Transmission Reliability Standards Review

Ministerial Council on Energy
Response to
Australian Energy Market Commission Final Report

16 November 2011

This document presents the Ministerial Council on Energy (MCE) response to the Australian Energy Market Commission (AEMC) Report of 10 December 2010 titled *Updated Final Report: Transmission Reliability Standards Review*.

Introduction

The MCE thanks the AEMC for providing the Transmission Reliability Standards Review Final Report (the AEMC Final Report) on 30 September 2008. The MCE recognises that the recommendations in the AEMC Final Report are based on the AEMC Reliability Panel's (the Panel) 31 August 2008 Final Report (the Panel's Final Report) titled *Towards a Nationally Consistent Framework for Transmission Reliability Standards* and, likewise, thanks the Panel for its work on that report.

In addition, the MCE thanks the AEMC for developing its Updated Final Report (released 10 December 2010), which takes into account changes to the energy market frameworks since 2008.

In considering the recommendations in the AEMC's Updated Final Report the MCE has:

- considered the Council of Australian Governments' (COAG) decision of 13 April 2007 directing the MCE to request the AEMC to undertake a review of transmission network reliability standards and develop a consistent national framework ; and
- had regard to the principles set out in the AEMC Updated Final Report.

Background and Context

On 13 April 2007, in response to the final report of the Energy Reform Implementation Group (ERIG), COAG directed the MCE to request the AEMC to undertake a review of transmission network reliability standards and develop a consistent national framework. COAG agreed that this review should be progressed, but with appropriate caution, noting the different physical characteristics of the network, existing regulatory arrangements in balancing reliability and costs to consumers, and that these standards underpin security of supply.

On 3 July 2007, the MCE directed the AEMC to conduct a review into electricity transmission network standards with a view to developing a consistent national framework for network security and reliability. The AEMC requested the Panel to undertake a review of jurisdictional transmission reliability standards and provide advice to the AEMC on a nationally consistent framework for transmission reliability standards (the national framework). The Panel provided its Report to the AEMC on 1 September 2008. The MCE notes the extensive consultation engaged in by the Panel in developing its Final Report and that the AEMC's 2008 Final Report, and recommended national framework, is based upon the recommendations in the Panel's Final Report.

Consistent with the original MCE Terms of Reference, the AEMC Final Report adopts the key recommendations of the Panel's Final Report but adds further specificity to some of those recommendations. The MCE notes that the AEMC based its consideration of the Panel's Final Report on the consistency of the recommendations with the 2007 COAG decision, the MCE direction and wider energy market reform initiatives, including the National Transmission Planning (NTP) function and the revised Regulatory Investment Test for Transmission (RIT-T).

The MCE notes that the AEMC released an update on its previous report in December 2010, due to the significant developments in the energy market that had occurred over the previous two years. The most notable relevant development to affect energy market frameworks was the establishment of the Australian Energy Market Operator (AEMO) on 1 July 2009. In addition to the introduction of the new National Transmission Planner (NTP) function, AEMO's establishment also changed the jurisdictional transmission planning processes for Victoria and South Australia, in particular the legal frameworks and institutional arrangements. The way in which these changes have been implemented through national legislation allows for these new arrangements to subsequently be adopted by other jurisdictions, if considered appropriate.

The MCE recognises that establishing a nationally consistent framework for transmission reliability standards is an important part of COAG's transmission reform agenda. One of the key objectives of this agenda is to optimise investment between transmission and generation across the power system by improving the provision of information to private and public investors. A national framework will contribute to this goal by increasing the transparency and specificity of jurisdictional reliability standards. This will provide greater depth to the information used in future National Transmission Network Development Plans (NTNDP), leading to a higher quality and more credible document that will better assist market participants with understanding the basis of Transmission Network Service Provider (TNSP) investment decisions.

Likewise, a national framework will contribute to the integrity of the Australian Energy Regulator's (AER) *ex ante* revenue determination process by ensuring that TNSP capital expenditure forecasts for reliability-based augmentations are underpinned by transparent and economically-based reliability standards. These improvements address one of the primary issues ERIG raised in its 2007 Final Report – that the lack of clarity and consistency in transmission planning standards compromises market participants' ability to understand TNSP investment decisions.

A national framework will enhance the effectiveness of the RIT-T in delivering economically efficient, nationally focussed, and timely investment. The RIT-T seeks to ensure the selection of the most economically efficient option for meeting a given reliability standard. If standards are derived from economic considerations and in a nationally consistent manner, as is intended under the national framework, the integrity of the RIT-T will be reinforced and project investment will be directed in a more economically efficient and nationally focussed manner.

