges and uncertainties. Risks associated with these challenges and uncertainties are exacerbated by changes outside the power system itself - particularly the effects of and need to mitigate and adapt to the changing climate - which have a growing impact on an increasingly weather-dependent power system. The final rule clarifies that AEMO should decide whether mitigation of risks is appropriate on the basis of how likely it is to impact power system security, regardless of whether the threat relates to a defined asset or impact. This will help to keep the system secure while minimising costs to consumers, particularly as the NEM continues to transition and extreme abnormal conditions become increasingly frequent as the climate changes.
- 3 The final rule is the result of an iterative and collaborative process initiated following a state-wide blackout in South Australia in 2016. The blackout was attributed to tornadoes damaging transmission lines, and a significant reduction in wind generation loss of the Heywood interconnector between South Australia and Victoria when a special protection scheme activated.¹ In reviewing AEMO's management of this event, the AER identified very different interpretations between market bodies of what actions the National Electricity Rules (NER) allows AEMO to take in advance of contingency events made more likely by abnormal conditions.² The AEMC then reviewed whether this event suggested changes to NER frameworks were required to manage new risks faced by the power system.³ On the basis of the recommendations from the AEMC's Review, the COAG Energy Council⁴ submitted three rule change proposals:
 - implementation of a general power system risk review (GPSRR) to regularly identify emerging risks to the power system, as well as actions to mitigate these risks, which will be implemented by 31 July 2023;

1 AEMO, 2017, Black System South Australia 28 September 2016 Final Report.

2 AER, 2018, Black System Event Compliance Report.

3 AEMC 2019, Review of the South Australian Black System Event Final Report.

4 Now the Energy Ministers' Meeting (EMM)

- implementation of a protected operation framework to sit alongside the contingency event framework and enhance power system resilience to indistinct events associated with abnormal conditions (this rule change); and
- clarification of the applicability of the NER during market suspension, which were clarified through a final determination on 17 June 2021.

4 The severe winds and the subsequent events on the power system seen in South Australia in 2016 are just one example of the types of indistinct events threatening the power system. While some of these threats can be expected, such as the impact of changing climate on weather-dependent renewable generation, it is possible that unforeseen and unexpected threats to the power system may emerge. For example, a decade or two ago we may not have expected rooftop solar generation and other distributed energy resources (DER) to grow to potentially become the largest credible contingency AEMO may have to manage. There are now mechanisms in place to manage the potential risks associated with DER related contingencies, but we cannot predict what threats may emerge in the future.

5 The final rule:

- integrates 'indistinct events' into the existing contingency event framework by expanding the definition of 'contingency event' and expanding the scope of the reclassification criteria, which will require AEMO to update the criteria in consultation with relevant stakeholders;
- introduces a new power system security principle requiring AEMO, where practicable, to make decisions about reclassification and measures to mitigate heightened risks that are predictable and consistent with the reclassification criteria;
- strengthens transparency and predictability for the expanded contingency event framework, including introducing a requirement for AEMO to consider improvements to the reclassification criteria through its regular reporting, and a requirement for specific reporting for when it is not practicable for AEMO to act in a manner consistent with the reclassification criteria;
- leverages existing governance arrangements, with guidance and oversight of AEMO's operational use of the contingency event framework to be provided by the Reliability Panel, AER and the Commission; and
- provides a 12 month implementation timeframe to ensure AEMO has sufficient time to consult on the updated reclassification criteria.

6 **Amending the contingency event framework to integrate indistinct events**

7 The Commission has generally maintained the policy positions from the draft determination, however some changes have been made to the final rule to reflect stakeholder feedback. Consistent with the draft determination, the final rule amends the contingency event framework to integrate indistinct events rather than introduce a new protected operation framework. This is a simpler approach which will create lower costs for consumers and eliminate the need for AEMO to choose between different frameworks during operations.

8 As part of integrating indistinct events into the contingency event framework, the definition of 'contingency event' has been expanded. The amended definition covers all equipment

involved in the generation, transmission or distribution of electrical energy, as well as sudden and unexpected changes to the level of output, consumption or power flow of this equipment, which may not involve complete failure and removal from service. AEMO will be required to update the reclassification criteria to ensure it outlines when reclassification of non-credible contingencies are more likely given abnormal conditions and the actions AEMO is likely to take to manage these credible risks. Under the final rule, the update must occur through consultation with relevant stakeholders by 9 March 2023.

9 The Commission has also introduced a new principle requiring AEMO, where practicable, to make decisions about reclassification and the measures to be implemented to manage contingency events, including indistinct events, in a predictable and transparent way with the reclassification criteria. This replaces the proposed addition of a new power system responsibility in the draft rule and reflects ongoing engagement with AEMO to inform and align with its operational practices. This principle is consistent with COAG Energy Council's proposal to establish a pre-defined protected operation framework for condition-dependent events to provide a transparent and predictable framework in advance of AEMO's decisions to reclassify and manage indistinct events.

10 But the regulatory framework should never prevent AEMO from mitigating risks to the power system that have not been defined within the contingency event framework, or taking unexpected actions when abnormal conditions justify this. So, consistent with COAG Energy Council's proposal to allow AEMO to manage ad hoc condition-dependent events, the principle only restricts AEMO to managing events and using actions in accordance with the reclassification criteria where it is practicable to do so. This effectively allows AEMO to use its discretion to manage indistinct events where it is necessary to do so, noting the obligation under the NEL for AEMO to conduct its activities in line with the NEO which requires the most efficient option to be taken.

11 Transparency and governance arrangements to support the amended framework

12 To support predictability and transparency, the existing reporting obligations for the contingency event framework still apply. Under the existing framework, AEMO must issue market notices when abnormal conditions arise and make non-credible contingency events more likely. AEMO must update the market as the conditions evolve and notify the market when it considers the event no longer likely. AEMO must then review its reclassification decisions every six months, although this review now includes a requirement to consider potential improvements to the reclassification criteria.

13 The draft rule proposed to require AEMO to undertake a reviewable operating incident report for every discretionary use of the emergency measure. In response to stakeholder feedback that this framework may not be timely enough or provide the desired information, the Commission has introduced a new standalone report. This report will act as a substitute for information that would otherwise be provided through the reclassification criteria and will communicate the risk posed by abnormal conditions and the basis of AEMO's approach to mitigation. Consistent with the draft rule, AEMO must then consider whether discretionary management of an indistinct event indicates a priority risk to review through the GPSRR.

14 The final rule also makes minor amendments to the governance arrangements to support the

transparency arrangements for predictability, and to ensure learning is captured and used to improve processes. The functions of the Reliability Panel have been amended to clarify that it can provide guidelines and principles relevant to all actions AEMO may take before, during and after a contingency event. However, the role of the Reliability Panel in declaring protected events when AEMO applies for a non-credible contingency event to be managed under this framework remained unchanged.

15 As per the draft determination, the Commission reiterates its intention to review the effectiveness and operation of the contingency event framework in the NER within five years of this rule being made. This one-off review would consider the performance of the contingency event framework created by these arrangements.

16 Implementation

17 The final rule provides AEMO with 12 months to consult with relevant stakeholders on amendments to the reclassification criteria to reflect the broadened definition of 'contingency event'. These consultations will also consider the measures that AEMO may implement to maintain power system security. The new principle and additional reporting requirement will commence at the same time as the updated reclassification criteria.

CONTENTS

1	COAG Energy Council's rule change request	1
1.1	The rule change request	1
1.2	Current arrangements to manage reclassified contingencies	2
1.3	Rationale for the rule change request	3
1.4	Solution proposed in the rule change request	4
1.5	Relevant background	5
1.6	The rule making process	6
2	Final rule determination	7
2.1	The Commission's final rule determination	7
2.2	Rule making test	9
2.3	Assessment framework	10
2.4	Summary of reasons	11
3	Elements of the final rule	15
3.1	Contingency event framework	15
3.2	Reporting arrangements	22
3.3	Implementation	27
3.4	Governance	28
	Abbreviations	31
	APPENDICES	
A	Summary of other issues raised in submissions to the draft determination	32
B	Legal requirements under the NEL	35
B.1	Final rule determination	35
B.2	Power to make the rule	35
B.3	Commission's considerations	35
B.4	Civil penalties	36
B.5	Conduct provisions	36
C	Changes from Draft to Final	37
	TABLES	
Table A.1:	Summary of other issues raised in submissions to the draft determination	32
Table C.1:	Changes between the draft rule and final rule	37
	FIGURES	
Figure 3.1:	Reporting framework for indistinct events in the draft rule	23
Figure 3.2:	Reporting framework for indistinct events in the final rule	26

1 COAG ENERGY COUNCIL'S RULE CHANGE REQUEST

This chapter summarises:

- COAG Energy Council's rule change request - section 1.1
- current arrangements to manage reclassified contingency events - section 1.2
- the rationale for the rule change request - section 1.3
- the solution proposed in the rule change request - section 1.4
- the relevant background to the rule change request - section 1.5
- the rule making process - section 1.6

1.1 The rule change request

On 26 May 2020, the Council of Australian Governments (COAG) Energy Council⁵ made a request to the Australian Energy Market Commission (AEMC or Commission) to amend the National Electricity Rules (NER) to introduce a framework to manage the risk of indistinct events in an operational timeframe.⁶

This rule change seeks to improve the NER to account for 'indistinct events' where there is a risk to the power system which does not arise from the failure of a single specific asset or where the specific asset(s) involved are not reasonably identifiable ex-ante.⁷

Indistinct events are not defined in the NER but for the purposes of this rule change they are events on the power system for which it is not possible or reasonable to identify:

- the associated threats to the specific power system elements because the threat is so broad or extreme and/or
- the specific assets likely to be affected because the broad nature of the threats means there are a large number of possible outcomes.

The rule change proposes creating a framework to allow AEMO flexibility to prepare for and manage the risk of indistinct events in the operational timeframe when abnormal conditions make them more likely to occur. This would include clarifying that standing risks from indistinct events can be managed via the protected events mechanism,⁸ as well as introducing transparency and governance arrangements for this framework.

5 In May 2020 the Prime Minister announced the cessation of the Council of Australian Governments (COAG), including the former COAG Energy Council. The COAG Energy Council has been replaced by the Energy National Cabinet Reform Committee (ENCRC) and the Energy Ministers' Meeting (EMM). See: <https://www.energy.gov.au/government-priorities/energy-ministers>

6 The rule change request can be found on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

7 The recommendation was part of the review into the South Australian black system event (BSE review): <https://www.aemc.gov.au/markets-reviews-advice/review-of-the-system-black-event-in-south-australia>

8 A protected event is a non-credible contingency event that the Reliability Panel has declared to be a protected event. If the Reliability Panel approves a non-credible contingency event as a protected event, AEMO can take certain ex-ante measures to prevent a cascading failure, which are beyond those it can typically take to manage non-credible contingency events. See NER cl. 4.2.3(f).

1.2 Current arrangements to manage reclassified contingencies

This rule change was focused on the framework for AEMO's operational actions to prepare the power system for a contingency event in advance of it occurring, or 'ex-ante'.

1.2.1 Actions to manage contingency events ex-ante

Under the framework in place prior to the rule being made, a contingency event is "an event affecting the power system which AEMO expects would be likely to involve the failure or removal from operational service of one or more generating units and/or transmission elements." Contingency events are divided into:

- *credible contingency events*: contingency events AEMO considers to be reasonably possible in the surrounding circumstances, including the technical envelope.⁹
- *non-credible contingency events*: contingency events other than credible contingency events.¹⁰

A key difference between credible and non-credible contingencies is the operational actions that AEMO can take to manage them ex-ante. Non-credible contingencies can be managed using:

- existing contingency capacity reserves;
- controlled load shedding arrangements; and
- in some cases, special protection schemes.

