

Australian Energy Market Commission

FINAL RULE DETERMINATION

National Electricity Amendment (Governance Arrangements and Implementation of the Reliability Standard and Settings) Rule 2015

Rule Proponent
COAG Energy Council

26 March 2015

RULE
CHANGE

Inquiries

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

E: aemc@aemc.gov.au

T: (02) 8296 7800

F: (02) 8296 7899

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About the AEMC

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

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Summary

The Australian Energy Market Commission has made a final rule, which is a more preferable rule, that strengthens the governance arrangements for the review and determination of the reliability standard and reliability settings. The final rule also provides greater transparency and flexibility in how the Australian Energy Market Operator assesses reliability in the National Electricity Market.

The final rule is the same as the draft rule and addresses issues raised in the COAG Energy Council's rule change request relating to accountability and transparency of decision making in respect of the governance arrangements and implementation of the reliability standard and reliability settings.

The *reliability standard*, expressed as a probability of unserved energy, measures the adequacy of the electricity generating systems and interconnectors to meet consumer demand. It is also used to evaluate whether there is sufficient investment in generator capacity and demand side response to meet consumer demand. Setting the reliability standard involves balancing the value that consumers place on the supply of reliable electricity with the costs required to deliver this level of reliability.

The *reliability settings* are price mechanisms under the National Electricity Rules (NER) that work to incentivise sufficient generation capacity and demand-side response to deliver the reliability standard. The reliability settings consist of a market price cap, a cumulative price threshold, a market floor price, an administered price cap, and an administered floor price.

The final rule

The Commission considers the final rule, a more preferable rule, will, or is likely to, better contribute to the achievement of the national electricity objective than the proposed rule.

The final rule addresses the issues raised in the rule change request and takes into account stakeholders' views in submissions to the consultation paper and the draft rule determination. The Commission notes that stakeholders have expressed broad support for the changes proposed to the draft rule in their submissions to the draft rule determination.

In summary, the final rule:

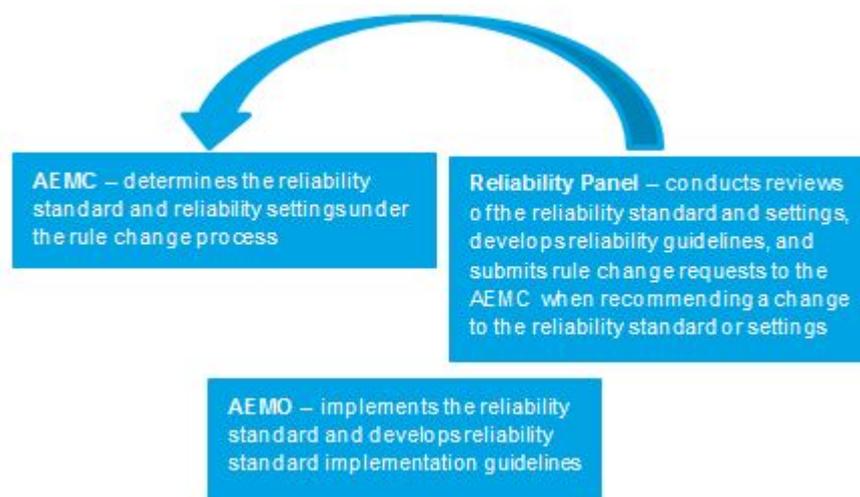
- incorporates the reliability standard into the NER, making it subject to the rule change process;
- requires the Reliability Panel to develop Reliability Standard and Settings Guidelines that it must follow when conducting reliability standard and settings reviews; and

- requires AEMO to develop Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures and in consultation with the Reliability Panel.

Under the final rule, the Reliability Panel will continue to undertake the four-yearly reliability standard and settings reviews and, where appropriate, submit a rule change request to the AEMC to change the reliability standard or the reliability settings. The final rule has also included the administered price cap within the meaning of "reliability settings" and, as a result, it will be reviewed as part of the scope of these reviews.

Although any person may submit a rule change request to the AEMC to change the reliability standard or the reliability settings, the Commission considers the Reliability Panel is particularly well-placed to make such requests.

The below diagram illustrates the relevant roles of the entities involved in reviewing, determining, and implementing the reliability standard and, where relevant, the reliability settings.



No material changes to the reliability standard have been made in this final rule. The existing form, level, and scope of the reliability standard remain unchanged.

However, necessary amendments to the articulation of the reliability standard have been made both to provide clarity and to incorporate the reliability standard into the NER.

The Commission considers the final rule strengthens good governance, accountability and transparency of decision making with respect to the governance arrangements for the reliability standard and reliability settings and creates desirable consistency of process across the reliability parameters.

The final rule also allows for appropriate flexibility in implementing the reliability standard to enable the Australian Energy Market Operator (AEMO) to undertake more transparent and efficient reliability assessments, including through the development of

Reliability Standard Implementation Guidelines that will guide AEMO's implementation of the reliability standard.

The final rule commences on 26 March 2015. However, the Commission has provided for transitional arrangements to manage the implementation of a number of these changes and to allow time for the Reliability Panel and AEMO to meet the new requirements. These arrangements are detailed in chapter 5 of this final rule determination and reflected in the final rule.

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1 COAG Energy Council's rule change request

1.1 The rule change request

On 9 May 2013, the COAG Energy Council (the proponent) submitted a rule change request to the Australian Energy Market Commission (AEMC or Commission) in relation to the governance arrangements for, and implementation of, the reliability standard and reliability settings.

The rule change request sought to amend the governance arrangements for determining the reliability standard and reliability settings, and to change how the Australian Energy Market Operator (AEMO) implements the reliability standard.

These two parts of the rule change request, governance arrangements and implementation of the reliability standard and settings, are considered separately.

This chapter outlines the following:

- background to the rule change request;
- the solutions proposed;
- the proponent's rationale;
- commencement of rule making process; and
- consultation on the draft rule determination and the draft rule.

1.2 Background

This rule change request arises out of the AEMC's 2010 Review of the Effectiveness of NEM Security and Reliability Arrangements in Light of Extreme Weather Events (Extreme Weather Review).

The Extreme Weather Review concluded there were areas in the governance framework of the reliability standard and settings that could be improved to maintain consumer expectations for the quality of electricity supply in a future in which the frequency/severity of extreme weather events could increase.

This Review recommended the governance arrangements be amended such that:

- the AEMC makes all reliability parameter decisions (ie, to review and, if necessary, amend the reliability standard and settings);
- AEMO makes all reliability operational decisions; and
- high-level policy guidance is included in the National Electricity Rules (NER), which the AEMC would need to have regard to when reviewing and, if need be, amending the reliability standard and reliability settings.¹

The rationale for these recommendations was based on the view that the existing governance arrangements, with separate decision-making bodies for the reliability standard and settings, may restrict the ability of the National Electricity Market (NEM) to respond efficiently to a possible increase in the frequency and/or severity of extreme weather events.

The Extreme Weather Review concluded that maintaining consistency and allowing for a single decision-maker with respect to the reliability standard and settings would reduce the complexity of the existing processes and establish appropriate alignment between the reliability standard and settings. It also recommended formalising in the NER the methodology and assumptions used by AEMO in applying the reliability standard at an operational level.

This Review also found that a lack of high level guidance in the NER for determining the reliability standard and settings can lead to inefficiencies and unintended restrictions on what information may be taken into account as part of the decision-making process.

1.3 Solution proposed

The COAG Energy Council proposed to address the issues raised in the rule change request by amending the NER to change the governance arrangements of the reliability standard and reliability settings, and to establish a clear allocation of responsibility for interpreting and applying the reliability standard.

1.3.1 Governance of the reliability standard and settings

This part of the rule change request proposed to:

- remove the Panel's responsibility for determining the reliability standard, and require the AEMC to take on this role and publish its determination in a schedule to the NER;
- remove the Reliability Panel's responsibility for reviewing the reliability standard and settings, and require the AEMC to take on this role;

¹ See Extreme Weather Review, Appendix I, available on the AEMC website.

- give the AEMC the power to determine certain reliability settings, including the Market Price Cap (MPC), the Market Floor Price (MFP), and the Cumulative Price Threshold (CPT), without the existing requirement for a rule change request, and publish its determination in a schedule to the NER; and
- require the AEMC to develop guidelines it must follow in reviewing and determining the reliability standard and settings.

Under the proposed rule, the AEMC would be required to conduct a reliability standard review and/or a reliability settings review on a four-yearly basis. These reviews would be conducted in accordance with the rules consultation procedures and the proposed Reliability Standard and Settings Guidelines (Reliability Guidelines), which would set out the principles and assumptions to be applied by the AEMC in determining the reliability standard and settings.²

Reliability Standard Review and Determination

In conducting a reliability standard review and determination under the proposed rule, the AEMC would be required to have regard to the same factors that the Panel must have regard to under the existing arrangements.³ In addition, the AEMC would be required to consider the potential impact of any proposed changes on end-use customers.

Reliability Settings Review and Determination

Under the proposed rule, an AEMC reliability settings review would review the same parameters as the Panel does under the existing arrangements, including:

- the MPC, including the manner of indexing the MPC;
- the CPT, including the manner of indexing the CPT; and
- the MFP.

² See clauses 3.9.3B and 3.9.3C of the proposed rule.

³ See NER 3.9.3A. Under the existing arrangements, this review must set out the Panel's decision with respect to the level of the reliability standard. This review must also be conducted in accordance with the rules consultation procedures. In conducting a review in accordance with clause 3.9.3A, the Reliability Panel must review the reliability standard; the market price cap, including the manner of indexing the market price cap; the cumulative price threshold, including the manner of indexing the cumulative price threshold; and the market floor price. Additionally, in any review under this clause, the Reliability Panel must have regard to the potential impact of any proposed change in the market price cap or cumulative price threshold on: (i) spot prices; (ii) investment in the National Electricity Market; (iii) the reliability of the power system; and (iv) Market Participants; must have regard to any value of customer reliability determined by AEMO which the Reliability Panel considers to be relevant; and may take into account any other matters the Reliability Panel considers relevant.

Additionally, the proponent sought to include the Administered Price Cap (APC) as part of the proposed reliability settings review.⁴

In conducting a reliability settings review and determination under the proposed rule, the AEMC would be required to have regard to the same factors as for the proposed reliability standard review.

Reliability Standard and Settings Guidelines

The proponent also sought to introduce a requirement on the AEMC to develop guidelines that would set out the principles and assumptions to be applied by the AEMC in determining the reliability standard and settings (Reliability Guidelines).

These Reliability Guidelines were proposed to be developed in accordance with the rules consultation procedures, capable of amendment by the AEMC as necessary, and required to be published.

1.3.2 Implementation of the reliability standard

This part of the rule change request proposed to:

- make AEMO responsible for making all reliability operational decisions and to review/amend the processes to assess the adequacy of generation reserves to meet the reliability standard; and
- require AEMO to develop, consult on and publish Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements, which would improve transparency and guide AEMO's implementation of the reliability standard.

The proponent considered these changes would provide flexibility for the reliability standard to be applied operationally through time and across different NEM reliability assessments or reliability projection timeframes to best suit the circumstances to which it is being applied. The proponent also proposed a number of associated consequential changes.

1.4 Rationale for the rule change request

In its rule change request the proponent notes the conclusions of the Extreme Weather Review mentioned above.⁵

⁴ The APC was previously not subject to review by the Panel when conducting its four-yearly report. Rather, it was subject to periodic review by the AEMC, usually every three years.

⁵ Rule change request, 9 May 2013, s. 3.

A further rationale for the rule change request noted by the proponent, and also featuring in the Extreme Weather Review, relates to the presence of market participants on the Reliability Panel (the Panel) and the potential for this to give rise to perceived or actual conflicts of interest and outcomes that favour incumbent parties.

Key claimed benefits raised by the proponent to support the proposed changes included the following:

- to reduce uncertainty and improve transparency regarding the reliability standard and settings review and determination processes, including the implementation of these parameters;
- to maintain consistency and reduce complexity of the existing decision-making processes and to provide important signals for long-term investment in capacity by market participants; and
- to establish a clear allocation of responsibility for interpreting and applying the reliability standard in the context of the numerous market processes used in the NEM.

The proponent argued that the proposed changes would improve accountability, consistency and timing around the reliability standard and settings review and determination processes, and thereby enhance investor certainty.⁶

The proponent submitted the proposed rule would better balance transparency and flexibility by clarifying responsibilities and governance under the rules, while providing flexibility for arrangements to be changed under a well-defined process.⁷

The proponent also considered the development of Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements would:

- bring the process of implementing the reliability standard under the governance of the rules and clearly assign AEMO with responsibility for doing this;
- make the process of implementing the reliability standard more transparent and require more engagement with the market through consultation;
- allow more flexibility for fit-for-purpose approaches to be used in various forecasting timeframes, where warranted; and
- enable the use of more accurate reliability measures as they are developed and create a set of processes and parameters that can evolve over time.

6 ibid.

7 ibid.

1.5 Commencement of rule making process

On 25 September 2014, the Commission published a notice under s. 95 of the National Electricity Law (NEL) advising of the commencement of the rule making process and the first round of consultation in respect of the rule change request. The AEMC also published a consultation paper on this date. Submissions to this consultation period closed on 23 October 2014.