The MCE notes that the AEMC's recommended national framework takes into account the COAG proviso that, in seeking to establish a national reliability framework, due regard should be given to differing jurisdictional network characteristics and regulatory arrangements for balancing reliability and cost to consumers. In particular, the recommended national framework allows the flexibility for Victoria to continue to use the probabilistic methodology for assessing proposed network projects whilst also allowing jurisdictions the option of using pre-set deterministic standards that are more consistent with the forms of standard currently applied in the NEM. However, where the use of probabilistic planning is employed, it is recommended that reporting is undertaken on a deterministic equivalent basis to ensure consistency in reporting between jurisdictions.

The MCE considers that the recommended national framework strikes the appropriate balance between establishing mechanisms to encourage a nationally focussed approach to setting reliability standards whilst also ensuring sufficient flexibility within the framework to ensure that individual jurisdictional requirements can be met.

A key to ensuring transparency in transmission investment decisions and reliability standards setting processes, is establishing appropriate governance structures at both the national and the jurisdictional level. The MCE notes that the recommended national framework achieves this through the proposed implementation of a national structure to promote and maintain consistency in the application of reliability standards through governance arrangements that ensure the body that sets the standards is separate from the asset owner that applies those standards. The MCE notes that these recommendations are intended to address possible issues of conflict of interest.

The AEMC report is a significant step in the process of achieving a national framework for transmission reliability standards. The MCE broadly accepts the framework recommended by the AEMC and notes that the intent of the AEMC Review is to establish a high-level framework, based on agreed principles, to which detail will be added in the course of implementation.

The MCE recognises that the implementation of the national framework is a sizeable task which may require changes to the National Electricity Rules (NER), state based legislation and other state based legal instruments, and possibly the National Electricity Law (NEL). The MCE considers that the AEMC is best placed to provide implementation and transitional advice, including recommendations in relation to the necessary changes at both a national and a jurisdictional level. Following receipt and consideration of the AEMC's advice and recommendations, including the potential undertaking of a Regulation Impact Statement (RIS), the MCE will task the appropriate national and jurisdictional bodies with progressing the required changes. The MCE notes that this would involve a co-ordinated effort amongst jurisdictions and the MCE to progress any amendments to the NEL and jurisdictional arrangements.

The MCE notes that the updated framework has been developed in the context of a number of reforms and ongoing work streams. The framework also recognises that the NEM is undergoing a significant period of change. Large scale investment in generation and transmission is required to maintain secure and reliable electricity supplies. Government policy initiatives in response to climate change are likely to drive much of this new investment. These factors will create new challenges for planning efficient transmission development. The introduction of the proposed national framework for transmission reliability standards, in combination with the other recent reforms to the transmission planning arrangements, would be expected to enhance the ability of the market to respond to those developments.

Principles

The AEMC's original Report presented a set of principles that were developed by the Panel, in consultation with market participants, and were used in the Panel's Final Report to evaluate a range of nationally consistent frameworks for transmission reliability standards. In its Updated Final Report, the AEMC confirmed the ongoing relevance of the principles, although these were clarified and revised slightly. The table below lists the principles used by the AEMC in developing its updated advice to the MCE.

Principles for a National Framework for Transmission Standards

Transparency - The processes for setting standards should be transparent and open, with ample opportunity for stakeholder input. The degree of transparency should be the same as that specified in the NEL for the assessment of Rule changes by the AEMC. The standards should be published and consistently applied by relevant bodies making investment decisions through transmission planning. Where the use of probabilistic planning is specified, transparent reporting should be undertaken on a deterministic equivalent basis. The consequences of not following the standards must be clearly defined along with the processes for enforcing the standards and reviewing or appealing any enforcement action.
Governance - The standards should be set by a body that is separate from the body that must apply the standard. Where the use of probabilistic planning is specified in a jurisdiction, investment planning should be undertaken by a body separate from the transmission asset owner.
Economic efficiency - The framework should result in standards being derived from economic analysis that relates transmission system costs to the value customers place on reliability.
Specificity of standards - Where pre-set standards are used, they should be clearly specified by connection point or on some other readily understandable basis (e.g. by geographic area, such as Central Business District (CBD), metro and rural areas). The standards should be clearly specified in a manner that: • identifies the starting condition for the transmission studies; • defines the test that would be performed on the system; and • states what constitutes acceptable system performance.
Fit for purpose - The framework should not be a "one size fits all" approach. Rather it should allow for standards to differ according to, say, the significance or criticality of the load centre (e.g. between CBD, metro and rural areas of a jurisdiction) or according to an explicit customer valuation of reliability at each connection point.
Amendable - The specific requirements and many of the processes should be able to be amended without requiring legislative approval; either through approval by the various regulatory bodies involved or an open consultation process.
Accountability - Transmission planners should be accountable to the appropriate authority for ensuring that the transmission standards are met, as well as to the AER for compliance with the resultant service standards, as this is an integral part of the regulatory incentive regime. If standards were to be set by a jurisdictional authority, it would most likely follow that the planner would be accountable to that jurisdictional authority.
Technology Neutral - Standards should be technologically neutral, and not be biased towards