These actions are part of AEMO managing the power system to arrest the impacts of a range of significant multiple contingency events or protected events.¹¹ The NER allows AEMO to take additional operational actions in advance to manage credible contingency events. These actions include:

- setting constraints
- issuing directions
- obtaining additional ancillary services, for example contingency raise and lower FCAS.

The NER allows AEMO to reclassify non-credible contingency events to credible contingency events if abnormal conditions (like bushfires or storms) make them more likely.¹² This would allow AEMO to take additional actions (e.g. constraints, directions, FCAS) to manage these reclassified events. AEMO publishes reclassification criteria which set out its approach to the reclassification of non-credible contingency events.¹³

As detailed in the draft determination, AEMO can also choose to use the protected event framework to manage low likelihood, high consequence non-credible contingency events.¹⁴

9 NER cl. 4.2.3(b). The technical envelope is the technical boundary limits of the power system for achieving and maintaining a secure operating state for a given power system scenario.

10 NER cl. 4.2.3(e)

11 NER cl. 4.3.1(k)

12 NER cl. 4.2.3A

13 NER cl. 4.2.3B requires AEMO to publish the criteria on its website but there are no requirements as to where this is published. AEMO chooses to publish them in the Power System Security Guidelines (PSSG).

14 For example, see sections 1.2.1 and 3.6 of the Indistinct Events draft determination for further discussion of this framework.

1.2.2 Transparency and governance arrangements for these actions

To provide transparency to the market and to policy makers, there are reporting obligations under NER clause 4.2.3A if AEMO chooses to reclassify a non-credible contingency event:

- A market notice as soon as practicable after AEMO identifies abnormal conditions make a non-credible contingency event more likely.
- Market notice(s) as AEMO becomes aware of new information that is material to its consideration of the event.
- A market notice when the relevant facts and circumstances have changed making the reclassified contingency event no longer reasonably possible.
- A report every six months reviewing all decisions to reclassify non-credible contingency events during the relevant period.

The NER also includes mechanisms to encourage learning and improvements to the reclassification criteria, including a requirement to review the reclassification criteria in consultation with relevant stakeholders every two years at a minimum.¹⁵ Should further guidance be required, the Reliability Panel has the power to provide principles and guidelines for AEMO to manage contingency events¹⁶ and the AER has the power to monitor AEMO's compliance with the NER under Part 3 of the NEL.

1.3 Rationale for the rule change request

In the rule change request, the COAG Energy Council sought amendments to the NER to manage risks to the power system presented by indistinct events. The rule change proposed to provide AEMO with mechanisms to enhance operational resilience in the power system to the risks presented by abnormal conditions.

One of these risks relates to the physical makeup of the NEM changing rapidly as old thermal generators retire, new inverter-based plant such as wind, solar and batteries connect, and customers increasingly take up new demand side options. While these changes bring obvious benefits, they also mean that the power system faces new risks. These risks are exacerbated by changes outside the power system itself, particularly the effects of and need to mitigate and adapt to climate change, which have a growing impact on an increasingly weather-dependent power system.

As the system transition continues, and storms, heatwaves and fires may become more intense and frequent, 'indistinct' events are emerging as an increased threat to power system security and supply of energy to customers. Indistinct events are events that can impact on multiple generators and transmission lines in an unpredictable and uncertain manner. Major storms, widespread bushfires, or cyberattacks could all be examples of indistinct events as they may all affect multiple parts of the power system in a hard-to-predict manner.

¹⁵ NER cl. 4.2.3B(b)

¹⁶ NER cl. 8.8.1(2a)

1.4 Solution proposed in the rule change request

COAG Energy Council sought to resolve the issues discussed above by proposing a rule to establish frameworks to manage indistinct events according to whether they are considered to be:

- **condition-dependent** indistinct events which increase in likelihood and severity due to abnormal conditions
- **standing** indistinct events that are a constant but unclear risk.¹⁷

These frameworks would sit parallel to the current framework for managing credible contingency events and non-credible contingency events which have been reclassified in abnormal conditions.

1.4.1 Proposed framework for condition-dependent indistinct events

Under the proposed framework AEMO would:

- pre-identify abnormal conditions and indistinct events through the general power system risk review (GPSRR),¹⁸ as well as actions it would take to manage indistinct events
- specify and publish criteria for abnormal conditions that would represent condition-dependent indistinct events and the approach for assessing the likelihood and severity of these events

AEMO would need to conduct cost-benefit analysis for possible actions and follow a cost minimisation principle defined in the NER. This would be used to justify the additional actions available to AEMO to manage the risk of condition-dependent indistinct events.

AEMO would also be able to manage events that had not been pre-identified (i.e. 'ad-hoc' condition-dependent indistinct events) but this would be balanced with additional transparency and governance requirements.

1.4.2 Proposed framework for standing indistinct events

Under the proposed framework, AEMO would use the existing protected events framework to manage standing indistinct events. An expedited approvals process would be introduced for protected event applications that are not controversial or are otherwise straightforward.

1.4.3 Proposed transparency and governance arrangements

There are some transparency and governance arrangements already in the Rules for the reclassification criteria and protected events frameworks. For example, as discussed above, when AEMO decides that abnormal conditions make a non-credible contingency event more likely to occur, it must issue a market notice. The rule change proposed a number of additions, such as a requirement for AEMO to report publicly and to the Reliability Panel as

¹⁷ The rule change proposal is available on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

¹⁸ The GPSRR was a rule change made in response to another recommendation from the AEMC BSE Review and will commence by July 2023. More information on this rule change is available on the project webpage: <https://www.aemc.gov.au/rule-changes/implementing-general-power-system-risk-review>

soon as practicable after declaring an ad-hoc condition-dependent indistinct event. AEMO would also be required to review the risks it managed for each use of the ad-hoc condition-dependent mechanism in the GPSRR.

The rule change proposed that all consultation on the management of indistinct events, including the reclassification of non-credible contingencies and protected events, be required to follow the Rules consultation procedures.¹⁹ Under the current framework, the Reliability Panel is required to use these procedures to consult on applications from AEMO to declare a non-credible contingency as a protected event. However, AEMO's consultations on the reclassification criteria are undertaken as targeted consultations with relevant stakeholders, given the complexity of these issues.

Finally, the rule change proposed that the Reliability Panel have the ability to determine guidelines for pre-defined and ad-hoc events, as well as to consider the overall framework as part of its Annual Market Performance Review (AMPR).

1.5 Relevant background

As detailed in the draft determination,²⁰ the rule change request followed an AER compliance report into the 2016 South Australian black system event and the subsequent AEMC Review of the System Black Event in South Australia on 28 September 2016 (BSE review). The cost of this black system event was estimated at \$367 million and highlighted the new system security challenges to the power system.

The 2018 AER compliance report identified that the AER and AEMO had different interpretations of certain provisions in the rules, including for reclassification requirements.²¹ The AER noted that AEMO (at the time of the black system event) considered reclassification of non-credible contingency events required the identification of specific power system elements. This means that if AEMO was unable to identify a specific asset or group of assets it did not think it could reclassify a non-credible contingency event. The AER's position was that there was greater flexibility allowed under the NER. So the AER recommended that the AEMC consider undertaking a review of the regulatory framework.

The AEMC had already initiated a review of the factors which contributed to the black system event at the request of the COAG Energy Council in 2017.²² In progressing this review, the Commission considered whether amendments to the NER were required and identified new operational tools to enhance power system resilience. The 2019 final report for the BSE review made three key recommendations which became the basis of rule change proposals from the COAG Energy Council:

¹⁹ NER cl. 8.9

²⁰ See section 1.5 of the draft determination on indistinct events for more detailed information

²¹ The report and further information are available on the AER's website: <https://www.aer.gov.au/wholesale-markets/compliance-reporting/investigation-report-into-south-australias-2016-state-wide-blackout>

²² The history of this review and relevant documents are provided on the project webpage: <https://www.aemc.gov.au/markets-reviews-advice/review-of-the-system-black-event-in-south-australi>

- implement a general power system risk review (GPSRR) to effectively identify emerging risks to the power system from all sources, which the Commission decided to implement in 2021²³
- introduce an operation tool for AEMO to enhance the resilience of the power system to indistinct events that are associated with abnormal conditions, the subject of this rule change request
- clarify the applicability of the National Electricity Rule arrangements during a period of market suspension, which was clarified through the AEMC's final determination in 2021.²⁴

1.6 The rule making process

On 17 December 2020, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the rule change request.²⁵ A consultation paper identifying specific issues for consultation was also published. Submissions closed on 11 February 2021.

The Commission received submissions from seven stakeholders as part of the first round of consultation, which can be found on our website. The Commission considered all issues raised by stakeholders in submissions in the draft rule determination.

On 22 April 2021, the Commission extended the time to make the draft determination to 28 October 2021. The extended timeframe was needed due to the complex issues raised in the rule change request and in stakeholder submissions to the consultation paper, as well as stakeholder requests for extra consultation. This allowed a number of technical working group meetings for this project to be held to get expert stakeholder input into these complex issues.

On 28 October 2021, the Commission published a draft determination and rule. The Commission's draft determination was to make a more preferable rule allowing AEMO to manage indistinct events within the existing, established frameworks. The Commission considered this approach simpler and more cost-effective than introducing a new parallel framework for indistinct events.

Nine submissions were received from stakeholders in response to the draft determination, which can be found on our website. The Commission has made its final determination and rule following consideration of the issues raised in stakeholder submissions. The Commission's consideration of these issues is set out in detail in Chapters 2 and 3.

On 27 January 2022, the Commission extended the timeframe to make the final determination to 3 March 2022. The extended timeframe was needed due to the complexity of issues raised in stakeholder submissions to the draft determination and rule.

23 the GPSRR will replace the power system frequency risk review by 2023. More information is available on the project webpage: <https://www.aemc.gov.au/rule-changes/implementing-general-power-system-risk-review>

24 the Commission decided not to make this rule. See the project webpage for more information: <https://www.aemc.gov.au/rule-changes/prioritising-arrangements-system-security-during-market-suspension>

25 This notice was published under s.95 of the National Electricity Law (NEL)

2 FINAL RULE DETERMINATION

2.1 The Commission's final rule determination

The Commission's final rule determination is to make a more preferable final rule (final rule). The final rule:

- integrates AEMO's management of indistinct events in the operational timeframe into the existing contingency event framework to ensure power system security;
- also expands the existing reporting requirements of the contingency framework to capture AEMO's management of indistinct events and requires specific reporting on AEMO's discretionary management of indistinct events
- provides AEMO with the operational tools it needs to manage system security as the NEM transitions and enhances system resilience to indistinct events
- provides market participants with predictability and transparency on how indistinct events are managed in the operational timeframe.

The final rule is attached to, and published with, this final rule determination. The final rule integrates AEMO's management of indistinct events into the existing contingency event framework. The key features of the final rule are set out below.

Expanding the definition of 'contingency event'

- The definition of 'contingency event' in clause 4.2.3(a) of the NER has been expanded to capture:
 - all 'plant', which is defined as all equipment involved in the generation, transmission or distribution of electrical energy; and
 - sudden and unplanned changes to the level of output, consumption or power flow of plant.