The Commission received seven submissions as part of the first round of consultation. Each is available on the AEMC website. A summary of the issues raised in these submissions and the Commission's response is provided in Appendix B.

1.6 Consultation on the draft rule determination and draft rule

On 18 December 2014, the Commission published a notice under section 99 of the NEL in relation to the publication of the draft rule determination and draft rule in respect of the rule change request. The Commission invited submissions on the draft rule determination and draft rule by 5 February 2015.

The Commission received seven submissions as part of the second round of consultation. Each is available on the AEMC website. A summary of the issues raised in submissions responding to the draft rule determination and draft rule is provided in Appendix B.

2 Final rule determination

2.1 Commission's final rule determination

The Commission has determined not to make the rule proposed by the COAG Energy Council and instead to make a final rule that is a more preferable rule.

The final rule is attached to and published with this final rule determination.

Having regard to the issues raised in the rule change request and by stakeholders, the Commission is satisfied that the final rule will, or is likely to, better contribute to the achievement of the national electricity objective (NEO) than the proposed rule.

The key features of the final rule:

- incorporate the reliability standard into the NER and make it subject to the rule change process;
 - this change means that under the final rule any person may submit a rule change request to the AEMC to change the reliability standard.
- require the Reliability Panel to develop Reliability Standard and Settings Guidelines that it must follow when conducting reliability standard and settings reviews;
- require AEMO to develop and publish Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures and in formal consultation with the Reliability Panel; and
- add the Administered Price Cap to the scope of the reliability standard and settings reviews.

The key differences between the final rule and the proposed rule are:

- The final rule does not require the AEMC to review and determine the reliability standard and reliability settings outside of the rule change process. Under the final rule, the reliability standard and reliability settings will continue to be reviewed by the Reliability Panel every four years. If the Reliability Panel recommends a change to the reliability standard or reliability settings, it must submit a rule change request to the AEMC. The AEMC would then consider the proposed changes under its rule making process.
- The final rule does not require the AEMC to develop Reliability Guidelines. Instead, the proposed Guidelines are to be developed by the Reliability Panel to inform the reliability standard and settings reviews.
- The final rule does not require AEMO to develop Reliability Adequacy Requirements, which the Commission considers is an unnecessary level of

prescription in the rules and may potentially restrict AEMO's ability to determine the most appropriate approach to assessing reliability.

The Commission's reasons for making this final rule are set out below in chapters three and four. Chapter three relates to the governance arrangements of the reliability standard and reliability settings, whereas chapter four relates to the implementation of the reliability standard by AEMO.

2.2 Rule making test

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 NEO.⁸

Section 7 of the NEL states:

“The objective of this Law is 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 price, quality, safety, reliability and security of supply of electricity, and the reliability, safety and security of the national electricity system.”

The relevant aspect of the NEO in the context of this rule change request is the efficient investment in electricity services for the long term interests of consumers of electricity with respect to the price, quality, reliability, and security of supply of electricity, and the reliability and security of the national electricity system.

2.3 Assessment approach

This section provides an explanation of the assessment approach the AEMC has used in assessing this rule change request.

The Commission has applied a set of principles it considers will guide an allocation of governance roles and responsibilities that best contributes to the NEO.

These principles are:

- *Promote best natural fit* - which entity is best placed to determine the reliability standard and reliability settings? Part of this assessment involved considering the accountability and governance of the Reliability Panel and the AEMC in their respective decision-making capacities and processes, and examining the role that each entity plays in the NEM.
- *Allow for proportionate regulation of the NEM* - is the administrative burden of the proposed rule no greater than necessary? Is there an appropriate balance between regulatory certainty and flexibility of approach?

⁸ NEL, s. 88(1).

When considering which entity is best placed to determine the reliability standard and reliability settings, we have considered the different aspects of accountability of the Reliability Panel and the AEMC.

2.4 More preferable rule

Under s. 91A of the NEL, the AEMC may make a rule that is different (including materially different) from a market initiated proposed rule if the AEMC is satisfied that, having regard to the issue or issues that were raised by the proposed rule, the more preferable rule will, or is likely to, better contribute to the achievement of the NEO.

Having regard to the issues raised by the proposed rule and the rule change request, and other requirements under the NEL, the final rule is a more preferable rule.

The Commission is satisfied that the final rule will, or is likely to, better contribute to the achievement of the NEO than the proposed rule because the final rule will:

- improve good governance, accountability and transparency of decision making;
- maintain consistency of process across the reliability parameters, increasing transparency and accessibility; and
- allow for appropriate flexibility in implementing the reliability standard to enable more accurate, more efficient reliability assessments.

2.5 Strategic priority

The subject matter of this rule change request affects the processes and manner in which decisions are made concerning the reliability standard and settings, and how the reliability standard is implemented. Decisions on these matters impact on market arrangements and efficient investment in the NEM.

This rule change request therefore relates to the AEMC strategic market priority to support market arrangements that encourage efficient investment and flexibility.

3 Governance arrangements of the reliability standard and reliability settings

Box 3.1: Summary

- This chapter relates to the governance arrangements for the reliability standard and reliability settings.
- The Commission considered the changes proposed in the rule change request and stakeholders' views and has decided to make a final rule that is the same as the more preferable draft rule.

Final rule

- The Commission has decided to make a final rule that places the reliability standard in the NER.
 - As a result, the reliability standard may only be changed by a rule change made by the AEMC in response to a rule change request.
- The final rule does not make any material changes to the existing form, level, or scope of the reliability standard.
- The Commission has decided to maintain the reliability settings in the NER.
 - The Commission has also decided to include the Administered Price Cap as a reliability setting in the NER, with the effect that it can only be changed through the rule change process.
- The Commission has decided to maintain the requirement on the Panel to conduct four-yearly reliability standard and settings reviews. The Panel is required to submit a rule change request to the AEMC where it recommends a change to the reliability standard or the reliability settings.
 - The Commission has also decided that the Administered Price Cap is to be reviewed by the Reliability Panel as part of the four-yearly reliability standard and settings review.
- Lastly, the final rule requires the Reliability Panel to develop the proposed Reliability Standard and Settings Guidelines setting out the principles and assumptions it will use in conducting reviews of the reliability standard and settings.

The commencement date of this final rule and transitional arrangements to accommodate these changes are discussed separately in chapter 5.

3.1 Existing reliability framework

The below table provides a summary of the existing reliability framework, including the reliability standard and each of the reliability settings.

Table 3.1 Summary of existing reliability framework

Parameter	Objective	Level	Decision-maker
Reliability standard	Indicates to the market the target level of supply and demand adequacy.	expected unserved energy (USE) of <0.002% of annual energy demanded in a given region	Reliability Panel
Market price cap	A key reliability setting. Incentivises sufficient generation capacity and demand-side response to deliver the reliability standard.	\$13,500/MWh (2014-15); CPI indexed each financial year	AEMC (via rule change)
Cumulative price threshold	A risk management mechanism designed to limit participants' exposure to protracted levels of high prices in the spot market.	\$201,900/MWh (2014-15); CPI indexed each financial year	AEMC (via rule change)
Administered price cap	Designed to reduce the financial exposure of market participants during an extreme market event, while maintaining incentives for market participants to supply electricity.	\$300/MWh	AEMC (via NER schedule, outside of rule change process)
Market floor price	The lowest allowable limit for the spot price. Aims to provide an appropriate price signal for the spot market to clear at times of very low demand and excess generation in a region by incentivising generators to offload generation when it is efficient to do so. It is generally considered unrelated to investment signals.	-\$1,000/MWh	AEMC (via rule change)
Administered floor price ⁹	A price floor to apply to a regional reference price, with the level of the price floor being the negative of the value of the administered price cap.	-\$300/MWh	AEMC (via rule change)

⁹ The value of the AFP is the negative of the value of the APC.

3.2 COAG Energy Council's views

The proponent argued that a change to the rules around the governance arrangements of the reliability standard and settings is needed because the existing arrangements may frustrate the timeliness of decision-making processes relevant to the reliability and security of the NEM.

The proponent also argued that the proposed changes are required to maintain consistency and allow for a single decision-maker to reduce the complexity of the decision-making processes while providing important signals to market participants for long-term investment in the NEM.

3.3 Stakeholder views

In submissions to the consultation paper, stakeholders broadly disagreed with the proponent's proposed changes to the governance arrangements of the reliability standard and reliability settings.¹⁰

In submissions to the draft rule determination, however, stakeholders expressed their broad support for the changes proposed in the draft rule in respect of the governance arrangements of the reliability standard and reliability settings.

For example, the Energy Supply Association of Australia (ESAA) expressed its support for the draft rule as it achieves the COAG Energy Council's goal of improved governance and transparency.¹¹ ESAA further indicated its support for the draft rule and its approach to incorporate the reliability standard into the NER and make any proposed changes subject to the rule change process.¹²

ESAA also expressed the view that the Reliability Guidelines developed by the Reliability Panel will provide greater clarity and transparency for participants and stakeholders as to how the four-yearly reliability standard and reliability settings reviews will be undertaken. Finally, ESAA also submitted its support for the proposed inclusion of the APC into the scope of the reliability standard and reliability settings reviews, noting that the APC is an integral component of the overall management of reliability in the electricity market.¹³

Other stakeholders, including Origin Energy, EnergyAustralia, and Stanwell, expressed clear support for the proposed changes in the draft rule to incorporate the reliability standard into the NER, and to maintain and enhance the role of the Reliability Panel in reviewing the reliability standard and reliability settings.

¹⁰ See Appendix B for a summary of, and AEMC response to, these submissions.

¹¹ ESAA submission, 5 February 2015, p1.

¹² *ibid*, pp1-2.

¹³ *ibid*, p2.

Origin Energy submitted the change with respect to the reliability standard and settings reviews would "capitalize on the expertise provided by the Panel",¹⁴ whilst EnergyAustralia noted that the Panel is "instrumental in ensuring reliability in the NEM."¹⁵ Stanwell expressed the view that incorporating the reliability standard into the NER, and maintaining Reliability Panel input, "provides clarity and confidence to the market."¹⁶

AGL Energy (AGL) expressed a mixed, but largely supportive, view about the changes proposed in the draft rule. AGL maintained its view that the existing process in which the Reliability Panel is responsible for determining the reliability standard is appropriate.¹⁷ Removing the Panel's responsibility for determining the reliability standard, AGL submitted, "will substitute the direct industry experience of the Panel members with the AEMC's assessment of the submissions it receives (and only the submissions it receives)".¹⁸ AGL noted, however, that the draft rule "will deliver better outcomes than the initial rule change proposal".¹⁹

The Commission considers the final rule strikes an appropriate balance that facilitates expert input from the Reliability Panel and provides for a robust consultative process. To make a rule change, the Commission must be satisfied that the rule change will, or is likely to, contribute to the achievement of the NEO. In making this assessment, the Commission undertakes its own independent analysis as well as drawing from stakeholder submissions, which provide a valuable input into the broader assessment process.

GDF Suez expressed its support for the approach taken in the draft rule, noting "it achieves the COAG Energy Council's goal of improved governance and transparency" and maintains "the role of the Reliability Panel in providing expert advice" to the AEMC in determining the reliability standard and reliability settings.²⁰

3.4 Commission's assessment

Having regard to the proponent's and stakeholders' views, and its own analysis, the Commission considers there are a number of issues with the existing governance arrangements for the reliability standard and settings that warrant changes to the NER.

The Commission has formed the view that the existing governance arrangements lack desirable consistency of process across the reliability parameters.

14 Origin Energy submission, 5 February 2015, p1.

15 EnergyAustralia submission, 5 February 2015, p1.

16 Stanwell submission, 5 February 2015, p1.

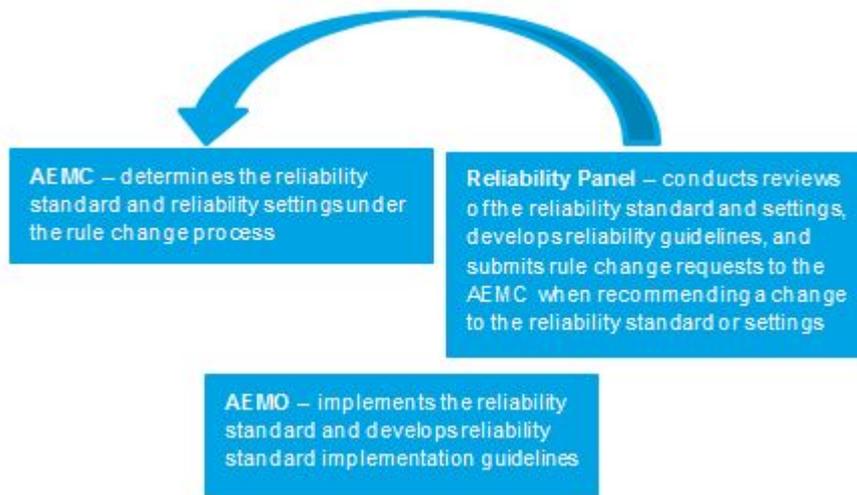
17 AGL submission, 3 February 2015, p1.

18 *ibid.*

19 *ibid.*

20 GDF Suez submission, 5 February 2015, p1.

The below diagram illustrates the relevant roles of the entities involved in reviewing, determining, and implementing the reliability standard and, where relevant, the reliability settings under the final rule.