network solutions where other non-network options can provide a comparable level of reliability.
Maintains the ability to achieve consistency between transmission and sub-transmission standards - The ability to achieve consistency between the form of standards and associated planning methodologies at the transmission and sub-transmission level is one important element in least-cost joint planning of transmission and sub-transmission networks to deliver the appropriate level of reliability at each connection point. Other important elements that contribute to economically efficient network design include: • the consistency of the different regulatory tests for transmission and distribution networks; • the effectiveness of any joint planning arrangements; and • the regulatory incentive regime for transmission and distribution networks.
Effectiveness - The framework should enable investment to proceed in a timely manner and meet customers' expectations for reliability and minimise the potential for disputes. The framework should recognise customers who have made long term investments in the expectation that the standard of reliability would be at least maintained into the future. The framework should allow for national and international comparison of standards in consistent formats.

The AEMC Final Report recommends that as part of the development and implementation process of a national framework, which will include any necessary amendments to both the NEL and NER, the relevant body(s) charged with these roles must have regard to the National Electricity Objective (NEO). Further to the NEO, the AEMC asserts the ongoing relevance of the Panel's Principles as part of the implementation process, particularly with respect to the development of the national reference standard template.

The MCE agrees with the principles provided by the AEMC and considers them to be consistent with the COAG direction. Further, the MCE notes that the principles will be useful for guiding the development and ongoing application of the proposed national framework and should be considered in conjunction with the NEO.

Response to Recommendations

The following sets out the AEMC's recommendations for a nationally consistent framework for transmission reliability standards and the MCE response to these recommendations.

1. Form

1.1 *Transmission reliability standards should be economically derived using a Customer Value of Reliability (CVR) or similar measure. They should be capable of being expressed in a deterministic manner, either as specified pre-set standards (referred to elsewhere in this document as a "hybrid" form of standards) or through reporting on an equivalent basis.*

1.2 *The national framework would make allowance for reliability standards to differ between connection points or on the basis of some other readily understandable categorisation (e.g. by geographic area, such as CBD, metro or rural areas), depending on the criticality of load or an explicit CVR.*

The Panel considered a number of different methods by which to achieve a national framework and recommended that the most appropriate option was to align the form of jurisdictional standards across the National Electricity Market (NEM) to the hybrid form. It reasoned that this option would institute a consistent national form while continuing to allow jurisdictions to set the level of the reliability standards applying to connection points within their own regions.

The MCE agrees with this approach and with the recommendation that transmission reliability standards should be capable of being expressed in a deterministic manner. The MCE considers that the hybrid approach to reporting is the most appropriate reporting format in this regard. The hybrid form, while allowing the use of common economic-based assessments of the transmission system, facilitates transparency, and therefore understanding and comparison of standards within and between jurisdictions. This transparency will improve the ability of NEM participants to assess the commercial risks of new investments (including existing operations) and provide for the on-going optimisation of potential investments across the NEM. This outcome is consistent with key 2007 ERIG findings.

The MCE considers that it is not practical to generalise transmission reliability standards against broad geographical regions across the NEM. Given the differences between CBD, metro and rural areas across the NEM, the MCE considers it would be difficult to obtain consistency in reporting, particularly against the proposed national reliability standards template. The MCE therefore considers that the criticality of connection point load should be the primary consideration for determining reliability standards. The similarity in physical characteristics of transmission connection points across the NEM is such that they provide a readily understandable means for reliability standards to be based and compared.

In addition to the current RIT-T process and proposed economic principles, the MCE agrees that the Customer Value of Reliability (CVR) will also play a critical role in determining connection point standards. The MCE notes that the structure and parameters of the economic principles and CVR will be developed as part of the implementation phase and that the process will be undertaken with full stakeholder consultation.

