

Australian Energy Market  
Commission

**National Transmission  
Planning Arrangements**

Final Report to MCE

30 June 2008

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## **About the AEMC**

The Council of Australian Governments, through its Ministerial Council on Energy, established the Australian Energy Market Commission (AEMC) in July 2005 to be the Rule maker for national energy markets. The AEMC 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 AEMC initiative.

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## Foreword

The Australian Energy Market Commission (AEMC) has been directed by the Ministerial Council for Energy (MCE) to conduct a Review into the development of a detailed implementation plan for new national electricity transmission planning arrangements. This Review is an important element of the reforms agreed to by Council of Australian Governments' directed at achieving a fully national electricity transmission grid. The objectives of the Review is to:

- establish a National Transmission Planner whose principal task is to inform the market on the strategic and efficient development of the grid; and
- develop a new project assessment and consultation process, replacing the current Regulatory Test, to ensure that investments are assessed against both meeting reliability standards and their ability to maximize benefits to the national market.

This Final Report presents the AEMC's recommendations for the implementation of a national electricity transmission planning function and revised project assessment and consultation process for transmission investment. We have consulted widely with stakeholders through the course of this Review and analysed a wide range of policy options and considerations.

The transmission grid plays a crucial role in facilitating competition and efficient resource use in Australia's wholesale and retail electricity markets. The AEMC has developed a set of recommendations which supports the development of a efficient national grid consistent with best regulatory practice.

The AEMC has also identified the need to reform the economic regulation of transmission network service providers in respect of transmission charging across regional boundaries, in order to support efficient and co-ordinated transmission planning across regions.

The arrangements governing investment in, and operation of, the national electricity transmission grid and its contribution to the efficient performance of the NEM have recently undergone significant reform. Government policy initiatives in response to climate change – including emissions trading and the expanded mandatory renewable energy target – will create new challenges for planning efficient transmission development. The recommendations contained in this Final Report will enhance the ability of the market to respond to those challenges.

John Tamblyn

Chairman

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## Abbreviations

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ANTS	Annual National Transmission Statement
APR	Annual Planning Report
COAG	Council of Australian Governments
Code	National Gas Code
Commission	see AEMC
DNSP	Distribution Network Service Provider
DSP	Demand Side Participation
ERIG	Energy Reform Implementation Group
ERAA	Energy Retailers Association of Australia
ESAA	Electricity Supply Association of Australia
ESIPC	Electricity Supply Association of Australia
ETNOF	Electricity Transmission Network Owners Forum
EUAA	Energy User Association of Australia
IRPC	Inter Regional Planning Committee
ISC	Implementation Steering Committee
ISO	Independent Systems Operator
kV	Kilovolt
JPB	Jurisdictional Planning Body
Law	National Electricity Law
LRMC	Long-run Marginal Cost
LRPP	Last Resort Planning Power
MAR	Maximum Allowed Revenue
MCE	Ministerial Council on Energy
MNSP	Market Network Service Provider
MOWG	Market Operator Working Group
NCAS	Network Control and Ancillary Services

NEL	National Electricity Law
NER/Rules	National Electricity Rules
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NEO	National Electricity Objective
NPV	Net Present Value
NSP	Network Service Provider
NTFP	National Transmission Flow Path
NTP	National Transmission Planner
NTPAC	National Transmission Planner Advisory Committee
NTNDP	National Transmission Network Development Plan
Panel	Reliability Panel
RFI	Request for Information
RIT-T	Regulatory Investment Test for Transmission
SCO	Standing Committee of Officials
SO	System Operator
SOO	Statement of Opportunities
TNSP	Transmission Network Service Provider
TO	Transmission Operator
TUoS	Transmission Use of System
VCR	Value of Customer Reliability
VENCorp	Victoria Energy Network Corporation

## Summary

This is the Final Report of the Australian Energy Market Commission (AEMC or Commission) on establishing national transmission planning arrangements for the National Electricity Market (NEM).

The Final Report sets out recommendations and supporting reasoning in three areas, and provides draft legal text in the form of proposed changes to the National Electricity Law (NEL) and National Electricity Rules (the Rules) to give practical effect to the recommendations. The three areas are:

- Establishing a National Transmission Planner as one of the functions of the proposed new Australian Energy Market Operator (AEMO);
- Creating a new process of consultation and assessment by Transmission Network Service Providers (TNSPs) when considering network investment, to replace the current Regulatory Test; and
- Reforming the framework of economic regulation for TNSPs to reflect the new arrangements.

### Context for the Review

The MCE's direction to the Commission followed a review by the Energy Reform Implementation Group (ERIG), which reported to the Council of Australian Governments (COAG) in January 2007. The ERIG Report highlighted a range of matters relating to the energy market and supporting regulatory framework. Key elements of the ERIG report endorsed by COAG at its meeting on 13 April 2007 included the creation of an AEMO and strengthened national transmission planning arrangements. Subsequently, the MCE directed the Commission to undertake this review.

The MCE also directed the Commission to undertake a review of transmission planning standards for reliability across the NEM, with a view to providing for a nationally consistent framework. The Commission requested the Reliability Panel to provide advice on this and their Draft Report was published on 24 April 2008. The Commission will provide a Final Report to the MCE setting out its recommendations on a nationally consistent framework by 30 September 2008.

The MCE direction requires the Commission to develop a detailed implementation plan for the National Transmission Planner (NTP), and for a new process of consultation and assessment for transmission network investments to replace the current Regulatory Test. COAG and the MCE have provided a degree of guidance and prescription on the characteristics of the new arrangements. Specifically, it is required that:

- The AEMO will be directly responsible for undertaking the functions of the NTP;
- The NTP will publish a National Transmission Network Development Plan (NTNDP) each year. The NTNDP will outline the long-term, efficient

development of the power system, including future and current capability of the national transmission network and development options;

- The NTNDP will not replace local planning or bind transmission companies to specific investment decisions, override TNSP performance standards, or constrain the timeframes for the revenue approval process for transmission companies. Nor would it bind the Australian Energy Regulator (AER); and
- The process of consultation and assessment for transmission investments to replace the current Regulatory Test will remove the current distinction between mandatory reliability and discretionary economic investments and ensure that all market benefits, including national market benefits, are properly considered across the range of relevant options.

In developing this Final Report the Commission has consulted extensively within the framework provided by COAG and the MCE. A Scoping Paper was published in August 2007 and an Issues Paper was published in October 2007. A public forum was held in April 2008 supported by a published Discussion Paper. Following consideration of the views raised at the public forum, the Commission released a Draft report on 2 May 2008.

All the relevant material generated through this consultation process can be found on the Commission's website. The Commission has supplemented this extensive public consultation process with a series of bilateral meetings with key stakeholders.

## **Establishing a National Transmission Planner**

### *Establishment and functions*

The Commission recommends that the NTP, its functions and the associated governance arrangements are defined in the NEL. The NTP is a key COAG initiative and should have commensurate visibility and permanence as a feature of the regulatory regime for the NEM. The AEMO responsibility for the NTP functions, and the objective of the NTP, should also be defined in the NEL. The NTP objective should refer directly to, and maintain the primacy of, the National Electricity Objective.

The core function of the NTP is to prepare and publish the NTNDP each year. The Commission recommends that this be supported by a requirement for the NTP to publish a database of information, data and methods used in producing the NTNDP. A high-quality NTNDP will be based on robust and demonstrably transparent analysis. The obligation to publish a database of information used to derive the plan will contribute significantly to this goal.

The focus of the NTNDP should be strategic and long term, looking out 20 years at a minimum. The Commission recommends that the strategic nature of the NTNDP is given practical effect by focusing the NTNDP on National Transmission Flow Paths (NTFPs). The scope of the NTNDP includes all those transmission elements which are part of or materially affect the transfer capacity of the NTFPs. The NTNDP will map out development strategies under a range of scenarios for the efficient delivery

of transmission capability across the NTFPs. The development strategies are likely to involve a combination of network and non-network solutions and assess the optimisation of generation and transmission investment. The precise pattern of the NTFPs may change over time, and may vary across planning scenarios, and this framework enables the NTP to respond dynamically to changing circumstances and new information while avoiding the risk of being drawn into the detail of localised planning issues.

The NTNDP will be a substantial improvement on the current Annual National Transmission Statement (ANTS). The NTP will be required and resourced to produce its own development strategies, including, its own transmission investment options. The NTNDP will therefore be less reliant on conceptual augmentations suggested by the TNSPs. The NTNDP will look at both reliability and market benefits projects and will provide a deeper and longer term scenario-based assessment of power system development to the market.

#### *The NTP and local transmission planning*

The NTNDP and the shorter-term investment planning activities of the TNSPs should work to complement each other in promoting efficient outcomes for consumers. The Commission recommends that the NTP must have regard to the Annual Planning Reports of each TNSP in preparing the NTNDP, and that each TNSP must have regard to the NTNDP in their Annual Planning Reviews. TNSPs must also explain how their investment plans relate to the NTNDP in their Annual Planning Reports, and the NTNDP will also contain a consolidated summary and commentary on the Annual Planning Reports of each of the TNSPs.

Additionally, the Commission recommends that the NTP has the discretion to make submissions to the consultation processes undertaken by each TNSP under the Regulatory Investment Test for Transmission, and by the AER in determining the revenue allowances of each of the TNSPs based on forecasts of required expenditure submitted by the TNSPs. The NTP should make submissions where the proposed investment affects the NTFPs, given that this will be the NTP's area of detailed knowledge and expertise.

#### *Focus and accountability*

The NTP is a priority COAG initiative to facilitate the efficient future development of the national transmission network. It is being established at a time when the tightening energy supply-demand balance and market responses to prospective climate change policies are highlighting the importance of timely and efficient network investment.

There are many benefits in the AEMO undertaking the functions of the NTP. These include the efficient use of technical resources and the ability to understand and take into account interactions between the gas and electricity networks and markets. However, the NTP will be established at the same time as the AEMO itself is being created with a number of other new functions as well as the ongoing NEMMCO functions. It will therefore be important to ensure that the transmission planning function has clear focus, visibility and accountability and access to the relevant technical experience and expertise. This is reflected in the Commission's

recommendations to establish an expert Advisory Committee - the National Transmission Planner Advisory Committee (NTPAC) - to support AEMO's NTP functions, with a review in five years time of the continuing need for a NTPAC; the requirement for the AEMO to consult on a work plan of the NTP; and broad and inclusive consultation in developing the NTNDP and publication of an associated database of analyses and assumptions.

Maintaining focus and transparency to stakeholders over how the NTP function is being prioritised, resourced and implemented will be particularly important because the value of the NTNDP for stakeholders, including prospective investors in the NEM, will depend on its credibility as an analytically robust and balanced document.

Noting that the AEMO will also be the system operator and a planner and procurer of gas and electricity transmission assets in Victoria (the Vencorp functions) appropriate transparency and accountability arrangements for the planning function will increase the confidence of market participants in the balance and credibility of the NTNDP.

### **Creating a new project consultation and assessment process for TNSPs**

The Commission's recommended new process of consultation and assessment for transmission investment, termed the Regulatory Investment Test for Transmission (RIT-T), provides for a single framework to apply to all transmission investment. As required by COAG, it removes the current distinction between reliability-driven projects and projects motivated by the delivery of market benefits.

The RIT-T framework will require consultation on the range of credible options for any given transmission issue, and consultation on a comparative analysis of costs and benefits using a standardized list of classes of costs and benefits. The RIT-T will only apply when the capital cost of any of the technically and economically credible options exceed \$5m in value, with the exception of urgent or unforeseen investments, investments related to the provision of connection or negotiated services, and transmission projects which only involve replacement.