To demonstrate the diversity of approaches with the existing governance arrangements of the reliability standard and settings and their review processes, the below table sets out each, along with the proposed approach and those under the final rule.

Table 3.2 Existing governance arrangements of the reliability standard and reliability settings

Parameter / Process	Decision-maker / administering entity	Decision-maker / administering entity	Decision-maker / administering entity
	Existing approach	Proposed rule	Final rule
Reliability Standard and Settings Guidelines	None	AEMC	Reliability Panel
Reliability Standard and Settings Review	Reliability Panel	AEMC	Reliability Panel
Reliability standard	Reliability Panel	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)
Market price cap	AEMC (via rule change process)	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)
Cumulative price threshold	AEMC (via rule change process)	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)
Administered price cap	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)
Market floor price	AEMC (via rule change process)	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)
Administered floor price	AEMC (via rule change process) ²¹	AEMC (via schedule to the NER, outside of rule change process)	AEMC (via rule change process)

²¹ The AFP is set in the NER and subject to the rule change process. It is not presently reviewed by the Reliability Panel when conducting its four-yearly reliability standard and settings reviews. However, because the AFP is set at the negative value of the APC, and reviewed periodically by the AEMC, any review or change of the level or form of the APC should also include consideration of the effects that any change to the APC may have on the AFP. This final rule has made the APC subject to review of the Reliability Panel when conducting its four-yearly reliability standard and settings reviews. See section 3.3.1 for further discussion.

As the above table demonstrates, the existing governance arrangements for the reliability standard and reliability settings spread responsibility across the Reliability Panel, the AEMC in its capacity as rule maker under the NER, and the AEMC as a function separate from rule making.

These governance arrangements mean that the reliability parameters are reviewed and determined under inconsistent processes. The Commission considers this lack of consistency is unnecessarily complex due to the numerous determination and review processes.

Given the strong interactions between the reliability standard and reliability settings, it is important that stakeholders have a clear view of how these reliability parameters are determined and under what circumstances, and understand how they will be consulted with and given an opportunity to express their views should a change be proposed.

The Commission considers the final rule addresses these, and related, matters more fully and appropriately than the proposed rule and will, or is likely to, better contribute to the achievement of the NEO.

The final rule strengthens good governance, accountability and transparency of decision making with respect to the governance arrangements for the reliability standard and reliability settings and creates desirable consistency of process across the reliability parameters.

3.4.1 Reliability standard

The Commission considers that the reliability standard, like the reliability settings, should be subject to the rule change process. The rule change process is set out in the NEL and largely well understood by stakeholders. This clarity of process and understanding is particularly important with regard to the reliability standard given its significant impact on the market and end use customers.

Because of this wide-ranging impact, the decision to maintain or amend the reliability standard, including its form or level, should be made through the rule change process under the NEL. The rule change process requires well-defined consultation with stakeholders and transparency of statutory decision making by accountable Commissioners.

The AEMC, although an independent statutory body, is ultimately accountable to the COAG Energy Council in the way it performs its role and functions. On an ongoing basis, the AEMC must perform its role within the bounds of the relevant laws, regulations and rules.

This includes, among other things:

- the statutory rule change process;
- the ability of stakeholders to propose rule changes;
- NEO requirements; and
- judicial review for statutory decisions.

These features provide an accountability framework for stakeholders by having a clear mechanism to challenge the AEMC's statutory decisions where they are not made in accordance with the AEMC's statutory obligations.

Given the importance of the reliability standard in determining the market settings that drive investment decision, the Commission considers it is best placed to make the decisions relating to the reliability standard as part of its rule-making function.

Further, the final rule is consistent with the role of the Reliability Panel in monitoring, reviewing and advising the Commission on the safety, security and reliability of the national electricity system than the proposed rule. Under the final rule, expert analysis and recommendations of the Reliability Panel will continue to be important considerations in determining the reliability standard in future.

The Commission is of the view that the final rule will, or is likely to, better contribute to the achievement of the NEO than the proposed rule because it better balances transparency and accountability of decision making while promoting best natural fit and allowing for proportionate regulation.

Given the interaction of the reliability standard and the reliability settings, in which the level of the reliability standard influences the level of the reliability settings, the Commission considers they should be determined using consistent processes and frameworks of assessment. This approach will also improve stakeholder accessibility and increase governance transparency through a clearer allocation of organisational responsibility and rules-based requirements.

Combined, these changes will strengthen the governance arrangements of the NEM, improve the quality of accountability of decision making, and provide a consistent, transparent and consultative process for determining the reliability standard. The Commission is satisfied these changes will, or are likely to, better contribute to the achievement of the NEO than the proposed rule.

The final rule makes no material changes to the reliability standard. The existing form, level, and scope of the reliability standard remain unchanged.

However, necessary amendments to the existing articulation of the reliability standard have been made both to provide clarity and to reflect the decision to incorporate the reliability standard into the NER.²²

The majority of changes to the reliability standard are editorial, resulting from revising the current expression of the reliability standard into a form more appropriate to the NER. For example, the existing form of the reliability standard was revised to remove direct reference to how maximum expected unserved energy (USE) is to be measured and expressed. The measurement and expression of USE is now detailed in the definition of USE.

The form of the reliability standard has also been amended from the existing “Reliability Standard for Generation and Bulk Supply” to the “reliability standard for generation and inter-regional transmission elements”. The Commission considers this articulation of the form of the reliability standard increases clarity and better describes the general scope of application.

The existing clauses on the form and level of the reliability standard, as determined by the Reliability Panel, include reference to “or the maximum amount of electricity expected to be at risk of not being supplied”. These references have not been retained in the final rule as they were considered redundant. This is because the expected USE is a forecast and so expressing it as a potential risk is unnecessary.

Finally, we have not retained the existing clauses relating to performance against and operational implementation of the reliability standard. These guidance notes are superseded by the Reliability Standard Implementation Guidelines to be developed by AEMO under the final rule.

3.4.2 Reliability settings

The Commission has also decided to maintain the reliability settings in the NER, and to include the APC as a reliability setting in the NER, with the effect that it can only be changed through the rule change process.

Under the existing arrangements, the Commission determines certain reliability settings (namely, the MPC, MFP, and CPT) under the NEL rule change process following a rule change request.²³ Historically, this has occurred on the recommendation of the Reliability Panel as a result of its four-yearly reliability standard and settings review.²⁴ Upon determining these reliability settings, the AEMC then publishes a schedule of the reliability settings on its website.

²² See clause 3.9.3C of the final rule.

²³ The AEMC must also annually calculate the MPC and CPT in accordance with clauses 3.9.4(c) and 3.14.1(d) of the NER. Clauses 3.9.4(d) and (e), and 3.14.1(e) and (f) set out the specific formulae that must be used by the AEMC, relating to indexing and rounding the value of the reliability settings.

²⁴ However, this need not be the case as any person may make a rule change request to amend the reliability settings under the NER.

The proponent has sought to remove the MPC, MFP, and CPT reliability setting from the rule change process and the requirement for the Reliability Panel's four-yearly review and replace it with a requirement for the AEMC to review and determine the reliability settings, guided by the Reliability Guidelines, and in accordance with the rules consultation procedures. The proponent has also sought to remove the APC from its current location in a schedule of reliability settings and include it as a reliability parameter to be determined by the AEMC in accordance with the rules consultation procedures.

Under this approach these reliability settings would be reviewed by the AEMC and, if it were to decide to make a relevant change, determined and published by the AEMC.

Although any changes would need to be made in accordance with the rules consultation procedures and the proposed Reliability Guidelines, and other relevant requirements under the NER, this would effectively allocate near full responsibility to the Commission to monitor, review, consult on, and determine the reliability settings.

The Commission is of the view that the transparency of its decision making would not be furthered by the proposed approach because it would be done outside of the rule change process and not subject to the same level of scrutiny, consultation, and statutory decision making by the Commission and would remove the current ability of any other person directly to propose a rule change to the reliability settings.

For these reasons, the Commission considers the final rule effectively balances the benefits of expert review of the reliability standard by the Reliability Panel, with associated consultation, with greater process transparency and accountability of decision-making through the Commission determining the reliability settings under the rule change process under the NEL.

3.4.3 Administered Price Cap

The Commission has also decided that the APC is to be specified as a reliability setting and thereby subject to regular review by the Reliability Panel.

Under the proposed approach, the proponent sought to add the APC to the reliability standard and settings review and the proposed Reliability Guidelines.²⁵ The APC does not form part of the Reliability Panel's review of reliability settings under the existing arrangements.

The Commission considers it appropriate that the APC is also reviewed by the Reliability Panel as part of the four-yearly reliability standard and settings review. The role of the APC is to reduce the financial exposure of market participants during an extreme market event, while maintaining incentives for market participants to supply electricity.

²⁵ Currently, the APC is determined by the AEMC under cl. 3.14.1 of the NER and published in a schedule on the AEMC website. This clause also requires the AEMC to review the APC periodically, which last occurred in November 2011.

Changes to the level, form, or scope of the other reliability settings may impact on whether the APC, and its form, level, or scope, remains appropriately set. For example, if the APC were to be significantly reduced, it could, at least in the short term, affect generators' incentives to make capacity available and therefore affect reliability in the NEM.

Including the APC in any reliability standard and settings review enhances consistency of process that allows for each reliability parameter to be reviewed under the same process and at the same time. The addition of the APC to the reliability standard and settings review also adds greater transparency to this review process.

The AFP does not presently form part of the Reliability Panel's review of reliability settings and the proponent has not proposed to change this. Given its negative value relationship to the APC, which will be subject to review by the Reliability Panel under the final rule, a separate review of the AFP would, in the Commission's view, appear unnecessary. However, the Commission considers a review and/or change of the APC would need to take into account the impacts this change may have on the AFP.

The Commission notes stakeholder submissions on the draft rule determination expressed support for including the APC as part of the four-yearly reliability standard and settings reviews. The Energy Supply Association of Australia, for example, expressed its support for this change and considered that the APC is an "integral component of the overall management of reliability in the NEM".²⁶

3.4.4 Reliability Standard and Settings Review

The final rule maintains the requirement on the Reliability Panel to conduct four-yearly reliability standard and reliability settings reviews and to submit a rule change request to the AEMC where it recommends a change to the reliability standard or reliability settings.

Under the existing arrangements, the Reliability Panel is tasked with conducting a four-yearly review of the reliability standard and settings (ie, the MPC, MFP, and CPT). Under the proposed rule, this task would fall to the AEMC.

The Commission considers it is more preferable for the Reliability Panel to continue to conduct this review and to submit a rule change request to the AEMC if it recommends a change to the reliability standard or settings.

The Commission notes the expertise of the Reliability Panel and considers it is appropriate to preserve the consultative process the Reliability Panel currently undertakes when conducting its four-yearly reviews. Maintaining this review process with the Reliability Panel also addresses stakeholder concerns relating to a potential loss of expertise from the Reliability Panel if it no longer conducted such reviews.

²⁶ ESAA submission, 5 February 2015, p2. See also GDF Suez submission, 5 February 2015, p3.

The proponent indicates that the proposed rule is intended to permit the AEMC to elect to conduct a reliability standard review or reliability settings review concurrently, or a reliability settings review only if the AEMC were to determine that no change to the reliability standard is necessary.²⁷ The proponent also indicates that if a reliability standard review was undertaken and no change to the reliability standard is determined, then no immediate review of the reliability settings would need to occur.

The Commission considers that the reliability standard and settings should be reviewed and consulted on as a package and under a set timeframe. Undertaking these reviews at the same time enables market participants and the Reliability Panel to appreciate fully the interactions between the reliability standard and the settings.

It is important, and in the interests of transparency and accessibility, that market participants have certainty about the reliability standard and settings review process and timing.

The final rule also clarifies that the Reliability Panel must have regard to any relevant terms of reference from the AEMC when conducting a reliability standard and settings review. The Commission considers this is more preferable to the proposed rule because it will permit the Reliability Panel to take into account and examine certain issues the AEMC considers important when conducting these reviews.

Given the advisory role of the Reliability Panel when conducting the reliability standard and settings reviews, providing an opportunity for the AEMC to augment these reviews with terms of reference relating to matters the AEMC determines may improve the comprehensive nature of these reviews.

The Commission notes a number of stakeholders indicated in submissions to the consultation paper that an option to "expedite" rule change requests from the Reliability Panel relating to reliability settings should be available.²⁸

3.4.5 Reliability Standard and Settings Guidelines

The final rule requires the Reliability Panel to develop the proposed Reliability Standard and Settings Guidelines (Reliability Guidelines) setting out the principles and assumptions it will use in conducting reliability standard and settings reviews.

Under the proposed rule, the AEMC would be required to develop and publish Reliability Guidelines setting out the principles and assumptions to be applied by the AEMC in determining the reliability standard and reliability settings.

The proponent's rationale for the development of the Reliability Guidelines is to improve transparency around the process the AEMC would undertake in reviewing and amending the reliability standard and settings under the proposed rule. In

²⁷ See rule change request, 9 May 2013, p11.

²⁸ See, eg, Alinta Energy submission, 27 October 2014, p2; EnergyAustralia, 28 October 2014, p2; ESAA submission, 24 October 2014, p3; Origin Energy submission, 23 October 2014, p2.

developing these proposed guidelines, the AEMC would be required to consult with stakeholders in accordance with the rules consultation procedures.