The MCE agrees that the proposed framework is flexible enough to allow Victoria to continue to use its probabilistic planning methodology and allows other jurisdictions the same flexibility if deemed appropriate. The proposed framework achieves this by establishing probabilistic

planning as an adjunct to the hybrid model. Jurisdictions which choose the probabilistic approach to planning will be required to determine these standards based on the framework's common economic parameters and express them in a deterministic (hybrid) format for reporting purposes.

The MCE supports the option to allow jurisdictions the flexibility to defer or advance an investment to meet an agreed standard if it could be demonstrated that it would be economic to do so as the MCE recognises that jurisdiction- specific circumstances play an important role in determining the timing of any investment decision.

2. Coverage

2.1 *Transmission reliability standards developed under the national framework would apply to connection points on all transmission networks owned by TNSPs.*

The AEMC Updated Final Report raises the issue of whether the reliability standards developed under the national framework should also apply to the parts of the network that meet the definition for transmission network under the Rules but are owned by a Distribution Network Service Provider (DNSP). The AEMC reasons that the national framework should not apply to any network owned by the DNSPs as requiring a DNSP to plan its network against two potentially different reliability standards would add complexity and costs to its planning processes for minimal benefit. The AEMC therefore recommends that the application of the national framework should only be mandatory for those transmission networks owned by TNSPs.

The MCE notes the AEMC's position, however, the MCE recognises the desirability of consistent planning approaches and compatible reliability standards at the points of connection of TNSP and DNSP networks, particularly if both network types meet the definition of a transmission network in the Rules. These elements of the network, although owned by DNSPs, typically operate in parallel with and support transmission networks and can significantly affect the performance capability of the transmission network, as well as influencing what is the most economically efficient network augmentation option.

The MCE notes that, in relation to the national framework, a key Panel principle was to achieve consistency between the form of the standards and planning methodologies at the transmission, sub-transmission and distribution levels. Accordingly, the MCE considers that the option for jurisdictions to choose to apply the national framework to all or part of their distribution networks should remain open and has the potential to form part of a joint transmission/ distribution planning process if deemed appropriate by the relevant jurisdiction.

Given the focus of this Review is specific to the reliability standards applied to connection points owned and operated by TNSPs, the MCE considers that the definition of what constitutes a connection point should be derived from the Rules and applied consistently to transmission network connection points across the NEM. The AEMC will clarify any ambiguities in the application of this definition if necessary.

3. Application

3.1	*The framework would provide the flexibility for jurisdictions to choose whether standards should be specified in jurisdictional instruments or determined through national governance arrangements, and whether pre-set standards should be defined or if standards should be derived from probabilistic cost-benefit analysis of network investments.*
3.2	*Where transmission reliability standards are to be pre-set deterministically, the jurisdictional body responsible for determining the standards should be separate from the body that must apply the standards. The determination should be based on economic analysis, which would be publicly reported.*
3.3	*Jurisdictions would also have the option of appointing a body to provide recommendations to the standard setting body. The recommendations, together with the analysis underlying them, would be published. This advisory role could be performed by the body that applies the standards or by another appropriately resourced organisation, such as AEMO.*
3.4	*Each jurisdiction would also have the option of appointing the AEMC to determine the appropriate pre-set reliability standards for the jurisdiction. The AEMC's decision would be informed by recommendations made to it by a body appointed by the jurisdiction under 3.3 above.*
3.5	*Alternatively, jurisdictions may allow the making of transmission investment decisions using probabilistic cost-benefit analysis, either through jurisdictional governance or through the application of the relevant provisions of the NEL. In such circumstances, planning of the relevant transmission system must be undertaken by a body independent of the transmission asset owner, and the independent planner should undertake reporting in planning timescales on a deterministic equivalent basis.*
3.6	*The national framework would be applied in a clear and transparent manner, and would include full stakeholder consultation.*
3.7	*Guidelines would be published by the AEMC that stipulate the assumptions and methodology that must be applied when conducting economic analysis, including the determination of pre-set reliability standards. The assumptions and methodology must be consistent with the RIT-T. Where use of probabilistic planning is specified in a jurisdiction (either through the NEL or otherwise), the planning process to be followed by the relevant independent planning body should be consistent with the economic analysis guidelines.*

The AEMC considers that the successful application of the national framework will deliver a transparent national structure to promote and maintain consistency in reliability standard setting processes across jurisdictions. In addition to the implementation of consistent economic modelling methodology, the AEMC recommends a revised corporate governance structure whereby the bodies that set the transmission reliability standards are separate from the bodies that apply those standards. These recommendations are intended to address possible issues of conflict of interest that could arise where the TNSP has responsibility for both planning and investment decisions leading to a lack of transparency and investor certainty. This is consistent with ERIG's recommendations.