The purpose of the new RIT-T is to identify the transmission investment option which maximizes the net economic benefits, and where applicable, meets deterministic reliability standards. This will involve four significant changes to the current Regulatory Test as it applies to transmission companies. First, it increases substantially, the amount of consultation on the options that are available to address any given transmission issue. This will reduce the risk that efficient options are overlooked. Second, it applies more rigor and consistency to the analysis of costs and benefits before transmission investment is undertaken. Again, this is likely over time to promote more efficient decision making. Third, it brings within the scope of the RIT-T network reconfigurations and projects which combine replacement and augmentation. Fourth, the proposed RIT-T will facilitate earlier consultation in the planning process thereby enabling other potential viable non-network options to be identified and assessed appropriately. This consultation will also enable market participants to identify possible national market benefits associated with the projects thereby ensuring that broader market benefits are recognised under the project assessment process.

### *Appropriate balance between proper assessment and timely investments*

In specifying the RIT-T there is a risk of increasing the administrative burden on TNSPs – the costs of which are ultimately borne by consumers – without delivering commensurate benefits. The Commission is recommending that this risk is appropriately managed by requiring the TNSP in each application of the RIT-T to identify and consult on which classes of benefits are likely to be materially relevant to the decision being made. The TNSPs will need to apply judgment, supported by reasoning and analysis, to justify the specification of the RIT-T in any given case, and stakeholders will have the opportunity to comment.

Also the Commission is recommending including a provision that enables the TNSPs to conduct a limited form of consultation for projects a) which only meet localised reliability needs and b) where no party has raised an alternative at the specification consultation stage that could deliver material market benefits. This will ensure that projects which are justified solely on reliability grounds are delivered in an efficient and timely manner.

In addition, the Commission is proposing to add more clarity and specification to the dispute resolution process to minimise the possibility of the planning process being unnecessary delayed.

### *Regulatory Test for Distribution*

A consequence arising from the introduction of new RIT-T arrangements is that the current regulatory test will continue to apply for projects which address a need on distribution networks. The Commission recognises that consideration of the appropriate project assessment for distribution networks is being conducted.

### *Climate Change Impacts*

As noted above, these reforms are taking place at the time of tightening energy supply-demand balance and increasing focus on the impacts to climate change and the policy response to climate change. Therefore it is important that the RIT-T can accommodate these developments and ensure that the relevant instruments which value carbon are treated appropriately. The Commission notes that further consideration on this issue is required once the relevant policies have been finalised.

### **Alignment of TNSPs Revenue Determination periods**

The MCE direction required the Commission to consider the case for aligning the dates of all TNSP revenue determination periods. The Commission, in the light of its review of the issues, does not recommend alignment. The costs of implementation are likely to be significant, while the benefits would not appear to be material. The publication of the annual NTNDP and the contingency project mechanism will help to facilitate national co-ordinated investment.

The Commission does, however, note that alignment of transmission and distribution re-sets within a particular geographic area might have merit. The AER is about to commence the regulatory resets for the New South Wales transmission and distribution network providers simultaneously. This will be instructive as to

whether alignment of transmission and distribution resets should be applied more broadly across the NEM.

### **Reforming inter-regional transmission charging**

A key policy issue facing the development of a national and co-ordinated electricity market is how to allocate costs for projects that deliver market benefits over more than one jurisdiction. Currently a TNSP recovers its own costs of building and operating the network from customers within its region. Under the Rules, deviations from this approach require inter-governmental negotiation and agreement. While the issue of inter-regional charging is not formally within the scope of the MCE direction, the Commission considers it to be closely linked to the underlying objective of promoting a more efficient, nationally co-ordinated transmission network.

The absence of effective arrangements for recovering the costs of transmission across regional boundaries reduces the cost-reflectivity of transmission charges, and has the potential to influence investment planning. A lack of cost-reflective charges can reduce efficiency, and has distributional impacts across classes of customer. These issues are likely to be more significant over time as the NEM become more integrated and interconnected.

The Commission has identified four approaches to reforming inter-regional charging. The initial view is that the load export charge option is the best option as it will promote efficient price signals and would be the most straightforward to implement. However further analysis of the options is required and stakeholders should be given further opportunity to consider the issues and input into the selection of the recommended option. Therefore we recommend that the MCE request the Commission to conduct a more detail review with stakeholders consultation on the appropriate mechanism for implementing a formal inter-regional transmission charging arrangement.

### **Implementation**

The Commission is recommending that the NTP functions and powers are implemented through a combination of legislative amendments to the NEL and a series of amendments to the NER). These amendments will form part of the general package of reforms necessary to implement AEMO, and will therefore need to be accommodated within the wider set of legislative changes being developed by the AEMO implementation working group.

An important issue for consideration is the first publication date for the NTNDP. The content and scope of the NTNDP will be greater than the current ANTS and will require additional modelling capabilities and resources compared to the ANTS. An appropriate framework for managing the transition from producing the last ANTS to the first NTNDP is required.

The Commission considers that, if practicable, it will be of benefit to the market for the first NTNDP to be published by December 2009. However this will require a series of additional steps. Also it would have to be recognised that the first NTNDP

might be more limited than subsequent NTNDPs, due to pressure of time and resources.

With regard to the implementation of the new RIT-T, the Commission considers that it might be appropriate and expedient to progress this through the fast tracked Rule change process, rather than through the process of AEMO implementation. This would enable an earlier implementation of the RIT-T than would otherwise be the case, which in turn enables the AER to begin the important process of developing new guidelines sooner. Also it would provide stakeholders with a further opportunity to comment on the detailed legal text before it is implemented in the Rules.

# 1 Introduction

This Final Report sets out the Australian Energy Market Commission's (AEMC or Commission) proposed recommendations to the Ministerial Council on Energy (MCE ) to implement a strengthened national electricity planning function and a revised network planning and consultation process to replace the current Regulatory Test. The Commission was directed to undertake a review on these matters by the MCE in July 2007.

This chapter introduces the Final Report by briefly outlining the following:<sup>1</sup>

- The policy context for the review
- The Commission's approach and process
- The structure of the Final Report.

## 1.1 Policy context for the review

### 1.1.1 The MCE's direction to the AEMC

As part of the reform process initiated by Council of Australia Governments (COAG), in response to the Energy Reform Implementation Group (ERIG) recommendations<sup>2</sup> on achieving a fully national and efficient energy market, the MCE<sup>3</sup> requested the Commission to conduct a Review on the implementation of a strengthened national electricity transmission planning function.

The MCE directed the Commission to deliver a detailed implementation plan including the most appropriate legislative amendments and rule changes to implement COAG's response to ERIG's recommendations on Electricity Transmission Planning and Regulation (COAG Communiqué). The COAG Communiqué sets out the scope of the review to:

- Develop an implementation plan for the national transmission planning function, that includes arrangements for the preparation of a minimum 10 year National Transmission Network Development Plan (NTNDP) to be updated annually;
- Develop revised transmission network planning and consultation process to replace the current 'Regulatory Test' with an assessment process that amalgamates the reliability and market benefits criteria of the current Test and expands the definition of market benefits to include national benefits; and

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<sup>1</sup> Further information on the background and context of this Review has been provided in the Commission's Scoping Paper and Issue Paper.

<sup>2</sup> Energy Reform Implementation Group, *Energy Reform: The Way Forward for Australia*, January 2007.

<sup>3</sup> Under Section 41 of the National Electricity Law.

- Consider the case for simultaneous determination of Transmission Network Service Provider (TNSP) revenue caps, in place of the current sequential reviews to further reinforce the national character of planning arrangements.

The COAG Communiqué also provides guidance on the required characteristics of the national transmission planning function for which the Commission is required to develop a detailed implementation plan, including that:

- Where possible, the new regime must at a minimum be no slower than the present time taken to gain regulatory approval for transmission investment;
- There must be provision for urgent and unforeseen investment to be made, when required;
- The NTNDP must not be binding on transmission companies;
- The AER is to have regard to the NTNDP when making revenue determinations, but the AER is not to be bound by it;
- The jurisdictional roles of VENCORP and ESIPC are to be preserved; and
- Accountability for transmission investment, operation and performance should remain with TNSPs.

### 1.1.2 Related policy issues

#### **Nationally consistent framework for transmission reliability standards**

The MCE has also directed the Commission to review the jurisdictional transmission reliability standards and provide advice on developing a consistent national framework. The MCE requires the Commission to provide a final report by 30 September 2008.

The Commission has requested the Reliability Panel (Panel) to consider and provide advice on this issue. The Panel has released a draft report on 24 April 2008, which set out a range of possible options to implement a consistent framework.<sup>4</sup> The Panel will submit a final report by 30 July 2008. The Commission will consult on the Panel's recommendations and also consider the Panel's advice in the context of the Commission's other recommendations to the MCE concerning: the role and functions of a National Transmission Planner (NTP), and the new Regulatory Investment Test for transmission (RIT-T).

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<sup>4</sup> AEMC Reliability Panel 2008, *Towards a Nationally Consistent Framework for Transmission Reliability Standards*, Transmission Reliability Standards Review - Draft Report, 23 April 2008.

## **Demand Side Participation Review**

The Commission is currently undertaking a review into Demand Side Participation (DSP) in the NEM.<sup>5</sup> The objective of this review is to determine whether there are barriers or disincentives within the Rules for the efficient uptake of demand side participation in the NEM.

The first stage considered DSP in the context of the Commission's current work program in order to develop recommendations that can be considered in the context of the relevant Rule change proposals and Reviews. The Commission engaged NERA Economic Consulting to undertake an assessment of DSP in the context of that work program and released the NERA's recommendations report on 16 May 2008.<sup>6</sup>

In its report, NERA provided a series of recommendations relating to how they considered demand side participation could be better facilitated through both the new NTP arrangements and the new project assessment process for transmission investment.

In this Final Report, the Commission explains how it has addressed NERA's recommendations in the development of the new arrangements.

## **AEMO Implementation**

A key component of the reforms agreed to by COAG in response to the ERIG report is the establishment of a national energy market operator (Australian Energy Market Operator or AEMO). The AEMO will be responsible for the operation and administration of the power system (currently performed by NEMMCO) and will also be the planned Gas Market Operator. It will also take over the functions currently performed by VENCORP, including the electricity transmission planning and procurement function for Victoria. The MCE established a National Market Operator Working Group (MOWG) to provide recommendations on the implementation of the AEMO. A synopsis of the work of the MOWG was published on 12 March 2008.<sup>7</sup>

## **Other related AEMC work**

This Review has been conducted in the context of a wider series of policy reform in relation to the provision of transmission services and the regulation of transmission companies. In addition to the Demand Side Participation Review, the key changes and review processes since October 2005 which set the wider context for the NTP Review are:

- Rule changes in respect of the Economic Regulation of Transmission Services;

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<sup>5</sup> AEMC, Statement of Approach on its Review of demand side participation in the NEM (3 March 2008).

<sup>6</sup> This can be found on the AEMC website: <http://www.aemc.gov.au>

<sup>7</sup> MCE, Australian Energy Market Operator Implementation Plan Synopsis, 12 March 2008.

- Last Resort Planning Power (LRPP);
- 2006 Review of Regulatory Test Principles;
- Comprehensive Reliability Review;
- Congestion Management Review; and
- Review on Impacts of Climate Change Policies (recently announced and yet to be finalised).

Appendix B provides more detail on the policy and status of these reforms.

Further, during the course of this Review, the Commission received two Rule change proposals which related to issues being considered under this Review. The first Rule Change was proposed by the Total Environment Centre (TEC).<sup>8</sup> The TEC's rule change proposal sought to facilitate the increased use of demand-side resources by placing requirements and incentives on supply-side participants to investigate and then undertake demand side solutions. The Commission is currently preparing its draft Rule determinations on both of these proposals.

