

Australian Energy Market Commission

DRAFT RULE DETERMINATION

National Electricity Amendment (Governance Arrangements and Implementation of the Reliability Standard and Settings) Rule 2014

Rule Proponent
COAG Energy Council

18 December 2014

**RULE
CHANGE**

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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 draft more preferable rule that strengthens the governance arrangements for the review and determination of the reliability standard and settings and provides greater transparency and flexibility to the manner in which the Australian Energy Market Operator (AEMO) assesses reliability in the National Electricity Market.

The changes made in the draft more preferable rule are intended to address concerns raised by the proponent of the rule change request, the COAG Energy Council, relating to accountability and transparency of decision making with respect to 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 the demand of consumers. 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 involved in delivering this level of reliability.

The reliability *settings* serve a different role as the 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 also provide a mechanism to limit financial risk for market participants. They include a market price cap, a cumulative price threshold, a market floor price, an administered price cap, and an administered floor price.

The draft more preferable rule

The Commission has decided to make a draft more preferable rule that it considers will, or is likely to, better contribute to the achievement of the national electricity objective than the proposed rule.

The draft more preferable rule effectively addresses many of the issues raised by the COAG Energy Council in the proposed rule and takes into account concerns raised by stakeholders in submissions to the consultation paper.

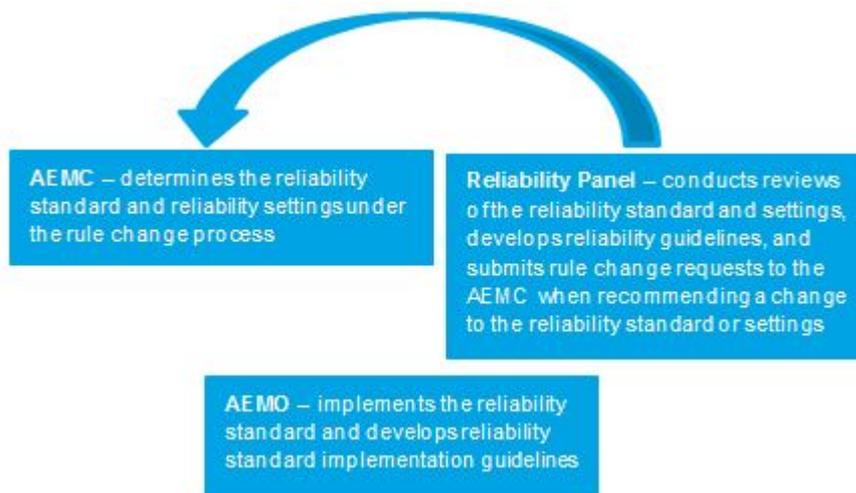
The key features of the draft more preferable rule are to:

- incorporate the reliability standard into the NER and make it subject to the rule change process;
- require the Reliability Panel to develop reliability standard and settings guidelines that it must follow when conducting its 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.

Under the draft more preferable 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 draft more preferable rule has also added the administered price cap to the scope of these Reliability Panel reviews.

Although any person may submit a rule change request to the AEMC to change the reliability standard or reliability settings under the draft rule, 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.



There are no material changes to the reliability standard in this draft more preferable rule. The current form, level, and scope of the reliability standard remain unchanged. However, necessary amendments to the current articulation of the reliability standard have been made both to provide clarity and to incorporate the reliability standard into the NER (eg, by adoption of appropriate Chapter 10 defined terms).

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

The draft more preferable rule also allows for appropriate flexibility in implementing the reliability standard to enable more accurate, more efficient reliability assessments by AEMO, including through the development of reliability standard implementation guidelines, which will act as parameters to guide and implement the reliability standard.

The rule change request and the proposed rule

The rule change request arises out of the AEMC's 2010 Extreme Weather Events Review, which recommended changes to improve the governance framework of the reliability standard and settings to reduce complexity, increase transparency and accountability of decision making, and mitigate the potential for perceptions of conflicts of interest to arise. The rule change request proposed to require the AEMC to determine the reliability standard and settings outside of the rule change process and to develop reliability guidelines and conduct periodic reliability standard and settings reviews.

It also proposed changes to how AEMO implements the reliability standard that would formalise AEMO's responsibility to implement the reliability standard operationally and require AEMO to develop guidelines specifying the methodology it uses to implement the reliability standard. The focus of these proposed changes was a perceived lack of transparency and clear allocation of responsibility for interpreting and applying the reliability standard.

Invitation for submissions

Stakeholders are invited to make written submissions in response to this draft rule determination and the draft more preferable rule by 5 February 2015.

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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 settings.

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

The details of these two parts of the rule change request are considered separately.

The remainder of this chapter outlines the following:

- the solutions proposed;
- relevant background to the rule change request;
- the proponent's rationale; and
- the current arrangements.

This Chapter also provides information relating to the commencement of the rule making process and consultation on this draft rule determination.

1.2 Solutions proposed in the rule change request

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

1.2.1 Governance of the reliability standard and settings

The first 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;
- remove the Reliability Panel's responsibility for reviewing the reliability standard and settings, and require the AEMC to take on this role;

- 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; and
- require the AEMC to develop guidelines it must follow in reviewing and determining the reliability standard and settings.

The AEMC would be required to conduct a reliability standard review and/or a reliability settings review on a four-yearly basis in accordance with the rules consultation procedures and proposed Reliability Standard and Settings Guidelines (Reliability Guidelines). The proposed Reliability Guidelines would set out the principles and assumptions to be applied by the AEMC in determining the reliability standard and settings under the proposed rule.¹

The reliability standard and settings reviews were proposed to be conducted in consultation with the Panel, Registered Participants and other such persons the AEMC considers appropriate. These proposed reviews and guidelines are discussed in more detail below.

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 current arrangements. In addition, the AEMC would be required to consider the potential impact of any proposed changes on end-use customers.²

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 current arrangements, including:

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

Additionally, the proponent has sought to include the Administered Price Cap (APC) as part of the proposed reliability settings review.³

¹ See clauses 3.9.3B and 3.9.3C of the proposed rule.

² As under the current arrangements with respect to the Panel's four yearly review of the reliability standard and settings, if the AEMC determines to amend the reliability standard under the proposed approach, it would be required to detail all relevant market conditions and circumstances on which the determination is based.

³ The APC is not currently subject to review by the Panel when conducting its four-yearly report. Presently, the APC is subject to periodic review by the AEMC, usually every three years.

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.⁴

Reliability Standard and Settings Guidelines

In its rule change request, the proponent 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).⁵ Further detail of the content of these proposed Guidelines are not provided in the proposed rule or the rule change request.

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 and available at all times after initial publication.⁶

1.2.2 Implementation of the reliability standard

The second part of this rule change request proposes 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 act as parameters to guide and implement 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 assessment or reliability projection timeframes to best suit the circumstances to which it is being applied.