The MCE agrees that the national framework in its application should provide the flexibility for jurisdictions to set and specify reliability standards through jurisdictional instruments or defer the determination of these standards to an appropriate national body if appropriate. The MCE also agrees that jurisdictions should have the flexibility to either define reliability standards in a deterministic manner or through probabilistic processes dependent on their specific jurisdictional circumstances. The MCE considers that this process complements the existing market framework arrangements by providing jurisdictions with the option to make transmission reliability standard decisions on a direct economic cost-benefit basis through

application of the relevant optional provisions of the NEL, or retain responsibility for standard determination which is currently the preferred option for most jurisdictions.

The MCE agrees that deterministic transmission reliability standards should be set by a body independent of the body that will apply the standards. This avoids the conflict of interest issues that may arise when a TNSP has responsibility for planning and investment and when the TNSP's revenue and profitability is driven by constructing assets to meet its own reliability requirements.

The MCE agrees with the AEMC that jurisdictions should have the option of appointing a body to provide recommendations to the body responsible for setting the standards within the jurisdiction. The MCE considers that it is appropriate for the standard-setting body, in accordance with the principles of the national framework, to publish the agreed standards, along with the underlying economic analysis and recommendations provided to it by the advisory body. Further, the MCE agrees that AEMO is well placed to provide an advisory role for jurisdictions that choose to defer this responsibility given AEMO's expertise in transmission planning in Victoria, advising on reliability standard levels in South Australia, and its National Transmission Planner responsibilities.

The MCE also supports the recommendation that, if requested by a jurisdiction, the AEMC is an appropriate body to determine pre-set reliability standards for a jurisdiction. The AEMC's determination could be based on recommendations provided to it by the jurisdictional entity that must apply the standards, or an appropriate independent body. The MCE notes that under the existing market governance framework, the AEMC is tasked with making decisions of an economic and market framework nature, including rule-making and energy market development. The MCE therefore considers that the AEMC is the appropriate body within the existing energy market governance framework to make decisions concerning levels of reliability provided in the NEM if a jurisdiction wishes to allocate the responsibility to a market body.

As stated, the MCE agrees that the national framework should provide the flexibility for jurisdictions to make transmission investment decisions through either deterministic or probabilistic processes. Where a probabilistic cost-benefit analysis is to be applied, the MCE considers that this can be achieved through either jurisdictional governance arrangements or through the application of the relevant provisions of the NEL. Consistent with the process for setting deterministic reliability standards, probabilistic outcomes should be determined by a body independent of the transmission asset owner.

The MCE notes the importance of consistency of reporting style and agrees with the AEMC that probabilistic outcomes should be expressed and reported in a deterministic format to facilitate transparency and comparison of standards across the NEM. However, the MCE acknowledges that the process through which probabilistic outcomes are expressed deterministically is not yet clear and that a more detailed explanation of how this will work in practice will be developed as part of the implementation phase for the national framework.

The MCE reiterates the strong need for consistent economic modelling which stipulates the assumptions and methodology that must be applied when developing and setting the transmission reliability standards for a jurisdiction. Accordingly, the MCE considers it is important that the economic guidelines be consistent with the RIT-T. The MCE agrees with the AEMC, as specified in its 2008 Report, that the AER is ideally placed to develop these guidelines. The MCE notes that the AER will need to consider this once the AEMC has provided its advice on implementation. Further the MCE notes the importance of a full stakeholder consultation process, including the jurisdictions and other market institutions, in the development of the economic guidelines.

4. National Reference Standard

4.1 *A national reference standard template would be introduced to identify the structure and parameters within which pre-set levels of standard should be specified. This would not stipulate any particular level of standard to be applied, but would promote consistency in the form and levels of jurisdictional standards, and would provide a basis for comparison between each jurisdiction.*

4.2 *The national reference standard template would be developed under the national framework, and would thus be consistent with the economic modelling assumptions and methodology used to determine jurisdictional transmission reliability standards.*

4.3 *The national reference standard template would be developed by AEMO and approved by the AEMC, in full consultation with stakeholders.*

4.4 *A jurisdictional transmission reliability standard setting body would be required to justify any divergence between the jurisdictional transmission reliability standards and the national reference standard.*