The second rule change was proposed by Grid Australia (formerly known as ETNOF) and sought the following<sup>9</sup>: to increase the regulatory test thresholds for new large and small augmentations; to index the Regulatory Test's monetary thresholds to movements in the Producer Price Index; and to require TNSPs to disclose certain information on all proposed replacement network assets in excess of 5 million dollars in their Annual Planning Reports (APRs).

## **1.2 The Commission's approach and process**

### **1.2.1 Consultation process**

The Commission has consulted extensively with market participants and other stakeholders to inform the preparation of these recommendations. This was a key requirement specified in the MCE Terms of Reference. The process has included:

- Scoping Paper released on 3 August 2007;
- Issues Paper published on 9 November 2007;
- Discussion Paper released on 28 March 2008;
- Public Forum held in Melbourne on 2 April 2008; and

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<sup>8</sup> Total Environment Centre, *Rule Change Proposal- Demand Management and Transmission Networks*, November 2007.

<sup>9</sup> Grid Australia (formerly known as ETNOF), *Regulatory Test Thresholds- Rule Change Proposal*, 21 November 2007.

- Draft Report published on 2 May 2008.

The Commission has also held a number of briefing sessions and bilateral meetings with stakeholders. Appendix A sets out the points made in submissions to the Draft Report and the Commission's policy response to each point.

In developing its policy recommendations, the Commission has sought advice from a number of consultants. Firecone assisted the Commission with respect to the national transmission planning function; Frontier Economics provided advice on the revised Regulatory Test and the Brattle Group assisted in regard to international approaches to transmission planning.

The Commission has published the following series of consultancy reports relating to this Review<sup>10</sup>:

- "International Review of Transmission Planning Arrangements" prepared by the Brattle Group. This study provides a factual description of transmission planning arrangements in international markets with similar characteristics to Australia.
- "The Evolution of Transmission Planning Arrangements in Australia" prepared by Firecone. This report contains a detailed, factual description of the development of transmission planning arrangements for the NEM.
- "Models of Inter-Regional Transmission Charging" from Brattle Group. This report describes the possible approaches to inter-regional charging arrangements, drawing from international experience and provides advice on how to address issues relating to the development of an inter-regional charging system, and
- "Advice on the application of Options for an Inter-Regional Charging Mechanism to the NEM" prepared by Frontier Economics. This report provides advice on the possible application of four options for implementing an inter-regional charging mechanism developed by the Commission.

### **1.2.2 Decision making Criteria for the Review**

In undertaking all of its functions, including this Review, the Commission is required by the NEL to have regard to the National Electricity Objective (NEO), which is to:

*Promote efficient investment in, and efficient use of, electricity services in 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.*

The Commission has interpreted the NEO as encompassing productive, allocative and dynamic efficiency and also taken the scope of the NEO to cover the means by which regulatory arrangements operate as well as their intended ends.

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<sup>10</sup> Copies available on AEMC website.

In the Issues Paper, the Commission set out the following decision making criteria for the Review:

- Consistency with the specific wording of, and the broad intent underpinning, the direction provided by the MCE to the Commission in its letter of 3 July 2007;
- Solutions which promote more efficient outcomes over time, and which are proportionate to the materiality of the problems being addressed;
- Application of good regulatory practice and design;
- Application of effective corporate governance and accountability principles; and
- Minimisation of implementation costs and risks – including costs associated with any duplication of functions.

In developing its recommendations, the Commission has evaluated the possible options against these criteria, having regard to the submissions made by stakeholders.

Also in applying principles of good regulatory practice and design, the Commission has taken into consideration the principles identified by the Taskforce on Reducing Regulatory Burdens on Businesses Report.<sup>11</sup>

The reasoning as to why the recommendations meet these Review criteria is set out in the subsequent chapters.

### 1.3 Structure of the Final Report

The following chapters of the Final Report set out different areas of recommendations. Each chapter starts with a short summary of the recommendations, followed by a more detailed discussion of individual policy positions and the supporting reasoning. Where relevant, the chapters refer to the draft legal text contained in the appendices.

- **Chapter 2** discusses the roles, functions and governance arrangements of the National Transmission Planner;
- **Chapter 3** addresses the NTNDP. It discusses the appropriate the scope of the NTNDP and explains its proposed content;
- **Chapter 4** discusses the framework for the RIT-T, in particular the amalgamation of reliability and market benefits and the treatment of national market benefits;
- **Chapter 5** covers the proposed revenue and pricing framework including the issue of inter-regional transmission charging regime and the timing of transmission companies revenue determinations;

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<sup>11</sup> Taskforce on Reducing Regulatory Burdens on Businesses, <http://www.regulationtaskforce.gov.au>

- **Chapter 6** provides the Commission's recommendations on the transfer of the various Inter Regional Planning Committee (IRPC) functions into the new arrangements;
- **Chapter 7** provides advice on the implementation of the new arrangements; and
- **Chapter 8** considers how the NTP and RIT-T relate to the regulatory and market framework more generally.

In addition, Appendices C and D contain the proposed legislative amendments and Rule changes for the NTP and new RIT-T.

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## 2 NTP objective, functions and governance

### Summary of our final recommendations:

- The functions of the NTP are undertaken by AEMO. The AEMO Board is the decision maker in respect of all NTP functions;
- The primary function of the NTP is to publish an annual plan (NTNDP). It will be required to consult annually on the preparation of the NTNDP and to also publish a database of assumptions methods and input data used in developing the NTNDP;
- The NTP has the discretion to make submissions to TNSP consultations under the RIT-T, and to AER consultations in respect of revenue cap resets. This only applies where the transmission issues relate to capability across the National Transmission Grid;
- The NTP has a number of advisory functions: to undertake reviews at the request of the MCE; and to advise the AEMC both in respect of the Last Resort Planning Power (LRPP), and on general matters relating to the development of a national transmission grid;
- The responsibility for the IRPC functions is transferred to the NTP;
- The NTP Objective is: “is to contribute to the achievement of the national electricity objective in a manner that promotes the efficient, strategic and co-ordinated, long term development of the national transmission grid.”. In undertaking its functions, it must also make regard to a number of supporting considerations;
- The AEMO board establishes a NTP Advisory Committee to support it in undertaking the NTP functions. The NTP Advisory Committee shall be established in the National Electricity Law;
- The arrangements for the NTP Advisory Committee must be reviewed within the first 5 years of operation; and
- Each year, AEMO consults on a work-plan for the NTP functions, and separately identifies the NTP expenditure in its overall budget.

### Introduction

This chapter sets out the key policy recommendations on the objective and functions of the NTP, and supporting Advisory Committee, as well as the governance arrangements required to give effect to those functions. The set of recommendations reflects a balance between establishing a new national transmission planning function that has focus, credibility and will encourage efficient transmission and generation investment, while at the same time recognising that accountability for investment will remain with TNSPs.

The prevailing view among submissions was that the Commission had struck the balance right in its Draft Report on the overall design for the National Transmission Planner. Grid Australia supported the overall proposals put forward by the Commission in relation to the NTP and NTNDP.<sup>12</sup> AER stated that the greatest assistance a NTP can provide to AER is a comprehensive and credible NTNDP.<sup>13</sup> Origin Energy considered the Draft Report represents a balanced response to the COAG terms of reference.<sup>14</sup> ERAA supported the main thrust of policy recommendations in the Draft Report and supported the overall objectives for a credible expert transmission planner.<sup>15</sup>

The Commission made amendments to its recommendations with respect to the detailed design of the NTP, as originally proposed in the Draft Report. The new design:

- (a) Ensures that the NTP is focused on strategic and long term output through the slight amendment of the phrasing of the NTP objective;
- (b) Removes the requirement to publish and consult on a draft NTNDP;
- (c) Requires the NTP to provide updates on new material information following the publication of the NTNDP;
- (d) Clarifies that the function of the NTP Advisory Committee (NTPAC) is to assist the AEMO in performing its NTP functions; and
- (e) Removes some of the prescription surrounding how the AEMO is required to establish the NTPAC.

This chapter sets out the Commission's recommendations and explains its reasoning for its final recommendations in respect of the framework for the NTP, including the refinements made to the recommendations from the Draft Report. Each policy recommendation is accompanied by proposed amendments to the National Electricity Law (NEL) or National Electricity Rules (NER) (Appendices C (i) and (ii)). Core functions, objectives and powers of the NTP are proposed to be located in the NEL; while greater prescription relating to the functions and how they should be undertaken are located in the Rules.

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<sup>12</sup> Grid Australia Draft Report Submission p. 16.

<sup>13</sup> AER Draft Report Submission p. 3.

<sup>14</sup> Origin Draft Report Submission p. 1.

<sup>15</sup> ERAA Draft Report Submission p. 1.

## 2.1 NTP Objective

### Policy recommendation

The NTP should have the following overarching objective (**Law, Section 7AA**). The NTP objective is to contribute to the achievement of the national electricity objective in a manner that promotes the efficient, strategic and co-ordinated, long term development of the national transmission grid.

### Reasoning for policy recommendation

There is considerable value in having an overarching objective for the national planning function defined in the Law, both to recognise formally the level of importance assigned to this function by ERIG and COAG, and market participants more generally, and to provide direction to the NTP in the exercise of its functions.

The objective will retain the primacy of the national electricity market objective (NEO) but specify the means by which the NTP will contribute to the NEO, i.e. by promoting the long term and nationally integrated development of the network. This recognises the fact that promoting efficient transmission development is not an end in itself but must be in the long term interests of consumers, who are ultimately concerned about delivered energy prices and security of supply, rather than transmission development per se. In developing the NTNDP, the NTP will therefore have regard to the most efficient combination of transmission, generation, distribution and non-network options that will deliver reliable energy supply at minimum efficient cost to consumers under a range of credible future scenarios.

The formulation of the objective is consistent with the COAG Communiqué which noted that the NTNDP should focus broadly on power system development. To ensure that the NTP is focused on strategic and long term objectives, the Commission has amended slightly the wording of the Objective proposed in the Draft Report.

Some submissions to the Draft Report commented on the precise wording of the objective. Grid Australia considered that the NTP objective will more accurately reflect COAG's objectives by framing the objective in terms of the overall development of the power system, rather than focusing only on transmission development.<sup>16</sup> NGF was disappointed with how the proposed NTP objective was phrased.<sup>17</sup> It considered that the NTP Objective to be too restrictive because it excludes short to medium term timeframes, grid operational issues and local or regional grid development concerns.

The Commission does not agree with NGF's suggestion that the NTP objective is too narrow. The Objective is consistent with the goals of the new arrangements as set

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<sup>16</sup> Grid Australia Draft Report Submission p. 17.

<sup>17</sup> NGF Draft Report Submission pp. 2-3.

out in the COAG Communiqué, and allows the NTP role to evolve in a manner which is consistent with the overall purpose for the NTP as intended by COAG.

## **2.2 Considerations that support the NTP Objective**

### **Policy recommendation**

In undertaking any of its functions the NTP must have regard to the following considerations (**Law, Section 7AB**):

- best practice in transmission planning of electricity networks;
- changes in technology that are relevant to the national transmission grid;
- the availability, price and technical feasibility of different fuel sources for the generation of electricity;
- the Acts of any participating jurisdiction, or any instruments made or issued under or for the purposes of any such Act, that relate to the supply or use of energy, including Acts or instruments that relate to the protection of the environment; and
- alternatives to the augmentation of the national transmission grid, including reductions in the demand for electricity, the installation of local generating systems and the use of forms of energy other than electricity.

### **Reasoning for policy recommendation**

The objective for the NTP is broadly constructed and it would therefore benefit from inclusion of a number of guiding considerations which the NTP must take into account in undertaking its functions. This will increase transparency and encourage consistency and predictability of NTP decision making.

In its response to the Draft Report, Grid Australia recommended that two further sub-clauses be added to the list of proposed factors, namely<sup>18</sup>:

- the focus of the NTP on strategic, long-term, high level planning; and
- avoiding duplication of the planning which NSPs have to do to meet their obligations with respect to reliability.