In order to effect these proposals, the proponent has also proposed a number of consequential changes.

AEMO has indicated to the AEMC that in its view a number of provisions in the NER currently constrain it from using a probability-based approach to applying the reliability standard.⁷

⁴ We note there appears to be a drafting mistake in the proposed rule that omits the words "by AEMO" at cl. 3.9.3C(c)(2) between the words "determined" and "which".

⁵ See clause 3.9.3D of the proposed rule.

⁶ *ibid.*

⁷ As noted in the rule change request, AEMO presently uses tools and processes in addition to minimum reserve levels (MRL) to implement the reliability standard, including probabilistic techniques developed to better reflect uncertainties with increasing forecast timeframes. MRLs are the reserve margins that AEMO calculates are required so as not to breach the reliability standard. See rule change request, 9 May 2013, p6.

Chapter 4 considers in greater detail the potential benefits of AEMO using the probability-based approach to implementing the reliability standard.

1.3 Background to the rule change request

This section provides relevant background to the rule change request. 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 existing governance arrangements be amended such that:⁸

- the AEMC make all reliability parameter decisions (ie, to review and, if necessary, amend the reliability standard and settings);
- AEMO make 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.

The rationale for these recommendations was based on the view that the current 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 consulting on and 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.

⁸ See Extreme Weather Review, Appendix I, available on the AEMC website.

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.⁹

A further rationale for the rule change request noted by the proponent, and also stemming from the Extreme Weather Review, relates to the presence of market participants on the Reliability Panel (the Panel), which may give rise to perceived or actual conflicts of interest leading to outcomes which favour incumbent parties.¹⁰

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.¹¹

The proponent also considered the proposed rule would better balance transparency and flexibility by clarifying responsibilities and governance under the rules, but providing flexibility for arrangements to be changed under a well-defined process that has been consulted upon.¹²

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

¹⁰ *ibid.*

¹¹ *ibid.*, p8.

¹² *ibid.*, p10.

In respect of the proposed development of the Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements, the proponent considered the benefits would include:

- bringing the process of implementing the reliability standard into the governance of the rules and clearly assigning AEMO with responsibility for doing this;
- making the process of implementing the reliability standard more transparent and requiring more engagement with the market through consultation;
- allowing more flexibility for fit-for-purpose approaches to be used in various forecasting timeframes, where warranted; and
- using more accurate reliability measures as they are developed and creating a set of processes and parameters that can evolve over time.

1.5 Current arrangements

This section outlines how the reliability standard and settings review and determination process is currently governed under the NER. This section also details how the reliability standard is presently implemented.

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

Table 1.1 Summary of the current reliability framework

Parameter	Objective	Level	Decision-maker
Reliability standard	Indicates to the market the target level of supply and demand adequacy.	expected 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 ¹³	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)

¹³ The value of the AFP is the negative of the value of the APC.

1.5.1 Governance arrangements of the reliability standard and settings

The Panel is currently responsible for setting the reliability standard as part of its requirement to undertake and publish a four-yearly review of the reliability standard and settings.¹⁴ This review must set out the Panel's decision with respect to the level and form of the reliability standard and its recommendations to the AEMC in relation to the reliability settings. This review must be conducted in accordance with the rules consultation procedures.¹⁵

The Panel decides the level and form of the reliability standard as part of this four-yearly review and, if it recommends changes to the reliability settings, it is required to submit a rule change request to the AEMC. When conducting a reliability standard and settings review the Panel must have regard to the following factors:

- the potential impact of any proposed changes in the MPC or CPT on: spot prices; investment in the NEM; the reliability of the power system; and market participants;
- any value of customer reliability determined by AEMO which the Panel considers to be relevant; and
- any other matters the Panel considers relevant.

The Panel's review of reliability settings must set out all relevant market conditions and circumstances on which its recommendation is based. The Panel may only recommend a level of the MPC or CPT that the Panel considers will:

- allow the reliability standard to be satisfied without use of AEMO's powers to intervene; and
- not create risks that threaten the overall integrity of the market.

Further, if the Panel is of the view that a decrease in either the MPC or the CPT may mean the reliability standard is not maintained, the Panel may only recommend such a decrease where it has considered any alternative arrangements necessary to maintain the reliability standard.

Additionally, the Panel may only recommend an MFP that the Panel considers will allow the market to clear in most circumstances and not create substantial risks that threaten the overall stability and integrity of the market.

Currently, the reliability settings (presently, the MPC, MFP and CPT) may be changed through the rule change process and where the Panel recommends changes to the reliability settings via a rule change request as part of its four-yearly reliability standard and settings reviews.

¹⁴ See NER cl. 3.9.3A.

¹⁵ *ibid.*

1.5.2 Implementation of the reliability standard

There are few NER-based requirements setting out how AEMO must implement the reliability standard. Presently, 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.¹⁶

PASA is a program 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.¹⁷

MRLs are the reserve margins that AEMO calculates are required so as not to breach the reliability standard. AEMO has historically determined MRLs in consultation with industry stakeholders and the Panel.¹⁸ Presently, AEMO determines MRLs on a periodic basis, most recently in 2010. However, this is not a requirement under the NER.

MRLs function to convert expected 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).

If a shortfall of reserves is forecast, AEMO has the power to procure additional generation reserves under clauses 3.20.7(a) and 4.8.9(a) of the NER, which enables AEMO to negotiate and enter into contracts with reserve providers. These arrangements are known as the Reliability and Emergency Reserve Trader (RERT) mechanism and provide a safety net in the event that the NEM does not deliver sufficient reserves to meet the reliability standard.¹⁹

In practice, we understand that where a reserve shortfall is forecast AEMO would typically conduct further studies to obtain more accurate estimates of likely reserves for a period.²⁰

The PASA assessments represent the limit of the current NER-based requirements on AEMO with respect to how it implements the reliability standard.

16 See NER cl. 3.7.

17 See NER 3.7.1(b).

18 Rule change request, 9 May 2013, p8.

19 Note the RERT provisions in the NER expire on 30 June 2016.

20 See Extreme Weather Events, Second Interim Report, 18 December 2009, p24.

1.6 Commencement of the 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. A consultation paper prepared by AEMC staff was also published with the rule change request. Submissions closed on 23 October 2014.

The Commission received seven submissions on the rule change request as part of the first round of consultation. Each is available on the AEMC website.²¹ A summary of the issues raised in submissions and the Commission's response to each is provided in Appendix B.

1.7 Consultation on draft rule determination

In accordance with the notice published under s. 99 of the NEL, the Commission invites submissions on this draft rule determination, including the draft more preferable rule, by 5 February 2015.