The Commission has considered the utility of the proposal that the AEMC develop the proposed Reliability Guidelines in light of the assessment approach outlined above, the proponent's rationale, and its decision in respect of which entity should determine the reliability standard and the reliability settings.

The Commission has decided that under the final rule the Reliability Panel will be required to develop the Reliability Guidelines, in accordance with the rules consultation procedures.

The Commission considers the Reliability Guidelines will provide greater clarity and transparency to stakeholders around the principles and assumptions the Reliability Panel will use in conducting the reliability standard and settings reviews.

The Reliability Panel is required to comply with the Reliability Guidelines when conducting reliability standard and settings reviews and when making related recommendations as to whether or not a change to the reliability standard or any of the reliability settings is needed.

The Commission considers the proposed Reliability Guidelines will also reinforce the expert contribution of the Reliability Panel to assessing and monitoring reliability in the NEM.

Under the final rule, the Reliability Panel may review and amend the Reliability Guidelines from time to time, in accordance with the rules consultation procedures. This will provide scope for the Reliability Panel to adjust the Reliability Guidelines to account for relevant changes in the NEM.

Stakeholder views on this matter were supportive of the approach taken in the draft rule requiring the development of Reliability Guidelines. In its submission to the draft rule determination, AGL Energy, for example, welcomed the approach to require the Reliability Panel to develop the Reliability Guidelines, noting the Panel's industry experience and knowledge will contribute positively to the development of the Reliability Guidelines.²⁹

The Commission notes the Reliability Guidelines will not constrain the matters the AEMC may consider when undertaking a rule change relating to the reliability standard or reliability settings.

²⁹ AGL Energy submission, 3 February 2015, p2. See also EnergyAustralia submission, 5 February 2015, p1; ESAA submission, 5 February 2015, p2; GDF Suez submission, 5 February 2015, p2; Origin Energy, 5 February 2015, p1; Stanwell submission, 5 February 2015, p1.

4 Implementation of the reliability standard

Box 4.1: Summary

- This chapter relates to the implementation of the reliability standard.
- The Commission considered the proposed changes and stakeholders' views and has decided to make a final rule that is the same as the draft rule.

Final rule

- The Commission has made a final rule that requires AEMO to develop the proposed Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures.
- The final rule differs from the proposed rule in the following respects:
 - it does not provide for the development of Reliability Adequacy Requirements, which the Commission considers is an unnecessary level of prescription and may potentially restrict AEMO's ability to determine the most appropriate approach to assessing reliability;
 - it requires AEMO to provide in the Reliability Standard Implementation Guidelines an explanation of the approach it will use and assumptions it will make about extreme weather events, which the Commission considers is an important consideration in assessing the reliability of the national electricity system;
 - it requires AEMO specifically to consult with the Reliability Panel in respect of the development of, and any amendment to, the Reliability Standard Implementation Guidelines; and
 - it also requires AEMO to review the Reliability Standard Implementation Guidelines periodically, in consultation with the Reliability Panel, to assess their operation and effectiveness and to provide an opportunity for all stakeholders to contribute to any changes to these guidelines.

The commencement date of the final rule and associated transitional arrangements are discussed separately in chapter 5.

4.1 Existing arrangements

There are few NER-based requirements setting out how AEMO must implement the reliability standard.

Under the existing arrangements, AEMO operationally applies the reliability standard in the short-term and medium-term Projected Assessments of System Adequacy (PASA) through Minimum Reserve Levels (MRL) for each jurisdiction.³⁰

PASA is a programme of information collection, analysis, and disclosure of medium-term and short-term power system security and reliability of supply prospects. The purpose of providing these assessments is to enable Registered Participants to be properly informed and able to make decisions about supply, demand and outages of transmission networks in respect of periods up to 2 years in advance.³¹

The PASA assessments are the only existing NER-based requirements on AEMO with respect to how it implements the reliability standard.

MRLs are the reserve margins that AEMO calculates are required so as not to breach the reliability standard. MRLs function to convert maximum expected unserved energy (USE) (.002%) into a minimum reserve level in megawatts such that if reserve levels in a given region are greater than the MRLs, the reliability standard will be expected to be met.

MRLs are also used across a number of operational timeframes, including in the Short-Term PASA (reserve projections for one week), Medium-Term PASA (reserve projections for two year outlook), and the Electricity Statement of Opportunities (ESOO) (reserve projections for ten year outlook).

AEMO has historically determined MRLs in consultation with industry stakeholders and the Reliability Panel.³² Under the existing arrangements, AEMO determines MRLs on a periodic basis (most recently in 2010). However, this is not a requirement under the NER.

4.2 COAG Energy Council's view

The proponent argued that a change to the NER relating to the implementation of the reliability standard is needed because the existing arrangements are uncertain and lack transparency about the manner in which the reliability standard is implemented.

The proponent also submitted that the proposed changes would provide AEMO with greater flexibility to implement the reliability standard in a more efficient manner.

30 See NER cl. 3.7.

31 See NER 3.7.1(b).

32 Rule change request, 9 May 2013, p8.

The proponent argued the proposed changes are needed to establish a clear allocation of responsibility for interpreting and applying the reliability standard. To do this, the proponent sought the following key changes:

- require AEMO to develop, consult on and publish Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements, which would guide the implementation of the reliability standard; and
- require AEMO to review/amend the reliability assessment parameters used to meet the reliability standard.

4.3 Stakeholder views

In submissions to the consultation paper, stakeholders provided a mix of qualified support for, and lack of support for, the proposed changes to how the reliability standard is implemented.³³

In submissions to the draft rule determination, stakeholders expressed their support for the approach taken in the draft rule determination in respect of how the reliability standard is implemented. For example, GDF Suez expressed its support for the development of the Reliability Standard Implementation Guidelines.³⁴

EnergyAustralia also expressed its support for the development of these Guidelines, noting that they will "remove the prescriptions in the rules on how AEMO implements the reliability standard" and should allow for needed flexibility and transparency in AEMO's operations.³⁵

AEMO raised an issue in its submission as to whether it is appropriate in every circumstance to require any amendment to the Reliability Standard Implementation Guidelines to be conducted in accordance with the rules consultation procedures.

AEMO argued that there may be certain circumstances in which the three month minimum consultation period under the rules consultation procedures may delay changes to the Reliability Standard Implementation Guidelines that are considered by AEMO to be urgently required.

AEMO proposed two approaches to address its concerns:

- use an expedited consultation process; or
- give AEMO the power to make urgent amendments without consultation, with an obligation to consult and amend the Reliability Standard Implementation Guidelines promptly thereafter.

³³ See Appendix B.

³⁴ GDF Suez submission, 5 February 2015, p2. See also Stanwell submission, 5 February 2015, p1 and ESAA submission, 5 February 2015, p2.

³⁵ EnergyAustralia submission, 5 February 2015, p1.

The Commission understands from AEMO staff that it would continue to consult with the Reliability Panel about any urgent change(s) required.

4.4 Commission's assessment

The Commission has had regard to the COAG Energy Council's and stakeholders' views, and its own analysis, and considers there are sufficient issues with the existing arrangements that merit changes to the manner in which the reliability standard is implemented under the NER.

Under the existing arrangements, the Commission considers there is a lack of clarity in the NER about the role of AEMO in implementing the reliability standard and a lack of desirable transparency and flexibility about how reliability is assessed by AEMO. This lack of clarity may contribute to avoidable uncertainty and ambiguity by market participants about the manner in which the reliability standard is assessed and implemented AEMO.

The Commission considers the final rule addresses the issues referred to above more fully and appropriately than the proposed rule and will, or is likely to, better contribute to the achievement of the NEO.

This final rule should achieve this by providing clarity about AEMO's responsibility to implement the reliability standard and by increasing the levels of transparency and flexibility in how the reliability standard is implemented.

As such, the Commission maintains its view that the development and/or amendment of the Reliability Standard Implementation Guidelines is, in all circumstances, to be conducted in accordance with the rules consultation procedures and in formal consultation with the Reliability Panel.

4.4.1 Reliability Standard Implementation Guidelines

The Commission's final rule requires AEMO to develop the proposed Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures.

The rationale for this aspect of the final rule relates primarily to the existing lack of rules-based processes governing how AEMO implements the reliability standard.

The development of the Reliability Standard Implementation Guidelines will serve the following primary functions:

- clarify that AEMO has responsibility to implement the reliability standard; and
- improve transparency of the methodology AEMO will use to implement the reliability standard operationally.

The Reliability Standard Implementation Guidelines will improve methodological transparency and guide the implementation of the reliability standard. To this end, the Reliability Standard Implementation Guidelines must detail the approach used and the assumptions made in relation to:

- the demand for electricity;
- the reliability of existing and future generation;
- intermittent generation;
- energy constraints; and
- how network constraints are taken into account.

Another rationale for this aspect of the final rule relates to the way in which AEMO implements the reliability standard under the existing approach and whether this approach is sufficiently flexible, tailored, and adaptive to enable accurate and efficient reliability assessments going forward.

The proponent has indicated that providing AEMO with the flexibility to use different assessment approaches may increase the accuracy of the reliability assessments used, and thereby reduce the risk of false-negative indications of meeting the reliability standard and/or false-positive forecasts of reliability issues that can cause unnecessary and costly intervention by AEMO to restore reliability.

In making this final rule, the Commission has decided that the Reliability Standard Implementation Guidelines, properly developed, can provide a sufficient basis for AEMO to apply the reliability standard operationally and in a manner that is sufficiently transparent and flexible to account for changing circumstances and the application of the most appropriate methods of assessing reliability. These guidelines should also provide AEMO appropriate flexibility to apply fit-for-purpose approaches to assessing reliability across forecasting timeframes.

The final rule does not include provision for the development of the proposed Reliability Adequacy Requirements. The Commission considers including the Reliability Adequacy Requirements in the NER may unnecessarily restrict AEMO's ability to develop or apply the most appropriate approach to assessing reliability in the NEM over different operational timeframes.

However, this approach does not preclude AEMO from developing a form of reliability adequacy requirement should it consider this necessary when it develops the Reliability Standard Implementation Guidelines. In this circumstance, the Reliability Standard Implementation Guidelines could be developed and/or amended to provide for such a parameter were that considered appropriate.

AEMO submitted that the Reliability Standard Implementation Guidelines would be simplified by removing the Reliability Adequacy Requirements.³⁶

Provided the Reliability Standard Implementation Guidelines contain sufficient information as to how they will be applied, Reliability Adequacy Requirements are not necessary to accomplish the goal of improving transparency in the operational implementation of the reliability standard. For these reasons, the Commission has decided not to require AEMO to develop the proposed Reliability Adequacy Requirements.

4.4.2 Additional requirements

Under the final rule, the Reliability Standard Implementation Guidelines, in addition to those matters set out in the final rule at clause 3.9.3E(c), must provide an explanation of the approach used and assumptions made in relation to the treatment of extreme weather events.

The potential for low probability, high impact events that can occur during extreme weather can have a significant impact on the expected level of unserved energy. Extreme weather events can cause demand to increase significantly and the simultaneously reduce the capability of generating systems and networks (eg, an extreme heat event).

Therefore, when developing the Reliability Standard Implementation Guidelines, AEMO should consider such events both in terms of lessons learned from previous extreme weather events and the potential impact on reliability that may be caused by future extreme weather events.

The final rule also requires AEMO to consult with the Reliability Panel in respect of the development of, or any amendment to, the Reliability Standard Implementation Guidelines. The Commission considers consultation with the Reliability Panel is an essential step to developing and maintaining appropriate and well-tailored Reliability Standard Implementation Guidelines.³⁷

The final rule also requires AEMO to develop the Reliability Standard Implementation Guidelines in accordance with the rule consultation procedures, as reflected in the proposed rule. This requirement should enable consultations to be conducted in a clear and transparent manner that many stakeholders are familiar with.

³⁶ AEMO submission, 9 February 2015, p1.

³⁷ We note AEMO has historically carried out consultation with industry and the Reliability Panel when interpreting short-term and medium-term reserve requirements and determining MRLs. See rule change request, p8.

The requirement that AEMO act in accordance with the rules consultation procedures when developing and/or amending the Reliability Standard Implementation Guidelines recognises that stakeholders have a clear and legitimate expectation that they will be consulted when changes are made that affect their operations, particularly when such changes introduce or amend a requirement to provide certain information or take a particular course of action. Foreclosing or reducing the period of opportunity for stakeholders to provide input to AEMO when amending the Reliability Standard Implementation Guidelines cuts across this expectation.

The Commission considers that AEMO should have sufficient scope to develop the guidelines in a manner that avoids the need for their urgent amendment.

The final rule also requires the Reliability Standard Implementation Guidelines to be reviewed periodically by AEMO to assess their operation and effectiveness. The Commission has decided that AEMO must conduct such a review, in consultation with the Reliability Panel and in accordance with the rules consultation procedures, at least every four years from the date of commencement of the first Reliability Standard Implementation Guidelines.

Having a defined, periodic review of the Reliability Standard Implementation Guidelines will provide stakeholders with the opportunity to comment on, and convey their experiences with, the performance of the Reliability Standard Implementation Guidelines to date and should also provide a useful platform for the further development of these guidelines as market conditions change.