4.5 *Where use of probabilistic planning is specified in a jurisdiction (either through the NEL or otherwise), the reporting undertaken by the relevant independent planning body in a deterministically equivalent manner should be on a basis consistent with the national reference standard template. The independent planner would be required to justify any divergence of its reporting from the template.*

The AEMC recommends the introduction of a national reference standard template to promote consistency in the form and levels of jurisdictional reliability standards and to provide a basis for comparison of these standards between jurisdictions. The AEMC recommends that the national reference template would be developed by AEMO and approved by the AEMC in full consultation with stakeholders. The AEMC considers that these recommendations will provide further transparency and accountability in the determination and application of standards through clearly delineated reporting mechanisms. The AEMC's recommendations also ensure that the body responsible for setting reliability standards would be independent of the body required to meet the agreed standards of reliability.

The MCE regards a national reference standard template as a key element in providing a common language to allow standards to be compared across the NEM, with the expectation that this will promote greater transparency and consistency in reporting between jurisdictions over time. Clarity and consistency of transmission planning standards, facilitated through the national framework, will provide for greater certainty for existing and potential market participants seeking to understand the basis upon which a TNSP will make an investment. It will also alleviate the potential asymmetries in the competitive market that can arise when different planning criteria drive different regulated sector investment outcomes between jurisdictions. This issue is particularly relevant where transmission networks cross jurisdictional boundaries.

The MCE agrees that the economic principles used to develop a national reference standard template should be consistent with the economic principles used in determining jurisdictional reliability standards. As stated previously, the structure and parameters for the economic modelling will be developed as part of the implementation phase in full consultation with stakeholders. The MCE considers that consensus on the form of a national template will be difficult to achieve until the economic guideline development process has been finalised.

The MCE believes it is appropriate that the national reference standard template is developed by AEMO, given its access to necessary resources and expertise through its roles in transmission planning in Victoria, in making recommendations as to the appropriate levels of transmission reliability standard in South Australia, and as the NTP. The MCE also supports the AEMC as the appropriate body to approve the template based on its day to day responsibilities in relation to decisions of an economic and market framework nature. The MCE rationale is therefore consistent with its response to the recommendations in relation to the application of the national framework (see section 3). The MCE agrees that both the development and approval process for the national reference standard template must be undertaken with full stakeholder consultation.

The MCE does not support the AEMC recommendation that jurisdictions would be required to justify divergences between jurisdictional transmission reliability standards and the national reference standard template in relation to both pre-set deterministic and probabilistic determinations. The MCE considers that it would be sufficient for jurisdictions to explain their processes in setting jurisdictional reliability standards with reference to the national reliability standard template. The MCE believes that the requirement for jurisdictional reliability standards to be derived through common economic principles (including the CVR and RIT-T processes) is sufficient to ensure that jurisdictional justification of divergence with the template is not necessary as the standard setting process assumes consistency in its application.

The MCE believes that it is appropriate, in accordance with the agreed principles of the national framework and NEO, for jurisdictions as part of the recommended public reporting process (see section 5) to report on any areas of difference with the national template. This will promote transparency and provide a readily understandable means to compare reliability standards across the NEM, aiding market participation and improving investment decisions.

5. Publication of Information

5.1	*Where the transmission reliability standards applying in a jurisdiction are specified through jurisdictional instruments, the standards would be published by the jurisdictional reliability standard setting body. This would include the justification for any inconsistency with the national reference standard template.*
5.2	*Where use of probabilistic planning is specified in a jurisdiction, reporting on a deterministic equivalent basis should be published by the relevant independent transmission planning body.*
5.3	*Where pre-set, transmission reliability standards would also be available in TNSP annual reports and TNSP revenue determinations.*
5.4	*AEMO would establish and publish an information base of reliability standards applying in the NEM, including reasons provided by jurisdictions for any inconsistency with the national reference standard template. This information base would include deterministic equivalent reporting in jurisdictions specifying the use of probabilistic planning (noting that is also the responsibility of AEMO to undertake planning for declared networks using the probabilistic approach).*

The AEMC considers that the publication of reliability standard information is essential in providing a source of information for stakeholders seeking to understand the rationale for specific reliability standard determinations. The AEMC considers that these recommendations therefore provide an important means to help optimise private and public investment between transmission and generation systems across the NEM through the requirement to stipulate the underlying analysis behind reliability standard decisions.

The MCE agrees that jurisdictional reliability standards, whether deterministic or reflecting probabilistic planning processes, should be published by the applicable reliability standard setting body or independent transmission planning body within the jurisdiction. Publication of reliability standards will be essential to ensure that generators, investors and customers can readily identify the reliability standards that apply at different points in the transmission network.