Expanding the reclassification criteria

- The reclassification criteria in clause 4.2.3B of the NER has been expanded so that AEMO must include in it information about measures that it may implement to maintain power system security as a result of reclassification decisions including:
 - the risks to the power system of different abnormal conditions;
 - the network elements or plant in relation to which measures may be implemented in response to different abnormal conditions; and
 - other measures or a range of measures that AEMO is likely to consider in different abnormal conditions.
- The consultation requirements for amendments to the reclassification criteria has been retained, however, they have been extended to distribution network service providers.

Expanding reporting arrangements

- The reporting requirements on AEMO have been expanded to cover all instances of reclassification, including indistinct events. These arrangements consist of:

- market notices to update market participants on reclassification decision and actions as abnormal conditions evolve²⁶;
- six-monthly reviews of all reclassification decisions²⁷;
- the General Power System Risk Review (GPSRR) which considers all risks to the power system, including those reclassified as credible and requiring mitigation²⁸.
- The addition of a requirement on AEMO in clause 4.2.3A(j)-(k) to publish a specific report where it has implemented measures to manage a reclassified credible contingency event that could not reasonably have been expected having regard to the reclassification criteria (i.e. the emergency measure). This report needs to be released as soon as practicable following the event and will outline:
 - notices relating to the event already given by AEMO;
 - information about the risk the abnormal condition posed to the power system;
 - an explanation of the basis on which AEMO determined the measures implemented; and
 - other information or material AEMO considers appropriate.

Additional principle for maintaining power system security

- A new principle has been included in the power system security principles in clause 4.2.6, which requires AEMO, where practicable, to make decisions about reclassification and the measures to be implemented in response that are predictable and consistent with the reclassification criteria.

Extended implementation

- Extends the implementation period for the expanded contingency framework to 12 months (9 March 2023), to allow AEMO time for meaningful consultation with relevant stakeholders on integrating indistinct events into the reclassification criteria.

Other measures

- Clarifies the functions of the Reliability Panel in relation to contingency event management so that it can provide guidance on AEMO's ex-post and ex-ante management of contingency events where it considers it to be necessary.

As noted in the draft determination, the AEMC can review the contingency framework in the NER at its discretion and intends to conduct a review within five years of implementation to ensure the framework functions as intended.

The Commission's reasons for making this final rule determination are set out in section 2.4. Further information on the legal requirements for making this final rule determination is set out in Appendix B.

26 Clause 4.2.3A(c) of the NER.

27 Clause 4.2.3A(i) of the NER.

28 Clause 5.20A.1 of the NER.

2.2 Rule making test

2.2.1 Achieving the NEO

Under the NEL, the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO).²⁹ This is the framework that the Commission must apply.

The NEO is:³⁰

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

2.2.2 Making a more preferable rule

Under s.91A of the NEL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NEO.

In this instance, the Commission has made a more preferable rule. The reasons are summarised in section 2.4.

2.2.3 Rule making in relation to the Northern Territory

Under the Northern Territory legislation adopting the NEL, the Commission may make a differential rule if, having regard to any relevant MCE statement of policy principles, a different rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule. A differential rule is a rule that:

- varies in its term as between:
 - the national electricity system, and
 - one or more, or all, of the local electricity systems, or
- does not have effect with respect to one or more of those systems

but is not a jurisdictional derogation, participant derogation or rule that has effect with respect to an adoptive jurisdiction for the purpose of s. 91(8) of the NEL.

As the final rule relates to parts of the NER that currently do not apply in the Northern Territory, the Commission has not assessed the rule against the additional elements required by the Northern Territory legislation.³¹

²⁹ Section 88 of the NEL.

³⁰ Section 7 of the NEL.

³¹ From 1 July 2016, the NER, as amended from time to time, apply in the NT, subject to derogations set out in regulations made under the NT legislation adopting the NEL. Under those regulations, only certain parts of the NER have been adopted in the NT. (See the AEMC website for the NER that applies in the NT.) National Electricity (Northern Territory) (National Uniform Legislation) Act 2015

2.3 Assessment framework

In assessing the rule change request, the Commission has considered whether the proposal set out in the rule change request is likely to support and improve the security and resilience of the power system through expanding the existing contingency framework to the risk of manage indistinct events.

The Commission has applied the following principles in its assessment of the COAG Energy Council's rule change request against the NEO:

- **Efficient investment and operation of the power system:** Regulatory frameworks should encourage efficient investment and operation for the benefit of consumers and address potential barriers or burdens. The rule should provide transparency and predictability to enable AEMO as system operator and market participants to respond to, and manage, changing system dynamics in operational timeframes.
- **Technology neutrality:** Regulatory arrangements should be designed to take into account the full range of potential market and technological solutions. They should not favour a particular technology nor be designed to meet the needs or requirements of specific technology in the operational management of indistinct events.
- **Flexibility:** Regulatory arrangements must be flexible to changing market, system and external conditions. They must be able to remain effective in achieving security outcomes over the long-term in a market and environment that is rapidly changing. Where practical, regulatory or policy changes should not be implemented to address issues that arise at a specific point in time and should be flexible enough to accommodate changing circumstances across the NEM. They should be effective in facilitating security outcomes where required, while not imposing unnecessary market or compliance costs on participants.
- **Risk allocation:** The allocation of risks, the accountability for investment and operational decisions should rest with those parties best placed to manage them. The arrangements that relate to system security should recognise AEMO's responsibilities and technical understanding as the system operator, meaning it is best placed to manage the security of the system. Market participants who wish to help manage these risks should be able to engage with AEMO through consultation processes.
- **Effective governance:** The governance arrangements for enhancing operational resilience to indistinct events should promote transparency and be predictable, so that market participants can anticipate AEMO's actions and make informed and efficient operational decisions, as well as consider implications for their investment decisions. They should also clearly allocate responsibilities and have transparent objectives to facilitate accountability. Simple frameworks tend to produce predictable outcomes that are easy to implement, understand and participate in.
- **Implementation considerations:** Implementation of arrangements to enhance operational resilience to indistinct events should impose minimal costs, be simple, and support efficient use of the framework. The use of existing frameworks can utilise established processes and avoid the potential for duplication, inconsistency, and unnecessary administrative burden on AEMO and market participants. Implementation

arrangements should also promote transparency and predictability through meaningful consultation and clear, consistent reporting for market participants on AEMO's operational management of indistinct events.

2.4 Summary of reasons

In assessing whether the more preferable final rule (final rule) will, or is likely to, contribute to the achievement of the NEO, the Commission has balanced the power system needs and associated benefits of improving system security and resilience in the operational timeframe against the cost of delivering those outcomes.

In making its determination, the Commission has taken into account the proponent's views, stakeholder submissions, technical working group discussions and technical advice provided by AEMO on its operational management of contingencies, risk management, and use of the reclassification criteria. Having regard to this, the Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NEO for the following reasons:

- The final rule would provide flexibility for AEMO to increase power system resilience to extreme abnormal conditions within a robust transparency and governance framework that would ensure it does so at least cost. Amending the current framework for AEMO's efficient management of reclassified contingency events in the operational timeframe would be lower cost than developing and introducing a new, parallel framework as outlined in the rule change proposal.
- Implementing the rule via the existing contingency events framework, rather than through a separate framework, would eliminate the need for AEMO to choose between different frameworks to manage events during operations and reduces complexity in the NER. This implementation approach should contribute to lower costs and provide stakeholders with greater clarity regarding AEMO's operational management of contingency events. It will also allow for the existing governance arrangements to apply to AEMO's decisions to reclassify and manage the risks posed by indistinct events.
- Requiring AEMO to only undertake targeted consultation (rather than full public consultation) when updating the reclassification criteria reduces regulatory burden on AEMO and stakeholders, ensures the consultations can effectively explore the necessary technical detail, and is consistent with consultation under the existing contingency event framework.

For these reasons the Commission considers the final rule will better meet the NEO than the proponent's proposed rule. Implementation arrangements will be lower cost, simpler and more transparent than establishing a new framework. Allocating the risks associated with indistinct events to AEMO while providing flexibility in approach will allow AEMO to manage threats to the power system more efficiently in the operational timeframe. Using existing governance arrangements, supported by transparency through reporting obligations, should also provide a simpler framework that is easier to understand and participate in.

An AEMC review of the contingency event framework would also help confirm the framework is functioning in line with the NEO and identify any potential areas for improvement. This

may also help improve market, regulator and consumer confidence in the framework. Stakeholders would have the opportunity to contribute to this review.

Below outlines the rationale for the elements of the final rule. Further detail on these elements can be found in chapter 3.

Integrating AEMO's management of indistinct events into the existing contingency event framework

Integrating AEMO's management of indistinct events into the existing contingency event framework provides a simple and efficient means of using established processes for managing such events in the operational timeframe. Implementing this rule via the existing contingency events framework rather than through a separate framework reduces complexity in the NER and creates lower costs for consumers, while also eliminating the need for AEMO to choose between different frameworks during operations. This is achieved through expanding the definition of 'contingency event' to include all 'plant' that forms part of the power system as well as the broader impacts of sudden and unplanned changes in energy flow. Rather than replace the current definition entirely, these changes update the existing definition for the modern power system, which provides a level of flexibility for AEMO to manage the NEM's transition.

The final rule also introduces a new general principle for maintaining the power system, which requires AEMO's reclassification decisions and mitigation actions to be predictable consistent with the reclassification criteria, unless this is not practicable. This is a change from the approach in the draft rule which proposed to amend AEMO's power system security responsibilities to include an additional responsibility 'to assess the possible impact of credible contingency events and determine the appropriate response to maintain system security where it is practicable to do so'. Instead of trying to define an 'emergency measure' under the rule, the final rule establishes the principle that AEMO may only use its discretion when it is not practicable to manage the risks posed by abnormal conditions in a manner consistent with the reclassification criteria. This change also reflects engagement with AEMO to ensure the proposed outcome is consistent with, and can inform, its operational practices.

Allowing for discretion to be used as an 'emergency measure' is broadly consistent with the mechanism referred to as 'ad hoc' in the rule change request. It is expected to apply where abnormal conditions pose a credible threat to the power system that does not arise from the failure of a single specific asset or where the specific asset(s) involved are not reasonably identifiable ex-ante. This approach leverages established processes to balance efficiency and effectiveness under uncertainty while giving AEMO the ability to manage indistinct events and improve the resilience of the system. Amendments to clarify arrangements for managing indistinct events provide stakeholders with greater transparency and predictability.

Extending existing reporting arrangements to cover all instances of reclassification

The management of indistinct events will be integrated into the current contingency event framework. The use of existing reporting means AEMO is not required to develop new reporting mechanisms for reclassified contingency events, stakeholders are familiar with the

established mechanisms, and relevant information can be collated together. But the final rule makes minor amendments to AEMO's six-monthly reporting on the reclassification framework to provide greater clarity and consistency to promote predictability and transparency. It also requires AEMO to consider whether experience from reclassifications suggests amendments are required to the reclassification criteria. Effectively this means that there is no reporting obligations specific to indistinct events as risks posed by these events will be directly captured through existing reporting requirements. Considering events related to priority risks as part of the GPSRR would also inform a process of learning and constant improvement for AEMO. These learnings would then feed back into the contingency event framework through updates to the reclassification criteria, enhancing the ability for AEMO to manage future indistinct events.

Adding a specific report for the emergency measure

The final rule establishes a specific reporting requirement for AEMO following its use of the emergency measure — the Report on the Emergency Measure (REM). Following feedback from AEMO and stakeholders, the Commission decided AEMO would not be required to publish a Reviewable Operating Incident report, which is focused on how the events played out following use of the emergency measure as originally proposed in the draft rule.