With increased clarity of responsibility and greater transparency about the methodologies AEMO will use and the matters it will consider when implementing the reliability standard, the Commission expects stakeholders will have increased confidence in how the reliability standard is implemented operationally. The Commission considers these outcomes will, or are likely to, contribute to the achievement of the NEO.

5 Commencement dates and transitional arrangements

Box 5.1: Summary

- The final rule results in a number of changes to the governance arrangements and implementation of the reliability standard and reliability settings.
- These changes arise out of new requirements, new governance arrangements, consequential or necessary changes, and changes that add clarity or certainty to the rules. Transitional arrangements are needed to manage the implementation of these changes and to allow time for the Reliability Panel and AEMO to meet the new requirements.

Governance arrangements of the reliability standard

- Changes to the governance arrangements of the reliability standard, and any related consequential or necessary changes, become effective on 26 March 2015.

Reliability Guidelines

- The transitional arrangements require the Reliability Panel to develop the Reliability Guidelines no later than 1 January 2017.

Reliability Standard and Reliability Settings Review

- The new requirements on the Reliability Panel's scope and conduct of the reliability standard and settings reviews become effective on 26 March 2015, and so will apply to the next scheduled reliability standard and settings review.
- Necessary or consequential changes associated with this new requirement also become effective on 26 March 2015.

Reliability Standard Implementation Guidelines

- The transitional arrangements require AEMO to develop the Reliability Standard Implementation Guidelines by 31 December 2015. Necessary or consequential changes associated with this new requirement also become effective on this date.

Consequential, necessary and other minor changes to the NER

- Other changes to the rules, and related transitional arrangements, are detailed in Appendix C.

5.1 Commencement dates and transitional arrangements

This chapter provides details of the commencement dates and transitional arrangements needed to manage the implementation of the changes arising out of the final rule.

The transitional arrangements will enable affected organisations, and stakeholders generally, to plan for and accommodate these changes. These arrangements also provide stakeholders necessary certainty about when each of the changes becomes effective.

5.1.1 Governance arrangements of the reliability standard

The changes to the governance arrangements of the reliability standard become effective on commencement of this final rule, 26 March 2015. This means that from 26 March 2015 the reliability standard will be defined in the NEL.

From this date, the Reliability Panel will no longer be responsible for determining the reliability standard and it will be subject to the rule change process under the NEL.

5.1.2 Reliability Guidelines

The final rule requires the Reliability Panel to develop and publish Reliability Guidelines no later than 1 January 2017.

This provides the Reliability Panel approximately 21 months to develop, and consult with stakeholders about, the Reliability Guidelines. Given these Guidelines will need to be developed in accordance with the rules consultation procedures, this period provides sufficient time for this to occur.

It is important that the Reliability Guidelines are developed and published prior to the Reliability Panel beginning its next Reliability Standard and Settings Review, due to commence in 2017, because the final rule requires the Reliability Panel to act in accordance with these Guidelines when conducting such reviews.

5.1.3 Reliability Standard and Settings Review

The new requirements on the Reliability Panel when conducting Reliability Standard and Settings Reviews are effective from the commencement date of this final rule (26 March 2015).

5.1.4 Reliability Standard Implementation Guidelines

The final rule requires AEMO to develop and publish the Reliability Standard Implementation Guidelines by 31 December 2015. This period is appropriate given the development (and any future amendment) of the Reliability Standard Implementation Guidelines is required to be done in accordance with the rules consultation procedures and in consultation with the Reliability Panel.

5.1.5 Consequential, necessary and other minor changes to the NER

Due to the new requirements on the Reliability Panel and AEMO under the final rule, and the changed governance arrangements of the reliability standard, there are numerous consequential, necessary and other minor changes to the NER not considered above. These changes, along with the rationale for making each change, are detailed in Appendix C.

Most of these changes relate to changing the definition in the NER of "power system security and reliability standards" to either "power system security standards" or "power system security standards and the reliability standard".

These changes are made to reflect the governance changes in the final rule that move responsibility to determine the reliability standard from the Reliability Panel to the Commission. These changes occur in NER Chapters 3, 4, 5, 8, and 10.

Other changes are consequential to the introduction and role of the Reliability Standard Implementation Guidelines, such as removing the following definitions:

- medium term capacity reserves;
- medium term capacity reserve standard; and
- short term capacity reserve (duplicate definition).

By removing these definitions, clauses in which these definitions appear have also been amended or, in some cases, removed entirely if they are no longer applicable or functional under the final rule.

Other changes are the result of the changed role of the Reliability Panel, the Commission, or the introduction of the Reliability Standard Implementation Guidelines, including clauses in Chapters 3, 4, 8, and 10 of the NER relating to:

- administration of PASA;
- medium term PASA;
- short term PASA;
- reliability standard and reliability settings review and report;

- administered price cap;
- reserve contracts;
- reliable operating state;
- responsibility of AEMO for power system security;
- declarations of conditions;
- load forecasting;
- purpose of the Reliability Panel; and
- reliability review process.

For the purposes of these transitional arrangements, each change made to reflect the new governance arrangements of the reliability standard becomes effective on the commencement of this final rule.

Each change made to reflect the Commission's decisions to make AEMO responsible for implementing the reliability standard and developing, consulting on, and publishing the Reliability Standard Implementation Guidelines is effective from 31 December 2015.

Changes necessary or consequential to the Reliability Panel's new responsibilities when conducting a reliability standard and settings review are effective from the commencement date of this final rule.

Other changes that are necessary or consequential to the final rule or add needed clarity or certainty to the rules, and do not affect:

- AEMO's development of the Reliability Standard Implementation Guidelines; or
- the Reliability Panel's new responsibilities relating to the Reliability Guidelines;
or
- the conduct of the Reliability Standard and Settings Reviews;

are effective on the commencement date of this final rule. These changes are detailed in Appendix C.

Abbreviations

AFP	Administered Floor Price
APC	Administered Price Cap
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
COAG Energy Council	Council of Australian Governments Energy Council
Commission	See AEMC
CPT	Cumulative Price Threshold
MCE	Ministerial Council on Energy
MFP	Market Floor Price
MPC	Market Price Cap
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules

A Legal requirements under the NEL

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

A.1 Final rule determination and final rule

In accordance with ss. 102 and 103 of the NEL, the Commission has made this final rule and associated final rule determination in relation to the rule proposed by the COAG Energy Council.

A.2 Commission's power to make the rule

The Commission is satisfied that the final rule falls within the subject matter about which the Commission may make rules.

The final rule falls within s. 34 of the NEL, as it relates to the operation of the NEM,³⁸ and the activities of persons (including registered participants) participating in the NEM or involved in the operation of the national electricity system.³⁹

A.3 Civil penalty provisions

The Commission's final rule amends clause 4.3.5(a) of the NER. This clause is classified as a civil penalty provision under Schedule 1 of the National Electricity (South Australia) Regulations.

The Commission considers that clause 4.3.5(a) should continue to be classified as a civil penalty provision and therefore does not propose to recommend any change to its classification to the COAG Energy Council.

The Commission does not consider any other provisions of the final rule should be classified as civil penalty provisions.

³⁸ See s. 34(1)(a)(i) of the NEL.

³⁹ See s. 34(1)(a)(iii) of the NEL.

A.4 Commission's considerations

In assessing the rule change request the Commission considered:

- the Commission's powers under the NEL to make the rule;
- the rule change request;
- the fact that there is no relevant Ministerial Council on Energy (MCE) Statement of Policy Principles;⁴⁰
- submissions received during the first and second rounds of consultation; and
- the Commission's analysis as to the ways in which the final rule will, or is likely to, contribute to the achievement of the NEO.

A.5 Participating jurisdictions

Under s. 91(8) of the NEL, the Commission may only make a rule that has effect with respect to an adoptive jurisdiction if it is satisfied that the rule is compatible with the proper performance of AEMO's declared network functions.⁴¹

The final rule is compatible with AEMO's declared network functions because it is unrelated to them, and therefore does not affect the performance of these functions.

⁴⁰ Under s. 33 of the NEL, the AEMC must have regard to any relevant MCE statement of policy principles in making a rule.

⁴¹ AEMO's declared network functions are specified in s. 50C of the NEL.

B Summary of issues raised in submissions

B.1 Consultation paper submissions

Stakeholder	Issue	AEMC response
AGL Energy	AGL Energy submitted that the existing arrangements benefit from Reliability Panel expertise and provide scope for additional information to be taken into account. AGL expressed reservations about the proposed Reliability Guidelines, suggesting greater prescription may lead to lower reliability in the NEM.	<p>The Commission notes the final rule enables the Reliability Panel to continue to provide its expert analysis and recommendations to the Commission as part of its four-yearly review process.</p> <p>Under the more final preferable rule, while the Reliability Panel must comply with the Reliability Guidelines when undertaking its review, it is the AEMC that sets the reliability standard through the rule change process. Consequently, the Reliability Guidelines should not lead to lower reliability in the NEM.</p>
Alinta Energy	Alinta Energy submitted that the existing arrangements have served, and continue to serve, the NEM well, and suggested no substantial arguments have been made to require governance reforms at present. Alinta Energy submitted that the existing approach to assessing reliability is working and there are no major issues with AEMO's existing ability to implement operational tasks to meet the reliability standard.	<p>As set out in chapter three of this final rule determination, the Commission considers there are benefits in having the reliability standard, as well as the reliability settings, set under the rule change process.</p> <p>The Commission also considers there would be transparency benefits to clarifying AEMO's role in implementing the reliability standard. This is discussed further in chapter four.</p>
EnergyAustralia	<p>EnergyAustralia, in its submission to the consultation paper noted that "the changes would effectively allow the AEMC to self-initiate rule changes in relation to the reliability settings".</p> <p>EnergyAustralia argued this would be "inconsistent with the governance arrangements for rule making under the National Electricity Law, which appropriately restrict AEMC from initiating</p>	<p>The Commission has the power under the NEL to make rules that confer functions on market institutions, including itself, where such rules contribute to the achievement of the NEO.</p>

Stakeholder	Issue	AEMC response
	<p>rule change requests to itself."</p> <p>EnergyAustralia submitted its support for the development of guidelines to provide greater direction to the review of the reliability standard and settings as outlined in the rule change request, noting this is consistent with the Reliability Panel's recommendations in the 2014 Reliability Standard and Reliability Settings Review.</p> <p>EnergyAustralia also submitted its support for those elements of the rule change proposal that seek to streamline reliability operational arrangements and provide greater guidance for the Reliability Panel. It also supported the development of guidelines to provide greater direction to the review of the reliability standard and settings.</p> <p>Finally, EnergyAustralia submitted that the proposed introduction of the Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements should improve transparency and facilitate flexibility in the implementation of the reliability standard, and noted that these changes would also provide AEMO with the ability to adapt relevant processes to match the form of the reliability standard without the need for a rule change.</p>	<p>However, the Commission considers the final rule better balances the accountability and transparency considerations set out in the assessment approach, and provides a proportionate response to the issues raised in the rule change request.</p> <p>Noted.</p>
ESAA	<p>ESAA indicated that it does not consider there to be widespread problem in this regard, transparency and certainty would be increased under this part of the proposed rule.</p> <p>ESAA noted that although the existing governance arrangements may be cumbersome, there is no major governance issue to be resolved. ESAA also argued that if a single body is preferred to review and determine the reliability standard and settings, then this should be the Reliability Panel,</p>	<p>The Commission considers the final rule improves good governance, accountability and transparency of decision making.</p> <p>The final rule strengthens the governance arrangements of the reliability standard by requiring the Reliability Panel to contribute its technical expertise and market knowledge to the review process and then subjecting it to the scrutiny of the rule change process.</p>

Stakeholder	Issue	AEMC response
	<p>not the AEMC.</p> <p>ESAA submitted that there is no need for additional prescription related to the Reliability Standard and Settings Guidelines in the proposed rule.</p> <p>ESAA expressed its general support for the reliability implementation part of the proposed rule, but noted that it considered a more defined process could decrease reliability to bring it closer to the target of expected unserved energy.</p>	<p>The final rule also provides for a consistent process across the reliability parameters, thereby reducing complexity and administrative burden, and increasing transparency and stakeholder accessibility.</p> <p>Regarding the level of reliability, the Commission notes that the reliability standard is determined to provide an acceptable level of expected unserved energy in a given year. It is assessed using a moving average of the actual observed levels of annual unserved energy for the most recent ten financial years, although AEMO aims to achieve the reliability standard in each financial year. Consequently, provided the reliability standard is met, there is no problem per se with the level of reliability decreasing.</p>
GDF Suez	<p>GDF Suez expressed its support for the existing governance arrangements, which, they argue, have proven to be robust and effective. GDF Suez argued that the rule change request has not identified an issue warranting significant changes to the governance arrangements.</p> <p>GDF Suez, however, noted there may be merit in achieving more consistency with respect to the governance arrangements of the reliability standard and settings, but this consideration should not override the importance of industry knowledge and experience that the Reliability Panel provides.</p>	<p>As set out in chapter four of this final rule determination, the Commission considers there are benefits in having the reliability standard, as well as the reliability settings, determined under the rule change process.</p> <p>The existing governance arrangements are unnecessarily complex and would benefit from a consistent, unified governance framework that is subject to the rule change process.</p> <p>The Commission notes the final rule maintains the benefits of Reliability Panel review of both the reliability standard and the reliability settings, thereby providing an opportunity for the Reliability Panel to contribute its technical expertise to the review process and subjecting both the reliability standard and the reliability settings to the scrutiny of the rule change process.</p>

Stakeholder	Issue	AEMC response
Origin Energy	<p>Origin Energy submitted that the existing arrangements have worked well, and argued there must be a high threshold for significant change to the governance framework.</p> <p>Origin also contended that there is no compelling evidence to suggest the proposed changes are warranted, which, if implemented, would undermine the check and balance strength in the split of responsibility between the Reliability Panel and the AEMC.</p> <p>Origin Energy agreed the development of high level guidelines would allow for improved transparency and greater efficiency in determining the reliability parameters.</p>	<p>The Commission is of the view that the reliability standard is best determined according to the rule change process with the benefit of a Reliability Panel review. This approach preserves the role of the Reliability Panel as an expert advisory body while strengthening the governance arrangements of the reliability standard by subjecting it to the scrutiny of the rule change process and the statutory independence of Commission decision-making.</p> <p>Noted.</p>
Snowy Hydro	<p>Snowy Hydro submitted its in principle support for the proposed changes with respect to the implementation of the reliability standard, noting the need for AEMO to have flexibility to explore other, more appropriate measures to discern sufficient reserves to meet the reliability standard.</p>	<p>Noted.</p>

B.2 Draft rule determination submissions

This appendix outlines limited issues not addressed elsewhere in the final rule determination. Both chapters 3 and 4 provide greater consideration of issues raised by stakeholders in their submissions to the draft rule determination.⁴²

⁴² See sections 3.3 and 4.3 above.