The MCE considers that as part of the public reporting process it is appropriate for the jurisdictional body to publish the standards and the reasons for its determination, including any economic analysis and/or recommendations provided to it by an advisory body. However, in accordance with the MCE's position as outlined in response to Recommendation 4.4, the MCE does not agree, as part of this reporting process, that it is necessary for the jurisdictional body to justify any inconsistencies with the national reference standard template. In this regard, the MCE considers that it is reasonable that the jurisdictional body explains differences from the national template.

In relation to recommendation 5.3, the MCE agrees that pre-set transmission reliability standards should also be published in TNSP annual reports. The MCE also agrees, in-principle, that reliability standards should be included as part of the AER published TNSP pricing determinations. However, the MCE reiterates that, under the national framework, the onus is on the TNSP to articulate how its investment proposals are in-line with the pre-determined standards when seeking approval for a capital expenditure program from the AER. Accordingly, the MCE considers that making reference to standards as part of the AER determination consultation process should not be seen as an opportunity to debate the suitability of the standards themselves, or a guarantee by the AER that the TNSP will meet the stipulated standards once final capital expenditure is set. In this regard, the MCE considers that it is appropriate for the AER to note in its final revenue determination that reliability standards are set in accordance with specific jurisdictional arrangements and provide reference to where further information on the applicable standard and standard setting process can be obtained.

The MCE supports the development of a public information base for reliability standards applying in the NEM and agrees that AEMO is the appropriate body to manage this process. For the reasons outlined above in the discussion of recommendation 4.4, the MCE does not support the need to publish jurisdictional justification for divergence from the national standard template. The MCE considers that provision of the underlying economic analysis and/or recommendations, including an explanation of where the jurisdictional standards differ from the national template, is sufficient to explain the jurisdictions' position.

6. Specification

6.1	*The national framework would be specified in the Rules. Where the transmission reliability standards applying in a jurisdiction are specified in jurisdictional instruments, these would be capable of being amended without legislative approval.*
6.2	*While use by AEMO of the probabilistic approach in planning augmentations to "declared networks" is stipulated in the NEL, requirements relating to the process to be followed and reporting on a deterministic equivalent basis would be specified in the Rules.*

The AEMC considers that the specification of the parameters relating to the national framework in the NER is necessary to ensure that standards are developed and expressed in a consistent manner across jurisdictions.

The MCE agrees with the AEMC that the national framework should be specified in the NER as this is consistent with the legislative architecture reflected in previous gas and electricity reform packages. The MCE, however, reiterates its position relating to recommendation 3.5 that, as part of the implementation advice phase, further detail from the AEMC is necessary regarding the process through which probabilistic outcomes are to be expressed deterministically.

The MCE notes that in accordance with the principles of this Review and the NEO it is desirable that processes with respect to setting and amending reliability standards be consistent across the NEM. However, the MCE also notes that the current requirements relating to the approval and amendment of standards differ across NEM jurisdictions. This is the result of the different mechanisms (i.e. codes, licences or regulations) that are used to stipulate and enforce these standards.

The MCE considers that, as part of the implementation advice phase, the AEMC should provide additional information on its recommendation that standards should be able to be amended without legislative approval, noting what necessary amendments to current jurisdictional instruments would be required, potential resource implications, and the role of the MCE in relation to any associated approval processes. The MCE recognises that, currently, there are a number of approaches to amending transmission reliability standards and that the proposed framework may be optimised through a common approach. However, the process for amending jurisdictional legislation is the responsibility of the jurisdiction it relates to. The MCE considers that, if the transmission reliability standards are set out in legal instruments specific to a jurisdiction, then a jurisdiction should have the option of maintaining the system as is, or amending it in line with the AEMC's implementation advice. However, where a jurisdiction appoints the AEMC to determine its pre-set reliability standard, it may be appropriate to consider what mechanisms would be suitable for amending those standards in the future.

7. Accountability

7.1 *Where standards are set by a jurisdictional authority, the transmission planner applying the standards would be accountable to the jurisdictional authority, as well as to the AER (for ensuring that service standards were met under the regulatory incentive regime). The jurisdictional transmission reliability standards setting body would be accountable to the jurisdictional government.*

7.2 *Where standards are set under national governance rather than by a jurisdictional authority, relevant national bodies would have statutory responsibilities to comply with the requirements of relevant national legislation and would be accountable to the AER for complying with requirements specified in the Rules.*

In accordance with the agreed principles that underpin the national framework, the AEMC considers that transmission planners[1] should be accountable for ensuring that the transmission reliability standards are met. The AEMC believes that the above recommendations deliver this by building on the proposed separation of powers as outlined in Section 3, as well as through the implementation of appropriate accountability measures at both the jurisdictional and the national governance level.