In accordance with s. 101(1a) of the NEL, any person or body may request that the Commission hold a hearing in relation to the draft rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 29 December 2014.²²

Submissions and requests for a hearing should quote project number "ERC0160" and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

²¹ www.aemc.gov.au.

²² Under section 101(1a) of the NEL, a request for a hearing in relation to a draft rule determination must be made within one week of publication of the draft determination. As the date one week after publication of this draft determination is the Christmas Day public holiday, section 28(3) of Schedule 2 of the NEL applies and the date by which a request for a hearing must be made is 29 December 2014, being the next business day after Christmas Day.

2 Draft rule determination

2.1 Commission's draft rule determination

In accordance with s. 99 of the NEL, the Commission has made this draft more preferable rule determination in relation to the rule proposed by the COAG Energy Council.

The Commission has analysed the rule change request and assessed the issues arising out of it. For the reasons set out below, the Commission has determined that a draft more preferable rule be made.

The Commission has determined it should not make the rule as proposed. Instead, it has decided to make a draft more preferable rule. The Commission is satisfied that the draft more preferable rule will, or is likely to, better contribute to the achievement of the NEO than the proposed rule.

The draft more preferable rule effectively addresses many of the issues raised by the proponent in its rule change request and takes into account concerns raised by stakeholders in submissions to the consultation paper.

The key features of the draft more preferable rule:

- incorporate the reliability standard into the NER and make it subject to the rule change process:
 - this change means that under the draft more preferable rule any person may submit a rule change request to the AEMC to change the reliability standard.
- require the 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 Panel; and
- add the administered price cap to the scope of the reliability standard and settings reviews.

The key differences between the draft more preferable rule and the proposed rule are:

- The draft more preferable rule does not require the AEMC to review and determine the reliability standard and reliability settings outside of the rule change process. Under the draft more preferable rule, the reliability standard and reliability settings will continue to be reviewed by the Panel every four years. If the 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 draft more preferable rule does not require the AEMC to develop Reliability Guidelines. Instead, the proposed Guidelines are to be developed by the Panel to inform the reliability standard and settings reviews.
- The draft more preferable 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 draft more preferable rule are set out below in Chapters three and four. Chapter three relates to the governance arrangements of the reliability standard and settings, whereas Chapter four relates to the implementation of the reliability standard by AEMO.

The draft more preferable rule is attached to, and published with, this draft rule determination. Note the draft more preferable rule also includes a number of other changes to the NEL that are necessary or consequential to the rule change request; these amendments are detailed at Appendix C.²³

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 National Electricity Objective (NEO).²⁴

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.”

²³ The AEMC may make rules that are consequential to a rule change request under s. 91B of the NEL.

²⁴ NEL, s. 88(1).

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 and examines the governance and role of the AEMC and the Panel to provide necessary context.

In assessing the proposed rule change, 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 settings? Part of this assessment involved considering the accountability and governance of the 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?

When considering which entity is best placed to determine the reliability standard and settings, we have considered the different aspects of accountability of the Panel and the AEMC. This draft determination also discusses issues of transparency and proportionality that have featured in the Commission's decision to make the draft more preferable rule.

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 (a more preferable rule) if the AEMC is satisfied that, having regard to the issues or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates), 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 draft rule is a more preferable rule.

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

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

2.5 Strategic priority

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

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.

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 proposed changes and stakeholder's views and has decided to make a more preferable draft rule.

Draft more preferable rule

- The Commission has decided to make a draft more preferable 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 draft more preferable rule does not propose any material changes to the current form, level, or scope of the reliability standard.
- The Commission has decided to maintain the reliability settings in the rules:
 - the Commission has also decided 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.
- The Commission has decided to maintain the requirement on the Panel to conduct the four-yearly reliability standard and settings reviews and to submit a rule change request to the AEMC if it recommends a change to the reliability standard or settings.
 - the Commission has also decided the APC should be subject to regular review by the Panel.
- Lastly, the draft more preferable rule requires the Panel to develop reliability standard and settings guidelines setting out the principles and assumptions it will use in conducting its reviews of the reliability standard and settings.

Commencement dates of any final rule and associated transitional arrangements to accommodate these changes are discussed separately in Chapter 5.

3.1 COAG Energy Council's view

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

The proponent has 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.

To do this, the rule change proposal sought to make the following key changes to the governance arrangements of the reliability standard and settings:

- remove the Panel's responsibility to determine the reliability standard, and require the AEMC to take on this role;
- require the AEMC to review, determine and publish the reliability standard and settings without the need for a rule change request (including the MPC, MFP, CPT, and APC);²⁵ and
- require the AEMC to develop guidelines setting out the principles and assumptions to be applied in determining the reliability standard and settings.

Each of these proposals, and relevant stakeholder views, is discussed below to explain the rationale for the Commission's decisions in this draft rule determination.

3.2 Stakeholder views

In submissions to the consultation paper, stakeholders broadly disagreed with the proposed rule in respect of the proposed changes to the governance arrangements of the reliability standard and settings. The general view from the seven stakeholders that made a submission to the consultation paper was that there was no present need to change these governance arrangements because the current arrangements are serving the NEM well.

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".²⁶ This, EnergyAustralia argued, would be "inconsistent with the governance arrangements for rule making under the National Electricity Law, which appropriately restrict AEMC from initiating rule change requests to itself."²⁷

²⁵ Note the APC was to be included as a reliability setting under the proposed rule.

²⁶ EnergyAustralia submission, 28 October 2014, p1.

²⁷ *ibid.*

AGL Energy submitted that the current arrangements benefit from Panel expertise and provide scope for additional information to be taken into account.²⁸

Alinta Energy expressed its view that the current arrangements have served, and continue to serve, the NEM well, and suggested no substantial arguments have been made to require governance reforms at present.²⁹

GDF Suez expressed support for the current governance arrangements, which, they argue, have proven to be robust and effective.³⁰ GDF Suez argued that the rule change request has not identified an issue warranting significant changes to the governance arrangements.³¹ 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 Panel provides.³²

Similarly, 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.³³ Origin also contended that there is no compelling evidence to suggest the proposed changes are warranted, and that, if implemented, the proposed changes would undermine the checks and balances in the split of responsibility between the Panel and the AEMC.³⁴

ESAA noted that although the current governance arrangements may be cumbersome, there is no major governance issue to be resolved.³⁵ ESAA also argued that if a single body is preferred to review and determine the reliability standard and settings, then this should be the Panel, not the AEMC.³⁶

AGL expressed reservations about the proposed Reliability Guidelines, suggesting greater prescription may lead to lower reliability in the NEM.³⁷

ESAA submitted there is no need for additional prescription relating to the reliability standard and settings guidelines in the proposed rule.³⁸