Reviewable operating incidents relate to events on the power system or actions taken by AEMO that significantly influence market outcomes. The requirement to collect and consider data from market participants can make these reports administratively burdensome and the reports are focused on ex-post impacts rather than AEMO's ex-ante decisions. Instead, AEMO would be required to publish a standalone report (i.e. the REM) as soon as practicable after the event outlining AEMO's decisions and actions to manage a perceived threat before it materialises. This would build on reporting in the relevant Market Notices and outline the risks to the power system that AEMO identified, as well as the actions it took in response to abnormal conditions not captured within the reclassification criteria. AEMO should be able to publish this report in a more timely manner as it will not be required to analyse whether the event materialised and the potential impact of the event and its actions through the REM. The final rule therefore balances the importance of providing AEMO with the operational flexibility to manage risks to the power system with proportionate and transparent reporting for participants.

This reporting and its intentions are consistent with the AER's views on the importance of balancing flexibility and transparency, which outline that:³²

"Where the Rules provide parties such as AEMO with the flexibility to apply judgement and expertise, this power is usually accompanied by a requirement to establish a decision-making process in consultation with affected participants and by obligations ensuring transparency of decision-making. This recognises that participants require certainty and transparency around decisions that may fundamentally impact their investment and operational outcomes, as well as the overall efficiency of the market."

³² AER, The Black System Event Compliance Report, December 2018, p. 25

Extending the implementation of the final rule from 6 to 12 months

Extending the implementation timeframe to 12 months (from the date the rule is made) will provide AEMO with time for meaningful consultation with stakeholders for the initial integration of indistinct events into the reclassification criteria. This will ensure that the list of potential abnormal conditions, as well as actions taken to manage the risks they present, is as extensive as possible. This should ensure that the emergency measure operates as intended, as a true last resort for AEMO when unprecedented conditions arise.

Leveraging existing governance arrangements and abilities of the Reliability Panel, the AER, and AEMC

The final rule also utilises the existing governance arrangements and abilities of the Reliability Panel, the AER, and AEMC. The final rule clarifies that the Reliability Panel has the ability to create guidelines for AEMO's ex-ante and ex-post management of contingency events if it considers guidelines to be necessary. Following an indistinct event, the AER can choose to conduct reviews into compliance with the rules at any point — providing another layer of governance to ensure the functionality of this framework. The Commission has the power to initiate reviews into the operation and effectiveness of the NER at its own discretion. Using this existing power, the Commission intends to review this framework within five years of implementation to ensure it continues to achieve the NEO as effectively as possible.

3 ELEMENTS OF THE FINAL RULE

This final rule includes the following key elements:

- integrating AEMO's management of indistinct events into the existing **contingency event framework**
- **reporting arrangements** to provide stakeholders with transparency and predictability for AEMO's operational use of the contingency event framework
- **implementation** of the expanded contingency framework and reporting arrangements
- **governance** to oversee the use of the amended contingency event framework to manage the risks presented by indistinct events.

The following sections set out the Commission's considerations in relation to each of these elements of the final rule. These sections focus on how stakeholder submissions to the draft rule determination, as well as additional information and engagement with the technical working group, as well as with AEMO to more closely accord with their operational practices, shaped the final rule determination. Information on how stakeholder submissions were considered earlier in the process is outlined in the Indistinct Events draft rule determination.³³

3.1 Contingency event framework

The draft rule proposed to integrate AEMO's management of indistinct events into the existing contingency event framework through three key steps:³⁴

1. Amend the definition of a 'contingency event' to ensure indistinct events can be captured.
2. Review the reclassification criteria to ensure it covers known indistinct events and ensure that the power system operating procedures communicate AEMO's likely actions to manage them.
3. Explicitly allow AEMO the discretion to use an emergency measure to respond to events where it was not practicable for AEMO to use contingency event analysis.

In the draft rule, the **definition** of 'contingency event' was proposed to be amended to clarify that it is the risk to the power system, not the event causing that risk, which AEMO should manage. It was also proposed to be expanded from simply failure or removal from service of assets to include the sudden and unplanned changes on the power system that could also present a risk to power system security. Finally, a new definition of 'plant' was proposed to be included to specify that risks posed to all elements of the power system were in scope, not just generation and transmission assets.

The **reclassification criteria** already covered a number of abnormal conditions that may make non-credible contingency events more likely, the threats posed by these events, and indications of actions AEMO might take to mitigate these threats. However, the Commission considered in the draft determination that it was important to review the reclassification

³³ This is available on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

³⁴ Chapter three of the draft determination provides greater detail on the proposed framework in the draft rule.

criteria in light of the amended definition of contingency event to ensure the criteria are as complete as possible. The draft rule also proposed to require AEMO to ensure the actions it may take to manage the events are clearly communicated in the power system operating procedures. The draft rule proposed to maintain the requirement for AEMO to consult with relevant stakeholders on these documents to ensure they are as comprehensive as possible. This would also provide stakeholders with the opportunity to engage with AEMO to identify alternative options to mitigate risks.

The discretionary use of the **emergency measure** was enabled through the proposed addition of a power system security responsibility in the draft rule. This proposed responsibility required AEMO to use 'contingency event analysis' where reasonably practical to manage credible contingencies but allows other reasonable practices or methodologies to be used when it is not. The intention was to ensure that the regulatory framework should never prevent AEMO from managing credible risks to power system security it has identified. As discussed in section 3.2, this significant discretion was to be balanced with reporting obligations to provide transparency as to how it is used.

3.1.1 **Proponent's view in its rule change request**

COAG Energy Council proposed for indistinct events to be formally defined under the NER and for frameworks to be created to manage the risks these events pose to the power system.³⁵ There would be different frameworks depending on whether the indistinct events are perceived to be standing or condition-dependent.

The proposed definition of 'indistinct event' would relate to an event affecting the power system which could occur over time, be widespread or affect multiple power system elements, and involve non-credible failure or removal from service of elements that cannot be reasonably identified. The definition of 'contingency event' would remain unchanged.

The proponent proposed that the framework for standing indistinct events that are not perceived to be a strong function of conditions would be the existing protected events framework. The proposal would clarify that indistinct events can be protected events. The protected events framework would remain relatively unchanged, although a minor amendment would introduce an option to expedite the approvals process for events that are perceived to be not controversial or are otherwise straightforward.

The proponent proposed that the framework for condition-dependent indistinct events which are a function of abnormal conditions would be called 'protected operation'. It was proposed that protected operation would cover operational management of pre-defined events and ad-hoc events. Pre-defined events would be identified through the GPSRR process and AEMO would publicly consult on and establish criteria to specify the abnormal conditions and the approach to managing the risk presented, including actions to prevent a cascading failure. The proposal was that ad-hoc protection would allow AEMO to manage events not captured by the criteria or use other actions as an emergency measure.

³⁵ A high level summary of this framework is provided on the first page of the rule change request with more detail in the subsequent pages for the 'B. Description of the rule proposed to be made' section.

3.1.2 AEMO's submission to the draft determination

AEMO generally supported the Commission's draft determination to integrate indistinct events under the contingency event and reclassification framework.³⁶ AEMO's submission proposed a minor amendment to move the actions it may take to manage the risks posed by indistinct events from the power system operating procedures to the reclassification criteria.³⁷ This would provide stakeholders with one document to access information on indistinct events, as well as allow AEMO to focus consultation on a single document.

However, in their submission to the draft determination, AEMO raised a number of concerns about how the emergency measure was captured in the rule. In particular, AEMO noted it considered that creating the distinction between management of credible contingencies using tools like the reclassification criteria and using significant discretion as a power system security responsibility risked duplication of other obligations. AEMO proposed this responsibility be deleted from the rule. AEMO also raised concerns with framing these tools as 'contingency event analysis', noting that this term is commonly understood to refer to the operational contingency analysis tool that forms part of AEMO's energy management system (EMS).³⁸ AEMO proposed that 'contingency event analysis' be replaced with a reference to whether it can reasonably apply constraints that identify specific power system elements at risk from a given set of abnormal conditions.

3.1.3 Stakeholder submissions to the draft rule

Other stakeholder submissions were generally supportive of the draft determination and rule.³⁹ This general support was reiterated at the Technical Working Group meetings on 30 November 2021 and 19 January 2022.⁴⁰ A number of stakeholders noted that this amendment should alleviate any concerns or uncertainty that the current framework may not sufficiently allow AEMO to manage indistinct events ex-ante.⁴¹ Submissions also suggested some changes to the draft rule and these are outlined below.

Stakeholders supported expanding the definition of 'contingency event' to capture all elements on the power system and events that do not necessarily involve complete failure or removal from service of an element but still represent a threat to power system security. But a number of submissions proposed a qualification be added to indicate the magnitude of the 'sudden and unplanned change' which would represent a contingency event, because the power system is becoming more variable given the transition underway.⁴² CS Energy and Shell Energy also suggested that 'load' should be explicitly referenced in the definition of 'plant' underpinning the revised contingency event definition.⁴³

³⁶ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.1

³⁷ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.3

³⁸ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.2

³⁹ The nine stakeholder submissions received are available on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

⁴⁰ The summaries from these TWG meetings are also available on the project webpage

⁴¹ See for example submissions to the draft determination from CS Energy and the AER

⁴² See for example submissions to the draft determination from CS Energy, Shell Energy and the AER

⁴³ See CS Energy and Shell Energy submissions to the draft determination

Stakeholders noted that updating the reclassification criteria following the amendment to the definition of contingency event should provide market participants with confidence of expected and transparent management and ensure AEMO only uses the emergency measure when there is no alternative.⁴⁴ In particular, the Australian Aluminium Council noted the value of transparency, stability and predictability.⁴⁵ However, while some stakeholders agreed that targeted consultation was appropriate to review the updates,⁴⁶ others suggested consultations should be open to all market participants given the impact of actions to manage indistinct events will likely influence market outcomes.⁴⁷ It was also proposed that distribution network service providers (DNSPs) be added to the list of relevant stakeholders for targeted consultation given the definition of plant includes elements on their networks.⁴⁸ A few stakeholders also noted potential improvements to AEMO's consultation processes, such as publication of feedback received noting how AEMO responded.⁴⁹

Stakeholders also supported AEMO noting the actions it is likely to take in the power system operating procedures. The Australian Aluminium Council noted that improved investment signals can help smelters respond more efficiently to system needs and noted AEMO referenced their load shedding as part of the efforts to manage the power system following the lightning strike which affected QNI on 25 August 2018.⁵⁰ TasNetworks also noted that stakeholders can respond through investment or information provision if they are able to understand the issues AEMO foresees and can put forward proposals for how the situation could be managed alternatively in the future.⁵¹

Finally, some stakeholders suggested that the word 'must' should be inserted into AEMO's power system security responsibilities to emphasise that AEMO should only deviate from the "codified" framework as a last resort.⁵²

3.1.4

The Commission's conclusions

The Commission has proceeded with the position in the draft rule determination to amend the existing contingency event framework, require the reclassification criteria to be reviewed on the basis of the amended definition, and enable AEMO to use its discretion to manage credible contingency events where required (an emergency measure). However, the Commission has changed some elements of how the amended framework is captured in the final rule. These changes to the manner in which policy positions have been translated into

⁴⁴ See for example submissions to the draft rule from CS Energy and TasNetworks

⁴⁵ Australian Aluminium Council, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.3

⁴⁶ See for example submissions from AGL and AEMO

⁴⁷ See for example submissions to the draft rule from Shell Energy and CS Energy

⁴⁸ See for example submissions to the draft rule from ENA and TasNetworks

⁴⁹ Some of these comments related to broader issues than just consultation on the reclassification criteria as discussed in Appendix A

⁵⁰ AEMO's reviewable operating incident is available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2018/Old---SA-Separation-25-August-2018-Incident-Report.pdf

⁵¹ TasNetworks, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.1

⁵² See for example submissions to the draft rule from Shell Energy and CS Energy

the final rule are intended to address advice from AEMO on practical considerations for how the framework would operate, stakeholder submissions and TWG commentary.