The MCE agrees that transmission planners should be accountable to the appropriate jurisdictional authority for ensuring that the transmission standards are met. Transmission planners should also be accountable to the AER, as part of the incentive regime, for explaining any differences between forecast reliability (as set out in their revenue proposals) and the capability of the network in meeting its performance targets once investment has occurred. The MCE also agrees that it is appropriate that the relevant jurisdictional standard setting body be accountable to the relevant jurisdictional government. Similarly, where standards are set under national governance arrangements, the relevant national body will be responsible for compliance with the NEL and the NER and accountable to the AER.

The intention of the framework is to ensure that reliability standards are both consistently derived and applied throughout the NEM. Given the national framework will be specified in the Rules, any failure to comply with the Rules under the national framework will be subject to AER enforcement as with other requirements set out in the Rules. Therefore, further consideration will need to be given to the implications of potential breaches of the applicable Rule provisions as part of the implementation advice process.

[1] The reference to transmission planner is to highlight the flexibility of the framework which allows for the transmission planner to be separate from the transmission asset owner (a current requirement when probabilistic planning is employed). However, in practice, the transmission planner in jurisdictions applying deterministically expressed standards is likely to be the TNSP.

Implementation and transition

The MCE notes that implementation of the proposed national framework is of considerable importance in the context of COAG's commitment to the development of a consistent national framework for network security and reliability.

The MCE considers that the implementation advice process will provide the mechanism through which detailed arrangements supporting the national framework, such as the economic guidelines, the national reference standard template, and deterministic equivalent reporting in jurisdictions specifying the use of probabilistic planning, can be developed and agreed upon.

The MCE acknowledges the complexity of the implementation and transition process. The MCE considers the next step towards the implementation of the national framework is to obtain detailed implementation and transitional advice and recommendations on amendments to the NER and potentially the NEL, and consideration of any necessary changes to jurisdictional legislative instruments to implement the national framework. The MCE considers that the AEMC is the organisation best placed to develop this advice. In directing the AEMC to do this work, the MCE requests that the process is coupled with comprehensive stakeholder consultation.

In addition to the required amendments to the NER, and potential legislative and transitional arrangements that will form the basis of the AEMC's advice and recommendations, the MCE considers that further clarification around specific details regarding the proposed design and interaction of certain aspects of the national framework is necessary. Consequently, the MCE requests further detail from the AEMC on:

- the structure and parameters of the proposed economic guidelines (including the CVR) to be used in determining pre-set jurisdictional standards and how this will be applicable to both deterministic and deterministic-equivalent forms of reporting;
- how the proposed economic guidelines and CVR process under the national framework will relate and interact with the current RIT-T process;
- how probabilistic planning decisions might be expressed on a deterministic basis in reporting;
- how the national framework will apply and potentially alter AEMO's current roles and responsibilities under the NEL;
- the AER's specific role under the national framework, particularly in relation to its task in developing and publishing the economic guidelines. Terms of reference to steer the development of the guidelines and timeframes for response should also be outlined;
- the structure of the national reference standard template, noting the MCE's position that the template should be based on criticality of connection point load rather than CBD, metro, or rural areas across the NEM;
- the reporting format and level of information that is necessary (at both the jurisdictional and the national level) when publishing the rationale behind the standard setting process, including timeframes for reporting and periodic review of standards. The AEMC is to note the MCE's position that jurisdictions should not be required to justify divergence from the template;
- the recommendation that standards may be amended without legislative approval, noting what necessary amendments to current jurisdictional instruments would be required, and potential resource implications; and

- the accountability provisions under the national framework, including consideration of implications for potential breaches of the applicable Rule provisions

Once the MCE, or the equivalent body, has considered and approved the AEMC's implementation and transition advice and recommendations, including draft NER and potential NEL changes, depending on the scope of the changes to the NEL, the MCE may be required to undertake a Regulation Impact Statement (RIS) process. If this is the case, once the RIS has been approved by the Office of Best Practice Regulation, the MCE will task the appropriate national and jurisdictional bodies with progressing the required changes to implement the national framework. This MCE notes that this may involve progressing potential NEL amendments through the South Australian Parliament.