Stakeholder	Issue	AEMC response
AEMO	<p>AEMO submitted that the current requirement under NER 3.7C for it to prepare and publish the EAAP study every three months is now unwarranted. AEMO proposed that the Reliability Standard Implementation Guidelines could encompass the EAAP study as well, which would enable AEMO to make changes to the EAAP, such as publication timing without seeking a rule change request.</p>	<p>This proposal is considered to be out of scope of this rule change request.</p>
GDF Suez	<p>GDF Suez queried how the AEMC would manage a rule change proposal requesting a change to the reliability standard coming from a party outside of the Reliability Panel's four-yearly review.</p> <p>GDF Suez also raised the concern that the Reliability Guidelines could be used as an instrument to prevent attempts to review the reliability settings, noting the view that there has been a general bias away from changes to some reliability settings for reasons that go beyond market efficiency.</p> <p>GDF Suez suggested that regardless of the Guidelines, where a strong case is made to change the MPC or CPT, then that should occur.</p>	<p>The Commission considers all rule change requests in respect of electricity according to the requirements of the NEL, set out in s. 94.</p> <p>At 3.4.4 above, this final rule determination discusses the importance of regular and transparent reviews of the reliability standard and reliability settings.</p> <p>The Commission notes that any person may submit a rule change request to change the reliability settings under the current arrangements.</p>
Stanwell	<p>Stanwell noted that the level of the CPT is no longer a multiple of 15 times the level of the MPC, which has occurred due to the annual CPI and rounding adjustments made under the NER. Stanwell notes that while the difference is minor at present, it is important that such incremental changes to these reliability parameters do not unintentionally alter the intended risk profile of the market.</p>	<p>The level of the MPC and CPT are outside the scope of this rule change request. Under the final rule, these parameters will be assessed by the Reliability Panel as part of its ongoing four-yearly reliability standard and reliability settings reviews.</p> <p>The Commission notes that any person may submit a rule change request to change the reliability settings.</p>

C Table of consequential, necessary and other minor changes to the NER

Section 91B of the NEL enables the AEMC to make rules that are necessary or consequential to a rule change request.

The table below itemises and provides the rationale for necessary or consequential and other minor changes to the NER arising out of the rule change request.

Table C.1 Table of consequential, necessary and other minor changes

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
3.7.1(c)(3)	Administration of PASA	"following analysis and assessment of the information referred to subparagraphs (1) and (2), <i>publish</i> information that will: (i) assist <i>Registered Participants</i> to plan any scheduled work on <i>plant</i> ; and (ii) inform the <i>market</i> of possible <i>power system security</i> and reliability of <i>supply</i> problems."	"following analysis and assessment of the information referred to subparagraphs (1) and (2), <i>publish</i> information that will <u>inform the market regarding forecasts of supply and demand</u> .: (i) assist <i>Registered Participants</i> to <u>plan any scheduled work on plant</u> ; and (ii) <u>inform the market</u> of possible <i>power system security</i> and reliability of <i>supply</i> problems."	This change is made to reflect the fact that parties additional to Registered Participants, such as demand-side responders, also need to be informed of these matters.
3.7.1(d)	Administration of PASA	"AEMO must use its reasonable endeavours to ensure that it provides to <i>Registered Participants</i> sufficient information to allow <i>Registered Participants</i> to undertake maintenance and <i>outage</i> planning without violating <i>power system security</i> and reliability of <i>supply</i> and to allow the <i>market</i> to operate effectively with a minimal amount of intervention by AEMO."	"AEMO must use its reasonable endeavours to ensure that it provides to <i>Registered Participants</i> sufficient information to <u>allow <i>Registered Participants</i> to undertake maintenance and outage planning without violating power system security and reliability of supply</u> and to allow the <i>market</i> to operate effectively with a minimal amount of intervention by AEMO."	ibid.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
3.7.2(b)	Medium term PASA	"AEMO may <i>publish</i> additional updated versions of the <i>medium term PASA</i> in the event of changes which, in the judgment of AEMO, are materially significant and should be communicated to <i>Registered Participants</i> ."	"AEMO may publish additional updated versions of the <i>medium term PASA</i> in the event of changes which, in the judgment of AEMO, are materially significant and should be communicated to <i>Registered Participants</i>. "	ibid.
3.7.2(c)(2)	Medium term PASA	"reserve requirements determined in accordance with the <i>medium term capacity reserve standards</i> ;"	Omitted.	Under the final rule, any capacity reserve is to be determined by AEMO through the Reliability Standard Implementation Guidelines.
3.7.2(f)(1A)	Medium term PASA	"reserve requirements determined in accordance with the <i>medium term capacity reserve standards</i> ;"	Omitted.	ibid.
3.7.2(f)(6)(ii)	Medium term PASA	"identification and quantification of: (i) any projected <i>violations of power system security</i> ; (ii) any <i>days on which low reserve or lack of reserve</i> conditions are forecast to apply; (iii) where a projected <i>supply</i> deficit in one <i>region</i> can be supplemented by a surplus in another <i>region</i> (dependent on forecast <i>interconnector</i> transfer capabilities); (iv) forecast <i>interconnector</i> transfer	"identification and quantification of (i) any projected <i>violations of power system security</i> ; (ii) <u>any projected failure to meet the <i>reliability standard</i> as assessed in accordance with the <i>reliability standard implementation guidelines</i></u> ; (ii) any <i>days on which low reserve or lack of reserve</i> conditions are forecast to apply; (iii) where a projected <i>supply</i> deficit in one <i>region</i> can be supplemented by a surplus in	Amended to reflect inclusion of the reliability standard in the NER and application of Reliability Standard Implementation Guidelines.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<p>capabilities and the discrepancy between forecast <i>interconnector</i> transfer capabilities and the forecast capacity of the relevant <i>interconnector</i> in the absence of <i>outages</i> on the relevant <i>interconnector</i> only; and</p> <p>(v) when and where <i>network constraints</i> may become binding on the <i>dispatch</i> of <i>generation</i> or <i>load</i>."</p>	<p>another <i>region</i> (dependent on forecast <i>interconnector</i> transfer capabilities);</p> <p>(iii) (iv) forecast <i>interconnector</i> transfer capabilities and the discrepancy between forecast <i>interconnector</i> transfer capabilities and the forecast capacity of the relevant <i>interconnector</i> in the absence of <i>outages</i> on the relevant <i>interconnector</i> only; and</p> <p>(iv) (v) when and where <i>network constraints</i> may become binding on the <i>dispatch</i> of <i>generation</i> or <i>load</i>."</p>	
3.7.2(g)	Medium term PASA	"AEMO must document the procedure it uses for preparation of the <i>medium term PASA</i> and make it available to all <i>Registered Participants</i> on a cost recovery basis."	"AEMO must document <u>publish</u> the procedure it uses for preparation of the <i>medium term PASA</i> and make it available to all <i>Registered Participants</i> on a cost recovery basis."	This change is made in recognition of the broader use of PASA beyond registered participants.
3.7.3(c)	Short term PASA	"AEMO may <i>publish</i> additional updated versions of the <i>short term PASA</i> in the event of changes which, in the judgement of AEMO, are materially significant and should be communicated to <i>Registered Participants</i> ."	"AEMO may <i>publish</i> additional updated versions of the <i>short term PASA</i> in the event of changes which, in the judgement of AEMO, are materially significant and should be communicated to <i>Registered Participants</i>."	ibid.
3.7.3(d)	Short term PASA	<p>"The following <i>short term PASA inputs</i> are to be prepared by AEMO:</p> <p>(2)reserve requirements for each <i>region</i> determined in accordance with the <i>short</i></p>	<p>"The following <i>short term PASA inputs</i> are to be prepared by AEMO:</p> <p>(2)reserve requirements for each <i>region</i></p>	The Reliability Standard Implementation Guidelines will describe how reserve requirements are to be

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<p><i>term capacity reserve</i> standards</p> <p>(3) forecast <i>network constraints</i> known to AEMO at the time; and</p> <p>(4) an <i>unconstrained intermittent generation forecast</i> for each <i>semi-scheduled generating unit</i> for each <i>trading interval</i>."</p>	<p>determined in accordance with the <i>short term capacity reserve</i> standards</p> <p>(32) forecast <i>network constraints</i> known to AEMO at the time; and</p> <p>(43) an <i>unconstrained intermittent generation forecast</i> for each <i>semi-scheduled generating unit</i> for each <i>trading interval</i>."</p>	determined.
3.7.3(h)(5)	Short term PASA	<p>"identification and quantification of:</p> <p>(I) any projected <i>violations of power system security</i>;</p> <p>(ii) any <i>trading intervals</i> for which <i>low reserve</i> or <i>lack of reserve</i> conditions are forecast to apply;</p> <p>(iii) where a projected <i>supply</i> deficit in one <i>region</i> can be supplemented by a surplus in another <i>region</i> (dependent on forecast <i>interconnector</i> transfer capabilities);</p> <p>(iv) forecast <i>interconnector</i> transfer capabilities and the discrepancy between forecast <i>interconnector</i> transfer capabilities and the forecast capacity of the relevant <i>interconnector</i> in the absence of <i>outages</i> on the relevant <i>interconnector</i> only; and</p> <p>(v) when and where <i>network constraints</i></p>	<p>"identification and quantification of:</p> <p>(I) any projected <i>violations of power system security</i>;</p> <p>(ii) any trading intervals for which low reserve or lack of reserve conditions are forecast to apply;</p> <p><u>(ii) any projected failure to meet the <i>reliability standard</i> as assessed in accordance with the <i>reliability standard implementation guidelines</i>;</u></p> <p>(iii) where a projected supply deficit in one region can be supplemented by a surplus in another region (dependent on forecast interconnector transfer capabilities);</p> <p>(iiiiv) forecast <i>interconnector</i> transfer capabilities and the discrepancy between forecast <i>interconnector</i> transfer capabilities</p>	Amended to reflect inclusion of the reliability standard in the NER and application of Reliability Standard Implementation Guidelines.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		may become binding on the <i>dispatch of generation or load.</i> "	and the forecast capacity of the relevant <i>interconnector</i> in the absence of outages on the relevant interconnector only; and (iv v) when and where network constraints may become binding on the dispatch of generation or load."	
3.7.3(i)	Short term PASA	"In the event that in performing the <i>short term PASA</i> AEMO identifies any projected <i>low reserve</i> or <i>lack of reserve</i> conditions in respect of a <i>participating jurisdiction</i> , then AEMO must use its reasonable endeavours to advise the <i>Jurisdictional System Security Coordinator</i> for that <i>participating jurisdiction</i> of any potential requirements during such conditions to shed <i>sensitive loads</i> ."	"In the event that If in performing the <i>short term PASA</i> AEMO identifies any projected low reserve or lack of reserve conditions <u>failure to meet the reliability standard</u> in respect of a participating jurisdiction <u>region as assessed in accordance with the <i>reliability standard implementation guidelines</i></u> , then AEMO must use its reasonable endeavours to advise the <i>Jurisdictional System Security Coordinator</i> for that who represents a participating jurisdiction in that region of any potential requirements during such conditions to shed <i>sensitive loads</i> ."	Amended to reflect addition of Reliability Standard Implementation Guidelines and reliability standard now defined in the NER.
3.7.3(j)	Short term PASA	"AEMO must document the procedure it uses for preparation of the <i>short term PASA</i> and make it available to all <i>Registered Participants</i> on a cost recovery basis."	"AEMO must document <u>publish</u> the procedure it uses for preparation of the <i>short term PASA</i> and make it available to all Registered Participants on a cost recovery basis"	This change is made in recognition of the broader use of PASA beyond registered participants.
3.8.1(b)(4)	Central dispatch	" <i>power system security</i> requirements determined as described in Chapter 4 and the power system security and reliability standards;"	" <i>power system security</i> requirements determined as described in Chapter 4 and the power system security and reliability standards;"	This clause relates to the central dispatch process operated by AEMO to ensure that the dispatch meets the various