Origin Energy, however, agreed the development of high level guidelines would allow for improved transparency and greater efficiency in determining the reliability parameters.³⁹

28 AGL Energy submission, 23 October 2014, p2.

29 Alinta Energy submission, 27 October 2014, p2.

30 GDF Suez submission, 23 October 2014, p1.

31 *ibid.*

32 *ibid.*

33 Origin Energy submission, 23 October 2014, p1.

34 *ibid.*

35 ESAA submission, 24 October 2014, p1.

36 *ibid.*

37 AGL submission, 23 October 2014, p2.

EnergyAustralia submitted its support for elements of the rule change proposal that seek to streamline operational arrangements and provide greater guidance for the Panel.⁴⁰ Energy Australia also supported the development of guidelines to provide greater direction to the review of the reliability standard and settings.⁴¹

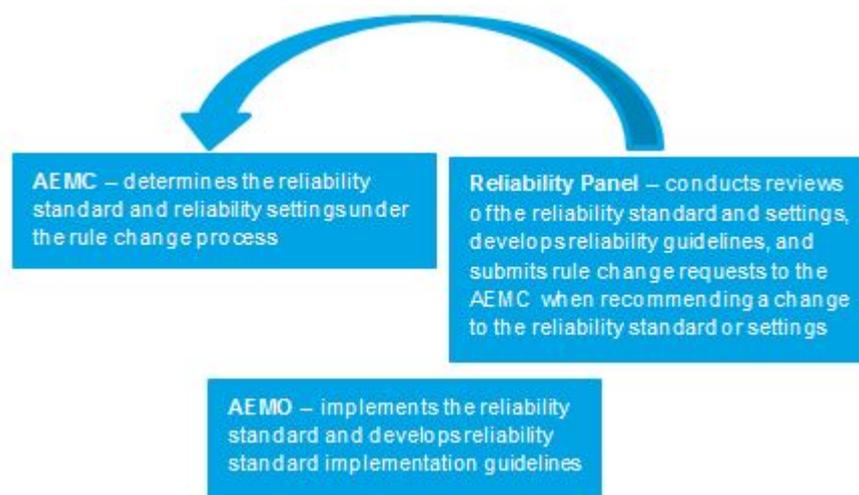
EnergyAustralia also supported the development of guidelines to provide greater direction to the review of the reliability standard and settings as outlined in the rule change request, noting this is consistent with the Panel’s recommendations in the 2014 Reliability Standard and Reliability Settings Review.⁴²

3.3 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 current governance arrangements for the reliability standard and settings that warrant a change to the NER.

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

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



To demonstrate the diversity of approaches to the current 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 draft more preferable rule.

38 ESAA submission, 24 October 2014, p2.
 39 Origin Energy submission, 23 October 2014, p3.
 40 EnergyAustralia submission, 28 October 2014, p1.
 41 *ibid.*
 42 *ibid.*

Table 3.1 Governance arrangements of the reliability standard and settings

Parameter / Process	Decision-maker / administering entity	Decision-maker / administering entity	Decision-maker / administering entity
	Current approach	Proposed rule	Draft more preferable 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 NER schedule, outside of rule change process)	AEMC (via rule change process)
Market price cap	AEMC (via rule change process)	AEMC (via NER schedule, outside of rule change process)	AEMC (via rule change process)
Cumulative price threshold	AEMC (via rule change process)	AEMC (via NER schedule, outside of rule change process)	AEMC (via rule change process)
Administered price cap	AEMC (via NER schedule, outside of the rule change process)	AEMC (via NER schedule, outside of rule change process)	AEMC (via rule change process)
Market floor price	AEMC (via rule change process)	AEMC (via NER schedule, outside of rule change process)	AEMC (via rule change process)
Administered floor price	AEMC (via rule change process) ⁴³	AEMC (via NER schedule, outside of rule change process)	AEMC (via rule change process)

⁴³ 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 draft more preferable 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 current governance arrangements of the reliability standard and settings are mixed 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 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, under what circumstances, and understand how they will be consulted with and given an opportunity to express their views.

The Commission also considers that the current arrangements, in which the reliability standard does not form part of the NER and is therefore not subject to the rule change process, do not promote best natural fit and associated accountability.

The Commission is of the view that the draft more preferable 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.⁴⁴ The reasons for this are explained in sections 3.3.1 and 3.3.2 below.

There are no material changes to the reliability standard in the draft more preferable rule. The current form, level, and scope of the reliability standard remain unchanged. However, necessary amendments to the current articulation of the reliability standard have been made both to provide clarity and to reflect the change to incorporate the reliability standard into the NER.

The Commission notes there will be some administrative costs associated with the changes in this part of the draft more preferable rule. For example, requiring the Reliability Panel to develop Reliability Guidelines may impose some additional costs. However, these costs are likely to be minor and, the Commission considers, outweighed by the benefits of greater transparency and stakeholder understanding about the principles and assumptions to be applied by the Reliability Panel in conducting a review of the reliability standard and settings.

⁴⁴ These principles are discussed further in section 2.3.

3.3.1 Determine, review and publish the reliability standard and reliability settings

Reliability standard

The Commission has decided to make a draft more preferable rule that places the reliability standard into the NEL, as is currently the approach for certain reliability settings. As a result, the reliability standard may only be changed by a rule made by the AEMC in response to a rule change request.

Therefore, the reliability standard under the draft more preferable rule will no longer be determined by the Reliability Panel, although it will continue to be reviewed by the Reliability Panel as under the current arrangements for the four-yearly reliability standard and settings reviews.

The draft more preferable rule better contributes to the achievement of the NEO because it:

- strengthens accountability and promotes best natural fit; and
- increases transparency of decision making and consistency of process.

Accountability and best natural fit

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 independent of, 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.

Further, the draft more preferable rule is more 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. The expert analysis of the Reliability Panel, and its recommendations, will continue to be important considerations in determining the reliability standard in future. The draft more preferable rule enables this to be realised.

Transparency and consistency

Given the interaction of the reliability standard and the reliability settings, in which the level of the reliability standard directly influences the level of the reliability settings, they should be determined using consistent processes and frameworks of assessment. This approach will also improve stakeholder accessibility and increase governance transparency through clearer allocation of organisational responsibilities 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 consultative process for determining the reliability standard. The Commission is satisfied that these changes will, or are likely to, better contribute to the achievement of the NEO than the proposed rule.

There are a number of consequential and necessary changes to the NER as a result of this decision. These changes are detailed in Appendix C below.

Reliability settings

The Commission has decided to make a draft more preferable rule that maintains the reliability settings in the rules (that is, the MPC, the MFP, and the CPT) and includes the APC as a reliability setting.

Under the current arrangements, the Commission determines certain reliability settings (namely, the MPC, MFP, and CPT) under the NEL rule change process following a rule change request.⁴⁵

⁴⁵ 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.