These changes can be summarised as:

- Amending the revisions to the **definition of 'contingency event'** to integrate indistinct events
- Changing the proposed power system responsibility to use transparent and predictable processes unless not otherwise practicable to a **principle for maintaining power system security**
- Amending the revisions to the **reclassification criteria requirements** to provide a clearer reference for stakeholders' expectations of AEMO's likely assessment of risks posed by abnormal conditions and actions to mitigate these risks
- Other **minor amendments** as a consequence of these drafting changes (see Appendix C).

The final rule does not amend the protected events framework. But it expands the definition of contingency event and therefore the definition of non-credible contingency event underpinning this framework. This means that indistinct events can be protected events, should AEMO apply for the Reliability Panel's approval to declare an indistinct event as a protected event. The final rule should not create a barrier or provide a deterrent to AEMO using the protected event framework as it considers appropriate.

Amending the revised definition of 'contingency event'

As proposed in the draft determination, revising the definition of 'contingency event' will help integrate indistinct events into this framework. Stakeholder submissions proposed further amendments to the definition, for example for load to be explicitly referenced in the definition of plant underpinning it. However, the definition of plant was not amended to include load, as 'plant' is intended to define the power system in which AEMO is responsible for managing risks. Should load be included in the definition of 'plant', there is a risk that it implies that AEMO should be managing assets behind the meter rather than just the impact of sudden and unexpected changes in load which threaten power system operation. However, by replacing the reference to 'loading level' with the elements of this definition under the NER, stakeholders are given explicit guidance that sudden and unplanned changes to consumption may be considered contingency events.

Similarly, a qualification like 'significant' was not introduced into the definition as this risks introducing ambiguity and subjectivity in determining what events meet this threshold, which may unnecessarily curtail AEMO's management of indistinct events. Likewise, introducing a specific metric may also unnecessarily curtail AEMO's management of indistinct events and, as noted in submissions, the purpose of this rule change is to clarify that AEMO can always act when power system security is under threat.

The revised definition is as follows:

A **contingency event** means an event on the *power system* which AEMO expects would be likely to involve:

- (1) the failure or removal from operational service of *plant*; or
- (2) a sudden and unplanned change to the level of output, consumption or power flow of *plant*.

Moving from a responsibility to a principle for maintaining power system security

The Commission notes the concerns raised in AEMO's submission to the draft determination that including the distinction between indistinct events that can be captured through frameworks like the reclassification criteria and those which are unprecedented and require mitigation which may not be captured by these frameworks in the power system responsibilities could be seen as potentially duplicative.⁵³ The Commission also notes AEMO's concerns that 'contingency event analysis' may be interpreted in a more limited way than intended in distinguishing when discretionary use of the emergency measure is allowed.

As noted in section 3.2.3, submissions to the draft determination recognised that the rule change provides AEMO with significant discretion to manage all credible risks to power system security and it is important the regulatory framework ensures this discretion is only used as a last resort. This means that it is not possible to simply remove this responsibility. However, the Commission considered it appropriate to change this requirement from a power system responsibility to a principle for maintaining power system security. The Commission also engaged further with AEMO to ensure the proposed outcome is consistent with, and can inform, its operational practices.

By establishing a new principle for maintaining power system security,⁵⁴ the Commission is able to move away from defining different approaches such as contingency event analysis or use of constraints. Instead, the principle focuses on AEMO managing reclassification decisions and measures to mitigate the risks identified in a reasonably predictable manner which is consistent with the reclassification criteria. This enables AEMO to use its discretion outside of the reclassification criteria if required, which is balanced with additional reporting, as discussed in the next section. However, by using the caveat 'where practicable,' the principle should ensure that AEMO's discretion is only used when there are no other practicable alternatives under the existing frameworks. AEMO's operational use of the reclassification criteria, as well as the discretionary use of the emergency measure and associated reporting obligations can then be tied to this principle.

Amendments to the reclassification criteria

The reclassification criteria framework has been amended to reflect stakeholder feedback. For example, AEMO's proposal to move the actions likely to manage the risk of an indistinct event

⁵³ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.3

⁵⁴ NER cl. 4.2.6(h) in the final rule

to the reclassification criteria from the power system operating procedures has been adopted.⁵⁵ However, while the Commission appreciates the desire to ensure that the reclassification criteria remain up to date in light of experience and learning, it did not consider it necessary to reduce the requirement to review the criteria from a minimum of two years to every six months.⁵⁶ This is because there are a number of prompts within the reporting framework (see section 3.2.4) to ensure changes to the reclassification criteria are considered and made as appropriate.⁵⁷

The requirements for the reclassification criteria contents have also been amended to inform stakeholder expectations of AEMO's decisions and actions. Previously AEMO was required to include possible impacts of abnormal conditions and actions in relation to a particular class or classes of network element, generating unit or other connected plant. This requirement was replaced in the final rule with a requirement for AEMO to provide information about the risks, impacts on different elements, measures in relation to these elements, and other measures AEMO may be likely to take.⁵⁸ By providing this narrative, AEMO will provide stakeholders with a meaningful reference to understand the likely decisions and mitigation measures when AEMO notes abnormal conditions in market notices.⁵⁹ This predictability and transparency should help address concerns raised in stakeholder submissions.

Additionally, the Commission considered potential amendments to the consultation requirements for any reviews or amendments to the reclassification framework under NER clause 4.2.3B(d)(1). This clause allows for targeted consultation but lists 'relevant stakeholders' AEMO must consult. To address stakeholder concerns in submissions to the draft determination that DNSPs should be included in consultations as they may be impacted by the expanded definition of 'plant', the final rule included DNSPs in this list of relevant stakeholders. The Commission continues to consider targeted consultation appropriate given the complexity of the issues involved. It is important that AEMO is able to engage efficiently and meaningfully in the detail of the risks to power system security, as well as the most effective actions to mitigate these risks. This should help ensure the updated reclassification is as complete as possible, given current information and understanding. As noted in section 3.3.2, even with stakeholders who engage with AEMO on threats to the power system, as well as the broader context of AEMO's operations, it is expected to take 12 months to thoroughly review the reclassification criteria to ensure the expanded definition of 'contingency event' is captured.

The Commission considers that stakeholders' interest in engaging with AEMO on possible alternative actions as noted in section 3.1.3, could be achieved through consultation on revisions to the reclassification criteria. The Commission also notes that AEMO is also able to improve its stakeholder engagement practices outside the consultation requirements in the

⁵⁵ NER cl. 4.2.3B(a)(2) in the final rule

⁵⁶ NER cl. 4.2.3B(b)

⁵⁷ NER cl. 4.2.3A(i)(2)(ii) in the final rule

⁵⁸ NER cl. 4.2.3B(a)(2) in the final rule

⁵⁹ The requirements for the reclassification criteria are set out in NER cl. 4.2.3B(a) in the final rule

rules. In fact, AEMO is currently making efforts to enhance its stakeholder engagement,⁶⁰ and there is a current rule change process underway for improving consultation procedures in the Rules.⁶¹ These measures should address stakeholder suggestions for improvements to AEMO's consultation procedures (see Appendix A).

3.2 Reporting arrangements

Under the draft rule, in addition to expanding the contingency event and reclassification criteria to integrate indistinct events, it also proposed to expand the reporting framework to incorporate operational actions to manage the threat of indistinct events to power system security. The draft rule also proposed to mandate the use of the reviewable operating framework to provide transparency around AEMO's discretionary use of the emergency measure. The reporting arrangements under the draft rule aimed to provide transparency and as much predictability as is practicable for market participants to understand AEMO's management of indistinct events. This is important as the impact of actions to mitigate the risk of indistinct events may influence market outcomes.

The figure below illustrates the transparency arrangements proposed in the draft rule to support operational management of the risk of indistinct events. The draft rule proposed that once a credible threat to the power system has been identified and AEMO has reclassified the contingency event:

- Regardless of whether the risk and actions to mitigate are included in the reclassification criteria, AEMO must issue a **market notice** to inform market participants of the abnormal conditions and the implications. AEMO must update market notices as new information that is material to its consideration comes to light. AEMO also has requirements to notify market participants when it decides to reclassify a non-credible contingency event as credible based on the abnormal conditions and to notify when it considers the event is no longer reasonably possible.⁶²
- If the event is included in the reclassification criteria, AEMO can choose whether it is of enough significance to the operation of the power system to be treated as a **reviewable operating incident**. However, under the draft rule AEMO would be required to provide a reviewable operating incident report every time the emergency measure is used.⁶³
- Every six months AEMO must **review of all its reclassification decisions** including how the reclassification criteria was used in making these decisions and relevant trends in reclassification decisions. The draft rule proposed to require AEMO to also consider the appropriateness and effectiveness of the reclassification criteria and measures to maintain power system security.⁶⁴

60 AEMO has set stakeholder engagement as one of its four strategic priorities and established initiatives to improve engagement. See AEMO's news update for more information: <https://aemo.com.au/en/newsroom/news-updates/aemo-implementing-enhanced-stakeholder-engagement-initiatives>

61 See the project webpage for more information on this rule change: <https://www.aemc.gov.au/rule-changes/improving-consultation-procedures-rules>

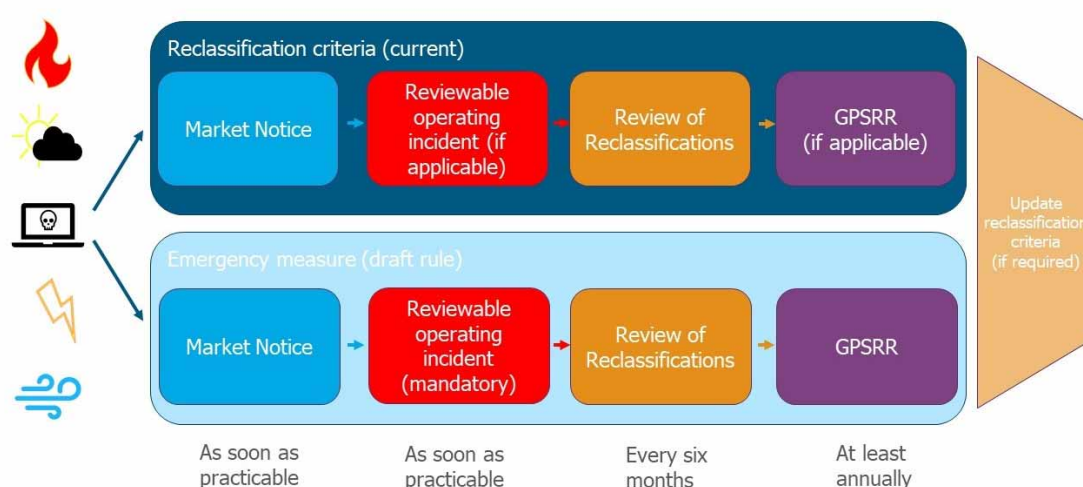
62 The requirements for market notices are outlined in NER cl. 4.2.3A

63 The reviewable operating incident is outlined in NER cl. 4.8.15

64 The requirements for the six month reviews are outlined in NER cl. 4.2.3A(i)

- AEMO may choose to consider events included in the reclassification process as part of its annual **General Power System Risk Review (GPSRR)** process. But the draft rule proposed to require AEMO to consider events which required management with the emergency measure in determining its prioritised set of risks for the GPSRR.⁶⁵

Figure 3.1: Reporting framework for indistinct events in the draft rule



3.2.1 Proponent’s view in its rule change request

COAG Energy Council proposed that the existing reporting framework apply for the standing and pre-defined condition-dependent indistinct events.⁶⁶ But under its proposal, when AEMO uses its discretion for the emergency measure it would be required to report publicly, and to the Reliability Panel, as soon as practicable following the event. At a minimum, the reporting would cover the nature of the abnormal conditions and why the emergency measure was justified, how AEMO mitigated the risk presented, the direct costs of using the emergency measure, and actions that may be taken in the future. Following the event, AEMO would be required to explicitly review the risks managed using the emergency measure in the next GPSRR to reflect on the experience and ensure learning is fed back into its processes.