The Commission has addressed Grid Australia's first additional factor through its proposed Objective.

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<sup>18</sup> Grid Australia Draft Report Submission p. 18.

However, the Commission does not agree with Grid Australia's second additional factor proposed above. It is not appropriate to prescribe in the Law the boundaries between the NTP and TNSP planning or to ring-fence reliability investments out of the NTNDP since reliability projects may also deliver significant market benefits as well.

## **2.3 Functions of the NTP**

### **2.3.1 Publication of the NTNDP**

#### **Policy recommendation**

The principal function of the NTP will be to produce and publish the NTNDP each year (**Law, Division [1] [1](1) (a)**).

#### **Reasoning for policy recommendation**

Publishing and developing the NTNDP will be the core function of the NTP and should therefore be set out in the Law. The proposed arrangements for how the NTNDP shall be prepared and consulted on are described in section 2.4.7 of this report.

### **2.3.2 Publication of the NTNDP Data base**

#### **Policy recommendation**

The NTP should establish a database accessible to the public and containing all relevant non-confidential information and analyses used in creation of the NTNDP (**Rules, Clause 5.6A.4 (a) and (b)**).

#### **Reasoning for policy recommendation**

Submissions to the Review outlined broad support for the creation of a comprehensive database of assumptions and analyses. Such a database would add considerable value to the publication of the NTNDP, increasing transparency and rigour as well providing a source of information for market participants and TNSPs.

While the precise content of the database is a matter for the NTP, it should at a minimum include a variety of benchmarked information such as fuel and capital costs for different generation technologies and transmission costs. It should also inform on modelling methodologies and planning approaches employed by the NTP as it is important that the database sufficiently enables market participants to replicate and develop their own modelling. This will assist potential investors and help to optimise investment in the power system.

### **2.3.3 Inter-Regional Planning Committee Functions**

#### **Policy recommendation**

The NTP will become responsible for the functions currently performed by the Inter-Regional Planning Committee (IRPC).

#### **Reasoning for policy recommendation**

The COAG Communiqué required the new NTP arrangements to replace the current IRPC. The transfer of the IRPC functions to the NTP is discussed in chapter 6 of this Report.

### **2.3.4 NTP submissions to Regulatory Investment Test consultations**

#### **Policy recommendation**

The NTP should have a discretionary role to make submissions to the RIT-T consultation process, but only where the RIT-T is being applied to an augmentation, or relevant substitute, which is likely to affect the transfer capability of the national transmission grid (**Law, Division [1] [1] (1) (e) and (2)**).

#### **Reasoning for policy recommendation**

There is a need for an appropriate level of interaction between the planning of the NTP and TNSPs. However, arrangements whereby the NTP involves itself extensively in the planning of TNSPs would be inconsistent with principles of good governance because the NTP bears no responsibility for the consequential investment outcomes. Also any inefficient duplication and blurring of accountabilities between the TNSPs and NTP may undermine their relationship causing potential delays in regulatory processes. Also a key implication of the COAG Communiqué is that there should be delineation in planning responsibility between the NTP and TNSPs.

As a consequence of the interconnectedness of the network, even small investments in subsections of the network, ostensibly for reliability purposes, could have significant impacts in other areas of the network. In this context there is a risk that local planning undertaken in isolation with the NTNDP would undermine the efficient and nationally integrated long term development of the network.

A balance must therefore be achieved between ensuring consistency between long term and short term planning while at the same time avoiding excessive duplication in planning responsibilities. A discretionary role in the RIT-T consultation process for the NTP strikes the right balance.

The NTP, as a highly informed participant, has the potential to add considerable value to the RIT-T process by providing independent views on whether an investment option or programme put forward by a TNSP is consistent with the

efficient long term development of the network. This should strengthen incentives for TNSPs to consider the broader market benefits of the alternatives they put forward under the RIT-T assessments.

However, the NTP should not be 'at large' to involve itself in all RIT-T proposals by TNSPs, as this would not be an efficient use of its limited resources and may affect the timeliness of the regulatory approval process. The NTP should focus only on those transmission issues which impact materially on the transmission transfer capability of the national transmission grid, rather than involve itself in more specific, local transmission issues.

The Commission has amended the proposed clause in the NEL, to only place this constraint on AEMO when it is acting as the NTP and not on the AEMO generally. This recognises that AEMO may want to provide submissions in relation to its other functions.

### **2.3.5 Submissions to AER revenue reset consultations**

#### **Policy recommendation**

The NTP should have a discretionary ability to make submissions to the AER revenue cap consultation process (**Law Division [1][1] (1) (f)**).

The AER may seek other forms of advice from the NTP, provided that any advice on which the AER relies upon or uses in revenue cap determinations is made public.

#### **Reasoning for policy recommendation**

The COAG Communiqué notes that the AER should refer to both the NTNDP and the advice of the NTP in revenue cap assessments.

The NTP's advisory role to the AER should be considered primarily in respect of its publication of a credible NTNDP, to which the AER may have regard to in its revenue cap determinations for TNSPs. However, consistent with its role in the RIT-T process, the NTP could also perform a valuable role in making public submissions to the revenue cap consultation process, in line with other market participants. Its independent and well informed views have the potential to provide valuable input into the AER's regulatory cap determinations.

It is also appropriate that the AER is able to seek further advice or input from the NTP provided any such interaction between the AER and the NTP is consistent with regulatory arrangements for transmission services in Chapter 6A of the Rules, which requires that any advice on which the AER relies or has regard to in its determinations is published.

The public nature of any NTP advice will provide transparency regarding interactions between the AER and NTP, which avoids the perception that the NTP has special status in the revenue determination process. Assigning any kind of formal or substantive advisory role to the NTP in respect of revenue cap assessments

would conflict with the accountability and governance framework proposed for the NTP, and is therefore not recommended.

Market participants have supported this proposal. AER stated that this has the potential to assist the AER significantly in undertaking its regulatory roles and could significantly streamline the AER's regulatory role.<sup>19</sup> It noted that it would clearly take considerable comfort from a submission by the NTP noting consistency between the projects outlined in the NTNDP and the TNSP's revenue reset application.

Again, like the discretionary role for the NTP in the RIT-T process, the NTP should only make submission to the AER on areas where it has expertise and can add value. Therefore the NTP can only make such submissions in relation to issues that affected transfer capability across the major flow paths of the national grid. This will be the key area of NTP expertise and this ensures that any submission to the AER is focused and credible.

This constraint is only on AEMO when it is acting as the NTP and not on the AEMO generally. This recognises that AEMO may want to provide submissions in relation to its other functions.

### **2.3.6 Advice to the MCE and AEMC**

#### **Policy recommendation**

The MCE should have the ability to request the NTP to conduct reviews into matters relating to the development of a strategic and nationally co-ordinated transmission network (**Law, Division [1][1] (1) (c)**)

The Commission should also have the ability to request advice from the NTP on similar matters to assist the Commission in undertaking its functions(**Law, Division [1][1] (1) (d)**).

#### **Reasoning for policy recommendation**

As the body of expertise on transmission issues, it is appropriate that the MCE should be able to direct the NTP to undertake reviews on specific matters on, or relating to, the development of the national transmission grid. In its submission to the Draft Report, the ERAA thought that this proposal was inappropriate because the NTP is fundamentally an operational body, not a policy making body.<sup>20</sup> The Commission does not see this as assigning a policy making role for the NTP but as an opportunity for the MCE to draw upon the NTP's expertise and knowledge.

Likewise, the Commission itself should also be seek advice from NTP where it would assist the Commission in undertaking its functions.

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<sup>19</sup> AER Draft Report Submission p. 3.

<sup>20</sup> ERAA Draft Report Submission p. 4.

## 2.3.7 Other Functions

### Policy recommendation

The NTP will undertake only those functions prescribed for it in either the Law or Rules.

### Reasoning for policy recommendation

Some submissions to the Issues Paper noted the potential for the NTP to take on a range of technical and performance related functions, such as provision of Network Control Ancillary Services (NCAS), technical monitoring of operational performance, coordination of maintenance scheduling, and publication and development of constraint equations.<sup>21</sup> Consistent with the COAG's Communiqué, however, which specified a strategic transmission planning focus for the NTP, functions of a more short-term operational nature may be more appropriately situated in other areas of AEMO. The only exception to this are the IRPC functions which COAG specified should be transferred to the NTP. These are discussed in more detail in chapter 6.

It is also important to avoid assigning functions to the NTP that may conflict with COAG's requirement that accountability for performance and investment remains with TNSPs, particularly those functions that furnish the NTP with inappropriate regulatory responsibilities. In this regard some of the functions noted above are likely to have a direct bearing on TNSP's performance and investment obligations.

As discussed in more detail in chapter 8, other components of the regulatory arrangements, such as the incentive arrangements in Chapter 6A of the Rules, are better placed to ensure that the TNSPs perform their operational functions efficiently and effectively. The NTP's focus should therefore be on transmission planning and the publication of relevant planning related information.

That being said, the NTP functions are specified in the Rules, and therefore, where additional functions may be considered over time to be relevant for the NTP, these can be assessed through the normal rule change process. This will allow the role of the NTP to evolve with changing market conditions in a manner consistent with its overall purpose decided upon by COAG and the NEO.

## 2.4 Governance and accountability arrangements

This section sets out recommendations and supporting reasoning for the appropriate governance arrangements for the NTP in the context set out by COAG, while at the same time being consistent with the application of effective corporate governance and accountability principles. This is a key Review criterion for the Commission.

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<sup>21</sup> NGF Issues Paper Submission pp. 23, 27-8; MEU Issues Paper Submission p. 13.

## 2.4.1 Establishing the NTP

### Policy recommendation

The AEMO will perform the proposed functions of the NTP ((Law, Division [1][1] (1)).

### Reasoning for policy recommendation

The MCE has clarified two detailed points relevant to designing the governance of the NTP during the course of this review.<sup>22</sup> First, that 'to ensure effective lines of accountability, the AEMO Board should be directly responsible for all functions to be carried out by the organisation'. Second, that the AEMO Board will undertake the functions of VENCORP among its other functions.

The AEMO Board will therefore undertake the NTP functions. There are likely to be significant benefits from a NTP that is located within AEMO, such as better resourcing, having a wider energy market focus including gas and electricity, and the opportunity for better integration of power system and transmission system modelling. The co-optimisation of the two from a long-term perspective should provide more robust investment signals and credible information to market participants as well as TNSPs.

The governance model proposed by the MCE for the AEMO provides a number of checks and balances to ensure that the NTP function, consistent with other functions performed by AEMO, will be objective and rigorous. First, the AEMO board will contain a mix of industry and independent representation, who will be appointed by the MCE on the recommendations of a selection panel with two industry and two MCE representatives, and an independent chair able to make the casting vote. This reduces the potential for the board appointed by the panel to be perceived as representing particular sectoral interests.

Second, the AEMO will also be subject to the Corporations Act 2001 requirements and ASX Corporate Governance Principles and Recommendations where these are relevant. These require that mechanisms are put in place to ensure, among other things: appropriate auditing of functions and performance (including its NTP functions); specification and disclosure of AEMO board member roles; and that board members are appropriately skilled, independent and accountable for their performance.

Appropriate scrutiny of internal processes through auditing measures will be an important mechanism to ensure that the NTP is held accountable for undertaking its functions efficiently and to a high standard.

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<sup>22</sup> MCE, Australian Energy Market Operator Implementation Plan Synopsis, 12 March 2008.

## Focus and accountability of the national planning function

While the Commission acknowledges the strong accountability and governance framework proposed for the AEMO, the Commission emphasises that the NTP is a priority COAG initiative, designed to facilitate the efficient future development of the national transmission network. It is being established at a time when the tightening energy supply-demand balance and prospective climate change policies will bring considerable uncertainty and change to the transmission network and power system more generally.

