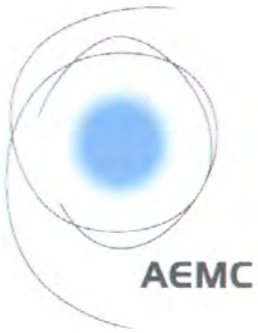

Australian Energy Market Commission

Final Rule Determination

National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006

Rule Proponent
Ministerial Council on Energy
30 November 2006

Signed: .....

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For and on behalf of
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AEMC 2006, *Reform of the Regulatory Test Principles*, Final Determination, 30 November 2006, Sydney.

About the AEMC

The Council of Australian Governments, through its Ministerial Council on energy, established the Australian Energy Market Commission (Commission) in July 2005 to be the Rule maker for national energy markets. The Commission is currently responsible for Rules and policy advice covering the National Electricity Market. It is a statutory authority. Our key responsibilities are to consider Rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on the Commission's initiative.

Contents

Summary

The Regulatory Test (Test) is part of the regulatory framework for assessing new network investment. The Test ensures that an assessment is conducted of new augmentation investment and alternative non-network options, to ensure that appropriate projects are justified and constructed.

On 5 October 2005, the Ministerial Council on Energy (MCE) submitted a Rule proposal to the Australian Energy Market Commission (the Commission) to implement new Regulatory Test principles. The Commission assessed the MCE's proposal, and released a draft Rule Determination on the proposal for comment by interested stakeholders. This Final Determination sets out the Commission's findings in relation to the Regulatory Test Principles. The Commission notes that its findings should be viewed in the context of the broader reforms of the Australian energy sector currently under consideration by the Energy Reform Implementation Group (ERIG).

As noted by the MCE, the application of the Regulatory Test has been the most disputed matter in the National Electricity Code (now Rules). In assessing this proposal, the Commission has taken into consideration previous experience with the Test and ongoing concerns that the Test may have operated to deter or delay potentially economic transmission investment.

The Commission assessed the MCE's principles for the Regulatory Test against the Rule making test. As a result, the Commission made some changes to the proposal so that the Regulatory Test principles may better contribute to achieving the National Electricity Market (NEM) objective. The Commission considers that the Rule addresses the concerns raised by the MCE and achieves the policy intent of the MCE proposal.

In assessing this proposal, the Commission has been conscious of the numerous ongoing work streams that are addressing the effectiveness of the current Rules regarding network regulation, investment and congestion management. The Commission has been particularly aware of the relationship between its ongoing programme and the work of the COAG Energy Reform Implementation Group (ERIG). The Commission is aware that ERIG is considering the effectiveness of the current transmission planning framework, and believes that the Commission's assessment of this Rule proposal should be complementary to ERIG's ongoing assessment of this and related issues.

The Commission understands the critical role that the Regulatory Test plays in the NEM, as the key regulatory assessment of new network investment. The Commission considers that the Regulatory Test principles will allow the Test to operate more effectively, providing greater policy guidance for the making of the Test and increasing the certainty and transparency of the application of the Test.

Key elements of the Rule are:

- **An improved governance structure for the Test.** The Regulatory Test principles will guide the Australian Energy Regulator (AER) who will be responsible for making the Regulatory Test.

- **Clearer objectives for the Test.** The Regulatory Test principles provide seven key objectives for the Test: economic efficiency, reliability, predictability, competitive neutrality, proportionality, consistency and transparency.

- **Improved certainty in the application of the Test.** The Commission has addressed concerns regarding the assessment of alternative options under the current market benefits limb of the Regulatory Test by putting in place a two stage process: first, requiring the Network Service Provider (NSP) to publish a request for information on potential alternative options, and second, requiring that the Test should take the form of an assessment of the proposal against the likely alternative or alternatives, rather than an assessment against all genuine and practicable alternatives.

  The Commission considers that this approach addresses the MCE's concerns regarding the potential for economic transmission investments to be deterred and reduces the scope for gaming of the Test. Critically, the Commission is of the view that this approach will reduce the risk of a project being justified as maximising net market benefits, yet failing to be constructed, resulting in sub-optimal outcomes for the market as a whole.

- **Improved procedural requirements.** To improve transparency in the making of the Test by the AER, the Commission has determined that the AER should be required to follow the Transmission Consultation Procedures contained in Chapter 6A of the Rules. The Commission has also adopted the MCE's proposal for guidelines to be developed by the AER to assist in the application of the Test.

- **Transitional Issues.** To facilitate a smooth transition for the current Test, the Commission has determined that the current Regulatory Test is to be deemed to comply with the new Regulatory Test requirements in the Rules. The Commission proposes that the transitional arrangements should expire on 31 December 2007. This should allow the AER sufficient time to determine whether the current Test complies with the Regulatory Test principles and, if necessary, make any changes to the Test.

The Regulatory Test Rule commences on 30 November 2007.

1 The MCE Rule proposal

On 5 October 2005, the Commission received a proposal from the Ministerial Council on Energy (MCE), seeking a Rule change to implement new principles for the Regulatory Test (Test).

In summary, the MCE proposal was intended to:

- Improve the governance structure for the Test, by providing 'principles' in the Rules, which the Test must be consistent with, supported by Test Guidelines. Both the Test and the Test Guidelines are to be made by the AER;
- Establish some requirements that the AER must address in either the Test or the Test Guidelines;
- Define a process by which the AER can change the Regulatory Test; and
- Establish appropriate transitional arrangements from the current Test to a new Test that is consistent with the changes made by the Rule proposal.

In regard to the role and purpose of its proposal, the MCE noted:

> *The emphasis of this Rule change is on improving the overall regulatory settings and establishing a streamlined process that helps to maximise the net economic benefit to all those who produce, consume and transport electricity in the market.*[1]
>
> *The regulatory test principles have been developed by the MCE. The focus has been on establishing appropriate principles to be followed by the AER and proponents. The high level principles will codify the policy requirements that the regulatory test must meet, while leaving sufficient discretion with the AER to promulgate the regulatory test and perform its role as regulator. The challenge in setting the principles is to strike a balance such that the AER is not both rule maker and rule enforcer with respect to the regulatory test.*[2]

The MCE proposal set out seven principles to provide appropriate policy guidance to the AER in promulgating the Test, noting that the principles were intended to *"ensure the regulatory test is promulgated in a manner which provides a level of certainty to Network Service Providers in undertaking new network investment."*[3] It defined the principles and their policy intent as:

- The Regulatory Test must have as its purpose the identification of new network investment or non-network alternatives that:
    - maximise the net economic benefit to all those who produce, consume and transport electricity in the market; or

[1] MCE Rule proposal p3
[2] MCE Rule proposal p3
[3] MCE Rule proposal p4

    - in the event the option is necessitated to meet the service standards linked to the technical requirements of Schedule 5.1 of the Rules or in applicable regulatory instruments, minimise the present value of the costs of meeting those requirements.

- The Regulatory Test must be used by NSPs in the assessment of all new network investment in accordance with the Rules and with a level of analysis commensurate with the scale and size of the new network investment.

- The Regulatory Test must be based on the principles of cost-benefit analysis as a means of economic discipline, thus satisfying the overarching objective to deliver efficient transmission investment, not simply more transmission regardless of the economics.

- The Regulatory Test must ensure that all genuine and practicable alternative options to proposed new transmission network investment are evaluated by NSPs without bias, regarding: energy source; technology; ownership; the extent to which the new transmission network investment or the non-network alternative enables intra-regional or inter-regional trading of electricity; whether the new network investment or non-network alternative is intended to be regulated; or any other factor. This is to ensure NSPs do not favour network-only investment, and that the most efficient solution for the NEM as a whole is progressed rather than the investment that is internally most efficient for the NSP.

- To allow NSPs to recover the efficient costs of maintaining a secure and reliable power system for end-users, the Regulatory Test must reflect the requirement for NSPs to meet network performance standards linked to the technical requirements of Schedule 5.1 of the Rules or in applicable regulatory instruments, while minimising the present value of the costs of meeting those requirements.

- To promote confidence in the Regulatory Test, and minimise avenues for legal dispute, the Regulatory Test must be transparent, robust, defensible and capable of consistent application.

- The Regulatory Test must be consistent with the basis of asset valuation determined by the AER for the purposes of clause 6.2.3 of the Rules to ensure internal consistency within the Rules.

The MCE proposed that the new principles would not apply until the AER elected to change the Test. The proposal notes "the new principles will not require the AER to change the current regulatory test and will only apply when the AER chooses to change the regulatory test."[4]

[4] MCE Rule proposal, p5

2 The Commission's Final Determination and power to make the Rule

The MCE Rule change proposal aimed to change the Rules regarding the assessment of augmentations to the transmission or distribution system. The Commission is satisfied that the Rule falls within the subject matter for which the Commission can make Rules set out in s.34 of the National Electricity Law (NEL). Specifically, the Rule relates to the following items under Schedule 1 of the NEL:

- The Rule is covered under s.34, as it relates to the regulation of both the operation of the National Electricity Market (NEM) and the activities of persons participating in the NEM.

- Item 12 of Schedule 1 of the NEL also states that the *"augmentation or expansion in the capacity of transmission systems and distribution systems"*[5] is an allowable subject matter for the National Electricity Rules.

Under s.88 of the NEL, the Commission is only able to make Rules if:

> *It is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective.*[6]

The National Electricity Market (NEM) objective, as set out in s.7 of the NEL, is to:

> *Promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.*[7]

Section 6 presents the Commission's reasoning as to how the MCE's proposal satisfies the NEM objective and the statutory Rule making test.

The Commission has determined in accordance with s.103 of the NEL to make the Rule attached to this Determination (Appendix A). The Regulatory Test Rule contains some amendments to the proposed Rule put forward by the proponent. A summary of the differences between the proposed Rule and the Regulatory Test Rule is included in Section 5.8 of this Rule Determination.

This Determination sets out the Commission's reasons for making the Rule. The Commission has taken into account:

1. The Commission's powers under the NEL to make the Rule;

2. The MCE's Rule change proposal and proposed Rule;

3. Submissions received in response to the proposed Rule put forward by the MCE and the Commission's Draft Determination, respectively; and

[5] Item 12 schedule 1, NEL
[6] Section 88, NEL
[7] Section 7, NEL

4. The Commission's analysis as to whether the Rule would contribute to the achievement of the NEM objective and whether it satisfies the statutory Rule making test.

3 Consultation on the MCE proposal

The MCE submitted its proposal to the Commission on 5 October 2005. On 20 December 2005, the Commission commenced consultation under s.95 of the NEL on the proposal. Consultation closed on 24 February 2006. The Commission subsequently published its Draft Determination on 21 September 2006, with Consultation closing on 3 November 2006.

The Commission received 19 submissions in response to its first round consultation ('First Consultation'), and 12 submissions following its second round consultation ('Second Consultation'). These submissions are available on the Commission's website. The Commission received submissions from:

- The Australian Energy Regulator;
- Alinta and Multinet;
- CitiPower and Powercor;
- Delta Electricity;
- The Electricity Transmission Network Owners' Forum;
- The Energy Action Group;
- EnergyAustralia;
- The Energy Retailers Association Of Australia;
- The Energy Users Association Of Australia;
- Energy Solutions Australia Pty Ltd;
- Enertrade;
- Ergon Energy;
- Hydro Tasmania;
- Integral Energy;
- The Inter Regional Planning Committee
- The Major Energy Users;
- Macquarie Generation;
- NEMMCO;
- Powerlink (including an additional supplementary submission);

- Stanwell Corporation (two submissions);
- The 'Group' – TRUenergy, International Power, Loy Yang Marketing Management Co, NRG Flinders and AGL;
- TransGrid;
- United Energy Distribution; and
- VENCorp.

In addition to these consultations, on 4 July 2006, the Commission invited a number of regulatory experts to attend a workshop to discuss issues associated with the Test. The workshop was intended to assist the Commission to understand some of the complex issues surrounding the Test, the role that the Test plays in the NEM investment framework, some of the previous issues that have been raised with the Test, and current issues with the application of the Test.

The workshop was attended by Darryl Biggar, Henry Ergas, Greg Houston, Danny Price, Geoff Swier, AEMC Commissioners and Commission staff. A summary of the issues identified and the matters discussed at the workshop is attached to this Determination at Appendix C.

4 Background and Context

This section provides a brief overview of the background relevant to the Commission's consideration of the issues relating to the Rule. It is structured as follows:

- Section 4.1 outlines the context for the review, including the policy issues leading to the development of the MCE Rule Proposal, and other reviews relevant to this review, in particular that currently being undertaken by ERIG;
- Section 4.2 outlines the nature of the economic problem that the Regulatory Test addresses; and
- Section 4.3 provides an overview of the current formulation of the Regulatory Test and the interactions between the current Regulatory Test and other requirements within the Rules.

4.1 Context for the review

As the MCE noted in its proposal, the Regulatory Test has been the most disputed matter in the history of the NEM. The Commission notes that the Test and the network augmentation Rules have undergone significant reform to address perceived weaknesses and problems with the Test and investment framework. An overview of the history and development of the Test is provided in Appendix B however, it is relevant to note two of the more significant reforms that are of particular relevance to this proposal. These are:

- **Network and Distributed Resources Code changes.** The Australian Competition and Consumer Commission (ACCC) approved the Network and Distributed Resources (NDR) National Electricity Code changes on 13 February 2002 relating to the process for network planning and augmentation. The National Electricity Code Administrator (NECA) stated that the purpose of its application was to "put network service providers in the driving seat by giving them primary responsibility for the decision-making process on proposed new regulated network investments."[8] The NDR amendments involved two major changes. First, responsibility for the application of the Regulatory Test for interregional augmentations was devolved from the National Electricity Market Management Company (NEMMCO) to transmission network service providers (TNSPs). Second, the distinction between inter and intra-regional network augmentations was removed and replaced with a distinction between new large and small network assets. A new large network asset is defined as an augmentation that a TNSP estimates will require a total capitalised expenditure in excess of $10 million. A new small network asset is an augmentation that a TNSP estimates

[8] NECA, Network and Distributed Resources Code change, Application to ACCC for Authorisation, p1

will require a total capitalised expenditure in excess of $1 million but not greater than $10 million.

- **Regulatory Test version 2.** The ACCC released its final determination on its review of the Test on 11 August 2004. The main definitional amendments to the Test were:

    - Alternative options – Under the 'reliability limb' of the Test, an alternative is required to be a 'genuine' alternative. However, consistent with the decisions on SNI[9], it is not necessary under the 'market benefits limb' of the Test to have an identifiable proponent;

    - Market benefits and costs – a non-exhaustive list of market benefits and costs was included;

    - Committed projects and anticipated projects definitions were made consistent with those used in the Statement of Opportunities (SOO);

    - Value of Lost Load (VoLL) – the reference to VoLL was replaced with a reference to the value of electricity to consumers;

    - Sensitivity Analysis – a non-exhaustive list of parameters that should be considered by NSPs when testing the robustness of the analysis was introduced;

    - Reliability limb –the 'minimising-cost' approach in version 1 of the Test was replaced with a 'least cost' approach for the reliability driven augmentations; and

    - Expected value – the 'market benefits limb' was revised to include the term 'expected'. The ACCC stated this was to ensure that the Test is consistent with the generally accepted principles of cost-benefit analysis upon which it is based.[10]

  Version 2 of the Test also allowed competition benefits to be assessed. Competition benefits were defined as the change in benefit between the scenario where, after implementation of the option:

  > (a) generator bidding is assumed to be the same as it was before the option was implemented; and
  >
  > (b) generator bidding reflects any market power after the implementation of the option,
  >
  > or another reasonable measure that can be demonstrated to produce an equivalent change in benefit. [11]

[9] The South Australia - NSW interconnector. See Appendix B for more details
[10] ACCC, Review of the Regulatory Test for Network Augmentations, Final Decision, 11 August 2004, p4
[11] Ibid. p5

The Commission notes that there have been ongoing concerns raised by a number of stakeholders that augmentations that should have occurred may not have occurred. As an example, the Parer Review[12] raised this issue and noted:

> *Concerns have been expressed about the lack of new regulated interconnects that have been proposed and approved…Weaknesses in the rules and approval processes applying to regulated interconnectors have been identified including:*
>
> - *the nature and application of the regulatory test for new regulated interconnectors*
> - *potential for conflict of interest within the IRPC (which assesses and advises NEMMCO on aspects of new proposals)*
> - *unduly long administrative processes*
> - *potential for competitors to game the process*
>
> *Concerns have also been raised about the inability to access the information required to develop new network augmentation proposals.*
>
> *At the heart of these concerns is the problematic regulatory benefits test. The Panel considers that the key problem with the benefits test is that it does not fully recognise the commercial benefits associated with alleviating network constraints between regions….The result has been uncertainty, protracted regulated investment processes and delayed (and possibly inappropriate) investment responses[13].*

The MCE also reflected this concern of the failure of the Regulatory Test to ensure appropriate investment had taken place in its proposal, stating:

> *As a consequence of this lack of clarity on the application of the regulatory test and consequent disputes, potentially economic transmission investment was either delayed or not made.[14]*

The 2005 MCE Statement on Transmission also provided some detail on the MCE's policy views regarding the Regulatory Test:

> *The Australian Competition and Consumer Commission (ACCC) has undertaken significant work in 2004 to amend the Regulatory Test, which now includes competition benefits as part of the Regulatory Test. The ACCC's work also delivers a reasonable framework for the removal of existing biases against the development of regulated transmission investment.*
>
> *The MCE will develop Regulatory Test Principles that provide minimum coverage guidelines for the AER to apply in promulgating the Regulatory Test. The MCE will*

[12] The Commission notes that the Parer Report was released in December 2002, before the finalisation of the ACCC review of the Regulatory Test. The Commission also notes that the concerns about the role of the IRPC raised by the Report were addressed as part of the Network and Distributed Resources Code changes.
[13] Council of Australian Governments Energy Market Review, Towards a truly national energy market, p127.
[14] MCE Rule proposal, p3

submit the Regulatory Test Principles to the AEMC for consideration as MCE-initiated Rule changes. The purpose is to provide a level of certainty in the AER's development of the Regulatory Test for transmission investments.[15]

These statements led to the MCE proposal and the Rule that is the subject of this Determination. However, the Commission notes that the Regulatory Test Rule is limited in scope and is only one of a number of policy initiatives that are seeking to address particular issues in achieving a more efficient framework for dealing with network augmentation and network congestion.

These include:

- **Rules for the regulation of electricity transmission revenue and prices.** The NEL required the Commission to review and, as appropriate, amend the current Rules for the regulation of both transmission revenue and pricing. The issues addressed by the review included the appropriate scope and form of regulation, incentives for investment and operating efficiency, incentives for service reliability and availability and improvements in the clarity, transparency and predictability in the regulatory framework. The regulatory framework for transmission interacts with the incentives for network augmentation, including the Regulatory Test. These interactions are discussed further in Section 5.4.4. The Commission made a Rule relating to transmission revenue regulation on 16 November 2006.

- **Last Resort Planning Power Rule Proposal.** This MCE Rule proposal would give the Commission a 'last resort' power to direct that the Regulatory Test be applied where there is evidence of material network congestion, which is not being addressed by investment responses from market participants. The Commission's power under this Rule Proposal would not extend to directing that efficient investment proposals be undertaken. The Commission released the Draft Last Resort Planning Power Rule and Draft Determination on 23 November 2006.

- **Transmission network congestion management review.** The MCE has directed the Commission to review and make recommendations on options for the more effective management of network congestion. Network congestion occurs when the available network capacity is insufficient to permit the dispatch of the lowest cost generation available to meet electricity demand. This can lead to inefficient pricing and trading across NEM regions and increased financial risk for participants trading between them. One of the reasons why significant congestion may occur is the failure of timely augmentation of the transmission network.

  The review will be conducted in conjunction with the Commission's consideration of a number of regional boundary changes and related Rule change proposals. The Commission expects to finalise its report and determinations in relation to these matters by March 2007.

[15] Ministerial Council on Energy, Statement on NEM Transmission , p2

In developing the Regulatory Test Determination, the Commission has sought to ensure consistency of approach given these current reviews. The Commission is conscious that in this respect, the review underway by ERIG is likely to be of central importance. ERIG was requested by the Council of Australian Governments (COAG) to recommend further reforms to the Australian energy sector in the areas of the national electricity transmission network, the efficiency of energy market structures and the performance of the energy financial markets.

ERIG's initial views set out in a series of recently released discussion papers, highlight that the Commission's findings in the context of the present Rule should be seen only as an element in a far wider ranging reform process that would incorporate NEM governance structures, and the broader regulatory framework for transmission and transmission investment.[16] Thus key components of ERIG's proposed reforms as they relate to the Regulatory Test would include:

- Replacing the Regulatory Test with a two step decision-making process, consisting of:
    - An over-arching longer term plan for the efficient development of the national transmission network, whereby the Test would be applied to the network as a whole; and
    - A requirement for the relevant NSP to consult on individual projects to ensure that the specific works proposed are the most appropriate and that alternative non-network solutions are fully considered.
- Integrating the two limbs of the Regulatory Test as part of a single Project Assessment and Consultation, possibly by an independent party, and preferably within the context of harmonised reliability criteria.

In summary, while the Commission's findings address significant current uncertainties in relation to the objectives and scope of the Test, the purview of its deliberations are necessarily limited and delineated from those of ERIG.

4.2 The economic problem arising from transmission investment

In considering concerns regarding the effectiveness of the Test, it is useful to consider *why* there is a need for a Regulatory Test in the first place. In other words what is the market failure that requires intervention in the form of the Test?

The electricity industry is broken into four vertically separated segments – generation, transmission, distribution and retail. While competition exists in the generation market and is emerging in the retail market, the natural monopoly characteristics of transmission and distribution are such that they are provided by single monopoly businesses, giving rise to a public policy requirement for economic regulation to prevent the misuse of market power and to provide incentives for efficient investment and operation.

The nature of transmission as a physical link between generators and distribution/retail businesses means that a transmission business is not able to

[16] Energy Reform Implementation Group, Discussion papers, November 2006.

directly influence the demand or supply for its services. As a regulated monopoly, a transmission business may not be responsive to changing circumstances in both the upstream generation market and the downstream distribution and subsequent retail market in the absence of incentives through the regulatory process to do so. As transmission capacity becomes constrained within the network, transmission businesses need to be provided with incentives to respond with investments to alleviate those constraints – a so called augmentation investment.

Two issues arise for a transmission business when it is considering an augmentation investment, which do not arise for most businesses in competitive markets. These issues are:

- The impact of the investment on upstream and downstream users of transmission services. Any transmission network augmentation investment is likely to have consequential implications for generators and distributors/ retailers, affecting how generators bid into the NEM; and

- Whether an alternative investment by an upstream or downstream business can solve the capacity constraint in a more efficient way. A non-network augmentation might be more cost effective or deliver wider benefits to the market, compared with a network option.

However, transmission businesses may have limited incentives to consider these two issues and to address them efficiently in their investment decision making.

This implies that there are likely to be external costs and benefits accruing to generators, distribution businesses and retailers, associated with any transmission augmentation investment. In the absence of specific incentives on a transmission business to take these external costs and benefits into consideration when choosing the appropriate approach to meeting the network need, efficient investment will not ensue.

4.3 Current formulation of the Regulatory Test

The Regulatory Test has evolved as the regulatory response to this economic problem. It is important to note that the Regulatory Test is only one aspect of the overall regulatory framework that provides investment incentives to transmission businesses. The rationale underpinning its role within the investment regulatory framework is to address the two particular economic issues identified above. An important aspect of the Commission's consideration of the MCE Rule Proposal has been an examination of the interactions between the Rule and the current Rules to ensure that the package of incentives created promotes the NEM objective.

The current formulation of the Regulatory Test was made by the ACCC in August 2004 following extensive market consultation. It is commonly referred to as the Regulatory Test Version 2[17] as it was developed in response to various issues identified with the initial version developed in 1999.[18]

[17] A copy of the Regulatory Test version 2 is attached at Appendix D

[18] A brief overview of the historical development of the Regulatory Test is provided in Appendix B

The Regulatory Test has two limbs – the reliability limb and the market benefits limb. The development of different approaches to the application of the Regulatory Test depending on the circumstances driving the investment is based on a concern to ensure that investments relating to reliability were not inadvertently prevented by a consideration of wider market benefits and costs. The Regulatory Test is therefore satisfied if:

- In the event of an investment required to meet a minimum network performance requirement, by the investment minimising the costs compared with alternative options – the reliability limb - clause 1(a), Regulatory Test; or

- In all other cases, by the option maximising the expected present value of market benefits less costs – the market limb - clause 1(b), Regulatory Test.

The Rules provide for the Regulatory Test to be applied by an entity proposing to undertake a new transmission network asset investment, and provides guidance as to the requirements necessary to be fulfilled prior to the commencement of the investment – clause 5.6.6, National Electricity Rules Version 9.[19]

In practice, the Regulatory Test requires the assessment of the costs and, for investments not necessary to meet network performance requirements, the benefits, of an option compared with alternative options. In essence, the Test is a regulatory formulation of cost benefit analysis that is widely applied for the assessment of capital expenditure projects. The key features of the Test are:

- Costs include costs of construction, operating and maintenance costs, compliance or any other costs considered relevant, as incurred by anyone affected by the investment – clause 2, Regulatory Test;

- Market benefits include any expected changes in other transmission costs arising from the investment, and also any competition benefits because of anticipated changes in generator bidding arising from the investment – clause 5, Regulatory Test; and

- Alternative options are required to be both genuine and practicable. For an investment pursuant to the reliability limb, genuine alternatives require an identifiable proponent of the alternative however this is not required for an investment within the market benefits limb – clause 3, Regulatory Test.