3.2.2 AEMO’s submission to the draft determination

AEMO generally supports using the existing reporting framework but questioned the requirement to use the reviewable operating incident and GPSRR frameworks every time is uses the emergency measure.⁶⁷ AEMO considers this may not be effective or efficient in its submission to the draft determination. In AEMO’s opinion if the event does not actually occur,

⁶⁵ The GPSRR framework is outlined in NER cl. 5.20A.1

⁶⁶ E.g. page 4 of the rule change proposal notes that requirements involving the issuance of market notices are proposed to remain the same

⁶⁷ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.4

it would not be understood to be a reviewable operating incident. AEMO also considers that being required to consider the use of the emergency measure in the GPSRR process may distort the broader GPSRR process.

AEMO proposed in its submission that its six-monthly review of reclassification decisions should be expanded to capture the decision to use the emergency measure. This reporting is likely to be more timely than a reviewable operating incident report and could provide a specific link back to the reclassification criteria if it were required to consider how the conditions and actions could be incorporated into the criteria.

3.2.3 Stakeholder submissions to the draft rule

There was strong stakeholder support for using the existing reporting framework for all reclassified contingency events, including those relating to indistinct events.⁶⁸ The AER noted this reporting framework should provide market participants with transparency over how the framework will operate.⁶⁹ Other submissions noted that requiring market notices for all reclassification decisions ensures timely provision of information for market participants and enables them to manage their risk exposure.⁷⁰

Stakeholder submissions noted that the discretionary use of the emergency measure may materially affect market participants and could result in unusual outcomes, so AEMO should be subject to strict transparency requirements.⁷¹ However, stakeholder submissions noted that stakeholders did not consider mandating the use of the reviewable operating incident framework to be the right mechanism to provide transparency for the emergency measure.⁷² The reviewable operating incident framework is seen to focus on the occurrence of events, which means it may take AEMO nine to ten months to collect and consider the information required to report.⁷³

CS Energy and Shell Energy proposed including reporting on the emergency measure in the six monthly review of reclassifications and increasing their frequency to three months,⁷⁴ while AGL proposed a standalone report on the discretionary use of the emergency measure with further narrative provided through the six monthly reviews.⁷⁵ There was general agreement that this reporting should be aligned with reporting on the use of the reclassification criteria.⁷⁶

Regardless of the format, stakeholders described the objectives and function they considered important for the reporting on the emergency measure. For example, the reporting should help stakeholders understand the issues AEMO foresaw, the actions taken to manage the risk

68 See for example submission to the draft determination from the AER, AGL, SA Department for Energy and Mining, CS Energy and Shell Energy

69 AER, 2022, submission to the draft determination, p.1

70 See for example submissions to the draft determination from AGL, CS Energy and Shell Energy

71 See for example submissions to the draft determination from AGL, CS Energy and TasNetworks

72 See for example submissions to the draft determination from AGL and CS Energy

73 See for example submissions to the draft determination from AGL and Shell Energy

74 CS Energy, 2022, Submission to the draft determination, p.8; Shell Energy, 2022, Submission to the draft determination, p.2

75 AGL, 2022, Submission to the draft determination, p2

76 See for example submissions from AGL, CS Energy, and Shell Energy

of reclassified contingency events, how this was outside the reclassification criteria, and should be published shortly after the event.⁷⁷

A number of stakeholders noted this information would help them manage the risk the abnormal conditions and AEMO's ex-ante mitigation posed, as well as potentially respond to support the system.⁷⁸ The Australian Aluminium Council noted that some smelters can respond by shedding around 600MW of load in less than a minute to help system operation, although consecutive interruptions in a short timeframe can make this more challenging.⁷⁹ TasNetworks noted this would enable market participants to help reduce the impact of future reclassifications through investment or information provision.⁸⁰

A few submissions explicitly supported using the GPSRR framework to create an informed process of learning and constant improvement for the reclassification criteria to support AEMO's management of future indistinct events.⁸¹ CS Energy noted that these reporting arrangements will be invaluable to stakeholders by providing examination of the issues, rather than just a statistical summary.⁸²

3.2.4

The Commission's conclusions

The Commission has maintained its position that indistinct events captured by the updated reclassification criteria will be covered by the related framework. This includes maintaining the amendments proposed in the draft rule to require AEMO to appraise the effectiveness of the reclassification criteria and the actions taken to maintain power system security, as well as to require (rather than to allow) AEMO to analyse reclassification trends.⁸³ This reporting should support transparency and predictability for AEMO's management of known abnormal conditions which may make contingency events more likely. While indistinct events may involve challenges in identifying the specific asset(s) affected, as well as identifying the specific impact, market participants should have confidence and clarity regarding AEMO's management of these events.

The Commission did not mandate the use of the reviewable operating incident framework for AEMO's discretionary use of the emergency measure as was proposed in the draft rule. Following stakeholder feedback, the Commission has revised the reporting obligations for AEMO's discretionary management of reclassified contingency events.

The final rule replaces the requirement to use the reviewable operating incident reporting framework with an additional, standalone reporting requirement on AEMO in clause 4.2.3A(j)-(k), which is triggered when the measures implemented by AEMO to respond to a credible contingency event could not reasonably have been expected having regard to the

⁷⁷ See for example submissions to the draft determination from AGL, TasNetworks, CS Energy, and Shell Energy, as well as the Summaries from the 30 November 2021 and 19 January 2022 TWG meetings

⁷⁸ See for example submissions from the Australian Aluminium Council, TasNetworks, CS Energy, and Shell Energy

⁷⁹ Australian Aluminium Council, 2022, Submission to the draft determination, p.2

⁸⁰ TasNetworks, 2021, Submission to the draft determination, p.1

⁸¹ See for example submissions to the draft determination from Shell Energy and CS Energy

⁸² CS Energy, 2022, Submission to the draft determination, p.2

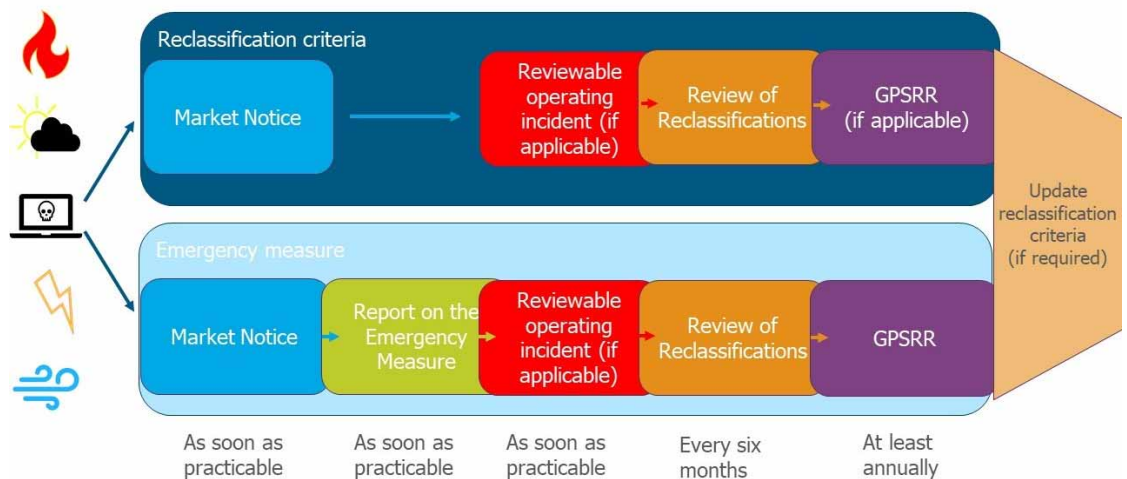
⁸³ NER cl. 4.2.3A(i)

reclassification criteria. The report on the emergency measure (REM) will be required as soon as practicable after the event and require AEMO to:

- list the market notices relevant to AEMO’s discretionary use of the emergency measure;
- inform stakeholders of the risk the abnormal conditions posed to the power system;
- explain how AEMO determined the appropriate actions to mitigate the risk; and
- provide any other information AEMO may consider relevant.

The figure below outlines how the different reporting frameworks will apply to indistinct events within the reclassification criteria and those managed through AEMO’s discretionary use of the emergency measure. It is worth noting that the framing of reports as soon as practicable is in reference to the fact that there may be a diverse range of conditions covered by this reporting. For some of these conditions, it may be simple and straightforward for AEMO to collect and consider the necessary information. But for others it may be more complex, particularly for those unforeseen by both AEMO and stakeholders when updating the reclassification criteria.

Figure 3.2: Reporting framework for indistinct events in the final rule



The Commission considers the reviewable operating incident framework is still appropriate for the reporting on AEMO’s discretionary use of the emergency measure. The draft rule included the emergency measure alongside AEMO’s disconnection of Registered Participant facilities under NER clause 4.8.15(a)(2), rather than with examples of incidents on the power system under NER clause 4.8.15(a)(1). This meant that it would have been the impact of AEMO’s ex-ante management of the risk, rather than whether the risk eventuates, that would have triggered this reporting because, as stakeholder submissions noted, AEMO’s actions can influence market outcomes. The Commission also notes that the Reliability Panel intends to

review its guidelines on this framework later this year which should help address stakeholder misconceptions about this framework being limited only to events on the power system.⁸⁴

As proposed by AEMO, the Commission added a requirement to the six monthly review of reclassification decisions for AEMO to consider whether its experience over the period suggests any changes are required to the reclassification criteria.⁸⁵ This should ensure that required changes do not wait until the biennial review of the reclassification criteria and can be incorporated into operational processes as soon as practicable.

The Commission also considered it important to clarify the policy intention regarding the inclusion of indistinct events where AEMO has used its discretion in the GPSRR framework. Under this framework, AEMO must develop a list of priority risks to the power system for which it will then assess options for future management of the event, the expected costs and time to implement each option, and recommend an option or range of options. The Commission did not propose to require AEMO to consider every event where it has used its discretion and is required to provide a report under NER clause 4.2.3A(j)-(k) as part of the GPSRR. Instead, AEMO must consider whether each event where it has used its discretion should be a priority risk. To reflect this nuance, the final rule was amended to move the reference to this requirement from NER clause 5.20A.1(1)(2A) which outlines the types of risks AEMO must review in the GPSRR to NER clause 5.20A.1(a1) which outlines what AEMO must have regard to when determining what the priority risks are.