Moreover, the AEMO will be responsible for a wide range of functions including electricity and gas market operation, the VENCORP functions, management of prudential risks and the security and reliability of supply. The AEMO board will consequently be required to manage a complex interplay of competing priorities and functions, with significant impacts on market participants and end users. In this complex and dynamic environment it will be important to ensure that the transmission planning function has clear focus, visibility and accountability and access to the relevant technical experience and expertise.

To achieve these outcomes the following key enhancements to the governance arrangements are proposed.

First, there should be a requirement for the AEMO to establish an expert Advisory Committee. This requirement should be set out in the Law with the detail of the Advisory Committee's role in the Rules. This will bring visibility and focus to the national planning function and ensure the NTNDP has diverse and balanced expert input.

Second, the AEMO should be required to consult on the work plan of the NTP, and to separately identify the NTP costs within its overall budget. Maintaining transparency to stakeholders over how the NTP function is being prioritised, resourced and implemented will enhance the credibility of the NTNDP as an analytically robust and well resourced document.

Third, the NTP should be required to undertake an open and inclusive consultation process for developing the NTNDP. Wide stakeholder input into the NTNDP will increase the confidence of stakeholders in its balance and credibility.

Each of the proposed accountability measures and supporting elements are outlined in more detail below.

### 2.4.2 Establishing an Advisory Committee

#### Policy recommendation

The AEMO is required to establish a NTP Advisory Committee (**Law, Division [2][1](1)**).

The NTP is required to have regard to the advice of the Advisory Committee in relation to any of its functions (**Law, Division [1][2]**).

## Reasoning for policy recommendation

The requirement in the Law for the AEMO to establish an Advisory Committee, namely, the National Transmission Planner Advisory Committee (NTPAC), will bring a singularity of focus and high visibility to the national planning role within AEMO, consistent with the high policy priority assigned to such a role by COAG.

A number of submissions to the Draft Report questioned the need to require the establishment of an advisory committee. AER and NEMMCO thought that it should be up to the AEMO Board to be left to decide what committees it requires to perform its functions.<sup>23</sup> ERAA questioned the rationale for the NTPAC and was concerned that it may obstruct rather than promote the NTP role.<sup>24</sup> In contrast, Origin Energy supported the establishment of an Advisory Committee as it would ensure direct involvement in national planning by stakeholders and experts.<sup>25</sup>

However the Commission considers that the establishment of an advisory committee is an important component of the overall NTP reforms. It will strengthen the credibility and visibility of the NTP functions and enables the AEMO Board to draw on an additional range of expertise in preparing the NTNDP.

### 2.4.3 Role of the NTP Advisory Committee

#### Policy Recommendation

The role of the NTPAC will be to assist the AEMO in the exercise of its NTP functions (**Law, Division [2][1] (2)**). It will be advisory only and not executive.

The AEMO may direct the NTPAC to conduct a review into or provide advice on, any matter relating to the development of the national transmission grid (**Law, Division [1][1] (1) (g)**).

The NTPAC will have regard to the NTP objective and take into account the same list of considerations as the NTP (**Law, Division [2][2]**).

#### Reasoning for policy recommendation

Consistent with the accountability framework proposed for the AEMO by the MCE, the role of the NTPAC would be supportive and advisory only, not executive. The AEMO board, in its capacity as the NTP, would make final decisions over the content of the NTNDP, and what public submissions to make to the AER or TNSP consultation processes.

The purpose of the NTPAC is to assist the NTP in performing its functions. The precise role and focus of the NTPAC and its involvement in preparing the NTNDP

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<sup>23</sup> AER Draft Paper Submission p. 4. ; NEMMCO Draft Paper Submission p. 3.

<sup>24</sup> ERAA Draft Paper Submission p. 4.

<sup>25</sup> Origin Energy Draft Paper Submission p. 2.

will be a matter for the AEMO Board. The AEMO Board will be required to take into account the advice of the Advisory Committee in undertaking its functions. This will have the effect of creating transparency and recognises the input of a balanced expert Committee, thus enhancing the rigour and credibility of the NTNDP.

It is also appropriate that the AEMO is able to direct the NTPAC to conduct reviews on, and provide advice, on any matter that may have a bearing on the strategic long term development of the national transmission grid.

VENCorp commented that there was inconsistency in the role of the NTPAC between the Law and the Rules as set in the proposed legal drafting.<sup>26</sup> One of the functions of the NTPAC specified in the Law, is “to oversee the preparation of the NTNDP”, but however the Rules do not set out how the NTPAC is intended to provide input into the preparation of the NTNDP. The Commission accepts this inconsistency and has now removed this function from the NTPAC framework. The purpose of NTPAC is to assist the AEMO in performing the NTP functions. The precise tasks of the committee and its involvement in preparing the NTNDP will be decided upon by the AEMO Board.

#### **2.4.4 Structure for the NTP Advisory Committee**

##### **Policy Recommendation**

The NTPAC should comprise of at least four members, including a chair person, with an appropriately balanced and diverse range of expertise, reflecting the range of skills needed to advise the NTP in undertaking its functions (**Law, Division [2][3] (1) and (2)**).

The chair person should be independent of regulatory or commercial interests in the market but may be a member of the AEMO Board (**Law, Division [2][3] (3)**).

In addition to the AEMO Board member, no more than one AEMO employee can also be selected as a member of the Advisory Committee (**Law, Division [2][3] (4)**).

##### **Reasoning for policy recommendation**

In appointing the Advisory Committee the AEMO board would be required to draw from an appropriately wide and diverse range of expertise for advice. This will avoid the perception that any one sector is over-represented on the Committee.

Submissions to the Draft Report raised issues with the framework and the degree of prescription proposed for the NTPAC. VENCorp considered that the proposals should not specify in any detail, the governance and membership arrangements for the NTPAC.<sup>27</sup> NGF commented that there is little justification for constraining the potential number of members of the Committee to 5 and advised that the AEMO

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<sup>26</sup> VENCorp Draft Paper Submission pp. 6-7.

<sup>27</sup> VENCorp Draft Paper Submission p. 6.

should have the flexibility to decide the optimum membership of the committee in the light of practical experience.<sup>28</sup> There was also some confusion amongst the submissions as to whether one or two AEMO members were allowed to be members of NTPAC.

The Commission agrees with NGF and has removed the prescription that the maximum membership of the committee is five. The proposed NEL clauses have also be clarified to state that both an AEMO Board member and an AEMO employee can sit on the advisory committee.

#### **2.4.5 Review of the NTP Advisory Committee**

##### **Policy Recommendation**

The Law should make provision for the Commission to review the need for an Advisory Committee after no more than 5 years of operation or when directed by the MCE (**Law, Division [2][4]**).

##### **Reasoning for policy recommendation**

The Commission considers the contribution of the NTPAC is essential in the early stage of the new national planning arrangements as it will add to the market confidence and credibility of the new functions and especially the NTNDP. The rationale for the NTPAC may diminish as the functions become more established. Therefore it is also proposed that the arrangement for an Advisory Committee be reviewed no later than 5 years after commencement, to assess whether it continues to be necessary and appropriate as a legal requirement. The MCE also has the option to request the Commission to conduct this review earlier.

The Commission notes that COAG has committed to reviewing the effectiveness of the overall new national planning arrangements after five years of operation, with a view to making further improvements if necessary. That review will assess the overall package of reforms to ensure that COAG objectives have been achieved and that the new arrangements will continue to support the efficient development of the power system. The Commission's review of the NTPAC will focus on the question of appropriate governance and the role of the NTPAC in helping to publish a credible, high quality NTNDP. This review will complement and inform the wider COAG review.

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<sup>28</sup> NGF Draft Paper Submission p. 3.

## 2.4.6 NTP budget and work plan

### Policy recommendation

The Rules require the AEMO board to set out and separately identify the NTP revenue requirements within general budgetary process and consult annually on the work plan for the NTP functions (**Rules, Schedule 1, clause 5.6A.1(b)(3)**) and **Rules, Schedule 2 [1], clause 2.11.3**).

### Reasoning for policy recommendation

Requiring the AEMO board to set out separately the budget allocation and work plan of the NTP, and to consult on these with market participants, would create transparency and ensure an appropriate level of resources are committed to the planning function. The proposed arrangements should therefore significantly enhance the credibility of the NTNDP.

The Commission accepts NEMMCO's comment that the consultation on the NTP budget should not be isolated from the wider AEMO budgeting process. Instead, the AEMO will be required to separately identify the projected revenue requirements for the NTP functions in its wider budget process. The precise details of how AEMO is required to inform the market of its budgeting requirements and whether it needs to consult on its budget, will be determined through the AEMO implementation work-stream.

The requirement on the AEMO to consult on the NTP work-plan for the forthcoming year will remain and will be part of the annual consultation process for the preparation of the NTNDP (discussed in 2.4.4). This will improve the transparency on how the AEMO performs the NTP functions and informs market participants on the key areas of network development that the NTP will be focusing on for that year.

## 2.4.7 Consultation on NTNDP

### Policy recommendation

The NTP should be required to consult by 30 January each year on:

- a) both the inputs to the NTNDP comprised of the scenarios and assumptions of the NTNDP being published in that year;
- b) the content of the current NTNDP including the accuracy of the National Transmission Flow Paths (NTFPs); and
- c) the proposed work-plan for the NTP functions (**Rules, Schedule 1, Clause 5.6A.1(a)(2)**).

Consultation shall be for a minimum of 30 business days. In developing the NTNDP, the NTP will be required to take into account submissions and explain why issues

raised in submissions have or have not been taken into account (**Rules, Schedule 1, Clauses 5.6A.2 (c) (1) and (f)(9)**).

### **Reasoning for policy recommendation**

Consistent with requirements expressed in the COAG Communiqué, the development of the NTNDP should benefit from wide ranging and inclusive consultation. This is perhaps the most important mechanism for ensuring the NTNDP is objective, transparent and rigorous, and that it is developed consistent with the needs of market participants.

The NTP will be required to have regard to participant submissions and explain how it has taken these into account in developing the NTNDP. This creates transparency and recognises the value of stakeholder input, enhancing the level of confidence stakeholders will have in the NTNDP.

The proposal contained in the Draft Report was for the NTP to also prepare and consult on a draft NTNDP. The consultation was to occur during October. Both ESIPC and TEC commented that they thought the requirement to have a draft NTNDP will be a useful step for the industry to have the opportunity to input into the process and correct any errors of fact.<sup>29</sup> However, NEMMCO questioned the need for a draft NTNDP.<sup>30</sup> It considered that consultation on a draft NTNDP has a limited value and restricts the analysis required to produce a credible NTNDP.<sup>31</sup> The process of preparing the NTNDP will require a substantial authoring and review process after the analysis. It argued that given the short time between draft and final it would not be feasible for the NTP to re-work analysis for the final report.

The Commission agrees with NEMMCO that the draft report stage would limit the time to do the necessary analysis and affect the ability of AEMO to produce a credible and high quality document.

Therefore it is recommended that instead of requiring a separate consultation on a draft plan, the NTP will be required to consult on the current NTNDP when it consults on the input and scenarios for next year's NTNDP. Furthermore, the NTP will be required to explain how it has addressed any points in next year's NTNDP. This recognises that the preparation of the NTNDP is a continuous, evolving process and that one-round of consultation is appropriate. This will give market participants adequate opportunity to comment on and improve the content of the annual plans. Also it is expected that AEMO will follow good regulatory practise, as NEMMCO does today, and undertake ad-hoc consultations on important matters relating to the NTP functions.

The Commission has also decided to add a clause which requires the NTP to provide updates on information on intra-jurisdiction matters plus forecast constraints and

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<sup>29</sup> ESIPC Draft Paper Submission p. 2. ; TEC Draft Paper Submission p. 6.