The Regulatory Test is only one aspect of the regulatory framework that provides incentives to TNSPs in their augmentation investments. The regulatory framework for investment also involves:

- The setting of minimum network performance standards;

- Requirements to undertake annual planning reviews and publish an Annual Planning Report that provides information on forecast loads, forecast constraints, where minimum network performance standards may not be

[19] The Commission notes that it is currently consideration a Rule Change Proposal submitted by Stanwell Corporation which, amongst other things, seeks to extend the application of the Regulatory Test beyond new transmission network asset investments

met, and proposed augmentations – clause 5.6.2 National Electricity Rules, Version 9;

- An information and consultation process for authorising new large transmission network augmentations – clause 5.6.6 National Electricity Rules, Version 9; and

- Review by the AER of capital expenditure forecasts at regulatory reviews for the purpose of determining capital expenditure allowances – clauses 6A.6.7 and 6A.14.1(2) in Chapter 6A of the Rules.

5 Commission's consideration of matters raised in analysis and consultation

5.1 Governance framework for the Regulatory Test

Prior to the making of the Regulatory Test Rule, the AER was required to promulgate the Test, having regard to the need to ensure consistency with the basis of asset valuation determined by the AER in its regulatory approach, and obligations to meet network performance requirements – clause 5.6.5A.

The Regulatory Test Rule changes this approach by specifying principles and requirements in the Rules that the Test must satisfy, when made by the AER, and a process by which the Test may be amended.

In response to the MCE Proposal, some submissions suggested that the entire Regulatory Test should be specified in the Rules. The MCE proposal and the alternative view are discussed in greater detail below.

5.1.1 MCE's perspective as presented in its proposal

The MCE noted:

> *The high level principles will codify the policy requirements that the regulatory test must meet, while leaving sufficient discretion with the AER to promulgate the regulatory test and perform its role as regulator. The challenge in setting the principles is to strike a balance such that the AER is not both rule maker and rule enforcer with respect to the regulatory test.*[20]

The MCE also noted:

> *Consideration was given to including a highly prescriptive regulatory test in the Rules. This approach was however discarded as it would go beyond setting policy requirements and would leave the Network Service Providers (NSP) and the AER with little discretion in applying the test.*[21]

5.1.2 Submissions

In the course of the first and the second round consultations, a number of stakeholders commented on the role of the Regulatory Test principles within the wider NEM governance framework, and specifically in relation to the role of the AER in promulgating the Regulatory Test.

The Group set out the relevant NEM governance structure, encompassing, in order of importance, the NEM objective, the Regulatory Test principles, the Regulatory

[20] MCE Rule proposal, p3
[21] Ibid

Test, and the Test guidelines.[22] A TNSP contemplating a network investment would need to consider these various governance "layers", and the Group considered that this would represent an additional source of complexity and uncertainty.

EnergyAustralia raised concerns that:[23]

- The proposed guidelines would increase the scope for discretion on the part of the AER in relation to the application of the Regulatory Test; and

- The AER would be placed in the position of simultaneously being a rule making body, a regulator and an arbiter in case of disputes.

Various submissions correspondingly suggested that rather than the Rules including principles for the Regulatory Test, the *existing* Test itself should be included in the Rules.[24]

Hydro Tasmania argued that this would simplify the governance arrangements for the Regulatory Test, imply a similar approach to the Regulatory Test as for other network and revenue rules, reduce concerns about multiple and inconsistent roles of the AER, clarify the respective responsibilities of the Commission and the AER, respectively, and avoid unnecessary duplication of rules and processes.[25] EnergyAustralia said that, given the importance of the Regulatory Test to transmission investment, the Regulatory Test should be incorporated in the Rules in its entirety.[26] This would also limit the scope for the AER to amend the Regulatory Test. The Energy Retailers Association of Australia (ERAA) also emphasised that as much as possible of the content of the Regulatory Test and the process of its application should be codified in the Rules.[27] This would also enhance certainty for market participants and improve NEM governance.

5.1.3 Commission's considerations and reasoning

In summary, the MCE approach involves:

- Provision for the framework for the operation of the Regulatory Test in the Rules;

- Allowing the AER to continue to make the Regulatory Test, although requiring it to be made consistent with the framework specified in the Rules; and

- Requiring the AER to develop guidelines to assist NSPs with their application of the Test.

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[22] Submission from the Group (the Group consists of TRUenergy, NRG Flinders, International Power, Loy Yang Marketing Management Co, AGL), February 2006, p3

[23] Submission from EnergyAustralia, 24 February 2006, P5. Submission from EnergyAustralia, 3 November 2006.

[24] Submissions that supported specifying the existing Test in the Rules were: Delta Electricity, the Energy Retailers Association of Australia, Hydro Tasmania, EnergyAustralia, 'The Group', Energy Retailers Association of Australia, Macquarie Generation and Ergon Energy

[25] Submission from Hydro Tasmania, 24 February 2006, p2

[26] Submission from EnergyAustralia, 3 November 2006.

[27] Submission from the Energy Retailers Association of Australia, 3 November 2006, p2.

An alternative approach that has been proposed in stakeholder submissions involves:

- Specification of the Regulatory Test Version 2 in the Rules;
- Requirement that the AER develop guidelines on the application of the Regulatory Test as specified in the Rules; and
- Using the Rule change process as the methodology for amending the Regulatory Test as circumstances require in the future.

The Commission examined both the MCE's proposed approach and the alternative approach set out in the various submissions, and considered the respective implications of these approaches for the promotion of the NEM objective.

The Commission believes that the approach proposed by the MCE achieves a more appropriate balancing of certainty and flexibility as circumstances change through time.

The Commission considers that the principles should provide a level of predictability for investors and market participants, while the making of the Test by the AER should provide a level of flexibility that is appropriate, given that the Test is required to assess a range of investment options of varying size and complexity in a range of electricity market circumstances.

The Commission has also considered the consistency of the MCE's proposal with the current division of regulatory responsibilities in the NEM, and the consistency of the proposal against the NEM objective. In the view of the Commission, a split between a high level governance framework for the Regulatory Test in the Rules and a requirement for the regulator to make and oversee the administration of the Test consistent with those principles is consistent with this framework.

This structure strikes an appropriate balance between the role of the Rule-maker in determining an appropriate framework to achieve policy goals for the Test and the regulator in ensuring compliance with the Rules in the making and administration of the Test, so that the policy goals are achieved in practice. The determination of the Regulatory Test is part of the economic regulation framework for transmission, and as part of the administration of that framework it is appropriate for the AER as regulator to have a key role in making the Test in accordance with the Rules.

Therefore, the Commission concluded that it is appropriate for the Rules to specify the framework governing the regulation of a particular issue, but that detailed issues of implementation should be developed by the AER. It is for this reason that the Commission chose to provide in the Pricing Rule a framework of principles for Transmission Pricing, rather than to continue with the detailed cost allocation approach in the earlier Rules. Similarly, the Commission has specified the regulatory approach for Transmission Revenue, including the building block methodology and form of regulation, but provided for the AER to develop detailed implementation issues, for example with the development of the post-tax revenue model and the design of cost efficiency and service reliability mechanisms.

Another consideration is the flexibility of the Regulatory Test framework. Some flexibility will be required in the application of the Test, as the Test will be required to assess investments of different sizes, complexities and circumstances. As such, an approach based upon principles is more likely to be able to meet changing requirements than a prescriptive set of requirements in the Rules establishing how the Test should operate.

Finally, the Commission does not agree with the proposition set out in various submissions that the MCE proposal allows the AER to be both Rule maker and Rule enforcer. The Commission considers that the Regulatory Test principles contained in the Rules will provide an effective framework that will sufficiently guide the AER and direct the exercise of its discretion in making the Test, so this should not be a concern.

5.1.4 Commission's findings

The Commission has considered the alternative approach in conjunction with the approach adopted in the MCE's Proposal and has determined that the Rules should include a high-level framework for the operation of the Regulatory Test, but that the Regulatory Test itself should not be specified in the Rules. This approach allows the AER to publish the Regulatory Test and resolve detailed issues associated with the implementation of the principles and framework as provided in the Rules.

5.2 The Role of the Regulatory Test

The Commission also considered the elements of the MCE's Rule proposal given the role of the Regulatory Test within the overall regulatory framework contained in the Rules. This is particularly important given the interactions between the Test and other Rules designed to promote efficient NEM transmission investment.

5.2.1 MCE's perspective as presented in its proposal

The MCE's proposal made a number of statements that point to the role of the Test, and identify concerns as to whether the current Test is performing that role effectively:

> *The overarching objective of the Regulatory Test is to deliver efficient transmission investment through application of a net economic benefits test, not simply more transmission regardless of the economics.*
>
> *As a consequence of this lack of clarity on the application of the regulatory test and consequent disputes, potentially economic transmission investment was either delayed or not made.*
>
> *The principles are intended to ensure the regulatory test is promulgated in a manner which provides a level of certainty to NSPs in undertaking new network investment,*

while leaving sufficient discretion with the AER to promulgate the regulatory test and perform its role as regulator.[28]

5.2.2 Submissions

Energy Australia's submission notes:

> *[N]either the Code nor the Rules have actually specified the purpose of the Regulatory Test. This can lead, and has led, to confusion about the role of the Regulatory Test. The Regulatory Test essentially sets out a methodology for assessing and ranking identified options to identify the most economically justified option and one which should be recognised by regulators as efficient investment. Only one project or option can be justified under the Test.*[29]

The Group said:

> *The MCE's Draft Principle 1 states that the Test "has as its purposes the identification of [economic] new network investment or non-network alternatives". In fact, it does nothing of the sort:*
>
> *it does not identify network investments: this is done through the TNSP network planning and ANTS processes described in the Rules;*
>
> *it does not identify unregulated non-network alternatives. This is done by potential investors in the unregulated market: eg generation planning functions.*
>
> *In fact, the Test purpose is to evaluate proposed regulated investments, against alternatives, to see whether they are likely to be economic.*[30]

The Group also noted:

> *In our view, the MCE's draft principles do not capture or represent the Test philosophy and objectives. In particular, they fail to recognise why the Test is needed: that the nature of TNSP regulation – and the moral hazard that it creates – gives rise to an institutional bias in favour of regulated investment and that a regulatory test hurdle (hopefully) restores neutrality and so promotes economic efficiency.*31

5.2.3 Commission's considerations and reasoning

In the view of the Commission, the Regulatory Test seeks to address three issues:

- **Avoiding crowding out of non network alternatives.** As outlined in Section 4, the inter-relationship between regulated and non-regulated sectors of the electricity market creates a risk that uneconomic investment decisions might be made. This risk arises because each sector faces different incentives for investment, yet regulated and unregulated investment are potential

[28] MCE Rule proposal, p1
[29] Submission from EnergyAustralia, 24 February 2006, p5
[30] Submission from the Group, February 2006, p6
[31] Submission from the Group, February 2006, p12

substitutes for one another. The Test therefore seeks to prevent NSP investments from 'crowding out' more efficient alternative investments by requiring NSPs to consider alternative non-network options when deciding on augmentation investments.

- **Ensuring efficient network investment choices.** The second issue is a concern that in the absence of the Regulatory Test, the NSP may propose inefficient, and more costly, investment options than would be optimal. This inefficient investment concern arises because NSPs lack a commercial incentive to consider potentially cheaper network solutions and/or an engineering preference exists for NSPs to invest in more complex solutions. Related to this problem is the fact that it is likely that the NSP will hold the relevant information on the costs and benefits of network investment alternatives. As such, it can be difficult for a regulator or other external party to determine whether a particular network option is the most efficient.

- **Ensuring reliability investments are made.** The current Regulatory Test also seeks to ensure that investment that is necessary to meet reliability standards occurs, and occurs in a timely manner. System reliability is a key service provided by transmission and is highly valued by electricity consumers. There are a number of instruments in the NEM to provide incentives or mandate the reliability of the national electricity system. Therefore there would seem to be a concern with ensuring that the framework for network investment does not deter or unnecessarily delay necessary investment to deliver reliability outcomes.

In addressing these issues, the Regulatory Test acts as a filter, determining which investment option out of a range of specified alternatives is the most efficient, by identifying and quantifying the costs and benefits of various alternative options.

The Test also acts to reveal information to investors on the relative efficiency of various options, which investors may then act upon. The information revelation element of the Test also forces the regulated business to disclose information on the relative efficiency of its preferred option and other options, which provides an incentive for the business to select more efficient investments.

The Test has a broader role than simply as an information revelation and network planning tool, as there are consequences to the application of the Regulatory Test.

The consequence for a network investment proposal that is deemed to be suboptimal under the Test is to both identify another project that is more efficient, and therefore to promote investment in that project. It also acts to effectively protect the more efficient investment against that option being undercut by the less efficient network option being built.

The consequence for an efficient network investment proposal is its promotion. It is justified as the most efficient option, which can give the NSP confidence that the project should go ahead. The act of passing the regulatory test transforms the project from a potential option to a more certain investment decision.

5.2.4 Commission's findings

In the view of the Commission, the role of the Test within the overall regulatory framework is to ensure that:

- All likely alternative investment options, including generation and non-network options, are considered prior to undertaking a transmission investment;

- Sufficient incentives are created to ensure that investment in reliability augmentations is undertaken in a timely manner, in conjunction with incentives created by other elements of the regulatory framework; and

- Sufficient predictability regarding cost recovery for transmission investment is provided.

Therefore, the role of the Test is to promote efficient investment, regardless of whether that investment is regulated or unregulated, or is in network assets or non-network alternatives. In doing this, it acts as a filter for investment proposals, by revealing information regarding likely investment alternatives, ensuring that inefficient proposals are rejected and efficient proposals are identified and have incentives to proceed. This may occur either through the linkage between the Regulatory Test and the process for determining the regulated revenue of a TNSP, or through the greater certainty for the proponents of efficient non-transmission options that returns will not be undercut by the construction of a sub-optimal, competing transmission line.

5.3 Objectives for the Regulatory Test

The principles that were proposed by the MCE fall into two categories:

- Principles that specify the objectives that the Test should meet, and

- Principles and requirements that provide the framework within which the Test operates.

This section addresses the MCE's principles that relate to the objectives for the Regulatory Test, the MCE's intent in proposing these objectives and relevant considerations in assessing these principles against the NEM objective. In the view of the Commission, the principles proposed by the MCE define a number of objectives for the Test:

- **Predictability.** The proposed Rule stated:

  > *The AER must promulgate the regulatory test for new network investment in accordance with the principles set out in this clause 5.6.5A. The principles are intended to ensure the regulatory test is promulgated in a manner which provides a*

level of certainty to Network Service Providers in undertaking new network investments[32].

- **The purpose of the Test.** The proposed Rule stated that the Regulatory Test must:

  have as its purposes the identification of new network investment or non-network alternatives that:

  - *maximise the net economic benefit to all those who produce, consume and transport electricity in the market; or*
  - *in the event the option is necessitated to meet the service standards linked to the technical requirements of schedule* 5.1 *or in applicable regulatory instruments, minimise the present value of the costs of meeting those requirements;*[33]

- **Reliability Augmentations.** The proposed Rule stated that the regulatory test must:

  reflect the requirement for Network Service Providers to meet network performance standards linked to the technical requirements of schedule 5.1 or in applicable regulatory instruments, while minimising the present value of the costs of meeting those requirements[34]*;*

- **Competitive neutrality**. The proposed Rule stated that the regulatory Test must:

  ensure that all genuine and practicable alternative options to new network investment are evaluated by Network Service Providers without bias, regarding:

  - *energy source;*
  - *technology;*
  - *ownership;*
  - *the extent to which the new network investment or the non network alternative enables intra-regional or inter-regional trading of electricity;*
  - *whether the new network investment or non-network alternative is intended to be regulated; or*
  - *any other factor.*[35]

- **Practicality in application of the Test.** The proposed Rule stated that the Regulatory Test must be able to be undertaken with *"a level of analysis commensurate with the scale and size of the new network investment";*[36]

[32] MCE Rule proposal, p7
[33] MCE Rule proposal, p7
[34] MCE Rule proposal, p8
[35] MCE Rule proposal, p7

- **Consistency**. The proposed Rule stated that the Regulatory Test must be "*capable of consistent application*".[37]

In its consideration of the issues related to the Regulatory Test, the Commission also considered an additional objective for the Test - that the Test should be transparent. These issues are discussed in greater detail below.

In considering these objectives, and their applicability as principles to guide the Regulatory Test, the Commission applied the following criteria:

- *Should be consistent with the NEM objective and statements of MCE policy.* In assessing any Rule proposal, the Commission is required to assess whether the proposal is likely to contribute to achieving the NEM objective. The Commission correspondingly considers that any principles established for the Regulatory Test must be consistent with the NEM objective and MCE policy principles. This may include an assessment of how the principle may affect efficient investment and efficient use of electricity services, and the extent to which the principles are consistent with the MCE's statement on transmission.

- *Internal consistency.* One of the objectives of including principles in the Rules is to provide greater clarity and certainty to market participants regarding the operation of the Test. Therefore, it will be important that the principles are internally consistent with one another. Given the controversial nature of the application of the Test to date, the Commission wishes to avoid, to the extent possible, the risk that inconsistent principles may in future lead to difficulties in its interpretation or disputation.

- *Should be sufficiently generally formulated to enable future issues or conflicts to be resolved.* The MCE noted in its Rule proposal that "*consideration was given to including a highly prescriptive regulatory test in the Rules. This approach was however discarded as it would go beyond setting policy requirements and would leave the Network Service Providers (NSP) and the AER with little discretion in applying the test*."[38] The Commission is aware that there is also a risk with specifying detailed principles in the Rules. If the circumstances in which the Test is applied change, gaps or problems in its formulation may become apparent, or new areas of contention may emerge that would need to be resolved on the basis of a broader objective.

  The Commission considers that the formulation of a clear set of generally applicable principles and priorities for the Regulatory Test will assist in the future interpretation of the Test and limit the scope for disputes and delays. Therefore, the Commission considers that the principles need to be established at a sufficiently high level, so that they do not become a highly prescriptive set of requirements for the Test. It is also important to establish a distinction between the role of principles and the decisions to be made under those principles.

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[36] MCE Rule proposal, p7
[37] MCE Rule proposal, p8
[38] MCE Rule proposal, p3

- *The intent of the principle should be clearly articulated.* The Commission recognises that the addition of principles adds an extra level of governance to the Regulatory Test, and therefore there may be a risk that poorly articulated principles may create additional uncertainty for those affected by the Test. As the intent of the proposal is to improve the governance surrounding the Regulatory Test, the principles should be clear in their intent and clearly articulated to ensure that the principles do not create additional uncertainty.

- *Should be able to be applied to the Test.* At a practical level, the Commission considers that it is important that any principle is phrased in such a way that it can be practically applied to the Test when it is published.

The objectives for the Test proposed by the MCE are each addressed against these criteria in the following sections.

5.3.1 Predictability

MCE's perspective as presented in its proposal

The MCE proposed Rule stated:

> *The AER must promulgate the regulatory test for new network investment in accordance with the principles set out in this clause 5.6.5A. The principles are intended to ensure the regulatory test is promulgated in a manner which provides a level of certainty to Network Service Providers in undertaking new network investment.*[39]

The MCE proposal stated:

> *The proposed Rule replaces clause 5.6.5A of the Rules and introduces a suite of principles that the AER must adopt in promulgating the regulatory test. The Rule should contain a set of regulatory test principles that will provide minimum coverage guidelines for the AER to apply in promulgating the regulatory test. The principles are intended to ensure the regulatory test is promulgated in a manner which provides a level of certainty to NSPs in undertaking new network investment, while leaving sufficient discretion with the AER to promulgate the regulatory test and perform its role as regulator.*[40]

Submissions

The Group noted in its submission:

> *The header paragraph to the proposed new clause 5.6.5A expresses an "intention" to provide a level of investment certainty to NSPs. We would seek to remove this drafting for two reasons:*
>
> - *it does not seem necessary to state an intention, and seems likely only to cause additional confusion. If the intention is not clear from the principles themselves, then perhaps the drafting of the principles should be improved; and*

[39] MCE Rule proposal, p7
[40] MCE Rule proposal, p3,4

- *the drafted intention is misleading and misconceived, as it ignores investment certainty for the remaining (unregulated) 90% of the market, which is equally important and relevant.*[41]

Commission's considerations and reasoning

This clause of the proposed Rule describes the role the principles are intended to play and what outcomes the principles are intended to achieve. This raises two issues – whether it is appropriate to specify an objective for the principles, rather than the principles establishing objectives for the Test, and whether certainty for NSPs is an appropriate objective for the Test.

On the first of these issues, the Commission is of the view that it is unnecessary and inappropriate to specify the purpose that the principles may serve. The principles will play a role in improving the governance of the Regulatory Test and will specify objectives, purpose and to an extent, the allowable form of the Test itself. While this improved governance and improved clarity regarding the objectives of the Test may act to improve certainty for NSPs, in the view of the Commission, this is not the single purpose of specifying principles for the Test in the Rules.

Therefore, the Commission considers that the objective of improved certainty for NSPs is more appropriately considered as an objective for the Test itself, and therefore as one of the principles, rather than an objective for the principles.

The second issue that the Commission must consider is whether providing "a level of certainty to NSPs in undertaking new network investment" should be an objective for the Regulatory Test.

In the view of the Commission, the term 'certainty' is problematic and does not best express the appropriate policy intent. 'Certainty' implies that the there should be no flexibility in the application of the Test and that the NSP should have certainty, under all circumstances about the process of applying and interpreting the Test before undertaking the Test. Given the nature of the Test, and the need for it to apply in a wide range of circumstances to a range of investments that may vary in size, complexity or other factors, some flexibility in the application of the Test would seem appropriate.

However, the Commission is concerned that the application of the Test should not be unpredictable. If the Test is unpredictable, it creates a risk that otherwise efficient investments are deterred as the NSP may be unwilling to pay the cost of undertaking the Test without a reasonable level of predictability about the outcome.

The Utility Regulators Forum included predictability as one of their nine principles of best practice regulation:

> *The principle of predictability of regulation is an essential requirement for utilities to be able to confidently plan for the future and be assured that their investments will not be generally threatened by unexpected changes in the regulatory environment. The*

[41] Submission from the Group, February 2006, p9

principle is particularly important in the utility sector, which is characterised by major infrastructure works with long investment time horizons.[42]

The Commission notes that the benefits of a predictable regulatory regime will not only accrue to NSPs. As noted by The Group's submission, the market more generally is likely to benefit from a predictable regulatory framework.

Therefore, the Commission is of the view that the principles for the Regulatory Test should include predictability as an objective.

The Commission also notes that an objective of predictability is strongly linked to objectives of consistency, transparency and practicality of application. These objectives are discussed in more detail below.

Commission's findings

The Commission has determined that the Rule should include predictability as an objective for the Regulatory Test – Rule 5.6.5A(c)(7).

5.3.2 Economic Efficiency and Reliability Objectives

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

> *The regulatory test must have as its purpose the identification of new network investment or non-network alternatives that:*
>
> - *maximise the net economic benefit to all those who produce consume and transport electricity in the market; or*
>
> - *in the event the option is necessitated to meet the service standards linked to the technical requirements of Schedule 5.1 of the Rules or in applicable regulatory instruments, minimised the present value of the costs of meeting those requirements.*[43]

Furthermore, the MCE also considered that:

> *To allow NSPs to recover the efficient costs of maintaining a secure and reliable power system for end-users, the regulatory test must reflect the requirement for NSPs to meet network performance standards linked to the technical requirements of Schedule 5.1 of the Rules or in applicable regulatory instruments, while minimising the present value of the costs of meeting those requirements.*[44]

The Draft Determination discussed the role of the Regulatory Test in the NEM network investment framework. A central issue for the Commission is how this definition of the role of the Test should be incorporated into the Regulatory Test principles. In the view of the Commission, it is important that a clear definition of the

[42] Utility Regulators Forum, Best Practice Utility Regulation Discussion Paper, July 1999, p6
[43] Ministerial Council on Energy Rule proposal, p4
[44] Ibid

purpose of the Test is established in the principles, to ensure that the Test, as published, is consistent with the purpose of the Test.

The MCE's first principle seeks to address the issue of the purpose of the Test. The principle has three elements:

- It specifies the purpose of the Test – "*The regulatory test must have as its purposes the identification of new network investment or non-network alternatives.*"

- It specifies the form that the Test must take as a test with two limbs and how project may be justified under each of the two limbs.

- It specifies the intent of the two limbs – one should be focused on economic benefits and one should be focused on reliability.

The Commission determined in the Draft Rule that the MCE drafting of clause 5.6.5A(b) should be adopted in the Rule. However, subsequent submissions by interested parties raised a number of additional matters, which are discussed in the following.

Purpose of the Test

In Section 5.2, it was argued that the purpose of the Test is to promote efficient investment, regardless of whether that investment is regulated or unregulated, or is in network assets or non-network alternatives.

In doing this, the Test acts as a filter for investment proposals, ensuring that poor proposals are rejected and that good proposals gain a level of regulatory certainty – either through the linkage between the Regulatory Test and the process for determining the regulated revenue of a TNSP under Chapter 6 of the Rules, or through the certainty for a non-transmission option that returns will not be expropriated by the construction of a sub-optimal, competing transmission line.

As noted in Section 5.2, ensuring that reliability is maintained is also a key outcome of the Test. The applicability of reliability concerns to the Regulatory Test principles is discussed further below.