3.3 Implementation

The draft rule proposed providing AEMO with six months to update the reclassification criteria to consider the revised contingency event definition, outline likely actions to mitigate risk posed by indistinct events, and consult with relevant stakeholders.⁸⁶ The obligation to update the reclassification criteria would provide stakeholders with transparency and predictability for AEMO's management of known indistinct events. The draft rule proposed that the emergency measure provisions in the rule would commence at the same time as the updated reclassification criteria. Aligning these two mechanisms would ensure that the emergency measure would only be used as a last resort. AEMO's additional reporting obligations would also commence at the same time as the amended contingency event framework.

However, the draft determination set out that this would be a dynamic framework with learning and experience driving updates to the reclassification criteria, reports and consultation on key documents. Insights from AEMO's six monthly review of reclassification decisions, the GPSRR and general learning and experience from reclassifications and broader developments in the power system could all act as triggers to update the reclassification criteria. As mentioned in Appendix A, AEMO also has work underway to improve its stakeholder engagement which could result in improved consultation on the reclassification criteria and more effective reporting.

⁸⁴ The Reliability Panel's forward workplan is published on its dedicated webpage: <https://www.aemc.gov.au/about-us/reliability-panel>

⁸⁵ NER cl. 4.3.2A(i)(2)(ii)

⁸⁶ NER cl. 4.2.3B(D)(1) outlines the relevant stakeholders AEMO must consult to update the reclassification criteria

3.3.1 Proponent's view in its rule change request

COAG Energy Council's rule change request did not include specific discussion in relation to implementation arrangements.

3.3.2 AEMO's submission to the draft determination

AEMO noted that it did not consider six months would be sufficient to meaningfully consult with stakeholders on updates to the reclassification criteria.⁸⁷ AEMO proposed 12 months to undertake these consultations to allow for the necessary collaborative technical process and consultation based on previous experience.

3.3.3 Stakeholder submissions to the draft rule

Generally stakeholder submissions did not include specific discussion in relation to implementation arrangements, although CS Energy proposed that the rule could require a review of the reclassification criteria every six months rather than every two years.⁸⁸

AEMO's proposal to increase the consultation period before the rule commences was supported by the Technical Working Group.⁸⁹

3.3.4 The Commission's conclusions

The Commission agrees that it is important for AEMO to have sufficient time to meaningfully engage with stakeholders on updates to the reclassification criteria that result from amendments contained in the final rule. As such, the final rule has been changed to allow AEMO the requested 12 month period.⁹⁰

However, the Commission did not consider it necessary to require AEMO to update the reclassification criteria on a regular ongoing basis, other than the current two year review requirement in the NER, because this document can be updated on a more regular basis than biennially if AEMO considers it necessary. The final rule also contains prompts in the reporting framework such as the six monthly review of reclassifications and the GPSRR.

3.4 Governance

The draft rule proposed to draw on the existing governance arrangements for a number of market bodies:

- The Reliability Panel can provide guidance on AEMO's management of contingency events where it considers necessary under the NER.⁹¹ The draft rule proposed to add an explicit reference to AEMO's ex-ante actions to clarify that this was in scope for principles and guidelines, should the Reliability Panel consider them necessary. The draft determination

⁸⁷ AEMO, 2021, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.4

⁸⁸ CS Energy, 2022, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.10.

⁸⁹ A summary of the 19 January 2022 Indistinct Events Technical Working Group is available on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

⁹⁰ This is achieved through setting the commencement date as 9 March 2023

⁹¹ NER cl. 8.8.1(a) outlines the functions of the Reliability Panel

noted that the Reliability Panel could also choose to consider the operation of this framework within its Annual Market Performance Review (AMPR).⁹²

- The AER can choose to monitor and enforce compliance with the NER at its discretion when it considers this necessary to ensure confidence in the market.⁹³ The AER exercised this power to undertake its compliance report into the 2016 black system event in South Australia.
- The AEMC has the power to conduct reviews into the operation and effectiveness of the Rules or any matter relating to the Rules.⁹⁴ The AEMC noted its intention in the draft determination to use this power to review the contingency event framework within five years to confirm whether the framework is delivering the intended benefits. The draft determination set out that the AEMC intends to undertake this review within five years of the implementation of the final rule.

3.4.1 Proponent's view in the rule change request

COAG Energy Council proposed some additions to the role of the Reliability Panel as part of the governance arrangements for AEMO's management of indistinct events.⁹⁵ For example, it proposed to introduce an expedited process for non-controversial and straightforward indistinct events to be considered under the protected events framework. Under the expedited process, the Reliability Panel would publish a consultation paper and consult for at least 10 days and if no objections were raised then the Panel would publish a single report outlining its decision.

COAG Energy Council also proposed that the Reliability Panel be given the ability to elect to determine principles and guidelines for protected operation of pre-defined and ad hoc indistinct events and to consider the management of these events in its AMPR. The Reliability Panel would also provide oversight for AEMO's use of the emergency measure for ad hoc events under the protected operation framework.

3.4.2 AEMO's submission to the draft determination

AEMO's submission did not include specific discussion in relation to governance arrangements.

3.4.3 Stakeholder submissions to the draft rule

Stakeholder submissions generally supported the proposed governance arrangements. A number of submissions emphasised support for the Commission's intention to review the operation and effectiveness of the contingency event framework in the rules within five years.⁹⁶ AGL noted that it supported the AEMC's proposed approach as robust governance

⁹² NER cl. 8.8.3(b) requires the Reliability Panel to review the power system in relation to factors such as the reliability standard, power system security standard (including contingency capacity reserves), and guidelines at least once each financial year.

⁹³ The AER's functions and powers are outlined in the NEL s 15 (1)

⁹⁴ This power is outlined in NEL s 45 (1)

⁹⁵ These changes are outlined in relation to each of the frameworks through the section titled 'B. Description of the rule proposed to be made'

⁹⁶ See for examples submissions to the draft determination from the SA Department for Energy and Mining, Shell Energy and CS Energy

arrangements are necessary for the proposed broad discretion for AEMO's use of the emergency measure.⁹⁷

Some stakeholders questioned whether the governance arrangements for the Reliability Panel could be strengthened further. It was suggested that the Reliability Panel could be explicitly tasked with creating principles and guidelines for AEMO's ex-ante management of contingency events, given the potential of these actions to impact the power system and the market.⁹⁸ However, in the January TWG meeting CS Energy and Shell Energy noted this proposal partly reflected a desire to ensure the Reliability Panel is aware of its role in the amended contingency event framework.⁹⁹

3.4.4

The Commission's conclusions

The Commission has proceeded with the governance arrangements outlined in the draft determination. These arrangements will help strengthen stakeholder confidence in the contingency event framework and provide a mechanism for correction should issues be identified over time.

The Commission does not consider it appropriate to require the Reliability Panel to produce principles and guidelines for AEMO's management of contingency events. This is consistent with the Commission noting its intention to review the contingency event framework in the rules within five years of the implementation of the final rule, rather than requiring this to occur in the final rule.

The Reliability Panel has the discretion to balance a number of functions according to its priorities and assessed need. Should the Reliability Panel consider guidelines and principles are required, it has the capacity to initiate this work under the NER.¹⁰⁰ The AEMC has liaised with the Reliability Panel throughout this rule change process.

However, as part of the Commission's efforts to ensure the regulatory framework is flexible and simple with appropriate allocation of responsibilities, we have revisited the drafting for this function. The Commission replaced the list of clauses relating to AEMO's management of contingency events with a reference to 'contingency event management'.¹⁰¹ This clarifies that the Reliability Panel is able to develop and publish principles and guidelines on all elements of AEMO's management of contingency events for the maintenance of power system security, considering the costs and benefits. The Reliability Panel can choose to advise on AEMO's ex-ante decisions and actions associated with the identification and assessment of risks through to any actions taken after the event occurs to restore power system security, as well as associated frameworks like the reclassification criteria.

97 AGL, 2022, Submission to the draft determination on enhancing operational resilience in relation to indistinct events, p.2

98 See CS Energy and Shell Energy's submissions to the draft determination

99 A summary of the 19 January 2022 Indistinct Events Technical Working Group is available on the project webpage: <https://www.aemc.gov.au/rule-changes/enhancing-operational-resilience-relation-indistinct-events>

100 NER cl. 8.8.1(a)(2A) allows for this to occur as a function of the Reliability Panel

101 NER cl. 8.8.1(a)(2a)

ABBREVIATIONS

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMPR	Annual Market Performance Review
BSE	Black System Event
COAG	Council of Australian Governments
Commission	See AEMC
DER	Distributed Energy Resource
DNSP	Distribution Network Service Provider
EMM	Energy Ministers' Meeting
ENCRC	Energy National Cabinet Reform Committee
FCAS	Frequency Control Ancillary Services
GPSRR	General Power System Risk Review
MCE	Ministerial Council on Energy
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National electricity objective
NER	National Electricity Rules
PSSG	Power System Security Guidelines
PV	Photovoltaic
QNI	Queensland-NSW Interconnector
REM	Report on the Emergency Measure
TNSP	Transmission Network Service Provider
TWG	Technical Working Group

A SUMMARY OF OTHER ISSUES RAISED IN SUBMISSIONS TO THE DRAFT DETERMINATION

This appendix sets out the issues raised in the second round of consultation on this rule change request and the AEMC's response to each issue. Submissions to the consultation paper and the Commission's responses were set out in chapter three of the draft determination.

Table A.1: Summary of other issues raised in submissions to the draft determination

STAKEHOLDER	ISSUE	AEMC RESPONSE
Australian Aluminium Council	Large electricity users play a number of roles in the market which are either uncompensated or the mechanism to value them is poorly aligned with operational practices.	The Commission notes that this rule change is targeted and relates to AEMO's ability to reclassify non-credible contingency events and take actions to mitigate the risks these events pose to power system security. The mechanisms to compensate market participants for the impact of these mitigation mechanisms, as well as to procure system support services, is part of the broader regulatory framework, which has not been examined as part of this rule change. However, the Commission notes that there is a rule change process currently underway that is looking to explicitly value, procure and schedule the delivery of system services where needed.
CS Energy	Detail in market notices can be generic and not as informative as desired. A lack of detail in market notices is problematic for identifying what risk is being managed by AEMO, what	The Commission considers it important for AEMO to always engage with stakeholders on potential improvements in market notices. Addressing this issue is better handled between

STAKEHOLDER	ISSUE	AEMC RESPONSE
	reclassification criteria have been met, and subsequent market signals.	these parties rather than through prescription in the rule.
CS Energy	Targeted consultation allows for continued use of the current process undertaken to consult on reclassification criteria. This is perceived to be limited to a restricted group of stakeholders from industry groups and associations. This means market participants outside these groups are perceived to be largely excluded from consultation process and have little transparency about the decision-making process.	<p>The Commission notes these concerns raised in submissions speak to broader concerns about AEMO’s approach to meeting consultation obligations. The rule does not require a specific approach to consultation, but rather that AEMO consider how to engage with all relevant stakeholders in a targeted and meaningful manner.</p> <p>The Commission acknowledges AEMO has a number of initiatives underway to improve stakeholder engagement, including:</p> <ul style="list-style-type: none"> • Setting engaging stakeholder as one of the four strategic priorities that underpin AEMO’s corporate plan • A set of specific enhanced stakeholder engagement initiatives published in February 2021 • The approach trialled to collaboratively resolve challenges through the Connections Reform Initiative
Shell Energy	Targeted consultation is perceived to be a sub-optimal approach from a governance perspective. AEMO’s current practices are seen to only engage with specific stakeholders which may exclude stakeholders impacted by the reclassification decisions and actions who are not members of specific groups.	<ul style="list-style-type: none"> • Also, the Commission is currently progressing the ‘<i>Improving consultation procedures in the Rules</i>’ rule change proposal. The draft

STAKEHOLDER	ISSUE	AEMC RESPONSE
		<p>determination is scheduled to be published on 14 April 2022. This process provides stakeholders with the opportunity to share their views on consultation processes. In addition to considering formal rules consultation procedures, this rule change may have implications for ad hoc consultation processes such as the targeted consultation on the reclassification criteria.</p>

B LEGAL REQUIREMENTS UNDER THE NEL

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this final rule determination.