<sup>30</sup> NEMMCO Draft Paper Submission p. 2.

<sup>31</sup> NEMMCO Draft Paper Submission p. 5.

associated planning options if materially new information arises. This obligation is currently contained the Statement Of Opportunities (SOO) provisions and the Commission considers that it is more appropriate to move this updating provisions to the NTNDP framework.

This consultation stage will also provide an opportunity for participants that are not subject to the NTP information powers to submit information and data to the NTP which would assist in the preparation of the NTNDP.

Box 2.1 (below) outlines the stages for the preparation of the NTNDP.

Date	Stage	Action
30 January	Consultation	i) In preparation for the NTNDP, AEMO must publish a document that sets out the NTNDP inputs, set out the proposed work plan for the following financial year and presents a summary of any material issues arising from submissions received that relate to the work-plan for the current financial year and the AEMO's response to such submissions  ii) AEMO must publish an invitation for written submissions to be made on the AEMO regarding the NTNDP inputs, content of NTNDP in the current year and proposed work plan
Mid March	End of Consultation	End of consultation date for AEMO to receive submissions
31 December	Final Report	AEMO must publish the NTNDP for the following year

## 2.5 Information powers

### Policy recommendation

The information gathering powers of AEMO should encompass the ability to request any information from transmission service providers that it reasonably requires to undertake its functions as the NTP, but have regard to the costs of providing that information (**Law, Division [3](1) and (2)**).

Additionally, to promote efficiency in how this information is gathered, the NTP will provide a 'planning information instrument' to each TNSP on an annual basis to collect information it needs for development of the NTNDP (**Law, Division [3] (3)**).

## Reasoning for Policy recommendation

The NTNDP needs to be sufficiently detailed and comprehensive if it is ultimately to be of value to market participants and guide investment decisions. It is important, therefore, that the NTP is able to access the information it reasonably requires from TNSPs, and market participants, in a timely fashion to meet its objectives, provided the cost of providing such information is not excessive and confidentiality requirements are taken into account.

The Commission recommends that the NTP has an explicit information gathering power to access relevant information from the TNSPs. This additional provision will build on the information powers of the AEMO and recognises that for exercising its other functions, the AEMO will receive a substantial level of relevant information from all market participants. The NTP will be able to incorporate such information into its analysis.

There are a number of reasons why this additional provision should be limited in application to TNSPs.

Firstly, it is considered that information currently required by non-TNSP participants to provide to NEMMCO for the fulfilment of its functions (e.g., preparation of the SOO, dispatch and system adequacy requirements) will provide a great deal of relevant information.

Secondly, the TNSPs have powers under the Rules to access information from other participants for its planning purposes. It reflects better regulatory practice for the NTP to access such information from the TNSPs than for the potential for participants having to cope with two separate information processes from both the relevant TNSP and NTP.

Thirdly, the NTP may to ask any organisation for any information on a voluntary basis. The Commission considers that voluntary submission of information to the NT, over and above the two sources described above is appropriate, having regard to regulatory burden on market participants and the potential inability of some participants to recover such costs.

The NTNDP consultation process will provide the NTP with a good opportunity to collect valuable planning and investment information from market participants where they volunteer to do so. Furthermore the transparency of inputs and improved understanding by market participants of the NTNDP preparation will improve the credibility of the NTNDP.

Some submissions to the draft report considered that this proposal was too narrow and overly prescriptive. Both ESIPC and Grid Australia proposed that information should be obtained from other market participants as well as TNSPs.<sup>32</sup> NGF considered that an annual information process is not sufficient and the NTP should

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<sup>32</sup> Grid Australia Submission p 19

have more flexibility to call on Jurisdictional Planning Bodies (JPBs) and TNSPs for assistance.<sup>33</sup>

The Commission maintains its recommendation. The NTP will be able to use and access relevant information provided by market participants to AEMO. However the information powers for the NTP will form part of the wider information assigned to AEMO. There are clearly benefits from having consistency around the AEMO, which will gather information for all its functions. The appropriate provisions in relation to the treatment of confidential information by AEMO should also apply to the NTP functions and powers.

The Commission is proposing to introduce a clause in the NER which requires the JPBs to provide such assistance as the AEMO reasonably requests for the NTP functions. This will enable on-going engagement and discussions between NTP and JPBs. Also the Commission expects that the AEMO Board will form a working group of TNSPs to carry out the technical work of the IRPC. This will ensure that there is an on-going dialogue between the NTP and other planning bodies.

## **2.6 Allocation of obligations between the NEL and NER**

### **Policy Recommendation**

Core functions, objectives and powers of the NTP are proposed to be located in the Law; while greater prescription relating to the functions and how they should be undertaken are located in the Rules. Also the establishment and role of the NTP Advisory Committee (NTPAC) should be set out in the Law.

### **Reasoning for Policy recommendation**

A number of submissions commented on the proposed drafting between the NEL and NER. VENCORP argued for careful consideration on how the proposals would be split between the provisions of the NEL and those in the NER.<sup>34</sup> VENCORP referred the Commission to a report published by the Expert Panel prepared for the MCE on Energy Access Pricing. VENCORP considered that only minor changes to the NEL are required to give effect to the AEMO's national transmission planning function. VENCORP illustrated this point by arguing that the NTP objective could simply be added to the AEMO's list of functions stated in the NEL.<sup>35</sup> VENCORP suggested that the legal specifications for Division 1 (AEMO - NTP Functions and powers) and Division 2 (NTP Advisory Committee) should be moved to the NER while Division 3 (Information Gathering powers) may remain in the NEL.<sup>36</sup> ESIPC expressed its preference for the NTP functions to be expressed in the NER rather in the NEL because it increased flexibility for updating the NTP scheme when

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<sup>33</sup> NGF Submission p 5

<sup>34</sup> VENCORP Draft Paper Submission p. 4.

<sup>35</sup> VENCORP Draft Paper Submission p. 5.

<sup>36</sup> VENCORP Draft Paper Submission p. 6.

necessary.<sup>37</sup> NGF considered that the NTP Objective should be framed in the NER to enable its role to change over time through the Rule change process rather than through the NEL.<sup>38</sup>

There are three sections to the NEL clauses proposed by the Commission – the NTP framework, the NTP Advisory Committee provisions, and the NTP information powers. The NTP framework and the NTP information set out the key principles on the NTP functions and powers. The further details and procedures surrounding these will be set out in the NER. Therefore the Commission considers that this approach is consistent with the current legal architecture applied in the NEM and disagrees with VENCORP’s consideration that the proposal is inconsistent with the Expert Panel recommendations. The legal hierarchy proposed for the NTP reflects the Expert Panel considerations.<sup>39</sup>

It is recognised that the same purpose and desired outcomes of the NTPAC could be equally met if the NTPAC provisions were contained in the Rules compared to having them in the Law. However the Commission continues to consider that given the credibility and focus the NTPAC adds to the NTP functions, the NTPAC provisions should be established in the Law. The NTPAC is a key component to the new arrangements and will be subject to review during the initial five years.

## **2.7 Demand Side Participation Review**

The Commission is currently undertaking a review into Demand Side Participation (DSP) in the NEM.<sup>40</sup> The objective of this Review is to determine whether there are barriers or disincentives within the Rules for the efficient uptake of demand side participation in the NEM.

The first stage of the DSP Review considered DSP in the context of the Commission’s current work program in order to develop recommendations that can be considered in the context of the relevant Rule change proposals and Reviews. The Commission engaged NERA Economic Consulting to undertake an assessment of DSP in the context of that work program and released the NERA recommendations report on 16 May 2008.

In its report, NERA provided a series of recommendations relating to how they considered DSP could be better facilitated through both the new NTP arrangements and the new project assessment process for transmission investment.

This section of the Report addresses NERA suggestions with respect to the NTP. NERA’s recommendations on the project assessment process for transmission investment are discussed in chapter 4.

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<sup>37</sup> ESIPC Draft Paper Submission p. 3.

<sup>38</sup> NGF Draft Paper Submission p. 3.

<sup>39</sup> Expert Panel on Energy Access Pricing, Report to the MCE, April 2006, pp. 22-28.

<sup>40</sup> AEMC, Statement of Approach on its Review of demand side participation in the NEM (3 March 2008).

With respect to the NTP, NERA recommended that:

- the NTP be required to develop a methodology for the inclusion of demand side participation in the expected load forecasts to be published on an annual basis in the NTNDP, by transmission exit point; and
- the Commission consider the role of the NTP in providing strategic direction for DSP, as part of next stage 2 of its review into the role of DSP.

The proposals for the NTP contain a number of elements that will help to facilitate the efficient level of DSP in the NEM. The NTP will be required to identify a range of scenarios for the geographic demand and supply over a minimum 20 years planning horizon, and inform the market on a range of development strategies for the NTFPs which are consistent with the co-optimisation of network and non-network investments. Therefore the NTP will improve the information available on the forecast of and potential for DSP in the market. Also it is noted that one of the supporting considerations that the NTP must regard when exercising its functions is the alternatives to network augmentations.

With respect to demand forecasting, the TEC also considered that the NTP should be required to develop a methodology for the inclusion of Demand Management forecasts and undertake and publish annual demand side forecasting as part of the NTNDP database.<sup>41</sup> The Commission considers that the NTP proposals addresses these points. The validity of forecasts and the methodology applied by the NTP will be a key component of the NTNDP and the forecasts will be included into the NTNDP database.

The Commission considers that it would be efficient and better practice to allow the NTP to develop its own approach to demand forecasting within the overall NTP governance framework, through consultation with market participants and in response to evolving market conditions. There is a danger of being over-prescriptive. Also the NTP will have regard to the most recent SOO and there is likely to be the overlap with the demand forecasting set out in the NTNDP and SOO. The SOO might be the more appropriate document to inform on more detailed demand side forecasting.

Regarding NERA's concept that the NTP could provide more strategic direction with respect to DSP within NEM, the Commission considers that it is not sensible to embed a bias for one form of investment over the other options in the NTP. Competitive neutrality across all network and non-network options is important to ensure credibility of the NTP outputs. The purpose of the NTP is to inform the

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<sup>41</sup> TEC Draft Paper Submission p. 5.

market on the optimal development path for the power system, including the efficient level of DSP.

## 3 National Transmission Network Development Plan

### Summary of our final recommendations

- The scope of the NTNDP covers all network limitations, and possible options for relieving them, which are part of, or materially affect, the transfer capability across National Transmission Flow Paths (NTFPs);
- The NTNDP provides a broad and deep analysis of different future supply and demand scenarios and impacts on NTFPs. This will take account of various policy, technology and economic assumptions and have, at minimum, a 20 years outlook;
- The NTNDP outlines “transmission development strategies” for NTFPs under each scenario, which must include consideration of a range of network and non-network alternatives;
- To strengthen the link between the NTNDP and the short term planning of TNSPs a reciprocal obligation will be inserted in the Rules: the NTP in developing the NTNDP will be required to have regard to the short term planning and investment decisions of TNSPs; conversely, TNSPs will be required to have regard to the NTNDP in their annual planning reviews and Annual Planning Reports; and
- The NTNDP reports on the existing and future dynamics of network capability and congestion on NTFPs. The NTNDP will also contain a consolidated summary of Annual Planning Reports (APRs) from each TNSP, with commentary on key variations between the NTNDP and previous APRs.

### Introduction

This Chapter sets out the Commission’s recommendations and reasoning for what the Rules should prescribe in relation to the content of the NTNDP (See Appendix C(ii)). The proposed content of the NTNDP represents the right balance between achieving a rigorous, detailed and credible NTNDP while avoiding excessive duplication and undermining TNSP accountability for investment.