The Commission considered whether this role is consistent with the statement in the MCE proposal that the purpose of the Test is *the identification of new network investment or non-network alternatives that…maximise the net economic benefit to all those who produce consume and transport electricity in the market; or minimise the present value of the costs of meeting those requirements.*

In the course of the First Consultation, The Group argued that the purpose of the Test is not "*the identification of new network investment or non-network alternatives.*"[45] Instead, the purpose of the Test is to *evaluate* proposed *regulated* investments against alternatives to see whether they are likely to be economic. Delta agreed with this point.[46] The Group also argued that 1(ii) duplicates principle 5.

[45] Submission from the Group, February 2006, p6
[46] Submission from Delta Electricity, p1

However, in the Commission's view, the MCE's statement and the Commission's identified role of the Test are consistent. The Test seeks to identify which project out of a range of alternatives should be promoted as the most efficient investment alternative. As such, the Commission considers that the statement on the purpose of the Test as "identifying new network investment or non-network alternatives" should be retained in the Rule.

Form of the Test

In its Draft Determination, the Commission set out that the construction of the current principle effectively inserts a requirement in the Rules that the Test should take the form of having two limbs, with a different standard of assessment and justification required under each limb. The Commission recognised that this requirement reflects the current form of the Test and that the form of the Test is well accepted by market participants and interested stakeholders. The Commission also noted that, given that the Test is required to achieve both efficiency and reliability objectives, a two-limbed test is a legitimate approach to achieving these different objectives.

The Commission thought that if it were to take the approach of specifying a reliability principle rather than the form of the Test, the current clause 5.6.5A(b) would be effective in this regard. The current Rules for the Regulatory Test require the AER to "*have regard to the obligations imposed on Network Service Providers to meet the network performance requirements set out in schedule 5.1 and relevant legislation and regulations of a participating jurisdiction, in developing and maintaining the regulatory test.*"[47] In the view of the Commission, this clause appears to have provided sufficient guidance to the ACCC/AER in making the Test in the past to allow necessary reliability investment to occur in a timely manner, and has allowed reliability obligations to be met in a least cost manner.

After considering these issues, the Commission took a preliminary view that the specification of the two limbs of the Test in the principles should be retained. The Commission noted that the approach of specifying the "limbs" of the Test in the Rules is a significant component of the MCE proposal, and that to move away from the MCE's approach would be a significant change in the scope of the proposal and potentially represent a divergence from agreed MCE policy.

Submissions

A number of stakeholders commented on the two-limbed approach in the course of the Second Consultation. The Electricity Transmission Network Owners' Forum (ETNOF) responded that the existence of the reliability limb of the Test is recognised in various aspects of the Rules, and is also reflected in various MCE statements.[48] Given its central importance, the reliability limb of the Regulatory Test should be retained. Furthermore, the AER should not be in a position to change the form of the test, in terms of the market and reliability limb.

[47] Rules, Clause 5.6.5A(c)
[48] Submission from the Electricity Transmission Network Owners' Forum, 3 November 2006, p3,4.

Integral Energy also commented that the MCE did not refer to the removal of the reliability limb of the Regulatory Test in the course of its deliberations, and that its removal would run counter to the intent of the MCE.[49] Integral Energy considered that the current formulation of a two limbed Regulatory Test explicitly recognises the MCE policy intent and the network performance standards of NSPs. Integral Energy specifically did not support the view that the less complex reliability limb of the Regulatory Test may result in a distortion against potential market benefits investments. Furthermore, any change which moved away from the current clear construction of the reliability limb in the Regulatory Test would risk delaying or preventing reliability investments.

In contrast, the Major Energy Users (MEU) considered that the relative simplicity of the reliability limb compared to the market benefits limb of the Test results in a bias against market benefits investments (for instance, inter-connector investments).[50] The Regulatory Test should therefore have an overall efficiency and reliability principle, so that the AER could require NSPs to conduct a Regulatory Test with both market and reliability limbs.

Commission's considerations and reasoning

In its Draft Determination the Commission commented that the distinction between "reliability" and "market" investment is in many respects an artificial one. An investment that is intended to meet a reliability criterion frequently delivers market benefits; conversely market investment may also deliver reliability benefits.

The reliability limb of the Test provides a simpler test for NSPs to meet, since the benefits side of the equation can be ignored for certain types of investment – those whose benefits are deemed to overwhelmingly relate to meeting reliability targets. More precisely, in assessing these investments, it is assumed that:

- The benefits outweigh the costs; and
- All the options being evaluated yield the same benefits, so that they are only distinguished in terms of the extent of the costs they entail.

As a matter of economics, the cost-effectiveness analysis that is implied by such an assessment follows the same "rules" as a cost-benefit analysis: the "benefits" need not be quantified (they are presumed to exist and to be valued by energy consumers), but costs must equally be valued in a common currency and compared at a common point in time. In this sense, a cost-effectiveness analysis is consistent with an overall efficiency objective.

However, as noted below, the relative simplicity of the reliability limb of the Test compared to the market benefits limb and the priority that TNSPs are required to give to meeting reliability standards has meant that the overwhelming majority of augmentations assessed under the Test have been reliability investments. This has given rise to some concern that the form of the Test may result in a bias against market benefits investments.

[49] Submission from Integral Energy, 9 November 2006.
[50] Submission from the Major Energy Users, 2 November 2006.

Overall, the Commission recognised in its Draft Determination that views about the status of the "limbs" of the Test in the Rules would likely differ, and asked for submissions from interested participants on whether the two limbs of the Test should be specified in the Rules, or, alternatively, whether the Rules should specify an "efficiency" principle and a "reliability" principle. This second option would allow the AER to make a Test with a "market benefits" limb and a "reliability" limb, without requiring the AER to do so.

The Commission also acknowledged in its Draft Determination that the form of the Regulatory Test as it relates to transmission planning is currently under consideration as part of the deliberations of ERIG.[51] The Commission considers that an assessment of the appropriateness of the reliability and market benefits limbs of the current Test is beyond the scope of this current Rule change proposal. The Commission therefore considers that the form of the Regulatory Test, including the appropriateness of the two limbs of the Test, should be the subject of a more comprehensive review of the Test as a whole and its role in the context of promoting efficient network planning and investment. It is also conscious in this regard of the need to avoid duplication between the Commission's ongoing work programme of Rule changes and reviews and the higher level policy focus of the ERIG review.

The Commission is mindful that in co-ordinating the work programmes between itself and ERIG, the Commission should avoid making decisions that may foreclose on assessments and recommendations that ERIG may make.

Another issue for consideration is the balance between codifying the framework for the Test in the Rules and the role of the AER in the administration and implementation of the Test. As set out in 5.1, the Commission is aware that a balance needs to be struck between the high level principles that should be established in the Rules and providing the AER with appropriate flexibility to make the Test. The MCE made a similar point in its proposal:

> *The regulatory test principles have been developed by the MCE. The focus has been on establishing appropriate principles to be followed by the AER and proponents. The high level principles will codify the policy requirements that the regulatory test must meet, while leaving sufficient discretion with the AER to promulgate the regulatory test and perform its role as regulator. The challenge in setting the principles is to strike a balance such that the AER is not both rule maker and rule enforcer with respect to the regulatory test.*[52]

The Commission finally notes that by inserting a requirement in the Rules that the Test should have a reliability limb and a market benefits limb, the opportunity for innovation or changes to the way the Test is structured is limited in this respect. There are both advantages and disadvantages to this approach. Certainty regarding the form of the Test may promote investor confidence, but specifying this requirement in the Rules may make it difficult to develop alternative forms of the Test to better achieve the efficiency and reliability objectives.

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[51] Both the ERAA and the EUAA commented that, given that there are important linkages, it would be appropriate for the Commission to extend the deadline for comment on the Commission's Draft Determination until after the release of ERIG's findings.

[52] MCE Rule proposal, p3

Overall, however, the Commission has taken the view that there would be merit in retaining the distinction in the principles between network augmentations that (primarily) capture reliability benefits and those that achieve market benefits, since:

- The overwhelming majority of investment in the NEM is undertaken under the reliability limb of the Test;
- The Rules and various jurisdictional regulations prescribe a broad range of reliability targets that NSPs must meet, as well as direct and indirect references to reliability and security objectives; and
- Changing this aspect of the Regulatory Test might risk unacceptable delays to reliability investment.

Commission's findings

The Commission has determined that there should be no change to the requirement for a reliability and a market benefits limb in the formulation of the Regulatory Test principles (5.6.5A(b)).

Efficiency versus reliability objectives

The following assesses the MCE's proposed wording for the two limbs of the Test, and how the inherent efficiency and reliability objectives would be expected to interact.

The first 'limb' of the principle specifies an efficiency objective for the Regulatory Test, in that the Test should:

> *maximise the net economic benefit to all those who produce consume and transport electricity in the market*[53]

The Commission notes that the wording used by the MCE reflects, but does not duplicate the wording of the current market benefits limb of the Regulatory Test:

> *in all other cases - the option maximises the expected net present value of the market benefit (or in other words the present value of the market benefit less the present value of costs) compared with a number of alternative options and timings, in a majority of reasonable scenarios.*[54]

Efficiency objective

In the view of the Commission, an efficiency objective would be consistent with the NEM objective and MCE policy. MCE policy statements overwhelmingly support an overall efficiency objective for the Regulatory Test. This focus on economic efficiency was also noted by the MCE in its proposal, stating:

[53] MCE Rule proposal, p4
[54] ACCC, Regulatory Test (Version 2) Clause (1)(b)

> *The overarching objective of the Regulatory Test is to deliver efficient transmission investment through application of a net economic benefits test, not simply more transmission regardless of the economics.*[55]

From an economic perspective, efficiency implies that the best use is made of existing resources to deliver the greatest benefit to society overall. The Commission notes that the promotion of economic efficiency is a central element of the design of the NEM, and an economic efficiency objective for the Regulatory Test should assist in achieving optimal investment in and use of transmission capacity, generation capacity and demand side measures.

Ernst and Young also identified economic efficiency as one of their four criteria for the Regulatory Test in their initial review that led to the development of version 1 of the Test. Ernst and Young noted that efficiency was an important theme of Chapter 6 of the Code and that given the Test was likely to involve some form of cost-benefit analysis, an understanding of the economic foundations of cost-benefit analysis was important. Ernst and Young noted that:

> *this gives rise to a decision-principle of maximising net benefit, which generally means identifying and undertaking the project which represents the greatest Potential Pareto Improvement (among a set of options). In general, this is measured as the net increase in the sum of the consumers' surplus and the producers' surplus.*[56]

This focus on economic efficiency was picked up by the ACCC, who noted in its determination of version 1 of the Regulatory Test that it relied on "the two key principles of economic efficiency and competitive neutrality."[57]

Therefore, the Commission came to the view in its Draft Determination that the current wording of the principle should be retained.

Reliability objective

While there appears to be little argument that the Test should focus first and foremost on achieving efficiency objectives, in practice, the reliability limb of the Regulatory Test is likely to play a far more important role. The overwhelming majority of investments that are undertaken in the NEM are currently assessed under the reliability limb of the Regulatory Test. The Rules and various jurisdictional regulations prescribe a broad range of targets that NSPs must meet to ensure that reliability and security standards for the NEM are maintained. Schedule 5.1 describes the planning, design and operating criteria that must be applied by NSPs to transmission and distribution networks. The Rules also contain numerous direct and indirect references requiring Participants to act in a manner that ensures the reliability and security of the system. Furthermore, all TNSPs and DNSPs are subject to separate jurisdictional regulations that impose specific performance requirements on them. As a general matter, these jurisdictional regulations require TNSPs (and

[55] MCE Rule proposal, p2
[56] Ernst and Young, Review of the Assessment Criterion for New Interconnectors and Network Augmentation, p16
[57] ACCC, Regulatory Test for New Interconnectors and Augmentations, 15 December 1999, p(i)

VENCorp) to apply (deterministic) reliability criteria to their network investment that are additional and more stringent than those set out in the Rules.

Reliability and system security requirements are therefore key drivers for network investment. The MCE recognised this by including both a specific principle dealing with reliability augmentations and included it as a 'limb' in the first principle.

In the view of the Commission, NSPs have clear obligations under both Schedule 5.1 and under jurisdictional requirements to maintain system reliability. It is clearly in the interest of consumers of electricity that the obligations are, and continue to be met. Therefore, an issue that the Commission considered in assessing the Rule is the risk that an overly complex or onerous Test may act to delay necessary reliability investment and therefore jeopardise the ability of NSP to meet their mandated reliability requirements.

The Commission also noted, however, that as a result of the understandable focus by NSPs on reliability issues and the less complex reliability limb of the Test may be a distortion against potential "market benefits" investments that may be able to address both reliability and market efficiency concerns. While the Commission did not propose a change to the Rules, for the reasons outlined above, it did seek submissions in its Draft Determination on whether the risk of inefficient (reliability) investment is material, and whether there are options for addressing it without risking delays to necessary reliability investments.

Submissions

A number of stakeholders commented on this issue in the course of the Second Consultation.

ETNOF considered that no consequential changes should be made to the assessment process under the reliability limb of the Regulatory Test:[58]

- There are a number of provisions in the Rules that provide opportunities for participants to contribute to the assessment of reliability-driven augmentations and to highlight alternative projects, including the Annual Planning Report, and the public consultation framework for new large network assets.

- The risks of material "missed opportunities to capture additional market benefits arising from the reliability limb of the Regulatory Test are small.

However, ETNOF indicated that in the event that the Commission considered that such risks existed, this concern could be addressed by ensuring that an assessment under the reliability limb could also (optionally) consider the impact of any additional market benefits that might arise from, say, an incrementally larger or earlier upgrade than the pure lowest cost solution. Such an approach would minimise the risk of time delays. In ETNOF's opinion, the following changes would be required to achieve this solution:

[58] Submission from the Electricity Transmission Network Owners, 2 November 2006, p4.

- First, Clause 5.6.5A(b)(2) should be amended to state that the net costs of meeting the reliability standard should be minimised (and not simply the present value of the absolute costs as presently drafted).

- Second, and in any case, the word "solely" should be removed from the existing definition of "reliability augmentation". This would ensure that the definition is consistent with the purpose of the reliability limb set out in clause 5.6.5A(b)(2).

Integral Energy considered that the current process under the Regulatory Test for reliability augmentations facilitates more timely investment decisions than that obtained under the more complex market benefits assessment process. Integral Energy did not support further consequential changes to the reliability limb of the Regulatory Test.[59]

NEMMCO also addressed the issue of whether the reliability limb of the Regulatory Test would potentially ignore market benefits.[60] Although NEMMCO thought that it is difficult to assess the materiality of this problem, NEMMCO considered that by relying on two separate limbs, the Regulatory Test risked inefficient transmission investment outcomes, if reliability driven network augmentations do not capture the full extent of potentially efficient market benefits.

NEMMCO therefore proposed that once reliability benefits had been identified, a further assessment could be carried out to test the project, in terms of the timing, scope (e.g. size) of the project, but also in terms of the selection of project. Overall, NEMMCO considered that the Rule is too prescriptive in its requirement for the Regulatory Test to have two independent limbs. However, NEMMCO noted that such a change in assessment procedures would need to ensure that there were no delays.

Commission's considerations and reasoning

The Commission accepts that it is possible that a focus by NSPs on reliability issues and the less complex reliability limb of the Test may represent a distortion against potential "market benefits" investments that may be able to address both reliability and market efficiency concerns. It is not clear to the Commission how material this problem is likely to be in practice.

The Commission also agrees that it would be possible to undertake a somewhat expanded analysis of reliability augmentations that would give NSPs the scope to investigate any market benefits in the context of a reliability augmentation, if these were potentially significant. Enabling an expanded analysis of reliability investment in some circumstances would potentially also give the AER some scope for requiring a more thorough investigation of market benefits. Given concerns about the timing of reliability investments, it would seem to be appropriate to provide for this as an option, rather than a requirement to assess such additional benefits.

In the view of the Commission, ETNOF's proposal does raise quite a significant conceptual difficulty, however, because it represents a hybrid between a cost-benefit

[59] Submission from Integral Energy, 9 November 2006.
[60] Submission from NEMMCO, 3 November 2006m, p3.

analysis and a cost-effectiveness analysis (CEA). As currently formulated, the reliability limb of the Test is a CEA – it is assumed that the reliability benefits of alternative projects are identical, so that only the costs of alternative projects must be compared. In effect, the ETNOF approach may enable the proponent to "pick and choose" between alternative investment options, by assuming that the reliability benefits of different projects are the same, but the market benefits are not. Whether this is a material problem in practice is not clear, but where there are significant differences between the reliability and market benefits of alternative (reliability) augmentations, a "full" CBA (rather than an expanded CEA) is likely to be more rigorous.

Commission's findings

As with its findings on the form of the Test, the Commission considers that the issue of the two limbs and measures to address any bias arising from the application of the reliability limb, should be the subject of a more comprehensive review than is permitted by the current Rule change proposal. The Commission notes that ERIG has reviewed the role and form of the Regulatory Test in its draft discussion papers and considers that the recommendations of the ERIG final report and COAG decisions made on the basis of it, represents the most appropriate forum for considering this policy issue in detail.

Given that ETNOF's proposal raises conceptual difficulties that would need to be explored in depth, and given also ERIG's terms of reference and current thinking specifically in relation to integrating the two limbs of the Regulatory Test as part of a single Project Assessment and Consultation (set out in Section 4.1), the Commission has concluded that a substantial modification in the application of the Regulatory Test would not be appropriate or within the scope of the present Rule making process.

Definition of a reliability augmentation

The current Rules, the current Test and this proposal all seek to address what should be considered reliability augmentations. The second 'limb' of Principle 1 of this proposal states:

> *in the event the option is necessitated to meet the service standards linked to the technical requirements of schedule 5.1 or in applicable regulatory instruments, minimise the present value of the costs of meeting those requirements*[61]

The reliability limb of the current Regulatory Test states:

> *in the event the option is necessitated solely by the inability to meet the minimum network performance requirements set out in schedule 5.1 of the NER or in relevant legislation, regulations or any statutory instrument of a participating jurisdiction - the option minimises the present value of costs, compared with a number of alternative options in a majority of reasonable scenarios*[62]

The Rules definition of a *reliability augmentation* also deals with a similar issue. It states:

[61] MCE Rule proposal, p4
[62] ACCC, Regulatory Test (Version 2), clause (1)(a)

A transmission network augmentation that is necessitated solely by inability to meet the minimum network performance requirements set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a participating jurisdiction.[63]

The MCE's principle characterises a reliability augmentation as investments to meet *"network performance standards linked to the technical requirements of schedule 5.1"*. The current Test describes these as investments to meet *"minimum network performance requirements set out in schedule 5.1"*.

In order to maintain a consistent approach, the Commission then took the view in the Draft Determination that it would be more appropriate to adopt the form of words currently prescribed in the Test and in the Rules definition of a reliability augmentation. The Commission considered that this would avoid any unnecessary confusion, inconsistency or lack of clarity, to the extent possible in the definition of a project that may fall under the reliability limb of the Test.

Submissions

In the course of the First Consultation, the Inter Regional Planning Committee (IRPC) and VENCorp commented on the use of the word "solely" in the reliability limb of the Test and in the Rules definition of a reliability augmentation. While the Commission had noted these comments, the Commission considered that its proposed approach would be preferable, since it maintained consistency between the Regulatory Test principles, the Test itself and the definition of a reliability augmentation.

In the course of the Second Consultation, the IRPC addressed this issue further, highlighting that the 'reliability limb' referred to in the Regulatory Test principles would be inconsistent with the Rules definition of reliability augmentation:

- The Rules definition of a reliability augmentation in Chapter 10 of the Rules states that the option must be "necessitated solely" by an inability to meet minimum network performance requirements; while

- Principle 5.6.5A(b)(2) of the proposed Rule stated that the option "is necessitated" to meet the service standards.

The IRPC recommended removing the word "solely" from the definition of reliability augmentation.[64]

The IRPC furthermore set out that including the word "solely" in the Rules definition allows an interpretation that reliability augmentations must not deliver benefits beyond those to just meet the minimum network performance requirements set out in schedule 5.1 of the Rules or elsewhere.[65] This interpretation would be impractical to apply, since almost all reliability augmentations also deliver some additional benefits. To be consistent with the proposed Rule 5.6.5A(b)(2), the criteria should allow a wider interpretation of what constitutes a reliability augmentation: one that would capture all augmentations that are required to meet the minimum

[63] Rules, Chapter 10
[64] Submission from the Inter Regional Planning Committee, p3
[65] Submission from the Inter Regional Planning Committee, 2 November 2006.

network performance requirements set out in schedule 5.1, even if the augmentations deliver additional benefits.

This position was supported by VENCorp and ETNOF.[66] The Group and TransGrid also highlighted the obligations of NSPs to meet network performance obligations. [67]

Commission's findings

The Commission has determined to amend the definition of investments undertaken to achieve reliability objectives in line with the Commission's proposed definitions for prescribed transmission services and negotiated transmission services for the revenue regulation rules. The Commission will therefore amend the current Rules definition of a *reliability augmentation* to substitute the word "solely" with the word "principally".[68]

5.3.3 Competitive Neutrality

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

> *The regulatory test must ensure that all genuine and practicable alternative options to proposed new transmission network investment are evaluated by NSPs without bias, regarding: energy source; technology; ownership; the extent to which the new transmission network investment or the non-network alternative enables intra-regional or inter-regional trading of electricity; whether the new network investment or non-network alternative is intended to be regulated; or any other factor. This is to ensure NSPs do not favour network-only investment, and that the most efficient solution for the NEM as a whole is progressed rather than the investment that is internally most efficient for the NSP.*[69]

Submissions

The Group agreed with a 'competitive neutrality' principle, but argued that the term 'genuine and practicable' leaves too much room for interpretation. It proposed:

> *[The Test must] ensure that all identified options are either evaluated, or are demonstrated to be:*
>
> - *impractical;*
> - *frivolous or poorly defined;*
> - *not able to provide a substitute for all or some of the services provided by the investment; or*

[66] Submission from VENCorp, 24 February 2006, p2. Submission from the Electricity Transmission Network Owners' Forum, 3 November 2006, p4.
[67] Submission from the Group, February 2006, p9. Submission from TransGrid, 24 February 2006, p2.
[68] Rules, Chapter 10
[69] MCE Rule proposal, p4

- *likely to provide costs and benefits similar to another, evaluated option.*[70]

Enertrade argued that greater clarification and a common understanding is required of the meaning of "genuine and practicable". It argued that a narrow interpretation could artificially raise the barriers for considering alternative options.

Commission's considerations and reasoning

The MCE proposed a principle that incorporates a competitive neutrality objective by requiring that the Regulatory Test would need to ensure that all genuine and practicable alternative options to a network investment should be evaluated by NSPs without bias regarding energy source, technology, or ownership. The Commission considers that there is some merit to the concept that assessments under the Regulatory Test should be made without bias. However, in the view of the Commission, the terms "genuine and practicable alternative options" that are referred to in (a)(4) of the MCE's proposed Rule have been a significant source of dispute in the application of the Test and is likely to continue to be difficult to apply in practice.

These terms are of central importance in the application of the Test, since they define the types of investment that can be expected over the forecasting horizon. Whether a particular investment project is included or not in the analysis is likely to have a material bearing on whether the option being evaluated is deemed to be economic or not. The ACCC has attempted to address this issue by defining these terms in more detail for reliability and market investments, respectively. Nonetheless, it could be argued that what constitutes a "genuine and practicable" investment option is open to interpretation (and therefore manipulation), particularly since the ACCC's definitions in turn refer to other undefined concepts, such as "technically feasible" or "technically and commercially feasible".

Therefore, the Commission has sought to avoid these terms in specifying the objectives for the Test. The Commission considers the assessment of alternative options further in Section 5.4 of this Report.

The Commission notes that achieving competitive neutrality in assessment between two network options, or a network option and a non-network alternative has been a central focus of the Regulatory Test since its inception. Ernst and Young noted:

> *This criterion follows directly from the code objectives of competition, customer choice, and non-discrimination. It implies that the decision criterion should not favour one group of generators over another, nor should it favour (or disfavour) regulated transmission options over other investment options.*[71]

The ACCC noted the importance of competitive neutrality in its Review of the Regulatory Test Issues Paper:

> *In developing the regulatory test the Commission relied on the two key principles of economic efficiency and competitive neutrality. Consequently, the Commission based the regulatory test on the traditional cost-benefit analysis framework but with a*

[70] Submission from the Group, February 2006, p8

[71] Ernst and Young, Review of the Assessment Criterion for New Interconnectors and Network Augmentation, p16

number of clarifications to limit any adverse impacts that regulated network investments might have on the competitive processes in the contestable parts of the industry. One of the recommended changes to the test was to remove the volatility inherent in the Customer benefits test and ensure even-handed treatment between network and non-network investment. That is, to extend the neutrality in the code between network and non-network alternatives such as generation, demand side or unregulated network investment to the regulatory test.[72]

As a general matter, competitive neutrality is intended to ensure that market processes achieve an efficient outcome by ensuring that competition is not distorted by factors such as Government ownership. Competitive neutrality is, in other words, bound up with the notion of allowing "competition on the merits", on the premise that such competition will ensure that resources flow to those uses where they are most highly valued.

From an economic perspective, "competitive neutrality" is essentially a means of achieving an overarching efficiency objective. It seems clear that the objective of achieving efficient investment outcomes would require an obligation on NSPs to assess all investment alternatives, irrespective of whether these are network or non-network options or undertaken by an NSP or market participant (that is, a competitive neutrality obligation). In the absence of such a requirement, NSPs may give preference to an investment option that would increase their asset base or otherwise suit their commercial interests, rather than reflect the public interest in an option that is most efficient.