B.1 Final rule determination

In accordance with s. 102 of the NEL the Commission has made this final rule determination in relation to the rule proposed by the COAG Energy Council.

The Commission's reasons for making this final rule determination are set out in section 2.4.

A copy of the more preferable final rule is attached to and published with this final rule determination. Its key features are described in chapter 3.

B.2 Power to make the rule

The Commission is satisfied that the more preferable final rule falls within the subject matter about which the Commission may make rules. The more preferable final rule falls within s.34 of the NEL as it relates to the operation of the national electricity system for the purposes of the safety, security and reliability of that system (NEL 34(1)(a)(ii)).

B.3 Commission's considerations

In assessing the rule change request the Commission considered:

- its powers under the NEL to make the rule
- the rule change request
- submissions received during first and second round consultation
- the Commission's analysis as to the ways in which the more preferable final rule will, or is likely to, contribute to the NEO.

There is no relevant Ministerial Council on Energy (MCE) statement of policy principles for this rule change request.¹⁰²

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of Australian Energy Market Operator (AEMO)'s declared network functions.¹⁰³ The more preferable final rule is compatible with AEMO's declared network functions because it would not affect those functions.

¹⁰² Under s. 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for energy. On 1 July 2011, the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated council is now called the Energy Ministers Meeting.

¹⁰³ Section 91(8) of the NEL.

B.4 Civil penalties

The Commission cannot create new civil penalty provisions. However, it may recommend to the Energy Ministers' Meeting that new or existing provisions of the NER be classified as civil penalty provisions.

The more preferable final rule does not amend any clauses that are currently classified as civil penalty provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the Energy Ministers' Meeting that any of the proposed amendments made by the more preferable final rule be classified as civil penalty provisions.

B.5 Conduct provisions

The Commission cannot create new conduct provisions. However, it may recommend to the Energy Ministers' Meeting that new or existing provisions of the NER be classified as conduct provisions.

The more preferable final rule does not amend any rules that are currently classified as conduct provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the Energy Ministers' Meeting that any of the proposed amendments made by the more preferable final rule be classified as conduct provisions.

C CHANGES FROM DRAFT TO FINAL

This Appendix outlines the amendments to the rule between the draft and final determinations to reflect the policy positions outlined in the body of this determination. In making its final determination, the Commission has taken into account the proponent's views, stakeholder submissions, technical working group discussions and technical advice provided by AEMO on its operational management of contingencies, risk management, and use of the reclassification criteria.

Table C.1: Changes between the draft rule and final rule

PROVISION	AMENDMENT
Overview	<p>The framework proposed in the draft rule included a new clause as part of AEMO's power system security responsibilities in clause 4.3.1. This provided for AEMO to determine the appropriate response to maintain power system security using contingency event analysis where reasonably practicable and, where not reasonably practicable, using other reasonable practices or methodologies determined by AEMO. This was supported by obligations to publish information about the circumstances in which the second approach would be used and reporting obligations when it was used.</p> <p>The final rule has moved from this approach to a principles-based framework involving the following key elements:</p> <ul style="list-style-type: none"> • a new power system operating principle to the effect that where practicable, decisions about reclassification and the measures to be implemented in response should be reasonably predictable and consistent with the reclassification criteria (new clause 4.2.6(h)); • an obligation to publish information in the reclassification criteria about measures that AEMO may implement to maintain power system security as a result of reclassification decisions (amended clause 4.2.3B(a)(2)); • the existing obligation to consult on the reclassification criteria; • where the measures implemented could not reasonably have been expected having regard to the reclassification criteria, an obligation to provide information to the market to explain the measures taken as soon as practicable (new clauses 4.2.3A(j) and (k)); • an obligation to consider the need to review the reclassification criteria as part of the existing six-monthly report about reclassification decisions (amended clause 4.2.3A(i)). <p>The remainder of this table explains, in clause order, these and other changes made from draft to final rule.</p>
4.2.3(a)(2)	<p>Clause 4.2.3(a) defines 'contingency event'. The draft rule proposed adding as a new subparagraph (2) 'a sudden and unplanned change to the <i>loading level of plant</i>'. In addition, the draft rule proposed a new paragraph for the</p>

PROVISION	AMENDMENT
	<p>definition of 'plant' in chapter 10 so that in this context, it would include 'all equipment involved in the generation, transmission or distribution of electrical energy'.</p> <p>As noted by consultation responses, the defined term 'loading level' is too narrow to cover transmission and distribution generally, since insofar as it refers to the power flow on a network asset, it only extends to scheduled network services.</p> <p>For the final rule, clause 4.2.3(a)(2) has been amended to refer to the 'level of output, consumption or power flow' of plant. The change to the definition of 'plant' has been retained.</p>
4.2.3(a)(c)	<p>To clarify that AEMO can identify a particular affected asset or a group or class of assets when considering the impact of abnormal conditions, the drafting in this paragraph has been aligned with the approach in paragraph (e) of the draft rule.</p> <p>The final rule now refers to where 'AEMO identifies that a non-credible contingency event is more likely to occur' (rather than where 'AEMO identifies a non-credible contingency event that is more likely to occur').</p>
4.2.3A(e)	For the final rule, a minor drafting change has been made for clarity.
4.2.3A(f)	For the final rule, a consequential change has been made to update the cross reference to clause 4.2.3B(a)(1). This reflects the change to clause 4.2.3B(a) under which the criteria for reclassification are referred to in subparagraph (1) and the additional information is in subparagraph (2).
4.2.3A(g)	<p>This paragraph describes the actions AEMO must take if it makes a reclassification decision including, under subparagraph (1), notice to the market. The draft rule also proposed a subparagraph (3) referring back to the notice requirement in paragraph (c).</p> <p>For the final rule, subparagraph (3) has been removed on the basis that paragraph (d) already deals with the circumstances in which a paragraph (c) notice must be updated and to clarify that the notice under subparagraph (1) is a separate notice requirement.</p>
4.2.3A(i)	<p>This paragraph provides for AEMO to issue 6-monthly reports on reclassification decisions. The draft rule included changes to the required content of the report.</p> <p>For the final rule, in addition to drafting corrections, includes a new subparagraph (2)(ii) that requires AEMO to include its appraisal of any need to review and amend the reclassification criteria before the next review under clause 4.2.3B(b). This is intended to clarify that AEMO may amend the reclassification criteria when the need arises and is not required to wait for the 2-year review cycle under clause 4.2.3B(b).</p>

PROVISION	AMENDMENT
4.2.3A(j) and (k)	<p>These paragraphs, inserted by the final rule, require AEMO to publish information for Market Participants when:</p> <ul style="list-style-type: none"> • a reclassification decision is made; and • the measures implemented to maintain system security could not reasonably have been expected having regard to the reclassification criteria.
4.2.3B(a)	<p>As explained above, the final rule adopts a principles-based framework that includes a requirement for AEMO to publish information as part of the reclassification criteria to inform the market about the measures AEMO may implement to maintain power system security as a result of reclassification decisions. The information requirement is reflected in the final rule in the changes to clause 4.2.3B(a)(2). The clause provides that the information must include:</p> <ul style="list-style-type: none"> • the risks to the power system of different abnormal conditions that the measures may seek to address; • the network elements or other plant in relation to which measures may be implemented in response to different abnormal conditions; and • other measures or a range of measures that AEMO is likely to consider in different abnormal conditions. <p>The draft rule had included in paragraph (a) an obligation to publish the reclassification criteria. This has been removed in the final rule because it is covered by paragraph (d)(3).</p>
4.2.3B(d)(1)	<p>This paragraph sets out AEMO's obligation to consult with relevant stakeholders when reviewing or amending the reclassification criteria. Transmission Network Service Providers are mentioned as one type of relevant stakeholder.</p> <p>In response to consultation feedback on the draft rule, the reference to 'Transmission Network Service Providers' has been changed to 'Network Service Providers' to clarify that Distribution Network Service Providers may also be relevant stakeholders.</p>
4.2.3B(e) (from draft rule)	<p>The draft rule proposed a new paragraph (e) requiring AEMO to include in the reclassification criteria the abnormal conditions in respect of which it may assess the possible impact and determine measures to be taken using an approach other than contingency event analysis.</p> <p>The paragraph has been removed from the final rule and replaced with the information requirement in clause 4.2.3B(a).</p>
4.2.6(h)	<p>As described above, the final rule adopts a principles-based framework. The guiding principle is set out in new clause 4.2.6(h), inserted by the final rule. The clause states that where practicable, decisions about reclassification and</p>

PROVISION	AMENDMENT
	the measures to be implemented in response should be reasonably predictable and consistent with the reclassification criteria.
4.3.1(j1) and (j2) (from draft rule)	<p>The draft rule included proposed new paragraphs (j1) and (j2) that were intended to give AEMO the flexibility to use methods other than contingency event analysis to determine measures to be taken to maintain power system security when reclassification decisions were made and to publish information about the actions it may adopt.</p> <p>As described above, the final rule instead adopts a principles-based framework and paragraphs (j1) and (j2) have been omitted from the final rule.</p>
4.8.15(a)(1)(i)	For the final rule, a drafting change has been made to this paragraph to reflect that a non-credible contingency event may occur anywhere on the power system (and not just on the transmission system).
4.8.15(a)(2A) (from draft rule)	<p>In the draft rule, new reporting requirements were included in the reviewable operating incident framework in clause 4.8.15. The proposed new requirement was applicable where AEMO used methods other than contingency event analysis to determine its response to a contingency event.</p> <p>For the final rule, the reporting requirement has been moved to clauses 4.2.3A(j) and (k) and modified to reflect the new principles-based approach.</p>
5.20A.1	<p>Clause 5.20A.1 provides for AEMO to undertake a general power system risk review. The draft rule proposed to include a reference to circumstances in which AEMO had used methods other than contingency event analysis to determine its response to a contingency event as one of the potential prioritised risks to be reviewed.</p> <p>Following further discussion with AEMO, the requirement has instead been moved to paragraph 5.20A.1(a1) and amended to reflect the new framework, with the result that these incidents are matters that AEMO must have regard to when identifying priority risks, rather than the incident itself being treated as a possible priority risk.</p> <p>Consequential changes have been made to the clause, including deletion of proposed new paragraph (c)(5) from the draft rule.</p>
8.8.1(a)(2a)	<p>Clause 8.8.1(a) sets out the functions of the Reliability Panel. These include, under subparagraph (2a), developing and publishing principles and guidelines about ex-post responses to contingency events. The draft rule proposed extending the subparagraph to refer to the discretionary framework.</p> <p>As a consequence of other changes made for the final rule, the clause references in subparagraph (2a) have been replaced with a general reference to '<i>contingency event</i> management'. The policy intention remains</p>

PROVISION	AMENDMENT
	the same. That is, the functions of the Reliability Panel are intended to include developing and publishing principles and guidelines relating to ex-ante and ex-post management of contingency events.