Historically, this has occurred on the recommendation of the Reliability Panel as a result of its four-yearly reliability standard and settings review.⁴⁶ Upon determining these reliability settings, the AEMC then publishes a schedule of these reliability settings on its website.

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 rules-based location 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 by the AEMC.

Although such a change 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 total 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 draft more preferable 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.

Reliability standard and settings review

As noted above, the Reliability Panel is currently 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.

⁴⁶ 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 Commission notes the expertise of the Reliability Panel and considers it is useful 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 effectively addresses stakeholder concerns relating to a potential loss of expertise from the Reliability Panel if it no longer conducted such reviews.

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.⁴⁷ 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.

Under the proposed approach, the proponent also sought to add the APC to the reliability standard and settings review and the proposed Reliability Guidelines.⁴⁸ The APC does not presently form part of the Reliability Panel's review of reliability settings.

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.

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.

Adding the APC to the reliability standard and settings review gains appropriate consistency of process allowing 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.

⁴⁷ See rule change request, 9 May 2013, p11.

⁴⁸ 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.

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 draft more preferable 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 draft more preferable 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 and 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.

Reliability standard and settings reviews that are comprehensive and consulted on appropriately may increase the likelihood that a request for an associated rule change will meet the criteria to be "fast tracked".⁴⁹

The Commission notes a number of stakeholders indicated that an option to "expedite" rule change requests from the Reliability Panel relating to reliability settings should be available.⁵⁰

3.3.2 Reliability standard and settings guidelines

Under the proposed rule, the AEMC would be required to develop and publish reliability standard and settings guidelines (Reliability Guidelines) that set out the principles and assumptions to be applied by the AEMC in determining the reliability standard and 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 developing these proposed guidelines, the AEMC would be required to consult with stakeholders in accordance with the rules consultation procedures.

⁴⁹ See NEL, s. 96A.

⁵⁰ 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.

Under the current approach, when determining the relevant reliability settings as part of the rule change process, the Commission must only make a change to the rules if it is satisfied that it will, or is likely to, contribute to the achievement of the NEO. It may also consider a variety of relevant matters.

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 draft decision in respect of which entity should determine the reliability standard and the reliability settings.

Under the draft more preferable rule, the Reliability Panel is required to develop the Reliability Guidelines, in accordance with the rules consultation procedures.

The Reliability Panel is required to comply with the Reliability Guidelines when conducting reliability standard and settings reviews, including its recommendations as to whether or not to change the reliability standard or settings. The Reliability Guidelines will also 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 proposed Reliability Guidelines will also reinforce the expert contribution of the Reliability Panel to assessing and monitoring reliability in the NEM.

The Reliability Panel may review and amend the Reliability Guidelines from time to time, according to 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 mixed, with some stakeholders supporting their development and others not supporting their development. 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.

As discussed above, the AEMC may also continue to issue terms of reference to the Reliability Panel that it must have regard to when conducting its reliability standard and settings reviews.

4 Implementation of the reliability standard

Box 4.1 Summary

- This chapter relates to the implementation of the reliability standard by AEMO.

Draft more preferable rule

- The Commission has made a draft more preferable rule requiring AEMO to develop the proposed Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures. The draft more preferable 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 in the rules 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, or 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 provide an opportunity for all stakeholders to contribute to any changes to these guidelines.

Commencement dates of any final rule and associated transitional arrangements to accommodate these changes are discussed separately in Chapter 5.

4.1 COAG Energy Council's view

The proponent has argued that a change to the rules around the implementation of the reliability standard is needed because the current arrangements are uncertain and lack transparency about the manner in which the reliability standard is implemented. The proponent has also argued that the proposed approach would provide AEMO greater flexibility to implement the reliability standard.

The proponent has also argued the proposed changes are needed to establish a clear allocation of responsibility for interpreting and applying the reliability standard in the context of the numerous market processes in the NEM. To do this, the proponent has sought to make the following key changes to the way in which the reliability standard is implemented:

- require AEMO to develop, consult on and publish Reliability Standard Implementation Guidelines and Reliability Adequacy Requirements,⁵¹ in accordance with the rules consultation procedures, which would guide and implement the reliability standard; and
- require AEMO to review/amend the reliability assessment parameters used to meet the reliability standard.

Each of these proposals, and relevant stakeholder views, is discussed below to explain the rationale for the Commission's decisions in this draft rule determination.

Under the proposed rule, AEMO would be required to develop Reliability Standard Implementation Guidelines, in accordance with the rules consultation procedures. The proposed rule, in relation to implementation of the reliability standard, is intended to:

- allocate responsibility to AEMO for determining a means of applying the reliability standard in every NEM forecasting timeframe it is required to address under the NER;
- provide flexibility for the reliability standard to be applied operationally through time and across different NEM forecasting timeframes so that it best suits the form of standard set and the circumstances to which it is being applied;
- set out a structure and process that AEMO must follow in establishing and changing the Reliability Standard Implementation Guidelines and associated Reliability Adequacy Requirements;
- allow AEMO to make changes to the NEM processes to adapt to any changes made to the reliability standard or reliability settings without the need for a rule change request; and
- transition from the current practice in which MRLs,⁵² determined by AEMO, will become Reliability Adequacy Requirements and the methodology for determining them would be set out in the Reliability Standard Implementation Guidelines.

⁵¹ The Reliability Adequacy Requirements are proposed to be the primary output of the Reliability Standard Implementation Guidelines and must include a description of how they are intended to be used.

⁵² MRLs are the reserve margins that AEMO calculates are required so as not to breach the reliability standard.

Under the proposed rule, the Reliability Standard Implementation Guidelines must specify a methodology for determining Reliability Adequacy Requirements for each forecasting timeframe, detailing the following matters:

- the approach used and the assumptions made in relation to the demand for electricity;
- the approach used and the assumptions made in relation to the reliability of existing and future generation;
- the approach used and the assumptions made in relation to intermittent generation;
- the approach used and the assumptions made in relation to energy constraints; and
- how network constraints are taken into account.

The proponent submits that this aspect of the proposed rule would enable AEMO to adjust the Reliability Adequacy Requirements as the power system changes, in accordance with the Reliability Standard Implementation Guidelines.⁵³ The Reliability Adequacy Requirements would be implemented in tools used by AEMO to inform the market, such as short-term PASA, and would be published on the AEMO website.

4.2 Stakeholder views

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

Those that did not support the rule change request, including Alinta Energy⁵⁴ and GDF Suez,⁵⁵ argued there are no particular issues with the existing arrangements.

However, other stakeholders have expressed their support for the proposed changes to how the reliability standard is implemented. EnergyAustralia, for example, 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.⁵⁶

⁵³ See proposed rule cl. 3.9.3E(d).