Therefore, the Commission has determined that an objective of competitive neutrality should form part of the Regulatory Test principles.

The Commission has also considered the MCE's proposal to include a non-exhaustive list of factors to have regard to considering alternative options. In the view of the Commission, such a list may be useful in assisting in the application of the Test, and should therefore be retained in the Rule.

Commission's findings

The Commission has determined that an objective of competitive neutrality should be included in the Rule (5.6.5A(c)(3)).

5.3.4 Complexity of analysis

MCE's perspective as presented in its proposal

The MCE stated that the Rule should capture the following policy intent:

The regulatory test must be used by NSPs in the assessment of all new network investment in accordance with the Rules and with a level of analysis commensurate with the scale and size of the new network investment.[73]

[72] ACCC, Review of the Regulatory Test, Issues Paper, 10 May 2002, p3
[73] MCE Rule proposal, p4

Submissions

The Group's submission noted:

> *We think that the first part of principle 2 (ie the use of the Test) is unnecessary since this is already required elsewhere in the Rules. However, we agree with the sentiment in the second part of principle 2 and consider that this could be better captured as follows:*
>
> > *[the Test must] be able to be undertaken at a cost that is commensurate with the likely magnitude of the costs and benefits associated with the proposed investment*[74]

Commission's considerations and reasoning

The principle proposed by the MCE seeks to address two issues, what the Regulatory Test should apply to – all new network investment - and the level of analysis the NSP is required to undertake in making a Regulatory Test assessment. The issue of what the Test should apply to is addressed in Section 5.4. This Section addresses the second of the issues - the level of analysis required in undertaking the Test.

In the Commission's view, it should be recognised that undertaking the Test imposes a cost in itself. As such, if the Test is too onerous, it may act to make marginal investments uneconomic, or more likely, reduce the incentive for parties to undertake the Test in the first place, for fear or incurring the costs of undertaking the Test, and then failing to have their investment justified under the Test.

This is most obviously the case for smaller investments, where benefits tend to be difficult to quantify, and where a "full-blown" cost-benefit analysis is potentially complex and costly. In this sense, principles that address the complexity of the analysis that must be undertaken would be consistent with a broader efficiency objective.

This objective would also be consistent with the current distinction in the Rules between "large" and "small" network investments, which require different processes to be followed for the two types of investment.

Therefore, it would seem reasonable that the cost of undertaking the Test should be an issue which should be considered in the promulgation of the Test.

Commission's findings

The Commission has determined that the Rule should include a clause specifying that the Test should not require the level of analysis to be disproportionate to the scale and size of the new network investment – Rule 5.6.5A(c)(6).

5.3.5 Consistency

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

[74] The Group submission, p9

To promote confidence in the regulatory test, and minimise avenues for legal dispute, the regulatory test must be transparent, robust, defensible and capable of consistent application.[75]

The MCE Rule stated:

The regulatory test or any amended regulatory test under this clause 5.6.5A must:

be capable of consistent application;[76]

Submissions

The Group argued that this principle lacks clarity and question whether the current test accords with this principle. The Group suggested that this principle should apply to both the Test and associated Guidelines and proposed the following changed wording:

The test must be capable of consistent application in that two persons independently evaluating through the Regulatory Test the same investment at the same time would likely obtain the same test result.[77]

Commission's considerations and reasoning

A potential problem with the Regulatory Test is the consistency of its application, given that the Test is not undertaken by a single party, but by different NSPs. In the view of the Commission, consistency is an important principle for the Regulatory Test, as consistency in application:

- Improves confidence in the regulatory process, reduces perceived risks and improves the legitimacy of the regulatory instrument;
- Improves the predictability of the analysis; and
- Reduces transactions costs to the extent that there is a "standard" model that can be followed.

Linked to the question of consistency is the clarity of the way that the Test is defined. A clearly defined Test will add to the ability of the Test to be consistently applied. Clarity in definition will improve the ability of the NSP to apply the Test, and reduces the scope for later disputes regarding its interpretation.

The Commission recognises that there is an issue as to how "consistent application" could be defined. Taken literally, this principle could require the AER to specify in detail each of the assumptions that are to be made in undertaking the Test. In its Final Determination of Version 2 of the Regulatory Test, the ACCC said:

The ACCC is of the view that to ensure the consistent application of the regulatory test definitions should be as clear as possible. In defining terms used in the regulatory test, the ACCC must strike a balance between providing guidance and ensuring that the test is not too narrow and prescriptive. If the test is defined too narrowly, real benefits or

[75] MCE Rule Proposal, p4
[76] MCE Rule Proposal, p7,8
[77] MCE Rule Proposal, p9

costs could be unintentionally excluded. This could have a material and detrimental impact on the outcome of an assessment. Therefore, in addition to the proposed amendments outlined in Chapter 3, the ACCC amends and defines certain terms in the test which it considers will provide greater guidance in its application whilst still providing sufficient flexibility for the test to evolve over time.[78]

The Commission agrees with the ACCC that improving consistent application requires a balance between codifying requirements in the Rules and flexibility in implementation.

However, the Commission also notes that other elements of this proposal should increase the ability for the Test to be consistently applied. For example, the introduction of Test Guidelines should assist NSPs in consistently applying the Test. The Commission's proposals relating to the form of the Test should also remove some inconsistency regarding the assessment of alternative options.

Commission's findings

The Commission has determined that the Rule should retain a consistency objective – Rule 5.6.5A(c)(7).

5.3.6 Transparency

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

To promote confidence in the regulatory test, and minimise avenues for legal dispute, the regulatory test must be transparent, robust, defensible and capable of consistent application.[79]

Submissions

Submissions did not comment on this issue.

Commission's considerations and reasoning

The Commission notes that the MCE included transparency in the objectives for the Test specified in the proposal, but not in the Draft Rule provided by the MCE. The Commission considers that transparency in the application of the Test is critical to the successful operation of the Test. In fact, part of the rationale for requiring NSPs to undertake the Regulatory Test is to improve the transparency with which network investment decisions are made in the NEM. Therefore, the Commission considers it appropriate to consider a transparency objective.

Transparency in conducting the Test can also play an import role in information revelation and improving the prospects of non-network alternatives being to address an identified issue. The function of conducting the Test reveals more information about needs for augmentation and may also reduce the information asymmetry regarding the location and timing of potential investment needs, thereby

[78] ACCC Final Determination of Version 2 of Regulatory Test, p34
[79] MCE Rule proposal, p4

improving the prospects for market-based, non-network solutions to come forward. However, it should be recognised that this is not the primary role of the Test.

The Rules also already specify a number of provisions to support transparency objectives; for instance, clause 5.6.6 (applications to establish new large transmission network assets) sets out detailed processes that TNSPs must follow in the course of establishing a large network asset. There are also obligations on other parties that are designed to improve the information that is available to market participants, including the Annual Planning Reports by NSPs, NEMMCO's obligation to conduct an annual national transmission review and publish an Annual National Transmission Statement (ANTS), and its obligation to publish an annual Statement of Opportunities (SOO).

A transparency objective may also assist in:

- Eliciting alternative investment proposals that may be more efficient than those put forward by the proponent of a network investment;
- Serve good governance objectives for NSPs, by requiring them to clarify their decision making processes, but also for the regulator, by requiring the regulator to set out the basis on which decisions are made; as well as,
- More generally, being supportive of an environment in which market participants would be more willing to trade and invest.

The Commission notes that the Request for Information process outlined in Section 5.4 will also assist in achieving these objectives.

Commission's findings

The Commission has determined that there should be a principle requiring the Regulatory Test to be undertaken and assessed in a transparent manner - Rule 5.6.5A(c)(7).

5.4 Application of the Regulatory Test

This Section addresses issues raised by both the MCE Rule proposal and submissions relating to the application of the Regulatory Test. The Commission aimed to differentiate the objectives that the Test should achieve, from requirements and specifications that relate to how the Test should operate in practice. The Commission has identified the following broad areas that relate to the application of the Test, as opposed to its objectives:

- The form of the Test as a cost-benefit analysis;
- The identification of alternative options;
- The scope of the Test/ what projects should be assessed;
- The linkage between the Regulatory Test and revenue regulation;
- The content requirements for the Test; and

- The creation and content requirement of Regulatory Test guidelines.

The Commission recognises that a significant number of issues with the Regulatory Test have been addressed through an extensive review, undertaken by the ACCC in 2004, which led to the development of Version 2 of the Test. These issues include, for example, the ability to include competition benefits within the assessment process. Version 2 of the Test also provided greater clarity on how the Test should operate.

The Commission notes that a number of submissions have stated that the current test "*appears to be operating satisfactorily from an implementation perspective*"[80], that "*much of the historical concern about Test robustness relates to Version 1 of the Test, and has been addressed by the changes made by the ACCC (in 2004) in promulgating Version 2*"[81] and that there is not "*any case to substantially alter the existing regulatory test*"[82].

5.4.1 Application of a cost benefit analysis

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

> *The regulatory test must be based on the principles of cost-benefit analysis as a means of economic discipline, thus satisfying the overarching objective to deliver efficient transmission investment, not simply more transmission regardless of the economics.*[83]

The MCE Rule proposal stated:

> *The regulatory test or any amended regulatory test under this clause 5.6.5A must:*
>
> *be based on the principles of cost-benefit analysis;*[84]

Submissions

The Group proposed adding the word 'established' before 'principles', to prevent a TNSP developing its own economic theory of cost benefit.

The Energy Users Association of Australia (EUAA) argued that the Test should give greater weight to consumer benefits over producer benefits:

> *The main point is that the public benefit test currently applied during application of the regulatory test assumes that a total surplus standard is appropriate. But this is one of a series of tests that could be conducted and no attempt has been made by the ACCC to justify the current total surplus standard.*[85] *Further, international experience indicates that choice of the appropriate standard is by no means a simple matter. Indeed, the*

[80] Transgrid submission, p2
[81] The Group submission, p1
[82] Macquarie Generation submission, p1
[83] MCE Rule proposal, p4
[84] MCE Rule proposal, p7
[85] The total surplus standard is the summation of both consumer and producer surpluses with no special weighting attached to any particular group(s)

orthodox approach would seem for policy makers to adopt a consumer welfare[86] test approach.

Given that this matter has not been directly addressed by the MCE, and – as MJA argue – is not a matter of public policy that should be decided by the AER, the AEMC needs to consider whether or not welfare weightings (apparently) assumed by the AER are both appropriate and consistent with achievement of the NEM objective to promote efficient investment for the long term interest of consumers of electricity.

In supporting this recommendation, the EUAA makes it quite clear that any reasonable interpretation of the Single Market Objective for the NEM would suggest that long-term consumer benefit be given greater weighting than other stakeholders. This would be entirely consistent with outcomes from a competitive market and also reflect the fact that it is end users who pay 100% of the cost of shared transmission services. MJA notes that these are perfectly rational arguments for assigning greater weighting to consumer welfare in a reasonable application of cost benefit analysis.[87]

The Major Energy Users noted:

There should be no doubt that the Regulatory Test should include the net cash benefit to consumers resulting from reducing price separations, which in turn will result from augmentations of the transmission network between regions, causing reduced inter-regional constraints. The Regulatory Test must be modified to incorporate this benefit.[88]

Citipower and Powercor's submission noted:

The Regulatory Test may cause a bias to underspend on necessary investment. The Rules should ensure that the parameters of the regulatory test are set in a conservative way to ensure that a particular investment is reasonably justified without undermining the incentive to make necessary capital investments in important infrastructure. Rather than allowing the Regulatory test to adopt a neutral economic stance, the rules should require the test to ensure necessary network investment, is facilitated within the reasonable bounds of probability for the proposal under analysis.[89]

Commission's considerations and reasoning

In assessing this Rule proposal, the Commission must consider the form that the Regulatory Test should take. The MCE has proposed that the Rules should specify that the Test must be in the form of a cost benefit analysis. A number of submissions have raised issues with how that cost benefit analysis should be applied. This section addresses these issues.

In determining whether it is appropriate to specify in the Rules the use of cost-benefit analysis to determine the most efficient investment option, the Commission has been mindful of a number of factors, including:

[86] Under the "consumer welfare test" consumers are attributed all the weight in the analysis.
[87] EUAA submission, p3
[88] Submission from MEU, p13
[89] Submission from Citipower and Powercor, p2

- The development of the form of the cost-benefit analysis in the Regulatory Test over several years by the ACCC. The partial equilibrium based approach to cost-benefit analysis used in the Regulatory Test has been the subject of significant debate and development since it was originally proposed by Ernst and Young to the ACCC when considering the original Regulatory Test. As such, major elements of the framework are well understood and have been the subject of significant market consultation. This does not mean that the form of cost-benefit analysis used in the Test is beyond improvement. The Commission considers that experience in the use of the Test may lead to further improvements in the specification of the form of cost-benefit analysis to be used for the Test. However, in the view of the Commission it would be inappropriate to discard the cost-benefit analysis framework that has already been well developed.; and

- The acceptance and experience in the use of the cost-benefit analysis framework by NSPs. The Commission also considers that participants have developed familiarity and acceptance of cost-benefit analysis as the framework for the Test. The Commission considers that by specifying the use of cost-benefit analysis in the Rules, regulatory uncertainty can be reduced.

Net Market Benefits or Consumer Benefits?

The Commission has received a number of submissions from the EUAA and the MEU suggesting that the Test should give primacy to benefits accruing to consumers over benefits accruing to producers. The EUAA and the MEU argued that price reductions that are currently considered to be 'wealth transfers' under the Test should be treated as benefits.

The current Test is framed to maximise net market benefits – that is, the sum of both producer and consumer surplus. When proposing the original Regulatory Test, Ernst and Young stated that "maximising net public benefit is equivalent to choosing the most efficient option (in the sense of a potential Pareto improvement)"[90].

The ACCC also considered this matter when determining whether competition benefits should be included in Version 2 of the Regulatory Test. The ACCC's Draft Determination stated:

> *What is evident from the submissions is that interested parties largely fall into two camps. There are those who consider that "competition" benefits are benefits arising from an increase in the market's efficiency. The opposing view is that the calculation of "competition" benefits should be based on a broader social objective of reducing prices to electricity consumers. In economic terms, this view considers the transfer of wealth from producers to consumers as a benefit. In balancing these views the Commission has turned to its obligations under the code and, in particular, the objectives that it must consider in promulgating the regulatory test….*
>
> *The Commission believes that it is clear that clauses 6.2.2 and 6.2.3 of the code emphasise that the regime it administers must provide for the efficient operation, provision and expansion of transmission facilities. As a consequence of enhanced*

[90] Ernst and Young, Review of the Assessment Criterion for New Interconnectors and Network Augmentation, p23

efficiencies, reductions in prices can and do arise. But lower prices are not an objective in itself. It is the Commission's view that if the writers of the code had intended that reducing prices for consumers were to be an objective it would have been expressly stated. It was likely that they considered that promoting efficiency would ensure the benefits for the market as a whole. That is the benefits will accrue to both producers and consumers of electricity, not just consumers…

Therefore, in keeping with the code's objectives the Commission considers that the calculation of "competition" benefits must be limited to considering those benefits arising from increases in efficiency from the augmentation of transmission networks[91].

While the ACCC made this determination based upon clauses 6.2.2 and 6.2.3 in the Code, the Commission can consider this issue in light of the NEM objective, which states that:

The national electricity market objective is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.[92]

The NEM objective specifies "efficient investment" as one of the key elements in delivering the long term interests of consumers. By definition, the Regulatory Test seeks to provide incentives for investment that result in the most efficient outcomes, by determining which alternative maximises the net benefit to the market.

If a consumer benefits only approach was taken, or an approach that valued consumer benefits more highly than producer benefits, it is likely that investments that are economically sub-optimal may be ranked more highly than investments that are superior from an economic efficiency perspective. NERA made a similar point in a paper attached to Transgrid's submission to the ACCC's discussion paper on Version 2 of the Regulatory Test:

It should be noted that adopting a 'gross competition benefits' approach may lead to projects which have lower net market benefits being ranked above projects with higher net market benefits. This may be the case if the loss of profits arising through the exercise of any market power by generators under one project is significantly greater than under another project.[93]

To suggest that a consumer benefits only criterion, or other criteria should be used to determine transmission investment has the potential to result in the promotion of inefficient investment at the expense of efficient investment. The Commission's view is that such an approach would be contrary to the NEM objective.

In its Draft Determination, the Commission therefore concluded that the Test must take the form of a CBA that would focus on benefits accruing to society as a whole; that is, including producers and consumers.

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[91] ACCC, Review of the Regulatory Test for Network Augmentations, Draft Decision, p48-49
[92] Section 7, NEL
[93] NERA, Inclusion of competition benefits in the Regulatory Test, A report for Transgrid, April 2003, p16

Submissions

The EUAA, the MEU, and the Energy Action Group provided further comment in relation to the Commission's finding in the course of the Second Consultation. The EUAA, MEU and Energy Action Group disagreed with the Commission, arguing that the Regulatory Test should focus on benefits accruing to consumers, rather than to all parties (consumers and producers alike).

The EUAA highlighted that the Regulatory Test has so far failed to facilitate efficient investment across the NEM, particularly inter-regional investment.[94] The EUAA has estimated that these costs amount to around $0.9 billion per year since the start of the NEM. The EUAA specifically thought that:

- The Commission had not considered other incentives and mechanisms that could be used to achieve improved investment outcomes, for instance, those that might arise in the context of transmission revenue regulation.

- The Regulatory Test should be applied from the perspective of consumers, since the investment options to be considered relate to the shared electricity network, which electricity consumers pay for. The EUAA stated that there is no conventional approach to the treatment of welfare transfers by economists. Economic theory allows greater weight to be given to the interests of consumers, or to treat transfers from producers to consumers as a benefit in the cost-benefit analysis (CBA). The EUAA therefore considered that the key issue in the application of the Test is to choose a project that will maximise the net benefits of end users, as specified in the NEM objective.

- The Commission had failed to specify the appropriate technical rigour that should be applied to the analysis, and had not considered in detail the issues that will arise in the course of the practical application of the Test, including the need to identify and scrutinise relevant alternative projects; to ensure that all comparable alternatives are considered; to examine ways of making potentially beneficial projects commercially feasible; to explore the most economic configuration of projects; to identify risks associated with the most beneficial projects and how these could be mitigated; to undertake accessible modelling; and to incorporate organisational incentives. These issues should be included in the list of matters that the AER should consider when developing the Regulatory Test.

- The Commission should consider whether a more general analysis than a partial equilibrium analysis would be appropriate.

The MEU stated that the Commission's approach would value the investments benefiting electricity supply entities above those of consumers. This would be inconsistent with the Rules, which refer to the long term interests of consumers. Instead, the MEU considered that an explicit measure of consumer benefit should be included in the formulation of the Regulatory Test, since:

[94] Submission by the Energy Users Group of Australia, 2 November 2006, p2ff.

- The Commission's approach implicitly assesses benefits on a regional basis, so that regional generation derives a commercial benefit at the expense of generation in another region;

- The cost of avoiding out-of-merit generation should be considered as a cost to consumers; and

- Economic efficiency for a consumer is increased when consumers can increase a cost in one area to achieve a larger cost saving in another area.

The Energy Action Group echoed the comments by the EUAA and the MEU and specifically pointed to:

- The change in regulatory status of NEM interconnector projects from market network service provider to regulated investment; and

- The failure of market interconnector investment, such as MurrayLink, DirectLink, and Basslink.

The Energy Action Group similarly considered that the Regulatory Test should be expanded from a partial to a full equilibrium analysis. Other issues that, in the view of the Energy Action Group had not been adequately considered in the Draft Determination included:

- Whether better alternatives than the Regulatory Test could achieve the MCE objectives;

- The degree of technical rigor that should be applied; and

- The appropriate role of consumer benefits within the context of the Regulatory Test.

Commission's considerations and reasoning

The Commission has considered carefully the views expressed by the MEU, EUAA, and Energy Action Group, but has not been persuaded that a different framework should be adopted for the analysis undertaken under the Regulatory Test. The Commission agrees with the EUAA that distributional considerations (transfers) are a matter for policy makers and are not an economic issue. However, in the view of the Commission, such distributional considerations relate to questions about who should pay for a transmission augmentation, rather than whether or not it would be efficient to undertake the augmentation in the first place. Specifically, the Commission considers that a CBA, rigorously applied, does not permit transfers from producers to consumers to be treated as a benefit. Even if it were the case that such transfers could be counted as a "benefit" on economic grounds (which, in the view of the Commission, is not the case), as a general matter, most large network investments will create "winners" and "losers" both among consumers and among producers, so that the clear delineation between consumers' and producers' interests would not exist in practice.

The Commission believes that the purpose of the Regulatory Test as set out in clause 5.6.5A(b)(1) is consistent with the NEM Objective. The long term interests of

consumers of electricity are best served by an industry in which all sectors – regulated or unregulated – operate on an efficient and sustainable basis. The NEM objective is not consistent with an approach in which a reduction in profitability in one part of the industry (production) is interpreted as a "benefit" to consumers. The Commission considers that all consumers – residential, commercial or industrial – have an ongoing interest in the reliable supply of electricity at an efficient cost and that it is in consumers' interests to ensure that this sector is adequately funded. A regulatory regime that does not reasonably compensate investors is not sustainable, in the sense that financing will become increasingly costly or private sector investors will exit the industry altogether.

The Commission also recognises that the broader regulatory framework may play an important role in shaping NSPs incentives to undertake network investment. However, these issues are beyond the scope of the present Regulatory Test Rule process, and will be addressed in the course of the review by ERIG that is currently underway.

Finally, the Commission recognises that in practice, the rigorous application of the Regulatory Test may pose significant conceptual and technical challenges. The Commission considers that the question of the appropriate technical rigor of the CBA relates to the application of the Regulatory Test, and as such would be a matter for the guidelines to be developed by the AER to assist in the application of the Test. The Commission considers that the scope of the Regulatory Test – in terms of a partial or general equilibrium analysis – is also a matter of application and therefore the AER guidelines.

Commission's findings

The Commission has therefore determined not to amend the purpose of the Regulatory Test, as set out in Rule 5.6.5A(b)(1),(2).

5.4.2 Process for assessing alternative options

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

> *The regulatory test must ensure that all genuine and practicable alternative options to proposed new transmission network investment are evaluated by NSPs without bias, regarding: energy source; technology; ownership; the extent to which the new transmission network investment or the non-network alternative enables intra-regional or inter-regional trading of electricity; whether the new network investment or non-network alternative is intended to be regulated; or any other factor. This is to ensure NSPs do not favour network-only investment, and that the most efficient solution for the NEM as a whole is progressed rather than the investment that is internally most efficient for the NSP.*[95]

The MCE Rule proposal stated:

> *The regulatory test or any amended regulatory test under this clause 5.6.5A must:*

[95] MCE Rule Proposal p4

ensure that all genuine and practicable alternative options to proposed new network investment are evaluated by Network Service Providers without bias, regarding:

- *energy source;*
- *technology;*
- *ownership;*
- *the extent to which the new network investment or the non network alternative enables intra-regional or inter-regional trading of electricity;*
- *whether the new network investment or non-network alternative is intended to be regulated; or*
- *any other factor.*[96]

Submissions

The Group's submission noted:

> *…how does the Test prevent a TNSP introducing bias through its selection of alternative options? As the SNI process demonstrated, simply requiring that all "genuine" and "practicable" options are evaluated is insufficient, since this leaves plenty of room for interpretation, and therefore potential dispute, which, ultimately, may have to be decided in the courts (as was SNI).*
>
> *This ambiguity in the Test has been addressed in Version 2, which provides some guidelines for interpreting the meaning of "genuine" and "practicable". But suppose, hypothetically that the AER decided to delete these new interpretations from the Test. Such a move would be unhelpful, arguably in violation of the NEM objective, but not in violation of principle 4 or any other. A new principle is needed.*[97]

Enertrade noted:

> *First, greater clarification is required with respect to 'practicable' and 'genuine' alternatives. If these terms are narrowly interpreted this could artificially raise the barriers for considering alternative options and could result in an inefficient outcome. A common understanding of these terms is required to ensure consistent application of the Regulatory Test.*[98]

Commission's considerations and reasoning

As noted in Section 5.3.2, one of the objectives of the Regulatory Test is competitive neutrality.[99] This objective is put into practice in the market benefits limb of the current Test by requiring an option to maximise "the expected net present value of the market benefit…compared with a number of alternative options and timings, in a

[96] MCE Rule Proposal p7

[97] Submission from the Group, February 2006, p8

[98] Submission from Enertrade, 24 February 2006, p3.

[99] It is relevant to note that competitive neutrality is not necessarily an end in itself. Competitive neutrality is a process for ensuring economic efficiency by ensuring that all alternatives are considered on their merits, and have access to a 'level playing field'

majority of reasonable scenarios."[100] While the current Test requires an alternative option to be "genuine" and "practicable",[101] as noted in Enertrade's submission, this definition of alternative options as "genuine" and "practicable" is open to interpretation and therefore uncertainty in its application.

The Commission is of the view that the most problematic and contentious area of the Test is the determination of alternative options against which a proposal must be assessed. The Commission has identified a number of problems, which result from the uncertainty regarding the definition of what may be considered "genuine" or "practicable". These problems include:

- **Potential for gaming.** Poor definition of alternative options can lead to gaming of the Test. The fact that transmission investment results in winners and losers provides strong incentives for parties that will be disadvantaged to abuse the process. This issue can be seen in two ways – first, opponents of a project may 'game' the Test by proposing unrealistic alternatives, or second, the Test may be 'gamed' by a TNSP taking too narrow an interpretation of the requirements of the Test, meaning that alternatives or scenarios that should have been considered are not considered.