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
				power system security requirements, including those determined by the Reliability Panel. Therefore, the final rule amends this clause so it no longer refers to the reliability standard.
3.8.1(b)(10)	Central dispatch	"arrangements designed to ensure pro-rata loading of tied <i>dispatch bid</i> and <i>dispatch offer data data</i> ;"	"arrangements designed to ensure pro-rata loading of tied <i>dispatch bid</i> and <i>dispatch offer data data</i> ;"	A minor change has been made to this clause to correct a typographical error.
3.9.3A	Reliability standard and reliability settings review		See final rule.	
3.9.3B	Reliability standard and reliability settings review report		See final rule.	
3.9.3C	Reliability standard		See final rule.	
3.9.3D	Implementation of the reliability standard		See final rule.	
3.9.4(b)	Market Price	"The value of the <i>market price cap</i> is \$12,500/MWh prior to 1 July 2012. Effective	"The value of the market price cap is	Amended to clarify the calculation of the value of the

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
	Cap	on and from 1 July 2012, the value of the <i>market price cap</i> for each <i>financial year</i> is the dollar amount per MWh calculated by the <i>AEMC</i> under paragraph (c)."	\$12,500/MWh prior to 1 July 2012. Effective on and from 1 July 2012, The value of the <i>market price cap</i> for each <i>financial year</i> is the dollar amount per MWh calculated by the <i>AEMC</i> under paragraph (c)."	MPC.
3.11.1 (c)(2)(ii)	Introduction	"in the circumstances contemplated in clause 3.11.3(c), by <i>AEMO</i> under <i>ancillary services agreements</i> entered into following a call for offers made in accordance with rule 3.11 to meet a <i>NSCAS gap</i> only for <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> "	"in the circumstances contemplated in clause 3.11.3(c), by <i>AEMO</i> under <i>ancillary services agreements</i> entered into following a call for offers made in accordance with rule 3.11 to meet a <i>NSCAS gap</i> only for <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards and the reliability standard</i> "	The NSCAS needs and NSCAS gaps relate both to the security and reliability of the power system, and so the final rule amends the clause to refer to both standards (which are now made under separate processes).
3.11.3(c)(2)	Acquisition of Network Support and Control Ancillary Services	"considers it is necessary to acquire <i>NSCAS</i> to meet the relevant <i>NSCAS gap</i> to prevent an adverse impact on <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> "	"considers it is necessary to acquire <i>NSCAS</i> to meet the relevant <i>NSCAS gap</i> to prevent an adverse impact on <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards and the reliability standard</i> "	ibid.
3.11.6(a)	"Dispatch of non-market ancillary services by <i>AEMO</i> "	"but <i>AEMO</i> may only call for offers to acquire <i>NSCAS</i> to maintain <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> "	"but <i>AEMO</i> may only call for offers to acquire <i>NSCAS</i> to maintain <i>power system security</i> and reliability of supply of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards and the reliability standard</i> "	ibid.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
3.11.6(a)(1)	Dispatch of non-market ancillary services by AEMO	"maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> "	"maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> and the <i>reliability standard</i> "	ibid.
3.15.9(d)(1) & (2)	Reserve settlements	"(1) without the intervention in the <i>market</i> of AEMO a <i>region</i> would otherwise, in AEMO's reasonable opinion, fail to meet the minimum <i>power system security and reliability standards</i> ; or (2) a <i>region</i> requires a level of <i>power system reliability</i> or <i>reserves</i> which, in AEMO's reasonable opinion, exceeds the level required to meet the minimum <i>power system security and reliability standards</i> "	"(1) without the intervention in the market of AEMO a <i>region</i> would otherwise, in AEMO's reasonable opinion, fail to meet the minimum <i>power system security and reliability standards</i> or the <i>reliability standard</i> ; or (2) a <i>region</i> requires a level of <i>power system reliability</i> or <i>reserves</i> which, in AEMO's reasonable opinion, exceeds the level required to meet the minimum power system security and reliability standards "	This clause relates to settlement when AEMO has contracted for reserves. While AEMO can only contract for reserves for reliability reasons, it can dispatch the reserves to manage both reliability and security; see clause 3.20.7(a) of the NER. Therefore, this clause should refer both to security standards and the reliability standard.
3.20.3(b)	Reserve contracts	"AEMO may determine to enter into <i>reserve contracts</i> to ensure that the reliability of <i>supply</i> in a <i>region</i> or <i>regions</i> meets the relevant <i>power system security and reliability standards</i> established by the <i>Reliability Panel</i> for the <i>region</i> and, where practicable, to maintain <i>power system security</i> "	"AEMO may determine to enter into <i>reserve contracts</i> to ensure that the reliability of <i>supply</i> in a <i>region</i> or <i>regions</i> meets the relevant power system security and reliability standards established by the Reliability Panel for the <i>region</i> and, where practicable, to maintain <i>power system security</i> "	AEMO can only enter into reserves to manage power system reliability, and not to manage system security. Note that the reference to the Reliability Panel has been deleted given the governance changes in the final rule.
3.20.7(a)	AEMO's exercise of the RERT	"has arrived, AEMO may <i>dispatch</i> such <i>scheduled reserves</i> or <i>activate</i> such <i>unscheduled reserves</i> to ensure that the reliability of <i>supply</i> in a <i>region</i> or <i>regions</i>	"has arrived, AEMO may <i>dispatch</i> such <i>scheduled reserves</i> or <i>activate</i> such <i>unscheduled reserves</i> to ensure that the reliability of <i>supply</i> in a <i>region</i> or <i>regions</i> meets	The reference in standards in this clause relates to meeting the reliability standard, while the reference to system security

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		meets the relevant <i>power system security and reliability standards</i> and, where practicable, to maintain <i>power system security</i> "	the relevant power system security and reliability standards and, where practicable, to maintain <i>power system security</i> "	does not expressly relate to a power system security standard.
4.2.4(a)(2)	Secure operating state and power system security	"the <i>power system</i> will return to a <i>satisfactory operating state</i> following the occurrence of any <i>credible contingency event</i> in accordance with the <i>power system security and reliability standards</i> "	"the <i>power system</i> will return to a <i>satisfactory operating state</i> following the occurrence of any <i>credible contingency event</i> in accordance with the <i>power system security and reliability standards</i> "	This clause only relates to system security and, therefore, should refer to the power system security standards.
4.2.7(c)	Reliable Operating State	"in AEMO's reasonable opinion the levels of <i>short term</i> and <i>medium term capacity reserves</i> available to the <i>power system</i> are at least equal to the required levels determined in accordance with the <i>power system security and reliability standards</i> "	"in AEMO's reasonable opinion the levels of short term and medium term capacity reserves available to the power system is projected to meet, the <i>reliability standard</i> , having regard to <u>the <i>reliability standard implementation guidelines</i></u> are at least equal to the required levels determined in accordance with the <i>power system security and reliability standards</i> "	This clause relates to system reliability and, therefore, should refer to the reliability standard. The clause has also been amended to refer to meeting the reliability standard, as determined in accordance to the Reliability Standard Implementation Guidelines. Also, the reference to short and medium term is removed to be consistent with the final rule changes to the definitions.
4.3.1(k) & (l)	Responsibility of AEMO for power system security	"(k) to assess the availability and adequacy, including the dynamic response, of <i>contingency capacity reserves</i> and <i>reactive power reserves</i> in accordance with the	"(k) to assess the availability and adequacy, including the dynamic response, of <i>contingency capacity reserves</i> and <i>reactive power reserves</i> in accordance with the <i>power</i>	These clauses relate to the control of voltage and frequency of power system security standards; it does not relate to

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<p><i>power system security and reliability standards</i> and to ensure that appropriate levels of <i>contingency capacity reserves</i> and <i>reactive power reserves</i> are available:"</p> <p>"(l) to determine the required levels of <i>short term capacity reserves</i> and <i>medium term capacity reserves</i> in accordance with the <i>power system security and reliability standards</i>, and to assess the availability of the actual <i>short term capacity reserve</i> and actual <i>medium term capacity reserve</i> in accordance with the <i>projected assessment of system adequacy (PASA)</i>, described in Chapter 3, which would be available to supplement utilised <i>contingency capacity reserves</i> and, if necessary, initiate action in relation to a <i>relevant AEMO intervention event</i>;"</p>	<p><i>system security and reliability standards</i> and to ensure that appropriate levels of <i>contingency capacity reserves</i> and <i>reactive power reserves</i> are available:"</p> <p>" (l) to monitor demand and <i>generation capacity</i> in accordance with the <i>reliability standard implementation guidelines</i> and , if necessary, initiate action in relation to a <i>relevant AEMO intervention event</i>;"</p>	reliability.
4.3.1(m)	Responsibility of AEMO for power system security	"to make available to <i>Registered Participants</i> as appropriate, information about the potential for, or the occurrence of, a situation which could significantly impact, or is significantly impacting, on <i>power system security</i> , and advise of any <i>low reserve</i> condition for the relevant periods where the <i>short term capacity reserve</i> and/or <i>medium term capacity reserve</i> is assessed as being less than that determined in accordance with the <i>short term capacity reserve</i> standard or <i>medium</i>	"to publish as appropriate, information about the potential for, or the occurrence of, a situation which could significantly impact, or is significantly impacting, on <i>power system security</i> , and advise of any <i>low reserve</i> condition for the relevant periods determined in accordance with the <i>reliability standard implementation guidelines</i> ;"	This change is made to reflect the fact that parties additional to Registered Participants also need to be informed of these matters and to reflect inclusion of Reliability Standard Implementation Guidelines and consequential removal of short and medium term capacity reserve standards.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<i>term capacity reserve standard respectively"</i>		
4.3.5(a)	Market Customer obligations	"All <i>Market Customers</i> having expected peak demands at <i>connection points</i> in excess of 10 MW, must provide automatic <i>interruptible load</i> of the type described in clause S5.1.10 of schedule 5.1. The level of this automatic <i>interruptible load</i> must be a minimum of 60% of their expected demand, or such other minimum <i>interruptible load</i> level as may be periodically determined by the <i>Reliability Panel</i> , to be progressively automatically <i>disconnected</i> following the occurrence of a <i>power system under-frequency</i> condition described in the <i>power system security and reliability standards</i> ."	"All <i>Market Customers</i> having expected peak demands at <i>connection points</i> in excess of 10 MW, must provide automatic <i>interruptible load</i> of the type described in clause S5.1.10 of schedule 5.1. The level of this automatic <i>interruptible load</i> must be a minimum of 60% of their expected demand, or such other minimum <i>interruptible load</i> level as may be periodically determined by the <i>Reliability Panel</i> , to be progressively automatically <i>disconnected</i> following the occurrence of a <i>power system under-frequency</i> condition described in the <i>power system security and reliability standards</i> ."	This clause relates to the automatic under frequency load shedding schedule used to manage the system frequency, and hence power system security. It does not relate to reliability.
4.4.1(b)	Power system frequency control responsibilities	"ensure that the frequency operating standards set out in the power system security and reliability standards are achieved."	"ensure that the frequency operating standards set out in the power system security and reliability standards are achieved."	This clause relates to frequency control, and hence power system security. It does not relate to reliability.
4.8.4(a) & (b)	Declaration of conditions	"(a) <i>Low reserve</i> condition – when <i>AEMO</i> considers that the <i>short term capacity reserves</i> or <i>medium term capacity reserves</i> for the period being assessed have fallen below those determined by <i>AEMO</i> as being in accordance with the relevant <i>short term capacity reserve standards</i> or <i>medium term</i>	" <i>Low reserve</i> condition – when <i>AEMO</i> considers that the short term capacity reserves or medium term capacity reserves for the period being assessed have fallen below those determined by AEMO as being in accordance with the relevant short term capacity reserve standards or medium term capacity reserve	This clause is amended to reflect role of Reliability Standard Implementation Guidelines in implementing the reliability standard and consequential removal of short and medium term capacity