⁵⁴ Alinta Energy submission, 27 October 2014.

⁵⁵ GDF Suez submission, 23 October 2014.

⁵⁶ EnergyAustralia submission, 28 October 2014, p2.

ESAA expressed its general support for this part of the proposed rule, but noted that it considered a more defined process could decrease reliability outcomes and bring them closer to the target of expected unserved energy.⁵⁷ The ESAA indicated it does not consider there to be a widespread problem in this regard, but argued that transparency and certainty would be increased under this part of the proposed rule.⁵⁸

Snowy Hydro submitted its in principle support for the proposed changes, noting the need for AEMO to have flexibility to explore other, more appropriate measures to discern sufficient reserves to meet the reliability standard.⁵⁹

4.3 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 current arrangements that merit changes to the manner in which the reliability standard is implemented operationally under the NER.

Presently, there is a lack of clarity in the rules about the role of AEMO in implementing the reliability standard. There is also a lack of transparency and flexibility about how reliability is assessed by AEMO when determining MRLs.

The Commission notes there will be some administrative costs associated with the changes in this part of the draft more preferable rule requiring AEMO to develop the Reliability Standard Implementation Guidelines. However, these costs are likely to be minor overall and, the Commission considers, outweighed by the benefits of improved transparency and enhanced investor certainty.

Draft more preferable rule

The Commission considers the draft more preferable 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 by providing clarity about AEMO's responsibility to implement the reliability standard and increasing the levels of transparency and flexibility in how the reliability standard is implemented operationally.

Under the current arrangements there are few NER-based requirements setting out how AEMO must implement the reliability standard. Although AEMO has historically determined MRLs on a periodic basis, most recently in 2010, this is not done under a requirement of the NER.

⁵⁷ ESAA submission, 24 October 2014, p5.

⁵⁸ *ibid*, pp3 and 6.

⁵⁹ Snowy Hydro submission, 22 October 2014, p2.

Reliability Standard Implementation Guidelines

The Commission's draft rule determination is that AEMO must, in accordance with the rules consultation procedures, develop the proposed Reliability Standard Implementation Guidelines. The rationale for this aspect of the proposed rule primarily relates to the current lack of rules-based governance and processes with respect to 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 operationally; and
- improve transparency in the methodology used to implement the reliability standard operationally.

Another rationale for this aspect of the proposed rule relates to the way in which AEMO implements the reliability standard under the current approach and whether this approach is sufficiently flexible, tailored, and adaptive to enable accurate and efficient assessments of reliability 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.⁶⁰

Properly developed, the Commission considers the Reliability Standard Implementation Guidelines should give AEMO appropriate flexibility to apply fit-for-purpose approaches to assessing reliability across forecasting timeframes.

In making this draft more preferable rule, the Commission has decided that the Reliability Standard Implementation Guidelines, properly developed and consulted upon, 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.

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

⁶⁰ *ibid*, p12.

However, this should 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 case, the Reliability Standard Implementation Guidelines could simply provide for such a parameter.

The AEMC understands from AEMO staff that the Reliability Standard Implementation Guideline process would be simplified by removing the Reliability Adequacy Requirements. Moreover, provided the Reliability Standard Implementation Guidelines contain sufficient information as to how they will be applied, the 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.

Additional requirements

The Commission has decided that the Reliability Standard Implementation Guidelines, in addition to those matters set out in the proposed 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 both cause demand to be high, due, for example, to increased use of air conditioners, and the capability of generating systems and networks to be reduced.

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 Commission has also decided that AEMO be required 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.

It is anticipated that this will provide an opportunity for the Reliability Panel to contribute its expertise and views as part of the development of, and any amendment to, the Reliability Standard Implementation Guidelines and provide an additional check on their proposed content, assumptions and methodologies.⁶¹

⁶¹ 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.

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

We understand there are likely to be some costs associated with this consultation and that AEMO may consult on the Reliability Standard Implementation Guidelines in its existing working groups and forums. However, the Commission considers that given this is a new requirement, and it is not likely the Reliability Standard Implementation Guidelines will be changed often, it is important that the development of the Reliability Standard Implementation Guidelines are consulted on with a broad group of stakeholders under a formal process.

Ultimately, it is stakeholders that will need to decide how to respond to the signals provided through AEMO's processes - for example, by deciding when to schedule planned maintenance outages.

Finally, the draft more preferable rule 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 accordance with the rules consultation procedures, at least every four years from the date of implementation of the first Reliability Standard Implementation Guidelines.

The Commission considers having a defined, periodic review of the Reliability Standard Implementation Guidelines will provide stakeholders with opportunity to comment on, and convey their experiences with, the performance of the Reliability Standard Implementation Guidelines to date and should also provide a platform for the further development of these guidelines.

With increased clarity of responsibility for implementing the reliability standard and greater transparency about the methodologies AEMO will use and the matters it will consider, the Commission expects stakeholders will have increased confidence in how the reliability standard will be implemented operationally. These outcomes, the Commission considers, contribute to the achievement of the NEO.

5 Proposed commencement dates and transitional arrangements

Box 5.1 Summary

- The draft rule determination will result 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 and governance arrangements, consequential or necessary changes, and changes that add clarity or certainty to the rules. Transitional arrangements are needed to manage the effects of these changes and to allow time for the Reliability Panel and AEMO to meet these new requirements

Governance arrangements of the reliability standard

- Changes to the governance arrangements of the reliability standard, and any consequential or necessary changes, are proposed to become effective on publication of any final rule.

Reliability Guidelines

- The proposed 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 are proposed to become effective on the commencement date of any final rule, and so will apply to the next reliability standard and settings review. Necessary or consequential changes associated with this new requirement will also become effective on the commencement date of any final rule.

Reliability Standard Implementation Guidelines

- The proposed transitional arrangements require AEMO to develop the Reliability Standard Implementation Guidelines by the date nine months after the commencement of any final rule. Necessary or consequential changes associated with this new requirement will also become effective on this date.

Consequential, necessary and other minor changes to the NER

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

5.1 The proposed commencement dates and transitional arrangements

This chapter provides details of the proposed commencement dates and transitional arrangements needed to manage the implementation of the changes arising out of the draft more preferable rule. The transitional arrangement will enable affected organisations, and stakeholders generally, to plan for and accommodate the proposed changes. These arrangements also provide stakeholders necessary certainty about when each of the changes will become effective.

5.1.1 Governance arrangements of the reliability standard

The changes to the governance arrangements of the reliability standard are proposed to be effective on commencement of any final rule. This means that from the commencement date 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 draft more preferable rule requires the Reliability Panel to develop and publish Reliability Guidelines no later than 1 January 2017.

This gives 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 draft more preferable 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 date of commencement of any final rule.