- **Fails to ensure that something is built**. The policy objective for the Regulatory Test is to compare the proposed project against the best alternative options that are likely to be built. The Test is not intended to compare the proposed project against all possible but unlikely options.

- **Fails to take account of regulatory failure.** The Test assumes that the best alternative can be found. Given the uncertainty around the assumptions that need to be made, and the inherent uncertainty of predicting the future, this may not be possible. As such, it is inappropriate to place too much emphasis on a deterministic regulatory instrument.

The Commission notes that the AER has sought to provide greater specificity to the definition of alternative options to address these concerns. However, the Commission remains concerned that the more specific definitions included in

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[100] AER, Regulatory Test Version 2, clause 1(b)

[101] The ACCC defined an alternative option under the market benefits limb as:

(i) a genuine alternative to the option being assessed, in that it:

(A) delivers similar outcomes to those delivered by the option being assessed; and

(B) becomes operational in a similar timeframe to the option being assessed;

(ii) a practicable alternative to the option being assessed in that it is:

(A) technically feasible; and

(B) commercially feasible, which is to be demonstrated by determining whether an objective operator, acting rationally according to the economic criteria prescribed by this test, would be prepared to construct or provide the alternative option.

The existence of a genuine proponent for the alternative option should be taken into account when determining practicability, however, absence of such a proponent will not exclude a project from being an alternative option for the purposes of the regulatory test.

Version 2 of the Regulatory Test still leave significant scope for uncertainty and therefore gaming with associated increased costs for the application of the Test.

The Commission's proposed approach - Request for information

Taking these issues into account, and the objectives that the requirement to assess alternative options is intended to meet, the Commission determined that more guidance should be provided in the Rules for the determination of alternative options. The Commission considered in its Draft Determination that a clearer, more transparent approach to determining which alternatives are likely to occur should reduce the scope for gaming, provide greater certainty that an alternative is likely to be built, and reduce the costs faced by proponents in undertaking the Test. In effect, in the view of the Commission, a two-stage process would be required, one that would:

- Strengthen the procedural requirements for NSPs to find alternative projects to their proposal; and

- Result in a streamlining of the assessment process for alternative options, to achieve better outcomes.

The Commission recognises that the NSP may not be in possession of all the relevant information required to make an assessment as to which project would be likely to occur in the absence of its proposed project. Therefore, to assist the NSP in determining which option should be determined to be the counterfactual, the Commission considers that the NSP should be required to issue a request for information (RFI) to identify possible alternatives to a proposed transmission augmentation. This could include:

- Local Generation;

- Demand Side Management;

- Non-electricity alternatives; or

- An alternative network upgrade.

The RFI process would be transparent and encourage interested parties to propose workable, commercial alternatives to a proposed network investment. The detailed requirements for the RFI process are to be determined by the AER, however, the Commission would expect that the RFI would set out, in a transparent manner:

- The nature of the network limitation(s) that the regulated network investment and any alternative investment, is intended to address;

- The timeframe over which the investment is likely to be required; and

- Any other supporting information that potential investors may require to prepare their response.

The Commission also considers that in its promulgation of the Test, the AER should include appropriate guidance as to the operation of the RFI process.

Such an RFI process may elicit one or more alternative proposals. Under the second stage of the Commission's proposed assessment process, the TNSP would then consider all potential alternatives, either from the RFI or potentially an alternative network proposal or another proposal which the NSP may be aware, and make an assessment as to which proposal or proposals were likely to occur in the event the NSP's proposal did not proceed.

Under this approach, rather than comparing the proposed project to all alternative options, a NSP would compare its proposed augmentation to the likely alternative or alternatives. The assessment process would remain a cost-benefit analysis, as prescribed in the current Regulatory Test to assess whether the proposed project or the likely alternative or alternatives had a higher net market benefit.

If the proposed option had higher net market benefits, it would pass the Test and therefore proceed. If the alternative option or options had higher net market benefits, the proposed option would fail the Test and not proceed. If the proposed option had higher, but negative net market benefit, the project would also not proceed.

This approach would require the NSP to make an assessment as to which of the potential projects should be assessed as alternatives as part of the cost-benefit analysis for the Test. The assessment required would be defined as "what would have happened, but for the proposed augmentation." This may result in a single most likely alternative, or two or more alternatives that were each determined to be likely to occur in the absence of the proposed project. The Commission expects that, in many cases, there will be more than one likely alternative against which the proposed project may be assessed.

To aid the transparency and therefore confidence in the process, the Commission is of the view that the TNSP should be required to publish its reasons and assessment as to how it determined the counterfactual, including the results of the RFI.

In effect under the Commission's approach, the NSP is required to compare the "future with" the new investment (the factual) with the "future without" the new investment (the counterfactual).

The future "with and without test" is the same test applied in respect of authorisation applications under section 90 of the *Trade Practices Act*. The test was explained by the Australian Competition Tribunal in *Re QIW Ltd* (1995) 132 ALR 225 at 276:

> "*The test is not to compare the present situation with the future situation, were the acquisition to take place: a 'before and after' test. Rather the test is to appraise the future, were the acquisition to take place, in light of the alternative outcome, were the acquisition not to take place: the 'future with-and-without' test.*
>
> *That does not mean that we prophesy the future. As QCMA expressed the point … :*
>
> > *'We are to be concerned with probable effects rather than with possible or speculative effects. Yet we accept the view that the probabilities with which we are concerned are commercial or economic likelihoods which may not be susceptible of formal proof. We are required to look into the future, but we can be concerned only with the foreseeable future as it appears on the basis of evidence and argument relating to the particular application.'*

Plainly we should take into account any likely changes to the business environment in which the proposed conduct would operate. We should also assess the benefit and detriment from the proposed conduct in light of any alternative conduct that would thereby be ruled out. In the present context, this does not mean that we undertake some mechanical comparison of the desirability of alternative merger scenarios; but the terms of s 90(9) require us to appraise the acquisition the subject of the application for authorisation 'in all the circumstances', and those circumstances include the likely alternatives to the merger in question."

The test was recently cited and applied in *Qantas Airways Limited* [2004] A CompT 9 at para 151.

There are several approaches that could be adopted in identifying the "likely alternative" outcome or outcomes which, in a counterfactual analysis, becomes the critical benchmark against which the likely costs and benefits of the new investment are measured.

In view of the interest to ensure economically efficient investment is not discouraged, in many cases, the determination of the relevant counterfactual will result in a clear single comparator. In other cases, two or more comparators may be identified The comparators could include a "do nothing" scenario. Alternatively, they could constitute alternative investment proposals.

However, the Commission notes that the selection of the likely counterfactual may be problematic in some cases. It has sought to address this by the operation of clause (c)(5) of the Rule. The combined operation of clauses (c)(4) and (c)(5) in the Rule is designed to ensure that the interpretation and application of the term "likely" needs to be objectively and subjectively defensible. A balance needs to be struck between alternative proposals which may all be conceivable or possible, compared to the one proposal or proposals which have a much higher likelihood of actually occurring in the absence of the factual.

Clauses (c)(4) and (c)(5) entail an analytical process, which is intended to encompass two phases:

- The first phase is to identify all "likely" alternatives. In this regard, the Commission adopts the meaning of "likely" to be "a real chance or possibility" rather than a mere possibility.[102]

- Once all likely alternatives are identified, the NSP should seek to identify whether any one or more of those alternatives are significantly more likely to occur, in the event the new investment proposal did not proceed. This phase will no doubt require the application of some judgment. However, it is intended that clause (c)(5) would apply only to those situations where the counterfactual option is both objectively and subjectively significantly more likely to occur than other realistic alternative options.

[102] The Commission is largely adopting the analysis of French J in *Australian Gas Light Company v Australia Competition and Consumer Commission* (2003) ATPR 41-966; also referred to in *Qantas Airways Limited*.

The Commission notes that in making the assessment as to the option or options that should be the counterfactual, the option does not have to be absolutely certain, it simply has to be likely. Another issue may be the existence of a proponent for a proposed alternative. While a proponent would not be required for a project to be considered as a potentially likely alternative, the absence of a proponent could be one of the factors to be assessed in determining which alternative option or options are likely in the absence of the proposed project. A specific case may be an alternative project that the NSP would be the proponent for. In this case one of the factors that the assessment would consider would be whether the NSP would be likely to be a proponent of the project in the absence of its proposed project.

The Commission is of the view that the determination of the likely alternative or alternatives will be an issue that can be disputed and therefore subject to review and determination by the AER. The Commission also expects that the process for establishing a counterfactual may be assisted through Regulatory Test guidelines, to be prepared by the AER.

Therefore, the framework set out in the Commission's Rule enables the following process:

- The NSP identifies a problem or opportunity and a proposed project to address it;
- The NSP puts out an RFI, seeking alternative approaches to solve the problem; and
- The NSP collects all the information from the RFI and then makes an assessment as to which of these options, or another option or options based on its own analysis, should be considered likely alternatives. This would be determined by the NSP based on its assessment of what is likely to occur if the proposal does not occur.

Under clause 5.6.6 of the Rules, the NSP then conducts the Regulatory Test, including the process for dispute resolution, if necessary; if the proposed project satisfies the Regulatory Test, it may proceed.

Implications of the RFI process

In the Commission's view, the counterfactual process outlined above is likely to have the following effects:

- **Potential to reduce 'gaming'**. While the Commission acknowledges gaming can never be removed entirely from any regulatory process, the proposed changes should reduce the scope for gaming of the Test. The process of the 'but for' analysis will significantly change the dynamic of the Test assessment process – rather than the NSP determining which projects meet the hurdle of being sufficiently genuine or practicable, and then assessing all of them against the proposed project, it is an assessment of which project or projects are likely alternatives in the absence of the proposed project. This is likely to change the incentives on proponents of alternative projects. Rather than simply being required to prove that their alternative is genuine and

practicable, a proponent of an alternative project will have to provide evidence that their project is likely to proceed but for the proposed network augmentation. This should result in higher hurdle for alternative projects, which should limit the ability of a project which is purely speculative or unlikely to proceed, from being used to block a proposed transmission augmentation.

- **More predictable outcomes and greater certainty for NSPs.** The Commission considers that the proposed process will result in more predictable outcomes for NSPs and, therefore, greater certainty for NSP investment decisions, by reducing the possibilities of gaming and the costs of assessing unlikely alternative projects that are currently required to be assessed. The Commission notes that the MCE stated in the Rule proposal that its intention was to provide "a level of certainty for an NSP undertaking new network investment."[103]

- **Addresses the issue of nothing being built if the transmission option is rejected.** The Commission's proposed assessment process is likely to address the issue of the proposed project failing the Regulatory Test, as another option was considered to maximise net market benefits, yet that alternative option does not proceed. Proposals that are unlikely to proceed will not be considered as an alternative, and therefore will not be assessed as part of the formal Test assessment. The result of this changed dynamic should be that a proposed project which is economic but would have failed the current Regulatory Test will be more likely to pass the Commission's proposed Test.

- **Lower costs.** As the assessment process will be simpler, and fewer unlikely alternative options will be subjected to a full cost benefit analysis under the Test, a result of the Commission's proposal is that the costs of undertaking the Test are likely to be reduced.

- **Most 'efficient' project may not be likely.** The Commission notes that in undertaking the Commission's proposed approach, a possible outcome is that the project which may have been defined as the most efficient project under the current Test may not be considered a likely alternative under the new Rules for the Test and will, therefore, not be assessed against the proposed project.

  The Commission notes that the assessment of the efficiency of projects under the current Test rests on the assumption that the project justified by the Test will be constructed. In the view of the Commission, there is a material risk that this may not be the case. As such, the Commission's assessment process has been designed to take into account the likelihood of a project actually being constructed and, therefore, actually delivering benefits to the market and to consumers.

In its Draft Determination the Commission set out that it considered that the proposed RFI process would lead to reduced assessment costs, reduced gaming, greater certainty for the NSP and greater certainty for the market that a solution to an

[103] MCE Rule proposal, p4

identified problem will actually proceed. The Commission asked for comments from stakeholders whether the requirement for an RFI and an assessment of likely alternatives under the market benefits limb of the Test would be appropriate.

In the course of the Second Consultation, stakeholders responded to a number of aspects of the RFI process set out in the Draft Determination. The following sections set out the issues raised and the Commission's considerations in turn.

Submissions - The counterfactual

Stakeholders had different views on the nature of the counterfactual proposed by the Commission. ETNOF considered that the proposed RFI process and the reliance on "most likely" alternative outcomes risks confusing alternative network investments with the market development scenarios against which alternative investment projects are currently assessed.[104] ETNOF and an attached paper prepared on behalf of TransGrid argued that:

- The focus on "likely" may exclude some projects that would otherwise be considered to be the most efficient;
- The focus on "likely" scenarios seems to conflict with the role of the market development scenarios currently required in the application of the Test;
- It is difficult to forecast future outcomes, and it is not clear what the term "likely" would mean in practice; and
- The future "with" scenarios would differ from the "without" scenarios, and the Draft Rule did not address how these outcomes would be compared under the Regulatory Test.

VENCorp also thought that the meaning of the terms "likely" and "alternative outcomes" is not clear, particularly whether "alternative outcome" refers to the outcome associated with a new investment or whether it refers to the alternative investment itself. VENCorp was also unsure of the role that market development scenarios have in the new market benefits limb of the Regulatory Test.

Energy Solutions Australia Pty Ltd thought the concept of a counterfactual raised three issues:[105]

- The NSP has a conflict of interest in determining which "genuine and practicable alternative options" are "likely" alternative(s). If the NSP can eliminate certain options from the analysis, then the Commission must provide guidance as to how this should be achieved.
- A Regulatory Test assessment may highlight alternatives that the market as a whole may not be aware of at the time when the network owner makes its public request for information. The RFI process does not recognise this, so that projects that come to light in the course of the application of the Regulatory Test would not be considered.

[104] Submission by the Electricity Transmission Network Owners, 3 November 2006, p5ff.
[105] Submission by Energy Solutions Australia Pty Ltd, 9 October 2006, p3ff.

- The fact that the Commission is proposing a 'higher hurdle for alternative projects' ignores the economic efficiency objective of the Regulatory Test and the practical experience of NSP gaming, again, as per SNI. Instead, the Commission should consider the reintroduction of stranding for inefficient network investments.

Other stakeholders also commented on the tension between the "likely" criterion and an efficiency objective:

- The AER considered that the Commission's approach would limit the options that the NSP would consider in undertaking the Regulatory Test. The AER thought that a better way of addressing this problem would be to allow the NSP to assess the likelihood of a non-network option, but require the NSP to include in its final analysis all genuine and practicable network options, including those that it may not want to build. Otherwise the NSP may have an incentive to exclude possible network options from the final assessment.

- The ERAA did not support the RFI process, because the focus on "likely", rather than "genuine and practicable" projects may exclude efficient investment projects.

In contrast, Integral Energy considered that:[106]

> *"The identification of a "likely alternative" by the network service provider which adopts the meaning of "likely" to be a real chance or possibility" rather than a mere possibility represents a significant improvement on the current Regulatory Test requirements of "genuine" and "practicable" alternatives. ... The requirement for a proponent of a "likely alternative" to provide evidence that their project will succeed is expected to reduce the opportunity to abuse the Regulatory Test and provide greater certainty to NSPs planning and investment decisions."*

Commission's considerations and reasoning

In its Draft Determination, the Commission recognised the potential tension between a "likely" and an "efficient" outcome; that is, in the process of selecting the likely counterfactual, more efficient options may be set aside. However, in the view of the Commission, the alternative – evaluating all transmission alternatives on an equal basis (i.e., irrespective of whether or not they are likely to proceed – may lead to an outcome whereby effort and time is expended on analysing investment options whose chances of being commissioned are small, since no (potential) proponent for the alternative exists. In the view of the Commission, the risk is that, in the absence of the RFI process, efficient network investment may be held up or perhaps prevented altogether, without an alternative (non-regulated) investment occurring in its place.

While the Commission recognises that an assessment of what outcome (in terms of alternative, non-network investment projects) are "likely" will inevitably require some degree of judgement, in the view of the Commission, the approach adopted in the Rule does not increase the scope for TNSP's to inappropriately ignore otherwise efficient investment options.

[106] Submission by Integral Energy, 9 November, p3.

Under the current formulation of the Regulatory Test, NSPs already face a considerable degree of uncertainty about the future "state of the world". That is, as currently formulated NSPs must make various assumptions in relation to how supply investment is likely to evolve with and without the proposed transmission investment. This process already requires an inherent degree of judgement; a status quo scenario that would realistically not eventuate would have little credibility. The Commission then considers that the proposed RFI process would "firm up" this crucial aspect of these scenarios that NSPs must develop, namely, it would provide a more reliable indication of the types of investments that would be considered by proponents in the event that no transmission investment took place.

The Commission also notes that the determination of the likely alternative or alternatives is an objective test for the TNSP, rather than whether an alternative option is likely from the perspective of the particular TNSP. This means that the fact that the TNSP does not wish to build an alternative network investment for arbitrary or capricious reasons, is not sufficient cause for a finding that the alternative network investment is therefore 'unlikely'. This objective assessment of likely alternatives is therefore an issue that can be disputed by market participants and is subject to review and determination by the AER.

Finally, a TNSP may be not prepared to build a particular network alternative because it believes that the project is technically or practically difficult and therefore 'unlikely'. Where there are genuine differences of views as to the practical and technical feasibility of an alternative option, third parties can have recourse to the dispute mechanisms applicable to the Regulatory Test. While this will go part way to resolving this problem, the Commission is also mindful that the Last Resort Planning Power[107] currently being considered for inclusion in the rules, is also designed to partly correct for this eventuality.

Where the comments in relation to the future role of market development scenarios is concerned, the Commission's considerations are as follows. At present, the Regulatory Test requires that the proponent of an investment must investigate the net benefits or costs of an option for a number of "reasonable scenarios", which in turn include "market development" scenarios.[108] These market development

[107] The Last Resort Planning Power is proposed to provide a power to the Commission to direct market participants to undertake the Regulatory Test for identified projects relating to transmission constraints within the national flowpaths and between regions. A Draft Last Resort Planning Power Rule and Determination was released on 23 November.

[108] Version (2) of the Regulatory Test specifies:

> (11) The analysis must include modelling a range of reasonable market development scenarios, incorporating varying levels of demand growth at relevant load centres (reflecting demand side options), alternative project commissioning dates and various potential generator investments and realistic operating regimes. These scenarios may include alternative construction timetables as nominated by the proponent providing that relevant reliability standards would be met. *Market development scenarios* must include:
> a) Committed projects;
> b) Anticipated projects;
> c) Modelled projects; and
> d) any other technically feasible projects identified during the consultation process.

scenarios effectively represent the proponent's expectation of future investment and infrastructure in the NEM.

The Commission's intention underlying the development of the counterfactual analysis is to identify alternative options that are likely but for the proposed network investment, and then undertake the CBA for a range of reasonable scenarios, which include market development scenarios for each option. The RFI processes will clarify the investment intentions of market participants, and assist in the identification of both the likely alternative options to assess, and the development of market development scenarios.

Commission's findings

The Commission has determined that the Rules should specify that, in assessing market benefits augmentations, the Regulatory Test must include a request for information process and take the form of an assessment of the option against the likely alternative or alternatives.

The Commission has modified the Rule to clarify the approach and incorporate the role of reasonable scenarios in the application of the Regulatory Test – Rule 5.6.5A(c).

The Commission also considers that there is merit in clarifying that the terms "likely" and "alternative outcomes" referred to previously refer to the alternative options considered, rather than to the benefits that the alternative investment might deliver, and has amended the drafting of 5.6.5(c)(3) and (5) accordingly.

Submissions – RFI versus Regulatory Test processes

Stakeholders also raised questions about the approach that should be taken in the event that new investment opportunities may come to light in the context of the Regulatory Test (rather than earlier, in the course of the RFI). The issue is then whether a project identified in the course of the Regulatory Test should be excluded from the Test on that basis (because it had not been identified in the course of the RFI).

Commission's considerations and reasoning

In the view of the Commission, this issue can be addressed within the counterfactual framework set out by the Commission:

- If such a project had a commercial proponent and could be deemed "likely", it should not be excluded from the evaluation;

- However, if the project had no proponent, or did not seem particularly likely, then a requirement to include it in the application of the Regulatory Test would seem to raise similar gaming issues that the RFI process is intended to address in the first place, and should be excluded from the evaluation.

Commission's findings

The Commission considers that the identification of "likely" projects should not be limited to the outcome of the RFI process. The drafting of Rule 5.6.5A(c)(4)setting out

the RFI process is therefore separate from Rule 5.6.5A(c)(5), which clarifies application of the term "likely".

Submissions – Scope of the RFI requirement

NEMMCO asks whether the Rule would apply equally to new small and large network assets. Currently consultations on potential new small network assets can be carried out by NSPs as part of the Annual Planning Report (APR) process.[109] NEMMCO considers that if an additional process were required for small network assets, an additional hurdle would hold up the progression of such assets.

Commission's considerations and reasoning

The Commission considers that the requirement for an RFI process should be confined to new large transmission network assets given that:

- This approach would be consistent with the "proportionality" clause in the principles;
- Consultation on new small network assets are carried out by NSPs as part of the APR process; and
- The RFI process is likely to represent a source of costs and will take time to undertake, which are likely to outweigh the potential benefits that such a process could deliver where small investment projects are concerned.

Commission's findings

The Commission has determined that the RFI process should be confined to the application of the Regulatory Test to new large transmission network investments - Rule 5.6.5A(c)(4).

Submissions – Requirement for a commercial proponent

ETNOF highlighted the importance that projects identified via the RFI process should have a commercial proponent.[110]

> *"In this regard it is essential that potential non-network investments only be considered as alternative options when they have a genuine proponent who will commit to the investment in the absence of the network alternative. There must be a genuine commitment otherwise the NSP could defer to the potential non-network investment as delivering greater net benefits, only to find that no investment is made. In these circumstances there would not be any benefits delivered to the market.*

Commission's considerations and reasoning

To an extent, the RFI process proposed by the Commission implicitly requires an investment alternative to have a genuine proponent. That proponent would then respond to the RFI and set out the status and scope of the project or any other relevant details. The Commission also recognises that while the RFI process, in combination with the "likely" criterion to define the counterfactual would increase

[109] Submission by NEMMCO, 3 November 2003, p5.
[110] Submission by the Electricity Transmission Network Owners, 3 November 2003, p5.

the likelihood that a commercial network alternative would realistically be commissioned (compared to a situation where no formal declaration was required), the RFI process would not amount to a financial or other commitment on the part of commercial proponents to undertake an investment. In the view of the Commission, it would not be appropriate to place additional requirements (such as a requirement to commit to the project):

- It is unlikely that an RFI process could be designed to compel proponents of investment alternatives to commit to their proposed investment; and

- In the event that an investment alternative emerged in the course of the RFI, was found to be efficient, but did not proceed, the NSP would be justified in pursuing a transmission option instead.

Commission's findings

The Commission has determined that the RFI process should not include an obligation on the proponent to commit to the investment in the absence of the network alternative.

Submissions – Applicability to the Reliability Limb

The Commission noted in its Draft Determination that stakeholders appear to hold greater concern regarding the market benefits limb of the Test as compared to the operation of the reliability limb of the Test. The Commission also notes the views in submissions that the reliability limb of the Test appears to be delivering timely investment to meet reliability obligations.

The Commission is mindful that the concerns with the identification of alternative projects has arisen in relation to the market benefits limb of the Test, and that there is good reason for retaining a simpler and more timely Test for reliability investments. However, the Commission is also aware that there may be concerns that the operation of the reliability limb of the Test has resulted in sub-optimal investments being justified as least cost at the expense of projects that may have had higher market benefits.

The Commission therefore proposed in this Draft Determination to maintain the current process and assessment for the 'reliability limb', and that the counterfactual process outlined above should relate only to projects assessed under the 'market benefits' limb of the Test. However, the Commission asked for views from stakeholders as to whether, as a result of the Commission's approach for the assessment of alternative projects for augmentations assessed under the market benefits limb of the Test, consequential changes should be made to assessment process for augmentations assessed under the reliability limb of the Test.

VENCorp considered that the RFI principle should similarly apply to the reliability limb:[111]

> *"VENCorp supports a consistent application of the regulatory test to all network augmentations. A consistent application of the regulatory test minimises the possibility of investment distortions."*

[111] Submission by VENCorp, 3 November 2003, p5.

In contrast, ETNOF note that there are a number of provisions already in the Rules that provide opportunities for participants to contribute to the assessment of reliability-driven augmentations and to highlight alternative projects, including the Annual Planning Review (APR), and the public consultation framework for new large network assets.[112] ETNOF therefore do not appear to support the extension of the RFI process to include reliability investments.

Commission's considerations and reasoning

As currently formulated, the Regulatory Test requires that alternatives to reliability investment have a commercial proponent in order to be considered. In principle, this proviso is consistent with an outcome under the RFI process, although it would require a more formalised RFI whereby proponents would have to be prepared to commit to a well-defined investment alternative.

At the same time, and as noted by the Commission:

- The RFI process was designed to overcome specific difficulties that were found to occur with the market limb of the Regulatory Test (namely, an incentive for opponents of a transmission investment to rely on commercial investments that were relatively speculative in nature);

- There are merits in retaining a simpler and timelier Test for reliability investments to minimise the risk of delays to reliability investments; and

- NSPs must already consult on investment options, including small and large reliability augmentations, as part of the APR process.