Market participants broadly supported the proposals for NTNDP presented in the Draft Report and therefore no changes had been made to the recommendations for the specification of the NTNDP.

### 3.1 Scope of NTNDP

#### Policy recommendation

The NTNDP should focus on the NTFPs, and those transmission elements (and relevant technical substitutes) that are likely to affect the transfer capability on NTFPs ( **Rules, Schedule 1, Clause 5.6A.2 (f) (2)**).

## Reasoning for policy recommendations

An important issue in defining the appropriate content for the NTNDP is the scope of transmission issues it should focus on. The Commission is recommending that the NTNDP focuses on transmission capability across NTFPs, as currently defined in the Rules<sup>42</sup>, and includes all constraints or network limitations, and possible options for relieving them, which are part of, or materially affect the transfer capability across NTFPs.

This approach recognises the interconnectedness of the network, while at the same time appropriately limits the involvement of the NTP to only those local planning issues that are likely to have a substantive impact on major energy path ways. The recommended scope will cover both the elements within a flow path and any other network assets that can materially affect flows on the major lines. For example, if a network asset located within a major Central Business District (CBD) can affect the delivery of flows to that CBD then that asset will be within scope of the NTNDP.

In submissions to the Issues Paper some participants, such as Grid Australia<sup>43</sup> and Macquarie Generation<sup>44</sup>, commented that the NTNDP should focus only on major existing and potential transmission corridors defined in some way as having “national significance”, although precisely how this would be defined was unclear. Alternatively, other submissions, such as VENCORP, ERAA and NGF, considered the NTNDP should effectively reproduce the planning of TNSPs to provide a comprehensive NEM wide perspective on network development.

The recommended scope of the NTNDP represents an appropriate balance between these two perspectives for the following key reasons.

Firstly, an NTNDP that focuses on the transfer capability of key energy path ways in the NEM is likely to capture transmission issues which will affect the efficient evolution of the grid, while at the same time avoiding excessive intrusion into local planning issues. This focus is therefore consistent with the proposed role and function for the NTNDP envisaged by COAG.

Secondly, the proposed scope for the NTNDP avoids categorisation of flow paths in terms of specific transmission elements or assets, and therefore recognises the interrelated nature of the transmission network. That is, constraints on major transmission elements are often caused by limitations on secondary elements on the network. If the NTNDP was restricted in its scope to major primary transmission elements only, it would be likely to exclude significant causes of network constraints and remove from visibility potential investments with substantive market benefits. Consequently, the NTNDP would be unable to meet its primary objective of providing an informed perspective on the efficient long term evolution of network.

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<sup>42</sup> The Rules define NTFPs as that portion of a transmission network or transmission networks used to transport significant amounts of electricity between major generation and load centres.

<sup>43</sup> Grid Australia (formerly known as ETNOF) Issues Paper Submission p. 8.

<sup>44</sup> Macquarie Generation Issues Paper Submission p.2.

The submissions to the Draft Report supported this definition of scope. The AER supported a flexible definition of NTFPs because it enables the NTNDP to adapt over time with changing flows on the network and the development of renewable energy technologies.<sup>45</sup> Similarly, ERAA supported an NTNDP that covers parts of the transmission network that ‘materially affect NTFP capacity.’<sup>46</sup>

### **Interpretation of NTFPs**

Interpretations regarding what constitutes a NTFP may vary over time and according to the assumptions inherent in different future scenarios. It should not be assumed however that future interpretations of NTFPs will necessarily be the same as NEMMCO’s current interpretation. In fact, it would be expected that the NTFPs would vary significantly across different credible scenarios and over time as market conditions alter.

It is important that the preparation of the NTNDP includes an annual consultative process for obtaining stakeholder views on determining and amending the NTFPs. The proposed consultation requirements for the NTNDP (see Chapter 2) include an obligation for the NTP to take into account participant submissions made in respect of the previous NTNDP when preparing the next year NTNDP. This will provide participants with the opportunity to comment on the credibility of the NTFPs set out in the NTNDP.

## **3.2 Scenarios in the NTNDP**

### **Policy recommendation**

The NTNDP should present a broad and deep analysis of different future supply and demand scenarios for NTFPs, taking account of various policy, technology and economic assumptions and looking out at least 20 years into the future (**Rules, Schedule 1, Clause 5.6A.2 (f) (3)**).

### **Reasoning for policy recommendations**

There was strong support from market participants that the NTNDP should present a broad and deep analysis of different future supply and demand scenarios taking into account various policy prescriptions (for example, climate change policies), technological innovations and economic assumptions with a planning horizon at least 20 years into the future. This is generally viewed as a significant gap in the current arrangements. In its submission to the Draft Report, Origin Energy supported the NTNDP having extensive scenario analysis and transmission

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<sup>45</sup> AER Draft Report Submission p. 5.

<sup>46</sup> ERAA Draft Report Submission p. 2.

development strategies that would support transmission companies and market participants in making investment decisions.<sup>47</sup>

### 3.3 Transmission development strategies

#### Policy recommendation

The NTNDP should be required to outline development strategies for major flow paths under each scenario and include consideration of a range of network and non-network alternatives (**Rules, Schedule 1, Clause 5.6A.3**).

The development strategies will also include a high level cost-benefit assessment of:

- a) options, or combinations of options, proposed for meeting transmission capability needs under a variety of supply and demand scenarios (**Rules, Schedule 1, Clause 5.6A.3 (d)(i)**); and
- b) the manner in which each such option, or combination of options, relates to the overall development of the power system (**Rules, Schedule 1, Clause 5.6A.3(d)(ii)**).

#### Reasoning for policy recommendations

One of the key implications of COAG's requirement for a strategic NTNDP is that NTP will need to develop views about the future development of the network and advise upon the optimal investment path.

This will add significant value over existing arrangements and would provide the market and potential investors with a more forward looking and strategic picture of investment needs.

In its report to the Energy Reform Implementation Group (ERIG), CRA International commented that the current approach to transmission investment under the regulatory test is largely incremental, with a focus on discrete investments to connect loads and generators to the network or address reliability standards as demand grows over time.<sup>48</sup> There is little explicit incentive under the current regulatory framework to consider how such incremental discrete investments might be better integrated to address long term capability issues, or how they might be modified or configured to maximise potential benefits to the market over the long term. CRA International further noted that a move to a more strategic national planning framework would therefore require greater emphasis on "development programmes

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<sup>47</sup> Origin Draft Report Submission p. 2.

<sup>48</sup> Charles River Associates International. *A Report to ERIG on Transmission in the National Electricity Market*, December 2006.

rather than projects”<sup>49</sup>. It is this gap in current regulatory arrangements that the NTNDP is required to fill.

Also in its submission to the Issues Paper, NEMMCO suggested that the NTP should have the capacity to propose its own “conceptual” augmentation proposals for addressing future network limitations on the network.<sup>50</sup> It noted that currently under the Annual National Transmission Statement (ANTS) such conceptual proposals were relatively limited and relied on information provided by TNSPs.

The NTP should therefore be required to develop, and reflect in the NTNDP, transmission development strategies for major flow paths under each scenario. Development strategies should include consideration of a range of network and non-network alternatives, future generator location decisions, and have close regard to the NTP objective and its supporting considerations, as outlined in Section 2.2.

Transmission development strategies should also include a high level assessment of their costs and benefits, which is essential in order for the NTP to come to a view as to what constitutes an efficient development strategy under a particular scenario.

Some parties have argued that any cost-benefit analysis set out in the NTNDP must be done on the same basis as the proposed regulatory investment test for transmission. The ERAA commented that the outputs of the NTNDP in the short term needed to be very precise and detailed. If not, they thought that TNSPs would have an opportunity to depart from the NTNDP’s strategies by arguing that more detailed analysis has revealed the weaknesses of the NTNDP’s strategies. ERAA was also concerned with the possibility of ‘cherry picking’ by a TNSP if it is presented with a range of alternative strategies.<sup>51</sup>

The Commission recognises that there are benefits from a common approach to project assessment across both TNSPs and NTP and notes that NEMMCO, when carrying out the ANTS review, employs a similar methodology to the current regulatory test for determining market benefits. The Commission considers that it would reflect better regulatory practice to give the NTP the flexibility to determine how best to assess investment options than to mandate one approach.

The Commission considers that formal project assessment analysis should not be undertaken by the NTP. Any cost-benefit analysis must necessarily be at a high level recognising the uncertainties of investment proposals some distance into future. The detailed costing and specific identification of “preferred” solutions should be left to TNSPs as the lead time for investment approaches, within the RIT-T process.

There may be good reasons for the TNSP to depart from the NTNDP and under the Commission’s proposals, this would need to be explained in both the AER revenue determination and in the TNSPs Annual Planning Reports (APRs). Also it would be inappropriate for the NTP to focus its resources on carrying out detailed assessments of potential projects instead of long term strategic planning.

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<sup>49</sup> Ibid., p. 29.

<sup>50</sup> NEMMCO Issues Paper Submission p. 2.

<sup>51</sup> ERAA Draft Paper Submission p. 3.

The EUAA thought that the information on the proposed development strategies is too minimalist and resubmitted its proposal for a 'Value Function' to be developed and included in the NTNDP.<sup>52</sup> It argued that this would allow end users and other stakeholders to identify and evaluate demand side resources relative to alternative economic present value cost of network development. The NGF took an opposite view and argued that more latitude be given to the AEMO Board to determine the scope and outputs of the NTNDP.<sup>53</sup>

The Commission considers that there is an appropriate balance between prescribing the NTNDP content and giving the NTP the discretion, within the framework of the NTP objective and considerations, to determine the extent of the analysis and relationship with short term planning. The AEMO Board has the flexibility to prepare an annual plan which addresses the needs of market participants within the proposed Rules and governance arrangements. The AEMO Board also has the ability of parties to raise submissions during the annual consultation. Both of these features will ensure that the NTNDP is informative and is of practical use for all market participants.

### **Development strategies and TNSP investment**

In light of the fact that the NTNDP is an information document only, it is important to consider how the longer term transmission development strategies contained within it might influence the actual investment decisions of TNSPs.

As noted by the NGF in its submission to the Issues Paper, the long term transmission development strategies produced by the NTP would start out as being uncertain given their long forecast horizon.<sup>54</sup> However, as the lead time for addressing network limitations approaches and the certainty of information improves, such development strategies should become more detailed and definitive. Over time, therefore, with iterative consideration each year in revised versions of the NTNDP and the benefit of input from TNSPs and other stakeholders through the consultation processes, transmission development strategies detailed in the NTNDP should start to inform the APRs, RIT-T and investment decisions of TNSPs.

To the extent TNSP investment proposals are consistent with the transmission development strategies outlined in the NTNDP, this should streamline the RIT-T and TNSP revenue determination processes. That is, by the time investment proposals and programmes initially identified by the NTP in the NTNDP find their way into the APRs of TNSPs they are likely to have been identified in a number of successive NTNDPs and will have benefited from substantial refinement and consultation.

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<sup>52</sup> EUAA Draft Paper Submission p. 1.

<sup>53</sup> NGF Draft Paper Submission p. 4.

<sup>54</sup> NGF Issues Paper Submission p. 8.

### 3.4 Other information contained in the NTNDP

#### Policy recommendation

The NTNDP reports on the existing and future dynamics of network capability and congestion on NTFPs and any other information of relevance to the strategic long term development of the network (**Rules, Schedule 1, Clause 5.6A.2 (f) (7)**).

The NTNDP should also contain a consolidated summary of APRs from each TNSP, with an explanation of key deviations between the NTNDP and previous APRs (**Rules, Schedule 1, Clause 5.6A.2 (f) (8)**).

#### Reasoning for policy recommendation

COAG stipulated that the NTNDP should replace the current ANTS, with the implication that an NTNDP containing less information than ANTS was not being contemplated. This would be unlikely to meet requirements for an "enhanced planning process" under the new arrangements.