5.1.4 Reliability Standard Implementation Guidelines

The draft more preferable rule requires AEMO to develop and publish the Reliability Standard Implementation Guidelines no later than nine months after the commencement date of any final rule. The period is appropriate given the Reliability Standard Implementation Guidelines are required to be consulted on in accordance with the rules consultation procedures.

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 draft more preferable 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 the 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" to reflect the governance changes in the draft more preferable 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;
- 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.

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 and relate 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 the proposed transitional arrangements, each change that is made to reflect the new governance arrangements of the reliability standard becomes effective on the commencement of any 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 to be effective from the date that is nine months after the commencement date of any final rule.

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

Other changes that are necessary or consequential to the proposed rule or add needed clarity or certainty to the rules, which 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, become effective on the publication of any 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
NGL	National Gas Law
NEM	National Electricity Market
NEO	National Electricity Objective
NERL	National Energy Retail Law
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 draft rule determination.

A.1 Draft rule determination and draft more preferable rule

In accordance with s. 99 of the NEL, the Commission has made this draft 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 proposed rule falls within the subject matter about which the Commission may make rules.

The proposed rule falls within s. 34 of the NEL, as it relates to the operation of the NEM (s. 34(1)(a)(I)), and the activities of persons (including registered participants) participating in the NEM or involved in the operation of the national electricity system (s. 34(1)(a)(iii)).

A.3 Civil penalty provisions

The Commission's draft more preferable rule amends clause 4.3.5(a) of the NER. This clause is currently 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 draft more preferable rule should be classified as civil penalty provisions.

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;⁶²
- submissions received during the first round of consultation; and
- the Commission's analysis as to the ways in which the proposed rule will, or is likely to, contribute to 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.⁶³

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

⁶² Under s. 33 of the NEL, the AEMC must have regard to any relevant MCE statement of policy principles in making a rule.

⁶³ AEMO's declared network functions are specified in s. 50C of the NEL.

B Summary of issues raised in submissions

Table B.1

Stakeholder	Issue	AEMC Response
AGL Energy	<p>AGL Energy submitted that the current arrangements benefit from Reliability Panel expertise and provide scope for additional information to be taken into account.</p> <p>AGL expressed reservations about the proposed Reliability Guidelines, suggesting greater prescription may lead to lower reliability in the NEM.</p>	<p>The Commission notes the draft more preferable 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 draft more preferable rule, while the Reliability Panel need to comply with the Reliability Guidelines when undertaking its review, ultimately it is the AEMC that will set the reliability standard through the rule change process. Consequently, the Reliability Guidelines should not lead to lower reliability in the NEM.</p>
Alinta Energy	<p>Alinta Energy submitted that the current arrangements have served, and continue to serve, the NEM well, and suggested no substantial arguments have been made to require governance reforms at present.</p> <p>Alinta Energy submitted that the current 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>	<p>As set out in section 3 of this draft 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. The Commission also considers there would be transparency benefits to clarifying AEMO's role in implementing the reliability standard. This is discussed in section 4.</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>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>EnergyAustralia argued, would be "inconsistent with the governance arrangements for rule making under the National Electricity Law, which appropriately restrict AEMC from initiating 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>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 draft more preferable rule better balances the accountability and transparency considerations set out in the assessment approach, and provides a more proportionate response to the issues raised in the rule change request.</p>

Stakeholder	Issue	AEMC Response
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 current 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, 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 Commission considers the draft more preferable rule improves good governance, accountability and transparency of decision making.</p> <p>The draft more preferable 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> <p>The draft more preferable 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 current 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</p>	<p>As set out in section 3 of this draft rule determination, the Commission considers that there are benefits in having the reliability standard, as well as the reliability settings, set under the Rule change process</p> <p>The current 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 draft more preferable rule maintains the</p>

Stakeholder	Issue	AEMC Response
	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.	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 it to the scrutiny of the rule change process.
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>As set out in section 3 of this draft rule determination, the Commission considers that there are benefits in having the reliability standard, as well as the reliability settings, set under the Rule change process</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	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.	Noted.

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	Current clause	Draft more preferable 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 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."	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 <i>AEMO</i> ."	"AEMO must use its reasonable endeavours to ensure that it provides to Registered Participants sufficient information to allow Registered Participants to undertake maintenance and outage planning without violating power system security and reliability of supply and to allow the <i>market</i> to operate effectively with a minimal amount of intervention by <i>AEMO</i> ."	ibid.
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 <i>AEMO</i> , 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 <i>AEMO</i> , are materially significant and should be communicated to Registered Participants ."	ibid.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
3.7.2(c)(2)	Medium term PASA	<i>"reserve requirements determined in accordance with the medium term capacity reserve standards;"</i>	Omitted.	Under the draft more preferable rule, any capacity reserve will be determined by AEMO through the Reliability Standard Implementation Guidelines.
3.7.2(f)(1A)	Medium term PASA	<i>"reserve requirements determined in accordance with the medium term capacity reserve standards;"</i>	Omitted.	ibid.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
3.7.2(f)(6)(ii)	Medium term PASA	<p>"identification and quantification of:</p> <p>(I) any projected <i>violations of power system security</i>;</p> <p>(ii) any <i>days</i> on 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> may become binding on the <i>dispatch</i> of <i>generation</i> or <i>load</i>."</p>	<p>"identification and quantification of</p> <p>(I) any projected <i>violations of power system security</i>;</p> <p>(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>;</p> <p>(ii) any <i>days</i> on 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><u>(iii) 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</u></p> <p><u>(iv) when and where <i>network constraints</i> may become binding on the <i>dispatch</i> of <i>generation</i> or <i>load</i>."</u></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	Current clause	Draft more preferable rule amendment	Rationale
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 Registered Participants 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 Registered Participants. "	ibid.
3.7.3(d)	Short term PASA	"The following <i>short term PASA inputs</i> are to be prepared by AEMO: (2) <i>reserve requirements for each region determined in accordance with the short term capacity reserve standards</i> (3) <i>forecast network constraints known to AEMO at the time; and</i> (4) <i>an unconstrained intermittent generation forecast for each semi-scheduled generating unit for each trading interval.</i> "	"The following <i>short term PASA inputs</i> are to be prepared by AEMO: (2) reserve requirements for each region determined in accordance with the short term capacity reserve standards (3) <i>forecast network constraints known to AEMO at the time; and</i> (4) <i>an unconstrained intermittent generation forecast for each semi-scheduled generating unit for each trading interval.</i> "	The Reliability Standard Implementation Guidelines will describe how reserve requirements are to be determined.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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> may become binding on the <i>dispatch</i> of <i>generation</i> or <i>load</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 interconnector transfer capabilities and the discrepancy between forecast interconnector transfer capabilities and the forecast capacity of the relevant interconnector in the absence of outages on the relevant interconnector only; and</p> <p>(ivv) when and where network constraints may become binding on the dispatch of generation or load."</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	Current clause	Draft more preferable rule amendment	Rationale
3.7.3(l)	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 <u>who represents a <i>participating jurisdiction</i> in that <i>region</i></u> 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 power system security requirements, including those determined by the Reliability Panel. Therefore, the draft more preferable 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 attached draft more preferable rule.	
3.9.3B	Reliability standard and reliability settings review report		See attached draft more preferable rule.	
3.9.3C	Reliability standard		See attached draft more preferable rule.	