Overall, it is not clear whether the application of an RFI to large reliability investments would deliver additional benefits beyond the consultation requirements that presently exist, compared to any additional risks of delays. The Commission has not been presented with evidence in relation to the materiality of this issue.

The Commission also notes ERIG's initial views that the application of the market benefits and reliability limb would be better undertaken within the framework of a consistent process, and therefore considers that ERIG is likely to be better placed to consider the future role of the RFI in that context.

Finally, the Commission notes that this issue will need to be similarly considered in the context of replacement and reconfiguration investments in the context of Draft Determination on the Stanwell Rule proposal.

Commission's findings

The Commission has determined that the RFI process should not be extended to include reliability investment. The scope of Rule 5.6.5A(c) has therefore been limited to apply to investment projects intended to deliver market benefits.

[112] Submission by ETNOF, 3 November 2003, p4.

Submissions – Structure of the RFI process

A number of additional matters relating to the broader context of the RFI process were also raised in the course of the Second Consultation.

VENCorp interpreted the RFI process to imply that the NSP would identify the optimal new network investment before considering all genuine and practicable options, and commented that:[113]

> *It is questionable whether the approach proposed by the AEMC delivers benefits as it will effectively require the NSP to pre-judge the outcome of a regulatory test assessment.*

VENCorp proposed that the NSP should instead undertake the RFI, but not identify the proposed network investment at that time. The proposed network investment would then be identified in the course of the application of the Regulatory Test at a later point in time.

VENCorp was further concerned that if, in the course of the RFI process, a better investment alternative was identified, further consultation would be required if this alternative was not deemed to have passed the Regulatory Test. VENCorp therefore asked for clarification that such an alternative option would have passed the Regulatory Test.

Commission's considerations and reasoning

The Commission gave some thought to the structure that any RFI process might take, and whether alternative approaches might be preferable. As set out by the Commission, the RFI process is designed to elicit market responses to an identified network problem (constraint), rather than to identify alternative network solutions. The question which of a number of alternative network solutions would be most efficient is then one that would be assessed in the course of the application of the Regulatory Test (rather than in the course of the RFI).

The Commission does not consider, however, that there would be sufficient merit in prescribing one or another process for identifying and assessing a network constraint. As a practical matter, stakeholders or proponents of investment alternatives may be in a better position to comment or submit alternative investment proposals if they have an understanding of the transmission investment being proposed by the NSP. It is conceivable that, in the course of the RFI, alternatives might emerge that could replace some part of the proposed transmission investment, rather than the investment in its entirety. In the view of the Commission, questions about the appropriate form that the RFI process should take should be addressed in the guidelines to be developed by the AER.

However, the Commission agrees that any duplication of effort that might arise because of interactions between the RFI process and the application of the Regulatory Test should be minimised. That is, in the view of the Commission, if a network alternative has passed the Regulatory Test subsequent to the RFI process, it should be deemed to have passed the Regulatory Test overall, rather than requiring a de novo assessment under the Regulatory Test.

[113] Submission by VENCorp, 3 November 2003, p3.

In addition, the Commission does not intend for the RFI process to absolve a TNSP from seeking alternative options that arising in the context of undertaking the Regulatory Test. The RFI process should simply be considered as evidentiary to the TNSP's assessment of alternative options for meeting the investment need. If no alternative options arise through the RFI process, then the TNSP would still need to satisfy itself whether there were alternative options that are likely in the context of applying the Test.

Commission's findings

The Commission has determined that the Rule should not prescribe the process for undertaking the RFI.

The Commission has determined that the Rule should clarify that an investment alternative that has been identified through the RFI process and is subsequently found to be the most efficient investment option is also deemed to have passed the Regulatory Test.

The revised drafting of the Rule therefore reflects a requirement for an RFI process as part of the application of the Regulatory Test, but does not require an RFI process to be undertaken individually for each project option in question (Rule 5.6.5A(c)(4)).

Furthermore, while the drafting of Rule 5.6.5A(c)(4)requires an RFI process to be undertaken for a new large transmission network asset, it does not prescribe the form of the RFI process. Rather, it places a requirement on the Regulatory Test to require the NSP to publish details of the project that satisfies the Test.

5.4.3 Scope of the Test

MCE's perspective as presented in its proposal

The MCE stated that its proposal should capture the following policy intent:

> *The regulatory test must be used by NSPs in the assessment of all new network investment in accordance with the Rules and with a level of analysis commensurate with the scale and size of the new network investment.*[114]

Submissions

The Group said:

> *We think that the first part of principle 2 (ie the use of the Test) is unnecessary since this is already required elsewhere in the Rules.*[115]

Commission's considerations and reasoning

The MCE proposal includes a principle addressing the issue of what the Test should apply to and who should undertake the Test along with the level of analysis required. While the issue of the level of analysis required has been addressed in

[114] MCE Rule proposal, p4
[115] Submission from the Group, February 2006, p9

Section 5.3 of this Draft Determination, the Commission considered whether the Rule should include a principle in relation to the scope of the Test.

The Commission notes that the issue of what investments the Test is to apply to and who the Test should be used by are already covered in other sections of the Rules.

Section 5.6 of the Rules sets out how the planning and development of the network should be undertaken and the respective responsibilities of distribution and transmission NSPs (DNSPs and TNSPs). Clause 5.6.2 requires DNSPs to undertake a cost-effectiveness analysis of investment options, Clause 5.6.6 sets out processes required to establish a new "large" network asset (including the requirement to apply the Regulatory Test), 5.6.6A in turn sets out the processes required to establish new "small" transmission network assets.

The MCE accepts the approach currently provided for in the Rules in its proposal by noting that the Test "used by Network Service Providers in the assessment of all new network investment in accordance with the Rules".116 As such in the Commission's view, to add an additional principle to the Rule would duplicate other clauses in the Rules without providing any additional benefit. This duplication is not only unnecessary, it may create risks associated with potential inconsistencies if these issues are restated in two separate clauses in the Rules.

Commission's findings

The Commission has determined that the proposed requirement that the Regulatory Test must be used by NSPs in the assessment of all new network investment in accordance with the Rules, not be included in the Rule.

5.4.4 Linkage between the Regulatory Test and NSP revenue regulation

MCE's perspective as presented in its proposal

The MCE proposal stated:

> *The proposed Rule should require the AER to address the extent to which it uses the results of an application of the regulatory test by a NSP, in determining what new network investment or non-network alternative options will be included in the regulated asset base of the NSP for future revenue cap decisions.*[117]

The MCE proposed Rule stated:

> *The AER must ensure that the regulatory test or any guidelines for the application of the regulatory test address the extent to which the AER will use the results of an application of the regulatory test by a Network Service Provider in determining what new network investment or non-network alternative options will be included in the regulated asset base of the Network Service Provider for future revenue cap decisions.*[118]

Submissions

[116] MCE Rule proposal, p4
[117] MCE Rule proposal, p5
[118] MCE Rule proposal, p8

The Group stated:

> *The intended meaning of the MCE's draft clause (e) is unclear to us, but it seems to relate to a need to ensure a clear nexus between the Test and TNSP regulation – in particular, asset valuation. We agree wholeheartedly with this sentiment; it is something that we have promoted in our submission to the AEMC Chapter 6 review.*
>
> *However, we do not think that this is something that the Test or the Test principles can really address. It really lies in the domain of Chapter 6, and is hopefully being addressed currently by the AEMC. We therefore see no need for the clause (e).*[119]

United Energy noted that the MCE Rule proposal stated:

> *New transmission network investment is deemed to satisfy the Regulatory Test if it maximises the Net Present Value (NPV) of the market benefits (or in the case of reliability augmentations, finds the least cost solution) having regard to a number of alternative projects, timings and market development scenarios. Transmission augmentations, which meet this standard should be added to the proponent's regulated asset base.*[120]

United Energy's submission said:

> *This passage establishes a clear and logical linkage between the Regulatory Test and the level of regulated revenue that a Transmission NSP should be permitted to recover. To date, there has not been a clear linkage in the Rules between the Regulatory Test and the revenue setting rules…UED considers that there would be some benefit in strengthening the linkage between the Regulatory Test and the revenue setting Rules, by including a statement in clause 5.6.5A to the effect that, subject to the revenue determination provisions set out in Chapter 6 of the Rules, the costs of transmission augmentations which satisfy the Regulatory Test are to be added to the proponent's regulated asset base. We suggest that this principle be incorporated into the first paragraph of clause 5.6.5A.*[121]

Energy Australia made a similar point:

> *It is a fundamental policy position that distribution and transmission augmentations (both large and small) which satisfy the Regulatory Test (i.e. either maximises the net present value of the market benefits or, in the case of reliability augmentations, finds the least cost solution) should be added to the proponent's regulated asset base. This is not clearly reflected either in the current or change to the Rules, and should be.*[122]

Commission's considerations and reasoning

The Commission recognises that the relationship between the Regulatory Test and the Rules for revenue regulation is critical to ensuring that effective incentives are created for efficient investment. The Commission is of the view that the various elements of the transmission regulatory regime should form a consistent framework to provide a comprehensive set of incentives for a TNSP. To this end the Commission

[119] Submission from the Group, February 2006, p11
[120] Submission from United Energy, 24 February 2006, p1, quoted from Ministerial Council on Energy Rule Proposal p1
[121] Submission from United Energy, 24 February 2006, p2
[122] Submission from EnergyAustralia, p3

has taken into account this relationship in its consideration of the Rules relating to the economic regulation of transmission services and in its assessment of this Rule proposal.

In relation to the relationship between the Regulatory Test and forecast capital expenditure, the Draft Revenue Rule provides that the AER must accept forecast capital expenditure proposed by the TNSP as part of its submission to a regulatory review so long as the Regulatory Test is satisfied ***and*** the AER is satisfied that the forecast expenditure is a reasonable estimate of the amounts required taking into consideration a list of criteria and information. If the AER is not satisfied that it is a reasonable estimate, the Rules provide for the AER to substitute the TNSP forecast expenditure with an amount that the AER considers is a reasonable estimate of the required capital expenditure.

This means that, in the context of the Regulatory Test, the Draft Revenue Rule provides scope for the AER to accept transmission projects which have passed the Regulatory Test, however it does not limit the AER from including in the forecast capital expenditure allowance an amount different from that used by the TNSP in undertaking the Regulatory Test.

In relation to the issues raised in submissions regarding how a project that has passed the Regulatory Test should be treated for the purposes of the Regulatory Asset Base, the Commission considers that this issue is more appropriately addressed in the Commission's assessment of Rules relating to the Regulatory Asset Base as part of the Economic Regulation of Transmission Services Rule proposal.

The Commission also considers that the MCE's proposal that the AER should "address the extent" to which the results of the Regulatory Test should inform the determination of the regulated asset base, is most appropriately addressed as part of the Commission's ongoing consideration of the Economic Regulation of Transmission Services Rule proposal.

The Commission notes that the Draft Revenue Rule adopts a process where:

> *The previous value of the regulatory asset base must be increased by the amount of all capital expenditure incurred during the previous control period…(regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the transmission determination (if any) for that period).*[123]

The Commission notes that under its Draft Revenue Rule, the actual expenditure on any project that passes the Regulatory Test will be able to be added to the Regulatory Asset Base at the start of the first regulatory year of the next regulatory control period[124].

Given the Draft Revenue Rule, the Commission considers that the MCE proposal is inconsistent with the Commission's approach to the treatment of the regulatory asset base in its Draft Revenue Determination. As such the Commission is of the view that the MCE's clause should not be included in the Rule.

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[123] Clause S6A.2.1(f)(1), Chapter 6A of the Rules
[124] Ibid, clause S6A.2.1(f)

Commission's findings

The Commission has determined that the MCE's proposed clause 5.6.5A(e) should not be included in the Rule.

5.4.5 Content requirements for the Test

MCE's perspective as presented in its proposal

The MCE Rule proposal states:

> *The proposed Rule should also set out the various factors that the AER must address in the regulatory test or the associated guidelines and should include at a minimum:*
>
> *1. The classes of possible benefits that may be included as benefits, and classes of possible benefits that may not be included as benefits.*
>
> *2. The method or methods permitted for estimating the magnitude of the different classes of benefits.*
>
> *3. The classes of possible costs that may be counted as costs, and classes of possible costs that may not be included as costs.*
>
> *4. The method or methods permitted for estimating the magnitude of the different classes of costs.*
>
> *5. The appropriate method and value for specific inputs, where relevant, for determining the discount rate to be applied.*[125]

Submissions

Enertrade's submission raised the issue of classification of costs and benefits and noted:

> *Enertrade supports the proposal for the guidelines to include the classes of possible costs and benefits and the permitted methods for their calculation. Greater clarity is also required in respect of the treatment of items such as network support payments. In this regard, Enertrade supports costs being calculated with reference to the market rather than to the network service provider and that wealth transfers are explicitly excluded.*[126]

With regard to timeframes for comparing investments, Enertrade noted:

> *the ability to consistently apply the Regulatory Test requires clarity in respect of the investment analysis process. Enertrade supports greater clarity in respect of the methodology for undertaking the financial analysis of alternative options including the timeframes over which they are assessed.*[127]

[125] MCE Rule Proposal, p5
[126] Submission from Enertrade 24 February 2006, p3
[127] Submission from Enertrade 24 February 2006, p3

Commission's considerations and reasoning

The issue of requirements in the Rules regarding factors that the AER must address in either the Regulatory Test or Test guidelines, and the issue of Test guidelines each address a concern regarding the clarity of the parameters for the Test and how they should be assessed. On this issue, Justice Nettle noted in the SNI judgement that:

> *The test does not define every concept with precision and it thereby leaves a large amount to general principles of cost benefit analysis. It is indeed littered with the need for judgments based upon those principles. The direction that "only costs and benefits (associated with a partial equilibrium analysis) should be included and any additional costs (associated with partial equilibrium analysis) should be excluded from the assessment" assumes a knowledge of economics and econometrics upon which no guidance is given in the verbiage of the text.*
>
> *Similarly, the direction that "the analysis should include modelling alternative development scenarios, incorporating varying levels of demand growth at relevant load centres (reflecting demand side options), alternative project commissioning dates and various potential generator investments and realistic operating regimes" assumes an understanding of economics and engineering which are left at large. Further, as Professor McDonnell observed in his reasons for decision, "many of the concepts scattered throughout the test such as 'market benefits', 'net benefits', 'development scenarios', 'sensitivity analysis' and 'efficient operating costs'....are all terms permitting of optional renderings. And examples can be multiplied.*[128]

Version 2 of the Regulatory Test addresses this issue, in part, through providing additional guidance in its definitions of various components of the Test. However, the Commission considers that there are likely to be benefits in specifying, in broad terms, the factors that the AER must address in the promulgation of the Test.

The Commission considers the categories proposed by the MCE are sufficient to provide those undertaking the Test with confidence regarding key parameters for the Test, and provide the AER with sufficient flexibility in specifying those parameters.

Commission's findings

The Commission has determined that the MCE's proposed clause 5.6.5A(d) should be adopted in the Rule (5.6.5A(c)(2)).

5.4.6 Guidelines for the application of the Test

MCE's perspective as presented in its proposal

The MCE proposed Rule states:

> *The AER must publish guidelines for the application of the regulatory test. The guidelines must be published at the same time that the AER promulgates the regulatory test or subsequently amends the regulatory test.*[129]

The MCE Rule proposal states:

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[128] Murraylink Transmission Company Pty Ltd v National Electricity Market Management Company Ltd & Ors [2003] VSC 265 per Nettle J at [12]

[129] MCE Rule proposal, p8

The proposed Rule should also impose an obligation on the AER to publish guidelines for the application of the regulatory test. This will clarify how the regulatory test should be applied and ensure it is applied consistently by all parties.[130]

Submissions

The Group noted in their submission:

It is unclear how the guidelines will be changed. In the MCE's current drafting, there is no requirement on the AER to undertake any consultation on the Test guidelines, let alone demonstrate that they are consistent with the Test and the Test principles. We believe these requirements should be included. It is also unclear to us whether guidelines can be changed between changes to the Test. We think this should be allowed.[131]

Enertrade's submission noted that:

Enertrade supports the proposal for the guidelines to include the classes of possible costs and benefits and the permitted methods for their calculation. Greater clarity is also required in respect of the treatment of items such as network support payments…

Enertrade also strongly supports a consultative process in the development of the guidelines akin to the processes adopted by the Australian Energy Market Commission with respect to proposed Rule changes. This should ensure the guidelines identify all relevant issues and result in greater clarity for investors in all options.[132]

Commission's considerations and reasoning

The Commission considers that the introduction of a requirement for the AER to produce guidelines will provide further guidance for those undertaking the Test. This will reduce uncertainty for participants, and make the results of the Test more transparent and predictable.

The Commission considers that issues that could be covered by guidelines may include guidance on:

- Methodologies for valuing parameters for the Test;
- The methodology for determining an appropriate discount rate;
- Appropriate assumptions to be made, among other factors; and
- The relevant criteria to be taken into account in establishing a "likely" counterfactual (5.6.5A(c)(5)).

In the view of the Commission, the role of the guidelines would be to provide additional assistance to those undertaking the Test, rather than acting as an additional set of Rules that must be complied with in undertaking the Test. As such,

[130] MCE Rule proposal, p5
[131] Submission from the Group, February 2006, p11
[132] Submission from Enertrade, 24 February 2006, p3-4

the use of the guidelines and compliance with any requirements in the guidelines should not be mandatory.

The Commission has noted the Group's concerns regarding the ability to change the guidelines between changes to the Test. The Commission agrees that there should be appropriate flexibility for the AER in its ability to change the guidelines when it considers a change to the guidelines is necessary. Given the non mandatory nature of the guidelines and their intent as an additional tool to assist an NSP in undertaking the Test, the Commission considers that it is not necessary to specify in the Rules that a consultation process is required to change the guidelines, however the Commission considers that it would be good regulatory practice for the AER to consult on any changes it wishes to make to the guidelines.

Commission's findings

The Commission has determined that the Rule should include a requirement for the AER to produce Regulatory Test guidelines.

5.5 Process for changing the Regulatory Test

This Section deals with the process to be included in the Rules for changing the Regulatory Test.

MCE's perspective as presented in its proposal

The MCE's Rule proposal included a provision for varying the Regulatory Test from time to time. A provision of this sort is required because, since its inception in 1997, the Regulatory Test has undergone a process of more or less continuous revision and reform, and further fine tuning of the Regulatory Test may continue.

To provide for more certainty in the electricity market, the MCE has stated that the process for varying the Regulatory Test should contain certain requirements that need to be met by the AER before an amendment to the Test can be made.

The MCE has stated that the minimum requirements, before an amendment can be made, include that the AER be required to:

- Publish a notice of its intention to review or amend the Regulatory Test;
- Invite and consider submissions from interested parties;
- Publish a draft decision in relation to the review or proposed amendments to the Regulatory Test; and
- Publish a final decision setting out any proposed amendments to the Regulatory Test and its reasons for a final decision.

Submissions

Three submissions received by the Commission directly addressed the issue of changing the Regulatory Test. The Group submitted that it was in favour of the Regulatory Test itself being made a part of the Rules. This being the case, the Group

submitted that the process for changing the Regulatory Test would be the statutory Rule making process provided for in the NEL.

The statutory Rule making process as provided for in the NEL consists of:

- The submission of a Rule proposal by any person;
- A first round of consultation following analysis by the AEMC as to whether the Rule proposal meets certain requirements that are provided for in section 94 of the NEL;
- A second round of consultation following the publication of a Draft Determination and Draft Rule by the AEMC;
- Publication of a Final Determination and Rule by the AEMC; and
- Statutory timeframes for each round of consultation including when the AEMC needs to publish its notice pursuant to section 95 of the NEL to initiate the first round of consultation, the Draft Determination and Draft Rule, and the Final Determination and Rule.

The advantages outlined by the Group in adopting the statutory Rule making process are that:

- Any person can propose a test which brings the combined experience and perspectives of NEM participants in the continuing evolution of the Regulatory Test;
- The sole criterion for assessment by the AEMC would be promotion of the NEM objective which presumably in the Group's view is a sufficient standard to measure effective changes to the Regulatory Test; and
- That AEMC governance of the change process would lead to improved stability and effectiveness of Test design.

As an alternative, the Group submitted that a process similar to the statutory Rule making process but governed by the AER rather than the AEMC, may be provided for in the Rules. The Group outlined that in its view, this alternative was an inferior option because it:

- Would require the construction of a new change process ;
- Would be at odds with AER's culture and role; and
- Would contravene MCE governance principles for the NEM, that Rule making and Rule enforcement be separated.

Furthermore, the Group submitted that should the AER have oversight for changing the Regulatory Test, a specific requirement on the AER to demonstrate how any changes would be in accordance with the new Test principles, should be included as part of the process.

The ERAA submitted that it was in favour of the Regulatory Test being elevated to the Rules, which would be consistent with the AEMC's transmission revenue review where the AER's Statement of Regulatory Principles has largely been made a part of the Rules. Similarly, this would mean that the statutory Rule making test would become the process for changing the Regulatory Test. The ERAA submitted that the advantages of adopting the statutory Rule making process are:

- That the AEMC would have responsibility for assessing changes. The ERAA submitted that the AER should not be in a position to amend key aspects of regulation that it administers and enforces; and

- Key aspects of the Regulatory Test can undergo a formal consultation process where all parties can make an equal contribution.

Macquarie Generation submitted that it supported the submission by the Group that the Regulatory Test be made part of the Rules. Macquarie Generation submitted that as a consequence the AEMC would become responsible for considering amendments to the Regulatory Test, while the AER would retain responsibility for reviewing the application of the test by transmission service providers.

Macquarie Generation submitted that this approach is consistent with the concept of separating Rule making from economic regulation as part of the NEM governance arrangements.

Commission's considerations and reasoning

The Commission notes that the proposed model for changing the Regulatory Test identified in submissions differs substantially from that proposed by the MCE.

The MCE proposal adopts a model where a variation process is incorporated into the Rules and the body that has oversight of this process is the AER. The submissions, on the other hand, are in favour of the statutory Rule making process as being the process for changing the Regulatory Test, where the Regulatory Test would be incorporated in the Rules and a Rule proposal would need to be initiated for any amendment to the Test to take effect. This would see the AEMC as the body charged with oversight of the process for changing the Regulatory Test while the AER and Market Participants would be afforded the opportunity to make submissions.

The Commission is of the view that any change process should be consistent with the aim of the Rules generally to provide added certainty and predictability to participants in the NEM. On the other hand, however, the Commission realises that the Regulatory Test has been revised on a number of occasions since its inception, so a measure of flexibility is required. The Commission is also of the view that the change process should be consistent with similar processes in other parts of the Rules.

The Commission is of the view that the statutory Rule making procedure may not provide enough flexibility for an adequate change process for the Regulatory Test and also notes that the statutory Rule making process overseen by the AEMC would only be in accordance with the NEM governance principles if the Regulatory Test were incorporated into the Rules. The Commission is also of the view that the MCE's Rule proposal may not provide market participants with adequate certainty

Chapter 6A of the Rules provides a process (the Transmission Consultation Procedures) for the AER to amend guidelines that are created and enforced by the AER pursuant to the Draft Revenue Rule. The Commission is of the view that the Transmission Consultation Procedures balances the interests of certainty and flexibility adequately. The Commission also notes that using the Transmission Consultation Procedures as a template for amendments to the Regulatory Test provides for the consistent treatment of amending ancillary documents arising from clauses of the Rules.

In using the Draft Revenue Rule process as a template for the process for changing the Regulatory Test, the AER would be required to publish its amendment to the Regulatory Test and an explanatory note of the amendment, receive submissions and publish a final amendment with reasons and a reference as to how the amendments accord with the principles contained in the Rules. The process also contains statutory timeframes for the completion of each stage.

Commission's findings

The Commission is of the view that the most appropriate process for changing the Regulatory Test is a model based on the Transmission Consultation Procedures.

The Transmission Consultation Procedures increase the AER's accountability compared to the model proposed by the MCE in its Rule proposal as it provides statutory timeframes for each stage of the process.

In adopting this model, the Commission is aware that the AER will have oversight of the change process. The Commission does not consider this to be problematic. The Commission notes that since its inception, the AER has had the ability to amend the Regulatory Test. Providing a process under the Rules would increase the certainty and transparency of the amendment process which would be advantageous to market participants in the view of the Commission.

The Commission has not elevated the Regulatory Test to the Rules in the Rule and therefore it does not consider it appropriate for the AEMC to be the body governing amendments to the Regulatory Test where the amendments would not be part of the statutory Rule making process. The Commission has therefore elected for the AER to oversee the process.

The Commission also notes that the process it has adopted only provides the AER with the opportunity to initiate amendments to the Regulatory Test. The Commission notes however that it does provide for Market Participants to be afforded the opportunity to make submissions to any amendments, proposed by the AER so that there is consultation with the wider sectors of the NEM.

5.6 Savings and Transitional/Implementation of the proposal

An implication of the Commission's Rule Determination is that the current formulation of the Regulatory Test may not be consistent with the Rule the Commission determines to make (and as reflected in the Rule). This Section outlines the Commission's proposed transitional approach to account for the differences

between the current requirements in clause 5.6.5A and the requirements in the Commission's Rule.

The Commission proposed that the most appropriate approach for addressing the savings and transitional issues is for the current Test which is currently made by the AER under clause 5.6.5A to be taken to be consistent with the principles applied to the Test under the new clause 5.6.5A. The Test made under the old clause will be taken to be consistent until the proposed date of 31 December 2007.

The intent of this provision is to allow the AER sufficient time to determine whether the current Test complies with the requirements of the new Rule, and if necessary, publish a new Regulatory Test to ensure consistency with the requirements of the new Rule.