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<p><i>capacity reserve standards</i>"</p> <p>"(b) <i>Lack of reserve level 1 (LOR1)</i> – when AEMO considers that there is insufficient <i>short term capacity reserves</i> available to provide complete replacement of the <i>contingency capacity reserve</i> on the occurrence of the <i>credible contingency event</i> which has the potential for the most significant impact on the <i>power system</i> for the period nominated. This would generally be the instantaneous loss of the largest <i>generating unit</i> on the <i>power system</i>. Alternatively, it might be the loss of any <i>interconnection</i> under <i>abnormal conditions</i>."</p>	<p>standards <i>balance of generation capacity and demand for the period being assessed does not meet the reliability standard as assessed in accordance with the reliability standard implementation guidelines.</i>"</p> <p>"(b) <i>Lack of reserve level 1 (LOR1)</i> – when AEMO considers that there is insufficient short term <i>capacity reserves</i> available <u>in an operational forecasting timeframe</u> to provide complete replacement of the <i>contingency capacity reserve</i> on the occurrence of the <i>credible contingency event</i> which has the potential for the most significant impact on the <i>power system</i> for the period nominated. This would generally be the instantaneous loss of the largest <i>generating unit</i> on the <i>power system</i>. Alternatively, it might be the loss of any <i>interconnection</i> under <i>abnormal conditions</i>."</p>	reserve standards.
4.8.7(a)	Managing a power system contingency event	"During the period when the <i>power system</i> is affected by a <i>contingency event</i> AEMO must carry out actions, in accordance with the guidelines set out in the <i>power system security and reliability standards</i> and its obligations concerning <i>sensitive loads</i> , to:"	"During the period when the <i>power system</i> is affected by a <i>contingency event</i> AEMO must carry out actions, in accordance with the guidelines set out in the <i>power system security and reliability standards</i> and its obligations concerning <i>sensitive loads</i> , to:"	ibid.
4.8.9(l)	Power to issue directions and clause 4.8.9	"When issuing <i>clause 4.8.9 instructions</i> to implement <i>load shedding</i> across <i>interconnected regions</i> , AEMO must use reasonable endeavours to implement <i>load</i>	"When issuing <i>clause 4.8.9 instructions</i> to implement <i>load shedding</i> across <i>interconnected regions</i> , AEMO must use reasonable endeavours to implement <i>load</i>	This clause relates to system security, not reliability.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
	instructions	<i>shedding</i> in an equitable manner as specified in the <i>power system security and reliability standards</i> , taking into account the <i>power transfer capability</i> of the relevant <i>networks</i> ."	<i>shedding</i> in an equitable manner as specified in the <i>power system security and reliability standards</i> , taking into account the <i>power transfer capability</i> of the relevant <i>networks</i> ."	
4.8.15(a)(1)(iii)	Review of operating incidents	"an event where the frequency of the <i>power system</i> is outside limits specified in the <i>power system security and reliability standards</i> ;"	"an event where the frequency of the <i>power system</i> is outside limits specified in the <i>power system security and reliability standards</i> ;"	This clause relates to frequency control, and hence power system security. It does not relate to reliability.
4.9.1(e) and (f)	Load forecasting	"A 10% probability of exceedence of <i>load forecast</i> must be adopted for the purposes of determination of <i>short term capacity reserve</i> and <i>medium term capacity reserve</i> requirements under the <i>power system security and reliability standards</i> ." "AEMO must aggregate the regional forecasts to produce a total <i>interconnected transmission network</i> indicative <i>load schedule</i> for use in AEMO processes such as the determination of the required levels of <i>short term capacity reserves</i> , <i>medium term capacity reserves</i> , the PASA assessments and <i>pre-dispatch schedules</i> ."	Omitted.	Under the final rule this clause is deleted because the Reliability Standard Implementation Guidelines will determine the approach used for demand forecasts.
5.20.2(c)(8)(ii) & (iii)	Publication of NTNDP	"(ii) for any NSCAS <i>gap</i> identified in subparagraph (I) required to maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security</i>	"(ii) for any NSCAS <i>gap</i> identified in subparagraph (I) required to maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability</i>	NSCAS relates both to security and reliability of the power system.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
		<p><i>and reliability standards</i>, the relevant NSCAS trigger date;"</p> <p>"(iii) for any NSCAS <i>gap</i> identified in subparagraph (I) required to maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i>, the relevant NSCAS tender date;"</p>	<p><i>standards and the reliability standard</i>, the relevant NSCAS trigger date;"</p> <p>"(iii) for any NSCAS <i>gap</i> identified in subparagraph (I) required to maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards and the reliability standard</i>, the relevant NSCAS tender date;"</p>	
8.8.1(a)(2)	Purpose of Reliability Panel	"review and, on the advice of AEMO, determine the <i>power system security and reliability standards</i> ;"	"review and, on the advice of AEMO, determine the <i>power system security and reliability standards</i> ;"	The Reliability Panel will continue to review performance against the power system security standards and the reliability standard.
8.8.1(a)(5)	Purpose of Reliability Panel	report to the AEMC and <i>participating jurisdictions</i> on overall <i>power system reliability</i> matters concerning the <i>power system</i> and on the matters referred to in clauses 8.8.1(a)(2) and (3), and make recommendations on <i>market</i> changes or changes to the <i>Rules</i> and any other matters which the <i>Reliability Panel</i> considers necessary;	report to the AEMC and <i>participating jurisdictions</i> on overall <i>power system reliability</i> matters concerning the <i>power system</i> and on the matters referred to in clauses 8.8.1(a)(2) and (3) clauses 8.8.1(a)(1b), (2) and (3), and make recommendations on <i>market</i> changes or changes to the <i>Rules</i> and any other matters which the <i>Reliability Panel</i> considers necessary;	Consequential changes to clause numbering.
8.8.3 (a)(1)	Reliability Panel review process	"the <i>power system security and reliability standards</i> ;"	"the <i>power system security and reliability standards</i> ;"	The Reliability Panel will continue to determine the power system security standards under the final rule, but not the

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
				reliability standard.
8.8.3(b)	Reliability Panel review process	"At least once each calendar year and at such other times as the <i>AEMC</i> may request, the <i>Reliability Panel</i> must conduct a review of the performance of the <i>market</i> in terms of <i>reliability</i> of the <i>power system</i> , the <i>power system security and reliability standards</i> , the <i>system restart standard</i> , the guidelines referred to in clause 8.8.1(a)(3), the policies and guidelines referred to in clause 8.8.1(a)(4) and the guidelines referred to in clause 8.8.1(a)(9) in accordance with this clause 8.8.3."	"At least once each calendar year and at such other times as the <i>AEMC</i> may request, the <i>Reliability Panel</i> must conduct a review of the performance of the <i>market</i> in terms of <i>reliability</i> of the <i>power system</i> , <u>the <i>reliability standard</i></u> , the <i>power system security and reliability standards</i> , the <i>system restart standard</i> , the guidelines referred to in clause 8.8.1(a)(3), the policies and guidelines referred to in clause 8.8.1(a)(4) and the guidelines referred to in clause 8.8.1(a)(9) in accordance with this clause 8.8.3."	The Reliability Panel will continue to review performance against the power system security standards and the reliability standard.
Chapter 10 - Definitions	Contingency capacity reserve standards	"The standards set out in the <i>power system security and reliability standards</i> to be used by <i>AEMO</i> to determine the levels of <i>contingency capacity reserves</i> necessary for <i>power system security</i> ."	"The standards set out in the <u><i>power system security and reliability standards</i></u> to be used by <i>AEMO</i> to determine the levels of <i>contingency capacity reserves</i> necessary for <i>power system security</i> ."	This relates to frequency control, and hence power system security. It does not relate to reliability.
Chapter 10 - Definitions	Delayed response capacity reserve	"That part of the <i>contingency capacity reserve</i> capable of realisation within 5 minutes of a major <i>frequency</i> decline in the <i>power system</i> as described further in the <i>power system security and reliability standards</i> ."	"That part of the <i>contingency capacity reserve</i> capable of realisation within 5 minutes of a major <i>frequency</i> decline in the <i>power system</i> as described further in the <i>power system security and reliability standards</i> ."	ibid.
Chapter 10 - Definitions	Extreme frequency excursion	"In relation to the <i>frequency</i> of the <i>power system</i> , means the limits so described and specified in the <i>power system security and</i>	"In relation to the <i>frequency</i> of the <i>power system</i> , means the limits so described and specified in the <i>power system security and</i>	ibid.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
	tolerance limits	<i>reliability standards.</i> "	reliability standards. "	
Chapter 10 - Definitions	Frequency operating standards	"The standards which specify the <i>frequency</i> levels for the operation of the <i>power system</i> set out in the <i>power system security and reliability standards.</i> "	"The standards which specify the <i>frequency</i> levels for the operation of the <i>power system</i> set out in the <i>power system security and reliability standards."</i>	ibid.
Chapter 10 - Definitions	Medium term capacity reserve	"The aggregate amount of generating capacity indicated by the relevant <i>Generators</i> as being available any time on a particular <i>day</i> during the period covered by the <i>medium term PASA</i> , and which is assessed by <i>AEMO</i> as being in excess of the capacity requirement to meet the forecast <i>peak load</i> , taking into account the known or historical levels of demand management ."	Definition omitted.	This concept and definition is deleted under the final rule as the Reliability Standard Implementation Guidelines will determine the approach used.
Chapter 10 - Definitions	Medium term capacity reserve standard	"The level of <i>medium term capacity reserve</i> required for a particular period as set out in the <i>power system security and reliability standards.</i> "	Definition omitted.	ibid.
Chapter 10 - Definitions	Normal operating frequency band	"In relation to the <i>frequency</i> of the power system, means the range 49.9Hz to 50.1Hz or such other range so specified in the <i>power system security and reliability standards.</i> "	"In relation to the <i>frequency</i> of the <i>power system</i> , means the range 49.9Hz to 50.1Hz or such other range so specified in the <i>power system security and reliability standards."</i>	This relates to frequency control, and hence power system security. It does not relate to reliability.
Chapter 10 - Definitions	Normal operating frequency	"In relation to the <i>frequency</i> of the <i>power system</i> , means the range specified as being acceptable for infrequent and	"In relation to the <i>frequency</i> of the <i>power system</i> , means the range specified as being acceptable for infrequent and momentary	ibid.

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
	excursion band	momentary excursions of <i>frequency</i> outside the <i>normal operating frequency band</i> , being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the <i>power system security and reliability standards</i> ."	excursions of <i>frequency</i> outside the <i>normal operating frequency band</i> , being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the <i>power system security and reliability standards</i> ."	
Chapter 10 - Definitions	NSCAS need	"maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> ;"	"maintain <i>power system security</i> and reliability of <i>supply</i> of the <i>transmission network</i> in accordance with the <i>power system security and reliability standards</i> and the <i>reliability standard</i> ;"	NSCAS relates both to security and reliability of the power system.
Chapter 10 - Definitions	Operational frequency tolerance band	"The range of <i>frequency</i> within which the <i>power system</i> is to be operated to cater for the occurrence of a <i>contingency event</i> as specified in the <i>power system security and reliability standards</i> ."	"The range of <i>frequency</i> within which the <i>power system</i> is to be operated to cater for the occurrence of a <i>contingency event</i> as specified in the <i>power system security and reliability standards</i> ."	This relates to frequency control, and hence power system security. It does not relate to reliability.
Chapter 10 - Definitions	Power system security and reliability standards	"The standards (other than the <i>system restart standard</i>) governing <i>power system security</i> and <i>reliability</i> of the <i>power system</i> to be approved by the <i>Reliability Panel</i> on the advice of <i>AEMO</i> , but which may include but are not limited to standards for the frequency of the <i>power system</i> in operation, contingency capacity reserves (including guidelines for assessing requirements), short term capacity reserves and medium term capacity reserves."	"The standards (other than the <i>reliability standard</i> and the <i>system restart standard</i>) governing <i>power system security</i> and <i>reliability</i> of the <i>power system</i> to be approved by the <i>Reliability Panel</i> on the advice of <i>AEMO</i> , but which may include but are not limited to standards for the <i>frequency</i> of the <i>power system</i> in operation and, <i>contingency capacity reserves</i> (including guidelines for assessing requirements), short term capacity reserves and medium term capacity reserves. "	Amended to reflect that under the final rule the Reliability Panel no longer has responsibility for determining the reliability standard.
Chapter 10	Reliability	"A standard as set out in the <i>power system</i>	"The standard specified in clause 3.9.3C."	Amended to reflect inclusion of

NER clause reference	NER clause heading	Existing clause	Final rule amendment	Rationale
- Definitions	standard	<i>security and reliability standards</i> , determined by the <i>Reliability Panel</i> under clause 8.8.3(a)(1)."		the reliability standard in the NER. See clause 3.9.3C of the final rule.
Chapter 10 - Definitions	Short term capacity reserve	"The aggregate amount of generating capacity indicated by the relevant <i>Generators</i> as being available for a particular <i>trading interval</i> during the next 7 <i>trading days</i> , and assessed by <i>AEMO</i> as being in excess of the capacity requirement to meet the forecast <i>load</i> , taking into account the known or historical levels of demand management."	Definition omitted.	This concept and definition is deleted under the final rule and is to be covered by the Reliability Standard Implementation Guidelines.
Chapter 10 - Definitions	Unserviced energy	"The amount of <i>energy</i> that is demanded, but cannot be supplied, in a <i>region</i> and which is defined in accordance with the <i>power system security and reliability standards</i> and is expressed as:"	"The amount of <i>energy</i> that is demanded, but cannot be supplied, in a <i>region</i> and which is defined in accordance with the <i>power system security and reliability standards</i> and is determined in accordance with clause 3.9.3(C)(b), expressed as:"	Amended to reflect inclusion of the reliability standard in the NER. See clause 3.9.3C of the final rule.
Chapter 10 - Definitions	Violation	"In relation to <i>power system security</i> , a failure to meet the requirements of Chapter 4 or the <i>power system security and reliability standards</i> ."	"In relation to <i>power system security</i> , a failure to meet the requirements of Chapter 4 or the <i>power system security and reliability standards</i> ."	Violations relate to power system security and, hence, power system security standards.