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
3.9.3D	Implementation of the reliability standard		See attached draft more preferable rule.	
3.9.4(b)	Market Price Cap	"The value of the <i>market price cap</i> is \$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)."	" The value of the market price cap is \$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)."	Amended to clarify the calculation of the value of the 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</i> and the <i>reliability standard</i> "	The NSCAS needs and NSCAS gaps relate both to the security and reliability of the power system, and so the draft more preferable 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</i> and the <i>reliability standard</i> "	ibid.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
3.11.6(a)	"Dispatch of non-market ancillary services by AEMO"	"but AEMO may only call for offers to acquire NSCAS 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> "	"but AEMO may only call for offers to acquire NSCAS 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> <u>and the <i>reliability standard</i></u> "	ibid.
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> <u>and the <i>reliability standard</i></u> "	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> <u>or the <i>reliability standard</i></u> ; 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 <i>Reliability Panel</i> 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 draft more preferable 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> meets the relevant <i>power system security and reliability standards</i> and, where practicable, to maintain <i>power system security</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 relevant power system security and reliability standards and, where practicable, to maintain <i>power system security</i> "	The reference in standards in this clause relates to meeting the reliability standard, while the reference to system security 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 <i>short term</i> and <i>medium term capacity reserves</i> available to the <i>power system</i> <u>is projected to meet, the <i>reliability standard</i>, having regard to 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> "	<p>This clause relates to system reliability and, therefore, should refer to the reliability standard.</p> <p>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 draft more preferable rule changes to the definitions.</p>

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
4.3.1(k) & (l)	Responsibility of AEMO for power system security	<p>"(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 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>"(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 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>" <u>(l) to monitor demand and generation capacity in accordance with the <i>reliability standard implementation guidelines</i></u> and , if necessary, initiate action in relation to a <i>relevant AEMO intervention event</i>;"</p>	These clauses relate to the control of voltage and frequency of power system security standards; it does not relate to reliability.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 standard</i> or <i>medium term capacity reserve standard</i> respectively"	"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.
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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
4.8.4(a) & (b)	Declaration of conditions	<p>"(a) <i>Low reserve</i> condition – when AEMO 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 AEMO as being in accordance with the relevant <i>short term capacity reserve standards</i> or <i>medium term 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>"<i>Low reserve</i> condition – when AEMO 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 standards <u>balance of generation capacity and demand</u> for the period being assessed does not meet the <u>reliability standard as assessed in accordance with the reliability standard implementation guidelines</u>."</p> <p>"(b) <i>Lack of reserve level 1 (LOR1)</i> – when AEMO considers that there is insufficient short term capacity reserves available in an <u>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>	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 reserve standards.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 instructions	"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 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> ."	"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 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> ."	This clause relates to system security, not reliability.
4.8.15(a)(1)(i) ii)	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

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
4.9.1(e) and (f)	Load forecasting	<p>"A 10% probability of exceedence of <i>load</i> forecast 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>."</p> <p>"AEMO must aggregate the regional forecasts to produce a total <i>interconnected transmission network</i> indicative <i>load</i> schedule 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 <i>PASA</i> assessments and <i>pre-dispatch schedules</i>."</p>	N/A.	Under the draft more preferable rule this clause is deleted because the Reliability Standard Implementation Guidelines will determine the approach used for demand forecasts.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
5.20.2(c)(8)(ii) & (iii)	Publication of NTNDP	<p>"(ii) for any <i>NSCAS 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 trigger date;"</p> <p>"(iii) for any <i>NSCAS 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>"(ii) for any <i>NSCAS 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> and the reliability standard, the relevant NSCAS trigger date;"</p> <p>"(iii) for any <i>NSCAS 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> and the reliability standard, the relevant NSCAS tender date;"</p>	NSCAS relates both to security and reliability of the power system.
8.8.1(a)(2)	Purpose of Reliability Panel	"review and, on the advice of <i>AEMO</i> , determine the <i>power system security and reliability standards</i> ;"	"review and, on the advice of <i>AEMO</i> , determine the <i>power system security</i> and reliability standards ;"	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 <i>AEMC</i> 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 <i>AEMC</i> 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 draft more preferable rule, but not the 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 limits	"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 reliability standards</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 reliability standards</i> ."	ibid.
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 draft more preferable rule as the Reliability Standard Implementation Guidelines will determine the approach used.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 excursion band	"In relation to the <i>frequency</i> of the <i>power system</i> , means the range specified as being acceptable for infrequent and 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> ."	"In relation to the <i>frequency</i> of the <i>power system</i> , means the range specified as being acceptable for infrequent and 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> ."	ibid.
Chapter 10 - Definitions	NSCAS need	"maintain <i>power system security and reliability of supply of the transmission network</i> in accordance with the <i>power system security and reliability standards</i> ;"	"maintain <i>power system security and reliability of supply of the transmission network</i> in accordance with the <i>power system security and reliability standards and the 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 power system 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.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 <i>frequency</i> of the <i>power system</i> in operation, <i>contingency capacity reserves</i> (including guidelines for assessing requirements), <i>short term capacity reserves</i> and <i>medium term capacity reserves</i> ."	"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, contingency capacity reserves (including guidelines for assessing requirements), short term capacity reserves and medium term capacity reserves ."	Amended to reflect that under the draft more preferable rule the Reliability Panel will no longer have responsibility for determining the reliability standard.
Chapter 10 - Definitions	Reliability standard	"A standard as set out in the <i>power system security and reliability standards</i> , determined by the <i>Reliability Panel</i> under clause 8.8.3(a)(1)."	"The standard specified in clause 3.9.3C."	Amended to reflect inclusion of the reliability standard in the NER. See clause 3.9.3C of the draft more preferable 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 proposed rule and is to be covered by the Reliability Standard Implementation Guidelines.

NER clause reference	NER clause heading	Current clause	Draft more preferable rule amendment	Rationale
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 power system security and reliability standards and is <u>determined in accordance with clause 3.9.3(C)(b)</u> , expressed as:"	Amended to reflect inclusion of the reliability standard in the NER. See clause 3.9.3C of the draft more preferable 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.