If the AER determines that a change to the Test is required, the AER will be required to apply the new Regulatory Test amendment process, as provided for in clause 5.6.5A(f) of the Rule.

The Commission considers that this approach will ensure that certainty and consistency is maintained for transmission investment decisions within the NEM. The Commission wishes to ensure that required new transmission investments are not affected by the implementation of the new Rule and any subsequent revisions to the Regulatory Test.

For this reason, in addition to creating a transitional arrangement to ensure consistency between the current clause 5.6.5A and the new Rule, the Commission has also sought to put in place transitional arrangements for any applications that rely on the Test or the principles of the Test as made by the AER until the commencement of the new Rule. For these applications, the current clause 5.6.5A and the Test as applied by that clause continue to apply until 31 December 2007.

The applications the Commission proposed to include are:

1. any uncompleted action taken or process commenced under the Rules that relies on the Test at the time of the making of the new Rule.

2. all uncompleted actions and processes that rely on or are referenced to the Test that are still uncompleted on 31 December 2007 or on the date on which any amendments to the Test commence.

The Commission requested for submissions on whether it is appropriate that savings and transitional arrangements apply to 31 December 2007, and whether there are any additional transitional issues arising from its Draft Rule.

Submissions

ETNOF supports these saving and transitional provisions as providing certainty for investment assessments that commence during any transitional period.[133]

[133] Submission from the Electricity Transmission Network Owners, 3 November 2003, p5.

Commission's findings

The Commission has determined that the Rule should include saving and transitional provisions that deem the existing Regulatory Test to meet the requirements of the new principles until 31 December 2007.

5.7 Other Issues

In addition to the issues addressed above, a number of additional issues were identified in submissions received on the MCE Rule.

5.7.1 Threshold for the Regulatory Test

A number of submissions considered that the thresholds at which an augmentation is subject to the Regulatory Test are currently too low, and should be increased.

Citipower/Powercor said:

> *CitiPower and Powercor believe the threshold of $1 million for regulated transmission investment to be subject to the regulatory test is too low placing an unnecessary burden on regulated entities required to apply the test. A project cost of $10 million, aligned with a defined New Large Transmission Network Asset would seem to be a more appropriate threshold.*[134]

Energy Australia said:

> *Connected with the role of the Regulatory Test is its reasonable application. EnergyAustralia considers that the benefits of conducting the Test must be commensurate with the associated costs. The current thresholds above which the Rules require the Regulatory Test to be conducted - $10 million for a new large transmission (or distribution) network asset, and $1 million for a new small transmission (or distribution) network asset – are too low to maintain that cost/benefit relationship. The conduct of the Regulatory Test does impose burdens on the investment process, and it is important to ensure that the burden is reasonable relative to the benefits that can be obtained for smaller projects. EnergyAustralia believes that the benefits of conducting the Regulatory Test on relatively small projects are overwhelmed by the costs associated with conducting the Test. EnergyAustralia suggests that more reasonable thresholds for the definitions of large and small transmission (and distribution) network assets would be $20 million and $5 million respectively.*[135]

In the course of the second Consultation, EnergyAustralia also argued that, given that NSPs are already required to adopt a rigorous approach for large capital investments, the threshold for the test should be lifted from $10 to $35 million.[136] This would be in line with the Commission's working threshold assumption for the application of the Regulatory Test in the Draft Rule for transmission reconfiguration and replacement investments.

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[134] Submission from Citipower and Powercor, 24 February 2006, p2
[135] Submission from EnergyAustralia, 24 February 2006, p4
[136] Submission from EnergyAustralia, 3 November 2006, p4

Commission's considerations and reasoning

The Commission notes that the Rules define a new large transmission network asset as:

> *An asset of a Transmission Network Service Provider which is an augmentation and in relation to which the Transmission Network Service Provider has estimated it will be required to invest a total capitalised expenditure in excess of $10 million, unless the AER publishes a requirement that a new large transmission network asset is to be distinguished from a new small network asset if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a new large transmission network asset.*[137]

A new small transmission network asset, a new large distribution network asset and a new small distribution network asset are described similarly.

The Commission has considered whether this issue is within the scope of this Rule proposal. The MCE proposal seeks to provide improved governance for the Test and improved policy guidance to the AER in its role to make the Test.

The issue of the appropriate thresholds is considered by the Commission to be relating to the implementation of the Test, rather than part of the framework for the Test – it establishes under what circumstances the Test would apply, not how the Test would apply to a project. As such, the Commission is of the view that this issue is beyond the scope of this Rule proposal to address.

The Commission notes that the AER may determine a different amount as a threshold for the application of the Test. Alternatively, if a proponent chose to do so, a Rule proposal could be submitted to the Commission, which the Commission would then consult on and assess against the NEM objective.

Commission's findings

The Commission considers that this issue is beyond the scope of this proposal to address.

5.7.2 An 'objective set of criteria' for a reliability augmentation

The IRPC raised an issue regarding clause 5.6.3(l) of the Rules, which requires the IRPC to produce and publish "an objective set of criteria" for determining whether a new network asset is a *reliability augmentation*, as defined in the Rules.

The IRPC argued that clause 5.6.3(l) is unnecessary and does not further the market objective, and should therefore be deleted. It stated that the IRPC would duplicate what already appears under jurisdictional minimum network performance standards, providing no additional benefits, and may cause a greater risk of dispute due to any inconsistencies between jurisdictional requirements and the IRPC's criteria.

[137] Rules, Chapter 10

The IRPC also raised a second issue, that the Rules definition of *reliability augmentation* is inconsistent with the proposed 'reliability limb' to be included in the Regulatory Test principles. This issue is addressed in Section 5.3.2 above.

MCE's perspective as presented in its proposal

In its proposal, the MCE stated that:

> *To allow NSPs to recover the efficient costs of maintaining a secure and reliable power system for end-users, the regulatory test must reflect the requirement for NSPs to meet network performance standards linked to the technical requirements of Schedule 5.1 of the Rules or in applicable regulatory instruments, while minimising the present value of the costs of meeting those requirements.*[138]

The MCE also stated:

> *Most network investment is undertaken to maintain network performance requirements, including reliability standards. Consequently, if the proposed Rule change promotes efficient investment in the manner described above, the long term interests of consumers of electricity will be promoted in respect to reliability and security of supply. Also, the reliability and security of the national electricity system will be enhanced.*[139]

Submissions

On the issue of whether clause 5.6.3(l) was necessary, the IRPC stated:

> *In April 2003, the IRPC (in an attempt to develop an "objective set of criteria") released draft criteria for assessing whether a proposed network asset was a reliability augmentation for consultation under clause 5.6.3 (I). Submissions received cast doubt over whether the draft criteria were consistent with the glossary definition of reliability augmentation. The IRPC has been unable to develop a workable "objective set of criteria" which are consistent with the glossary definition.*[140]

and

> *So far the regulatory test has been applied to justify reliability network augmentations in the absence of the IRPC's "objective set of criteria". In these applications of the regulatory test no issue has been made of the absence of the IRPC's criteria. Further, the ACCC (and now AER) has reviewed all TNSPs' revenue requirements in its five-yearly revenue resets (including reviewing regulatory test applications to set the regulatory asset base) and it has never made comments on the absence of the IRPC's criteria.*[141]

and

> *Minimum network performance requirements are set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a participating jurisdiction. Each jurisdiction maintains minimum network performance standards which are*

[138] MCE Rule proposal, p4
[139] MCE Rule proposal, p6
[140] Submission from IRPC, 20 February 2006, p2
[141] Ibid

subtly different in nature. In developing an "objective set of criteria" for determining whether a new network asset is a reliability augmentation, the IRPC would duplicate what already appears under jurisdictional minimum network performance standards.

The IRPC believes that a duplication of the jurisdictional minimum network performance requirements within its criteria provides no additional benefits to what is already contained in the jurisdictional requirements. Further, this duplication may cause a greater risk of dispute due to any inconsistencies that may apply between jurisdictional requirements and the IRPC's criteria. Also the development of an objective set of criteria imposes additional compliance cost in the drafting, consultation and maintenance of the criteria.[142]

and

The removal of clause 5.6.3 (1) of the Rule should further the market objective through removing an obligation that places greater risks and costs on the market and adds no additional market benefit to the minimum network performance standards that are already defined in each jurisdiction. The Rules already contain provisions for the proponents of new transmission network assets to justify why they consider that the new small (or large) transmission network asset is a reliability augmentation. These provisions are contained in clause 5.6.2A (b)(5)(iii) for new small transmission network assets and clause 5.6.6 (b)(5) for new large transmission network assets.[143]

Commission's considerations and reasoning

The Commission notes the concerns of the IRPC and also notes that the ACCC/AER have commented on this issue in their submission to the current Energy Reform Implementation Group (ERIG) process. The ACCC/AER stated:

A further step in enhancing the clarity and certainty of the regulatory test is the development of a clear definition of a reliability augmentation for the reliability limb. The IRPC has requested that the AEMC remove the provision in the Rules which requires the IRPC to provide a set of criteria for the definition of a reliability augmentation. Given that the majority of projects are assessed under the reliability limb, it is important to have a clear definition of a reliability augmentation for market transparency and certainty. This will assist the AER in performing its role as the dispute resolution body for the regulatory test. This issue is a difficult one and is tied to the challenges in achieving consistent transmission reliability requirements across the jurisdictions.[144]

Clause 5.6.3(l) currently states:

The Inter-regional Planning Committee must develop and publish, and may vary from time to time, an objective set of criteria for assessing whether a proposed new small transmission network asset or new large transmission network asset is a reliability augmentation, in accordance with the Rules consultation procedures. In developing the objective set of criteria referred to in this clause, the Inter-regional Planning

[142] Submission from IRPC, 20 February 2006, p3
[143] Submission from IRPC, 20 February 2006, p4
[144] Submission from AER/ACCC to ERIG, p11

Committee must have regard to the relevant guiding objectives and principles provided by the AEMC in accordance with clause 5.6.3(n).[145]

Clause 5.6.3(n) currently states:

The AEMC must, in consultation with NEMMCO, provide the Inter-regional Planning Committee with guiding objectives and principles for the development by the Inter-regional Planning Committee of the criteria for assessing whether a proposed transmission network augmentation is reasonably likely to have a material inter-network impact and/or whether a proposed new small transmission network asset or new large transmission network asset is a reliability augmentation under clauses 5.6.3(i) and 5.6.3(l), respectively.[146]

A clear definition and set of criteria for assessing what is considered a reliability augmentation is likely to benefit the market, adding transparency to the investment assessment process under the Test and also ensuring that consumers are not forced to pay for augmentations which may be designated as reliability, but in fact, are not.

It is also relevant to note that the Commission has other ongoing workstreams that address elements of this issue. The Comprehensive Reliability Review currently being conducted by the AEMC Reliability Panel, is addressing the NEM reliability standard and how it interacts with other reliability obligations in the NEM. The Commission's draft report on the Review of Enforcement and Compliance with Technical Standards foreshadowed that the Reliability Panel would conduct a full review of technical standards in the Rules by June 2008.[147]

Considering these issues, it is the view of the Commission that an assessment of whether the IRPC should or should not be required to develop an 'objective set of criteria' for determining a reliability augmentation is beyond the scope of this Rule proposal.

The Commission considers that this proposal addresses the governance framework for the Regulatory Test and the principles that the AER must follow in promulgating the Test. The link between this scope and the IRPC's proposal is limited – as the IRPC has noted in its submission, the Test has operated to date in the absence of this set of criteria. The Test may continue to operate with or without the IRPC criteria being published.

However, consistency and clarity is important. The Rules may operate in a more transparent manner if there was consistency in the definition and criteria for determining what is a reliability augmentation. Investors could be more certain of how their investment would be treated by the regulatory framework and consumers could be more confident that they were not paying for investments classified as 'reliability augmentations' that went beyond the minimum standards for network performance.

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[145] Clause 5.6.3(l), Rules

[146] Clause 5.6.3(n), Rules

[147] AEMC, Review of Enforcement and Compliance with Technical Standards, Draft Report, p30

Therefore, while the Commission is of the view that the IRPC proposal is beyond the scope of this Rule proposal to address, the Commission has made no assessment of the merits of the IRPC proposal. Were the IRPC to propose the matter as a separate Rule proposal, the Commission could consult on the issue and assess the proposal against the NEM objective.

Commission's findings

The Commission considers that this issue is beyond the scope of this proposal.

5.7.3 Application of the Test to DNSPs

A number of DNSPs suggested that it was inappropriate that the Regulatory Test should apply to them.

MCE's perspective as presented in its proposal

The MCE proposal did not address this issue.

Submissions

Citipower/Powercor said:

> *The discussion around the Regulatory Test, including the Attachment A to the letter from the MCE requesting that the AEMC reform the Regulatory Test Principles, considers the issue entirely in the context of Transmission Network investment. However, the proposed Rule, 5.6.5A Regulatory Test, is drafted in such a way that it has application to Distribution network Investment also. This should be readily corrected by amending reference to "Network Service Providers" and "new network investment" to "Transmission Network Service Providers" and "new transmission network investment" respectively.*[148]

United Energy Distribution said:

> *The Regulatory Test is designed to address issues that are considered to be specific to electricity transmission…*
>
> *…The discussion in Attachment A is focused (solely) on transmission issues. It seems clear that the intended application of the Regulatory Test is to be limited to transmission investment…*
>
> *…On the basis of the foregoing discussion, we understand that it is the MCE's intention that Distribution NSPs would not be required to apply the Regulatory Test. However, the drafting of the proposed new clause 5.6.5A of the Rules (set out in Attachment B of the MCE's Rule Change Application) is written in a way which makes the Regulatory Test applicable to both Transmission and Distribution NSPs.*
>
> *In view of the current status of the MCE's work in establishing a national regime for energy network regulation, it would be inappropriate for Rule changes to be made to clause 5.6.5A now without clarifying that the Regulatory Test is to be applied to transmission investment only. UED therefore submits that the proposed new clause*

[148] Submission from Citipower and Powercor, 24 February 2006, p1

5.6.5A should be drafted so as to limit its application to transmission investment only.[149]

Commission's considerations and reasoning

The Commission notes that United Energy Distribution raised the MCE's consultation paper on the establishment of a national regulatory framework for energy distribution and retailing. That paper stated:

> *The formal application of the regulatory test for electricity distributors is an onerous requirement, given the relative size of the majority of distribution investments.*[150]

The MCE consultation paper proposed that:

> *The current provisions in the National Electricity Rules relating to the form of regulation - including the requirement on distributors to apply the Regulatory Test - will be replaced with new proposed Rules relating to the form of regulation.*[151]

and

> *Proposed new distribution network expansion rules – to be applied on a national basis – will replace the regulatory test for distributors*[152].

The Commission notes that the MCE has not finalised its review of distribution and retail regulation. The Commission also notes that the proposal put forward by Citipower/Powercor and United Energy would effectively remove the requirement on distributors to use the Regulatory Test without replacing it with an alternative set of rules relating to distribution network expansion, as by consultation paper.

As such, not only would it be inappropriate for the Commission to act on any preliminary conclusions that may have been made in a consultation paper, the Commission would have to consider what regulatory framework would be most appropriate to replace the Regulatory Test for distributors. Not only would this be beyond the scope of this Rule proposal, it would duplicate other workstreams that the MCE is currently progressing.

The Commission notes that the most appropriate process would be for the MCE to finalise its views on distribution and retail regulation, at which point it would be appropriate to amend the relevant elements of clause 5.6.5A to take account of the MCE's decisions.

Commission's findings

The Commission considers that it should not remove the requirement for DNSPs to conduct the Regulatory Test.

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[149] United Energy Distribution, 24 February 2006, p2,3
[150] MCE, Public Consultation on a National Framework for Energy Distribution and Retail Regulation. Prepared by NERA and Gilbert + Tobin, p23
[151] Ibid, p23, 24
[152] Ibid, p41

6 Rule making test and the NEM objective

Under s.88 of the NEL, the Commission may only make a Rule if "it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective."

The NEM objective, as set out in s.7 of the NEL, is to:

> *promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.*[153]

In Section 5 of this Draft Determination, the Commission considered the likely advantages and disadvantages of the MCE proposal in its contribution to economic efficiency and the performance of the NEM based on the analysis the Commission has undertaken. This Section provides the Commission's assessment of the extent to which the MCE proposal promotes the NEM objective and satisfies the Rule making test.

The Commission considers that there are four areas where the Rule proposal is likely to contribute to the achievement of the NEM objective:

- Better alignment of the Regulatory Test and NEM objective;
- Promotes efficient investment;
- Reduces regulatory uncertainty and sovereign risk; and
- Promotes good regulatory practice.

Better alignment of the Regulatory Test and NEM objective

As noted in Section 5.2, the key purpose of the Regulatory Test is to promote efficient investment. In this sense, the purpose of the Regulatory Test is aligned with the NEM objective. However, as has been recognised in submissions to this Rule proposal, there is concern regarding how effectively this purpose has been achieved by previous and current versions of the Test. Therefore, the Commission is of the view that the Test has not been as effective as it could have been in promoting efficient investment.

The Commission recognises that the Test acts as part of a range of incentives and regulatory instruments to promote efficient investment in network investment or in non-network alternatives. The Test plays a crucial role in this process by filtering alternative proposals, and ensuring that more efficient proposals are promoted at the expense of less efficient proposals.

[153] Section 7, NEL

In the view of the Commission, a number of the elements of this proposal are likely to result in the Test operating more effectively to achieve the purpose of promoting efficient investment, and therefore promote the NEM objective.

A key element of the proposal is providing greater clarity of the policy objectives for the Regulatory Test. By elevating and explicitly stating these policy objectives in the Rules, the Commission considers that the objectives of economic efficiency, predictability, consistency, transparency, competitive neutrality and proportionality are more likely to be reflected, not only in the Test as published by the AER, but in the actions of those parties undertaking the Test. In the Commission's view, the promotion of these objectives allow a clearer, more balanced, and more effective assessment of alternative options to determine whether a project is efficient.

The Draft Rule also provides clear statements of policy which can guide the AER in the promulgation of the Test. This should provide greater certainty that the Test as published will align with the defined purpose of the Test and also with the NEM objective.

Promotes efficient investment

The Commission considers that the Draft Rule's proposed treatment of alternative options is likely to promote more efficient investment outcomes for the market. The Commission's Draft Rule recognises the risk that a project which is determined to maximise market benefits under the current Test may not be built, but due to the operation of the Test will stop a project which has positive market benefits and would have been built from going ahead.

In effect, the Commission's Draft Rule seeks to avoid the chilling result that the Test may have on necessary, and efficient investment. It recognises that the Test is required to be more than an abstract assessment of alternatives, but in fact is required to act to compare and assess *likely* alternatives.

The Commission also considers that the Draft Rule is likely to promote use of the market benefits limb of the Regulatory Test in assessing projects which may have otherwise been assessed under the reliability limb of the Test, as some of the uncertainty and risks of gaming of the market benefits limb should be reduced as a result of the Draft Rule. The Commission considers it likely that greater use of the market benefits limb will promote more efficient decision making as both the costs and benefits of a proposal are assessed. It may also be the case that the project may be able to be justified sooner under a market benefits assessment than would be the case under a reliability limb assessment.

The Commission also considers that by promoting efficient transmission investment, the Draft Rule is also likely to result in more efficient use of upstream generation assets. A more effective Regulatory Test is likely to promote the removal of material network congestion, which should result in a more efficient dispatch of generation assets at prices that better reflect marginal costs, improving both productive efficiency and allocative efficiency in the wholesale electricity market.

Reduces regulatory uncertainty and promotes good regulatory practice

The Commission is of the view that the Draft Rule will provide greater certainty for NSPs in undertaking the Test and by providing Rules for the review of the Test by the AER, provide a stable framework for the Test to be published, reviewed and updated over time.

By providing clearer objectives, a simplified assessment process and scope for guidelines for the application of the Test, the Commission considers that the Draft Rule will reduce the risk that the operation of the Test itself will deter efficient network investment from taking place.

The proposed Rule's improved governance structure for the Test is likely to promote good regulatory practice. By specifying the requirements for the Regulatory Test in the Rules, NSPs can have greater confidence in the Test and how it should be applied. The separation of the Rule making function and the Rule application/enforcement functions for the Test should also provide NSPs and investors with greater confidence in the application of the Test.

The new governance structure should also provide a better balance codifying the framework and policy requirements for the Test in the Rules and the role of the AER in administration and implementation of the Test. In this sense, the governance arrangements for the Regulatory Test will align with the governance arrangements for NSPs under the Commission's Rules for the regulation of electricity transmission revenue and prices. This consistency of approach to governance is likely to provide a stronger, more consistent regulatory framework for network investment and the market as a whole.

7 Appendix A: Rule as made

See separate attached Rule as made.

Appendix B: History of the Regulatory Test

The following describes the development of the Regulatory Test. This is not intended to be a complete chronological history of all developments regarding the Regulatory Test, but to provide a guide to relevant stages in the development of the Test.

- **Customer benefits test.** The customer benefits test formed part of the original National Electricity Code authorised by the ACCC on December 10, 1997. The relevant clause stated that in making a determination on whether an augmentation was justified, NEMMCO must "*consider the augmentation from the perspective of maximising net benefits to Customers*".[154] The ACCC approved the Code with a number of conditions, including that in assessing potential augmentations, the Inter-regional Planning Committee was required to consider alternative strategies to network augmentation for removing or reducing network constraints. The ACCC also required NEMMCO, in making a determination as to whether an augmentation was justified, to consider alternatives to network augmentation including, but not limited to, alternative generation and demand side options.

  Regarding the customer benefits test, the ACCC did note that "*the Code places no requirement on NEMMCO to obtain a least cost solution, instead it is to look at what option maximises net benefits to customers. The Code's definition of customers refers to persons that register with NEMMCO as customers and hence maximising the net benefits to customers criteria may not be consistent with maximising the overall public benefit.*"[155]

- **NEMMCO SANI assessment.** In December 1997, the proponents of the SANI interconnector between NSW and South Australia, Transgrid (NSW) and ETSA Transmission Corporation (SA), applied to have the SANI project deemed a regulated interconnector. The Transitional Inter-Regional Committee (TIRC) was established by the relevant jurisdictions to undertake the inter-regional planning functions on a temporary basis, including the evaluation of the proposed SANI interconnector. Several members of the TIRC had a perceived conflict of interest and the TIRC decided that the evaluation should be performed by NEMMCO.

  NEMMCO performed the evaluation of SANI using the Customer Benefit test. NEMMCO used economic and legal consultants to ensure the methodology and the process were consistent with the Code requirements.

[154] National Grid Management Committee, National Electricity Code, October 1996, clause 5.6.5(k)
[155] ACCC, Application for authorization, National Electricity Code, 10 December 1997, p148-149

In June 1998, NEMMCO published their determination. NEMMCO's report concluded that the Customer Benefit test was not robust and therefore could not show that the proposed SANI project provided a Customer benefit.[156]

Following the NEMMCO determination on SANI, the NSW Government took the view the Customer Benefits test was deficient and placed it on the NEM issues register, meaning the National Electricity Market (NEM) would not commence until the issue was resolved to their satisfaction.

- **Regulatory Test code changes.** On 23 July 1999, NECA applied to the ACCC for authorisation of Code changes to replace the Customer Benefits test with a Regulatory Test, which was to be determined by the ACCC. The ACCC authorised the Code change on 20 October 1999. The Code change provided a definition of the Regulatory Test, required the ACCC to ensure the Test was consistent with its assessments of asset values, and required all NSPs to apply the Test in determining which network augmentations should proceed. It also required the Inter Regional Planning Committee and NEMMCO to apply the Test when considering possible system augmentations.

- **Regulatory Test version 1.** Ernst & Young were engaged by the ACCC to assist in developing the Regulatory Test, resulting in a report published in March 1999. The Ernst & Young report made the following recommendations on the Regulatory Test:

    - The Chapter 5 transmission augmentation criterion should be based on net benefits accruing to generators and customers (both wholesale and retail).

    - The relevant benefits to measure are those that can also be captured by non-regulated alternatives: for example, savings in costs associated with energy and ancillary services, and improvements in reliability, priced at a level consistent with spot market mechanisms. Only those "external" benefits and costs which are the subject of current or reasonably-anticipated government laws and regulations, and therefore required to be factored into investment decisions - such as Environmental Protection Authority requirements - should be included within the analysis.

    - The test should require an augmentation to maximise benefits. This should mean that the proposed augmentation delivers more anticipated benefits than any identifiable alternative across a range of (although not necessarily all) forecast scenarios.[157]

    After considering the Ernst and Young report, the ACCC developed the Regulatory Test, "based on the traditional cost-benefit analysis framework but with a number of clarifications to limit any adverse impacts that regulated network investments might have on the

[156] Parliament of South Australia, Economic and Finance Committee, Report on the South Australian Energy Market, p83

[157] Ernst and Young, Review of the assessment criterion for new interconnectors and network augmentation, p4-5

competitive processes in the contestable parts of the industry."[158] Elements of the Test included:

- Reference to net public benefits rather than the original net customer benefits;
- Calculating the net benefits of the various options with reference to the underlying economic cost savings and not with reference to pool price outcomes which may be distorted by market participants exercising market power;
- Partial equilibrium analysis, excluding from the analysis the costs and benefits associated with competitive, non-electricity, market activities;
- Including in the analysis only those environmental impacts that governments or their environment agencies have sought to redress;
- Using the discount rate that would be used by participants in contestable markets; and
- Relying on forecasts of future market behaviour based on both assumptions of a competitive market as well as actual market behaviour.[159]

- **SNI.** In October 1998, Transgrid submitted a new application for a NSW South Australia interconnector, following a route south of the River Murray, known as the 'SNI'. In April 1999 Murraylink announced its intention to develop a merchant interconnector over a similar (but shorter) route to SNI. On 30 July 1999, TransGrid requested NEMMCO to suspend consideration of SNI pending finalisation of the revised regulatory test. In March 2000, Transgrid requested that NEMMCO and the IRPC recommence evaluation of SNI based on the newly promulgated ACCC regulatory test. In April 2001, Murraylink commenced construction along a similar route to SNI.

  On 19 September 2001, the draft report of the IRPC recommended that SNI did not satisfy the Regulatory Test. In October 2001 TransGrid revised SNI to include more transmission reinforcement works in NSW. On 1 November 2001, the final report of the IRPC recommended that SNI now satisfied the Regulatory Test. NEMMCO confirmed this in its Determination on 6 December 2001.

  On 21 December 2001, Murraylink applied to the National Electricity Tribunal for a review of this decision. On 31 October 2002, the Tribunal upheld NEMMCO's decision by a 2-1 majority. On 28 November 2002, Murraylink secured a judicial review of the Tribunal's decision, in the Victorian Supreme Court. On 24 July 2003, the Supreme Court held in favour of the Tribunal on most grounds but in favour of Murraylink's appeal on two grounds. It remitted the decision back to the Tribunal for reconsideration.

[158] ACCC, Regulatory Test for New Indicators and Network augmentations, p(i).
[159] Ibid, p(i-ii)

In the majority decision on the Tribunal stated:

> *The most significant issue in the proceedings was whether the Tribunal should have regard to USNI*[160] *as an alternative project. It is common ground that USNI contributes a greater part of the net present value of SNI and if undertaken by itself would result in a higher rate of return than SNI. It is also common ground that acceptance of USNI as an alternative project would mean that SNI does not maximise net present value of market benefit*[161]

The majority held that USNI should not be considered an alternative project as it had no proponent and was therefore not commercially feasible.

Key issues in the Supreme Court judgement were:

1. The use of cost-benefit analysis. Murraylink claimed that "*the Tribunal erred in law in holding or proceeding on the basis that it was not necessary to apply general principles of cost-benefit analysis in the application of the Regulatory Test*".[162] The Court held that the question was whether the cost benefit analysis had been carried out in accordance with generally accepted standards of cost benefit analysis as conditioned by the Regulatory Test. There was expert evidence before the Tribunal to support a number of competing views as to whether or not it had been. On the basis of that evidence Professor McDonnell took one view and the majority took another. The majority were entitled to do so.

2. SNI as an alternative project. Murraylink claimed that the Tribunal should have considered USNI as a practicable alternative to the SNI proposal. The Court agreed that "*the Tribunal was bound in law to make an objective assessment of whether unbundled SNI (USNI) was a practicable alternative and that it erred in law by deciding the question on the subjective basis that TransGrid refused to be a proponent of USNI.*"[163]

3. Basis of significant risk of stranding. Murraylink claimed, as the Court rephrased it, that the Tribunal had failed to make clear the basis of its finding that there was a significant risk of stranding if TransGrid constructed unbundled SNI. The Court agreed with this claim.

Murraylink entered commercial operation in October 2002. On 18 October 2002, Murraylink applied for conversion from merchant status to regulated status. On 1 October 2003, the ACCC approved the conversion to regulated status and set a revenue cap.[164]

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[160] USNI, or 'unbundled SNI' was a more limited version of the SNI interconnector project.
[161] National Electricity Tribunal, Reasons for decision in the matter of an application for review of a NEMMCO determination on the SNI interconnector dated 6 December 2001, the Hon Jerrold Cripps and Professor Douglas Williamson, p 26
[162] Murraylink Transmission Company Pty Ltd v National Electricity Market Management Company Ltd & Ors [2003] VSC 265 per Nettle J at [2]
[163] Murraylink Transmission Company Pty Ltd v National Electricity Market Management Company Ltd & Ors [2003] VSC 265 per Nettle J at [23]
[164] Stephen Littlechild, Regulated and Merchant Interconnectors in Australia: SNI and Murraylink Revisited, p8-9

- **Network and Distributed Resources Code changes.** On 21 December 2000, NECA submitted Code changes to the ACCC for approval, focusing on the process for network planning and augmentation. NECA stated that the purpose of its application was to "*put network service providers in the driving seat by giving them primary responsibility for the decision-making process on new regulated network investments*".[165] The ACCC approved the package on 13 February 2002, with a number of changes.

  The NDR amendments involved two major changes. Firstly, the responsibility for the application of the Regulatory Test for inter-regional augmentations was devolved from NEMMCO to TNSPs. Secondly, the distinction between inter and intra-regional network augmentations was removed and replaced with a distinction between new large and small network assets. A new large network asset is defined as an augmentation that a TNSP estimates will require a total capitalised expenditure in excess of $10 million. A new small network asset is an augmentation that a TNSP estimates will require a total capitalised expenditure in excess of $1 million but not greater than $10 million.

- **Regulatory Test version 2.** On 10 May 2002, commenced a review of the Regulatory Test, releasing an Issues Paper which highlighted specific concerns raised by interested parties with the operation of the Regulatory Test. The ACCC released its final determination on 11 August 2004. A number of changes were made to the Test including the addition of 'competition benefits' and better definition of specific terms used in the Test. The main definitional amendments to the Test were:

  - Alternative options – Under the 'reliability limb' of the Test, an alternative is required to be considered a genuine alternative. However, consistent with the decisions on SNI, it is not necessary under the 'market benefits limb' of the Test to have an identifiable proponent;

  - Market benefits and costs – a non-exhaustive list of market benefits and costs was included;

  - Committed projects and anticipated projects definitions were made consistent with those used in the Statement of Opportunities (SOO);

  - Value of Lost Load (VoLL) – the reference to VoLL was replaced with a reference to the value of electricity to consumers;

  - Sensitivity Analysis – a non-exhaustive list of parameters that should be considered by NSPs when testing the robustness of the analysis was introduced;

[165] NECA, Network and Distributed Resources Code change, Application to ACCC for authorisation, p1

- Reliability limb –the 'minimising-cost' approach in version 1 of the Test was replaced with a 'least cost' approach for the reliability driven augmentations; and

- Expected value – the 'market benefits limb' was revised to include the term 'expected'. The ACCC stated this was to ensure that the Test is consistent with the generally accepted principles of cost-benefit analysis upon which it is based.

Version 2 of the Test also allowed competition benefits to be assessed. Competition benefits were defined as the change in benefit between the scenario where, after implementation of the option:

> *(a) generator bidding is assumed to be the same as it was before the option was implemented; and*
>
> *(b) generator bidding reflects any market power after the implementation of the option*
>
> *or another reasonable measure that can be demonstrated to produce an equivalent change in benefit.*[166]

Due to the complexity of modelling competition benefits, NSPs have the discretion to choose when to calculate them.

- **MCE Statement on Transmission.** The MCE December 2003 Report to COAG was a further step in the development of the Test. The MCE stated:

> *A new regulatory test will be implemented to recognise the full economic benefits of transmission including where transmission is the most efficient means of mitigating market power. The new test will remove inefficient impediments to regulated transmission in dispute resolution, and information requirements. The MCE will develop code changes for implementation in July 2004. These changes will take account of the ACCC's current review of the regulatory test.*[167]

The 2005 MCE Statement on Transmission provided more detail on the MCE intention:

> *The Australian Competition and Consumer Commission (ACCC) has undertaken significant work in 2004 to amend the Regulatory Test, which now includes competition benefits as part of the Regulatory Test. The ACCC's work also delivers a reasonable framework for the removal of existing biases against the development of regulated transmission investment.*
>
> *The MCE will develop Regulatory Test Principles that provide minimum coverage guidelines for the AER to apply in promulgating the Regulatory Test. The MCE will submit the Regulatory Test Principles to the AEMC for consideration as MCE-initiated Rule changes. The purpose is to provide a level*

[166] Version 2 of the Regulatory Test.
[167] Ministerial Council on Energy, Report to the Council of Australian Governments, Reform of Energy Markets, p11.

of certainty in the AER's development of the Regulatory Test for transmission investments.[168]

This statement led to the current Rule change proposal before the Commission.

[168] Ministerial Council on Energy, Statement on NEM Transmission, p2

Appendix C: Summary of Regulatory Test Workshop

On 4 July 2006, the Commission held a workshop on the Reform of the Regulatory Test Principles Rule proposal. The intention of the workshop was to ensure that the Commission understood the history, context and major issues with the current Test, as well as an understanding of the economic and policy issues that the Test seeks to address. The attendees at the workshop were Darryl Biggar, Henry Ergas, Greg Houston, Danny Price, Geoff Swier, AEMC Commissioners and Commission staff.

This appendix provides a summary of the issues discussed at the workshop. The discussion was wide ranging, with different perspectives on issues. This summary represents a combined set of comments from workshop participants.

Why do we need a Regulatory Test?

Participants discussed why a Regulatory Test is necessary. It was suggested that institutional arrangements tend to mean that transmission is favoured over other forms of investment, although, that may not necessarily be true in terms of interconnection. There is a risk of opportunism by TNSPs, in that transmission investment can expropriate the returns of generation investments that generators would otherwise have expected to obtain. This creates a risk for locationally specific assets.

Network investment acts as the interface between the competitive and regulated part of the market. There is a risk that transmission can 'crowd out' other investment options, which may arise because the culture of a stand-alone transmission business will tend towards network solutions, there may exist incentives on boards and management to over-invest so as to 'avoid blame' if the lights go out, or the regulatory environment may offer more attractive risk-adjusted returns for transmission than the wholesale market does for generation.

Role of the Regulatory Test

Participants at the workshop noted that the Regulatory Test is only one element in the network investment framework. In facilitating efficient network investment there are a number of functions:

- An information function – which is principally achieved through NSP Annual Planning Reports and the NEMMCO Annual National Transmission Statement.
- A filtering function – which is principally achieved through the Regulatory Test.
- A process for dealing with those investments that should occur but otherwise do not – which may occur through the revenue regulation of the NSP and reliability standards.

In this context, participants considered that the role of the Regulatory Test was to promote investment, but also stop inappropriate investment. In performing this role the Test acts as a filter in ranking network and non-network options, with the effect

of disallowing the preferred network option where as a consequence of the Test, it is seen as not the most optimal. It was also noted that the Test also has a role in information revelation.

It was noted that the role of the Test is not about identifying network investment rather it is about determining if there are other alternatives that would be superior. The Test acts to promote investment, as once a proposal has passed the Test, the investment is more likely to happen. In this sense it provides NSPs with a degree of comfort that there is some degree of protection to carry out the project.

How a Test should be designed

Participants noted that designing institutions and processes to guide investment decisions at the interface between competitive and monopoly markets is a difficult policy challenge. The fundamental difficulty is in designing a process that socialises decision-making while retaining incentives for truthful revelation of information.

The complexity lies in the design and allocation of decision rights. The allocation of decision rights in situations where there are third party effects (externalities) inevitably creates a tension between:

- The risk of misalignment of costs and benefits, when third party effects are not fully taken into account;
- Collective action problems, and associated pathologies, when decision-making is socialised, creating problems associated with:
    - Private information and associated inefficient bargaining; and
    - Rent-seeking and other influence activities.

By making the TNSP the decision maker, you are asking a TNSP to put aside its private interest and act in the public interest. As such there needs to be a framework in place to help make that assessment.

Another issue identified was consistency between the Test and revenue regulation. It was considered that this is a basic element in incentive compatibility**.** For example, if a goal is to ensure TNSPs make use of non-transmission alternatives, then the revenue mechanism and incentives should be consistent with that objective.

What are the problems with the current Test?

Participants also discussed concerns with the current Test and the intention underlying the MCE's Rule change proposal. Issues included:

- **Interconnection.** It was noted that a concern for the MCE was interconnection and promoting inter regional investment. In considering the Test it is important to distinguish between incentives for intra- regional investment and incentives for interconnection. It is relevant to note that the majority of investment is intra-regional. Interconnection problems may be compounded

by state-based transmission arrangements. It was noted that there was not currently a logical obligation on a party to plan interconnections.

- **Certainty for TNSPs.** There was a concern that no TNSP would want to 'run the gauntlet' of the market benefits limb of the Regulatory Test, and therefore TNSPs focused on serving their state defined customer area. It was noted that the MCE proposal reflected a concern that more interconnection has not occurred because of lack of certainty for TNSPs, although it was also noted that the number of economic interconnection project may be limited.

- **Uncertainty about how the Test is to be performed.** Prescription, application and conduct of the Test is an issue, however, that is distinct from the regulatory consequences of the AER's role in revenue regulation. It was noted that the MCE proposal reflected a concern that clarity in the operation of the Test was necessary, as a result of the controversy regarding how the Test is to be conducted and how it is to be used. At a more specific level, it was suggested that additional clarity should be provided on the definition of the project being analysed and the definition of appropriate alternative projects. It was noted that terms such as "genuine", "practical", and "commercial" may be too vague to be useful in the analysis. Additional clarity could also be provided on the costs and benefits to be included.

- **Gaming of the Test.** Concerns were raised regarding the scope for gaming of the Test. Although it was noted that these issues may be difficult to overcome, gaming could be seen in the proposal of alternative options, the basis of project commitment, the use of scenarios and how conclusions are drawn from the variety of scenarios. The data to be used for assessment may also be subject to gaming. It was noted that the use of different tests for reliability and market benefits investments also has the potential to cause gaming. As the Test for reliability is a cost effectiveness test, this may create a bias for NSPs to allocate costs to reliability investments.

- **Cost-benefit analysis.** It was also noted that there are limitations in the use of cost-benefit analysis, and that cost-benefit analysis does not solve every problem and has many inherent limits. Two strengths of cost benefit analysis are that it can help screen out very poor proposals, and imposes a common framework for the information stage of policy evaluation. It was noted that there are high returns in trying to standardise some aspects of that evaluation process. However, there is an inescapable exercise of discretion in reasonable decision-making.

Objectives for the Regulatory Test.
Participants also discussed the objectives of the Regulatory Test. It was considered that the NEM objective should guide the Test. Economic efficiency is also an objective, to achieve optimal investment in, and use of, transmission capacity, generation capacity and demand side measures.

Other objectives included achieving competitive neutrality as between transmission, generation and demand side investments, and preventing regulated transmission businesses from crowding out efficient investment in generation or demand-side management. Reducing the information asymmetry regarding the location and

timing of potential 'investment needs' was an important consideration, thereby improving the prospects for market-based, non-network solutions to come forward. Although it was recognised that the Test is not the primary mechanism for information disclosure.

It was noted in the assessment of alternative options, commerciality is not equivalent to having a proponent. For example, if the best option is grid support, there may not be an actual proponent, but if the TNSP put out a tender it may induce a proponent to come forward. A consequence of the Test may be for the TNSP to find a proponent. Annual Planning Reports may have a role in this process.

It was also noted that if the Test is to act as a filter, clarity is needed on what is being filtered. The appropriate assessment process should be "but for the transmission project, is it likely that the alternative will proceed?" It was noted that if the project is commercial, the project is likely to proceed.

It was also noted that it is not actually necessary to identify the best alternative, but only the commercial alternatives as it was noted that there ought to be a rule that if the project is denied, the alternative project will actually happen. Otherwise, the result is that the market is simply denied the benefits arising from the project.

Participants also considered that the Test needs to be sufficiently clear and capable of consistent application, to ensure that it is robust to the litigation that will inevitably occur.

Appendix D: Regulatory Test (Version 2)

Preamble

This *regulatory test* has been promulgated by the AER in accordance with clause 5.6.5A of the National Electricity Rules (NER).

In this test "option" includes, but is not limited to, an *augmentation*, a *new large network asset* and a *new small network asset*.

The regulatory test

(1) An option satisfies the *regulatory test* if:

a) in the event the option is necessitated solely by the inability to meet the minimum network performance requirements set out in schedule 5.1 of the NER or in relevant legislation, regulations or any statutory instrument of a participating jurisdiction - the option minimises the present value of *costs*, compared with a number of *alternative options* in a majority of *reasonable scenarios*;

b) in all other cases - the option maximises the expected net present value of the *market benefit* (or in other words the present value of the *market benefit* less the present value of *costs*) compared with a number of *alternative options* and timings, in a majority of *reasonable scenarios*.

For the purposes of this test:

(2) Costs means the total cost of an option (or an alternative option) to all those who produce, distribute or consume electricity in the National Electricity Market.

a) In determining the costs, the analysis may include, but need not be limited to, the following:

b) costs incurred in constructing or providing the option;

c) operating and maintenance costs over the operating life of the option;

d) the cost of complying with existing and anticipated laws, regulations and administrative determinations such as those dealing with health and safety, land management and environment pollution and the abatement of pollution (including greenhouse gas abatement). An environmental tax should be treated as part of a project's cost. An environmental subsidy should be treated as part of a project's benefits or as a negative cost.

e) other costs that are determined to be relevant to the case concerned.

(3) Alternative options means:

a) For an option proposed in accordance with paragraph 1(a) of this test:

(i) a genuine alternative to the option being assessed, in that it:

(A) has a clearly identifiable proponent; and

(B) meets the requirements referred to in paragraph 1(a);

(ii) a practicable alternative to the option being assessed in that it is technically feasible.

b) For an option proposed in accordance with paragraph 1(b) of this test:

(i) a genuine alternative to the option being assessed, in that it:

(A) delivers similar outcomes to those delivered by the option being assessed; and

(B) becomes operational in a similar timeframe to the option being assessed;

(ii) a practicable alternative to the option being assessed in that it is:

(A) technically feasible; and

(B) commercially feasible, which is to be demonstrated by determining whether an objective operator, acting rationally according to the economic criteria prescribed by this test, would be prepared to construct or provide the alternative option.

The existence of a genuine proponent for the *alternative option* should be taken into account when determining practicability, however, absence of such a proponent will not exclude a project from being an *alternative option* for the purposes of the regulatory test.

(4) Reasonable scenarios means scenarios incorporating:

a) reasonable forecasts of:

(i) electricity demand (modified where appropriate to take into account demand-side options, variations in economic growth, variations in weather patterns and reasonable assumptions regarding price elasticity);

(ii) the efficient operating costs of competitively supplying energy to meet forecast demand from existing, committed, anticipated and modelled projects including demand side and generation projects;

(iii) the avoidable costs of committed, anticipated and modelled projects including demand side and generation projects and whether all avoidable costs are completely or partially avoided or deferred;

(iv) the cost of providing sufficient ancillary services to meet the forecast demand; and

(v) the capital and operating costs of other regulated network and market network service projects that are augmentations consistent with the forecast demand and generation scenarios;

b) scenarios defined as market development scenarios; and

c) sensitivity testing.

(5) Market benefit means the total benefits of an option (or an alternative option) to all those who produce, distribute and consume electricity in the National Electricity Market. That is, the change in consumers' plus producers' surplus or another measure that can be demonstrated to produce an equivalent ranking of options in a majority of reasonable scenarios. For clarity, market benefit does not include the transfer of surplus between consumers and producers.

In determining the *market benefit*, the analysis may include, but need not be limited to the following benefits:

a) changes in fuel consumption arising through different generation dispatch;

b) changes in voluntary load curtailment caused through reduction in demand-side curtailment;

c) changes in involuntary load shedding caused through savings in reduction in lost load, using a reasonable forecast of the value of electricity to consumers, or deferral of reliability entry plant;

d) changes in costs caused through:

(i) deferral of market entry plant. This must be excluded if reliability benefits are determined using deferral of reliability entry plant;

(ii) differences in capital costs;

(iii) differences in the operational and maintenance costs; and

(iv) deferral of transmission investments;

e) changes in transmission losses;

f) changes in ancillary services;

g) competition benefits; and

h) other benefits that are determined to be relevant to the case concerned.

(6) Competition benefits means the change in benefit between the scenario where, after implementation of the option:

a) generator bidding is assumed to be the same as it was before the option was implemented; and

b) generator bidding reflects any market power after the implementation of the option

or another reasonable measure that can be demonstrated to produce an equivalent change in benefit.

(7) The market benefit of an option will only include competition benefits where:

a) the option is a new large network asset or a new large distribution network asset; and

b) the Network Service Provider responsible for undertaking the analysis of the option determines that it is appropriate, in all the circumstances, to take competition benefits into account in assessing the market benefit of the option.

(8) In determining costs or market benefits, any cost or benefit which cannot be measured as a cost or benefit to producers, distributors and consumers of electricity in terms of financial transactions in the market should be disregarded. The allocation of costs and benefits between the electricity and other markets must be based on principles consistent with the Transmission Ring-Fencing Guidelines and/or Distribution Ring-Fencing Guidelines (as appropriate). Only direct costs and benefits (associated with a partial equilibrium analysis) should be included and any additional indirect costs or benefits (associated with a general equilibrium analysis) should be excluded from the assessment.

(9) In determining the costs or market benefits, it should be considered whether the proposed option will enable:

a) a Transmission Network Service Provider to provide both prescribed and other services; or

b) a Distribution Network Service Provider to provide both prescribed distribution services and other services.

If it does, the *costs* and *market benefits* associated with the other services should be disregarded. The allocation of costs between prescribed and other services must be consistent with the Transmission Ring-Fencing Guidelines. The allocation of costs between prescribed distribution services and other services must be consistent with the relevant Distribution Ring-Fencing Guidelines.

(10) The present value calculations must use a commercial discount rate appropriate for the analysis of a private enterprise investment in the electricity sector. The discount rate used should be consistent with the cash flows being discounted.

(11) The analysis must include modelling a range of reasonable market development scenarios, incorporating varying levels of demand growth at relevant load centres (reflecting demand side options), alternative project commissioning dates and various potential generator investments and realistic operating regimes. These scenarios may include alternative construction timetables as nominated by the proponent providing that relevant reliability standards would be met.

Market development scenarios must include:

a) Committed projects;

b) Anticipated projects;

c) Modelled projects; and

d) any other technically feasible projects identified during the consultation process.

(12) Committed project means a project which satisfies all the following criteria:

a) the proponent has obtained all required planning consents, construction approvals and licenses, including completion and acceptance of any necessary environmental impact statement;

b) construction of the proposal must either have commenced or a firm commencement date must be set;

c) the proponent has purchased/settled/acquired land (or commenced legal proceedings to acquire land) for construction of the development;

d) contracts for supply and construction of the major components of the plant and equipment (such as generators, turbines, boilers, transmission towers, conductors, terminal station equipment) should be finalised and executed, including any provisions for cancellation payments; and

e) the financing arrangements for the proposal, including any debt plans, must have been finalised and contracts executed.

(13) Anticipated project means a project which:

a) does not meet each of the criteria in note 12; and

b) is in the process of meeting one or more of the criterion in note 12.

(14) Modelled project means a project (other than a committed project or anticipated project) modelled using either 'least-cost market development' modelling or 'market-driven market development' modelling:

a) Least-cost market development modelling means modelling projects based on a least-cost planning approach akin to conventional central planning. The proposals to be included would be those where the net present value of benefits, such as fuel substitution and reliability increases, exceeds the costs.

b) Market-driven market development modelling means modelling spot price trends based on existing generation and demand and includes new generation developed on the same basis as would a private developer (where the net present value of the spot price revenue exceeds the net present value of generation costs). The forecasts of spot price trends should reflect a range of market outcomes, ranging from short run marginal cost bidding behaviour to simulations that approximate noncompetitive bidding or imperfect competition, with power flows to be those most likely to occur under actual systems and market outcomes.

(15) The calculation of the costs or market benefits must encompass sensitivity testing on key input variables. Sensitivity testing may be carried out on, but not limited to, the following, and should be appropriate to the size and type of project:

a) Market benefits:

(i) Using all reasonable methodologies; and

(ii) Testing reasonable forecasts of the value of electricity to consumers.

b) Capital and operating costs of alternative options.

c) Discount rate (the lower boundary should be the regulated cost of capital).

d) Market demand.

e) Generation bidding behaviour using:

(i) SRMC; and

(ii) Approximates of realistic bidding if measuring competition benefits.

f) Commissioning dates of:

(i) Alternative projects;

(ii) Committed projects;

(iii) Anticipated projects; and

(iv) Modelled projects.

g) Market based regulatory instruments that may be used to address greenhouse and environmental issues.

h) Other sensitivity testing determined to be relevant and material to the case concerned.

(16) Any relevant information which may have a material impact on the determination of costs or market benefits which comes to light at any time before an assessment is finalised must be considered and made available to interested parties.

(17) This version of the regulatory test (version 2) comes into operation from the date of its promulgation, subject to the following transitional provisions.

The version of the *regulatory test* in operation immediately prior to the promulgation of version 2 of the *regulatory test* continues to apply in relation to:

a) possible options for which a Distribution Network Service Provider has commenced consultation under clause 5.6.2(f) or an economic cost effectiveness analysis under clause 5.6.2(g) prior to the promulgation of version 2 of the regulatory test;

b) a new small network asset for which a Transmission Network Service Provider has set out the matters required under clause 5.6.2A(b)(4) and (5) in an Annual Planning Report published before 30 June 2004. The AER can substitute a later date if a Transmission Network Service Provider does not publish its Annual Planning Report by 30 June 2004 (as required by clause 5.6.2A(a) of the NER);

c) a new small network asset not identified in an Annual Planning Report for which a Transmission Network Service Provider has published a report required under clause 5.6.6A(c) prior to the promulgation of version 2 of the regulatory test; and

d) a new large network asset for which a Transmission Network Service Provider has published an application notice under clause 5.6.6(b) prior to the promulgation of version 2 of the regulatory test.