It is therefore proposed that the NTNDP, like the ANTS, reports on the existing and future dynamics of network capability and congestion on major NTFPs. This will require the NTP to develop a suitable measure for network transmission capability for NTFPs in the NEM. The Commission also expects the NTP to incorporate any recommendations made in relation to the collection and reporting of congestion related information in the Congestion Management Review.<sup>55</sup>

EUAA argued against including analysis of congestion pricing. It stated that congestion pricing is not a core function of transmission planning and could divert the NTP into unrelated or tangential work areas and though that generator mispricing information might be more suitable content for the SOO.

The Commission considers that congestion data is an important input into transmission planning and the proposed requirement is to provide a summary of the Congestion information resource maintained by AEMO. Therefore, the NTP's focus and resources will not be diverted away from its core purpose.

The NTNDP should also contain a consolidated summary of APRs from each TNSP with supporting reasons for any key variations between the NTNDP and APRs. This will allow participants, as well as the AER, to examine linkages and the level of consistency between TNSP planning and the NTNDP.

Further, the NTNDP should not be precluded from presenting other similar types of information which may be of value to participants in assessing current and future network capability.

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<sup>55</sup> AEMC, *Final Report, Congestion Management Review*, June 2008, Sydney.

### 3.5 Relationship between NTNDP and other planning documents

#### Policy Recommendations

In preparing the annual NTNDP, it is recommended that the NTP take into consideration the most recent APRs and the revenue determinations for each TNSP.

Also it should have regard to the most recent SOO, and to any other SOOs prepared for the gas industry.

#### Reasoning for policy recommendations

An implication of the new arrangements proposed in the COAG Communiqué, is that the SOO and the ANTS will not be published as a joint document.

The SOO will contain information on the future supply and demand requirements, including demand management capacity of the network and the extent of future electricity supply needs. This would be an important input into the preparation of the NTNDP.

To ensure that the NTP has sufficient time to assess and include the latest SOO into the preparation of the NTNDP, the Commission proposed in the Draft Report to bring forward the annual publication date of the SOO from 31 October to 30 June. NEMMCO responded that it considered that the proposed publication date of 30 June would not allow sufficient time for NEMMCO to produce a high quality document.<sup>56</sup> It noted that key input data necessary for the SOO only becomes available at the end of May. The Commission accepts this argument and has moved the proposed publication date for the SOO to the 30 August.

### 3.6 Relationship between NTP and TNSP planning

#### Policy Recommendation

The NTP in developing a long term NTNDP should have regard to the short term planning and investment decisions of TNSPs (**Rules, Schedule 1, Clause 5.6A.2 (e)**).

Conversely, TNSPs in developing their short term investment planning should have regard to the NTNDP (**Rules, Schedule 2 [4], Clause 5.6.2 (b) (3)**).

#### Reasoning for Policy Recommendations

A key implication of the COAG Communiqué is that the NTP should predominantly focus on long term and strategic network development issues and TNSPs on localised or regional transmission planning issues.

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<sup>56</sup> NGF Draft Paper Submission p. 5.

However, as discussed in chapter 2, a sharp separation in planning responsibilities could potentially undermine the nationally integrated and efficient development of the grid. The NTP and TNSP planning should complement and inform each other. One way the Commission has proposed to achieve this outcome was through the proposed role for the NTP as an interested party who can make submissions to the RIT-T.

A second key measure proposed to achieve such consistency is through creating a reciprocal obligation in the Rules. The obligation would require the NTP and TNSPs to “have regard” to the planning of the other in developing their own plans. This is appropriate because the NTP should take into account the actual investment and investment intentions of TNSPs. Conversely, if TNSPs ignored the broader strategic implications of their investment decision making then this will undermine the NTP’s objective for promoting the efficient long term development of the network. The AER supported the proposal to make TNSPs have regard to the latest NTNDP when formulating its APRs and for the AER to have regard to NTNDP in revenue rests as it ensures strong inter-linkage between the NTNDP and APRs.

The creation of a reciprocal obligation should strengthen incentives for the NTP and the TNSPs to ensure overall transmission planning of the grid is internally consistent and nationally integrated. It is also expected that this will encourage appropriate interaction and dialogue between TNSPs and the NTP in respect of their network planning issues.

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## 4 Regulatory Investment Test for Transmission

### Summary of our final recommendations:

- The Regulatory Investment Test for Transmission (RIT-T) will be undertaken by a TNSP when a transmission network planning issue exists and the most expensive economically credible option is estimated to cost more than \$5m; the planning issue is not urgent or unforeseen; and the planning issue is not solely the provision of connection services nor negotiated transmission services or replacement;
- The purpose of the RIT-T will be to identify the preferred option which maximises the present value of net economic benefits (or minimise the present value of net economic costs) subject to meeting deterministic reliability standards (where they apply);
- The RIT-T will involve:
  - A quantified assessment of costs and benefits across a range of credible options;
  - 12-week consultation on the range of credible options to assess and the classes of costs and benefits (from a standardised list) that are materially relevant;
  - Publication of a draft report on the assessment of costs and benefits for consultation for 6 weeks;
  - An ability to raise disputes, which will then be assessed by the AER; and
  - Application of the same process irrespective of whether a transmission issue is motivated by reliability or by the potential to deliver market benefits, or both; and
- Projects Assessments for planning issues relating to distribution networks will continue to be assessed under the current regulatory test.

### Introduction

This chapter sets out the Commission's recommendations for a new project assessment and consultation process for transmission to replace the current Regulatory Test. The new process is proposed to be called the Regulatory Investment Test for Transmission (RIT-T). The chapter describes the component parts of the RIT-T in detail, with references to draft legal text. Appendix D contains the proposed new Rule and Rule changes necessary to implement the RIT-T.

On balance, submissions to the Draft Report supported the new test and agreed that it achieved the objectives set out in the COAG Communiqué. A number of market participants raised issues relating to the process and framework for the RIT-T and proposed the following amendments, which the Commission accepted, to the Draft Report Proposals. These amendments will:

- Clarify that distribution projects are out of scope of the new test, including dual function assets and also transmission investments which primarily address an issue on a distribution network;
- Clarify the treatment of reconfiguration projects for the RIT-T;
- Amend the information to be included in project specification consultation report;
- Allow the TNSP to seek an extension from the AER to the 12 month time limit between project specification and project assessment draft report;
- Include an exemption clause for certain projects assessments to by-pass the project assessment draft report. This can only be applied in limited circumstances and will improve the timing of projects approval;
- Clarify that if the preferred option is a reliability augmentation then it must have a proponent;
- Increase the consultation period on the project assessment draft report from 4 weeks to 30 business days;
- Allow TNSPs to consult via their APRs;
- Remove the requirement that the project assessment conclusions report must be published within four weeks of the end of the consultation on the project assessment draft report;
- Include a provision that enables the costs thresholds to be reviewed every 3 years; and
- Require AER to publish their reasons for any dispute resolution determination.

#### **4.1 Current Regulatory Test to continue for DNSPs**

##### **Policy Recommendation**

Investment projects which address an issue on a distribution network, including dual-function assets, will continue to be assessed under the current Regulatory Test (**Appendix D, RIT-T Rules, clause 5.6.5C**).

##### **Reasoning for Policy Recommendation**

The proposed RIT-T will only apply to TNSPs and not DNSPs. The COAG Communiqué states that the new test “will allow proposed transmission projects to be assessed against meeting reliability standards and their ability to maximise benefits to the national market”. The Commission has been developing a proposed test which is fit-for-purpose for transmission.

Under the new arrangements, network augmentations necessary to meet deterministic planning standards applied to distribution networks will continue to be assessed under the current regulatory test, while proposed projects addressing identified needs on the transmission network will be subject to the new RIT-T. In the Draft Report, the Commission sought views on whether having two separate project assessment processes would lead to complications or prevent joint planning process from continuing.<sup>57</sup>

Ergon Energy did not envisage that there would be complications from having different project assessment processes for distribution and transmission and Energex agreed that having two separate processes would not prevent joint planning from continuing. Grid Australia recommended that further consideration be given to the implications of efficient joint planning and project assessment where there are potentially two distinct tests for transmission and distribution.<sup>58</sup>

Energy Australia submitted that it considers that the current regulatory test should be maintained for both its distribution and “dual function” transmission assets. Dual function transmission assets are those that provide support to higher voltage transmission network but have no material market impact. It suggests that the new RIT-T should not apply to such dual function transmission assets; rather, the current Regulatory Test for distribution should apply.<sup>59</sup>

To address these points, the Commission has amended the legal drafting and clarified that investments in transmission whose primary purpose is to address a problem on the distribution network will be assessed under the distribution test.

The Commission has made a final determination on a rule change proposal from Energy Australia in relating to the regulatory treatment of dual function assets.<sup>60</sup> Consistent with the Commission’s determination on that Rule change, such dual function assets projects will be exempted from the RIT-T and instead be subject to the distribution test.

In its submission to the Draft Report, the AER stated that although it appreciates that a full consideration of a regulatory test for distribution is outside the scope of the NTP review, it noted that simply allowing the current version to continue to apply is not a long term viable option since the current test was developed in the transmission context.<sup>61</sup> The Commission understands that the MCE is considering this issue under its review of retail and distribution regulation.

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<sup>57</sup> The network development framework in Chapter 5 of the Rules requires the TNSPs to conduct a joint planning processes with relevant DNSPs. This joint planning process ensures that the capacity of the transmission network is sufficient for the needs of the distribution network and also helps to ensure that the most efficient combination of TNSPs and DNSPs augmentations are implemented.

<sup>58</sup> Grid Australia Draft Paper Submission p. 11.

<sup>59</sup> EnergyAustralia Draft Paper Submission p. 1.

<sup>60</sup> AEMC, Final Rule Determination, Economic Regulation of Transmission Services undertaken by Distributors, 26 June 2008.

<sup>61</sup> AER Draft Report Submission p.7.

## 4.2 Amalgamating Reliability and Market Benefits

### Policy Recommendation

Project assessment shall be carried out under on a cost-benefit framework. The purpose is to identify options which maximise the present value of net economic benefits (or minimise the present value of net economic costs) subject to meeting deterministic reliability standards (where they apply) **(RIT-T Rules, clause 5.6.5B (b) and (c))**.

Under the RIT-T, mandatory reliability obligations would be met by the option that had the highest positive net present value (NPV) or lowest negative NPV. Where there is no underlying mandatory reliability obligation (an issue solely motivated by the delivery of market benefits) then the test would be met by the option which had the highest positive NPV **(RIT-T Rules, clause 5.6.5B (c)(11))**.

Where deterministic standards exist, only the incremental reliability benefits delivered in addition to the level of reliability required by the standard will have to be quantified for the purpose of the RIT-T **(RIT-T Rules, clause 5.6.5B (c) 7)**.

### Reason for Policy recommendation

The MCE directed the Commission to establish a new project assessment and consultation process which amalgamates the reliability and market benefits limbs of the current Regulatory Test, in order to allow proposed transmission projects to be assessed against both local reliability standards as well as their ability to maximise benefits to the national markets.

In the NTP Issues Paper, the Commission discussed two possible approaches to amalgamating the current limbs. Firstly, a full cost benefit approach ('option 1') where all planning is based on a full cost-benefit framework, with the benefits of meeting mandatory obligations explicitly valued in the analysis. The second approach would maintain the existing least cost approach to projects intended solely to meet mandatory obligations, but would allow for the incorporation of additional benefits where relevant ('option 3').

Options 1 and 3 are very similar in principle – both require cost-benefit analysis and assess the economic validity of projects in net present value terms. The key difference between the two possible is that option 1 would attempt to quantify all reliability benefits, but option 3 does not.

The Commission's recommendation is for the adoption of an option 3 approach. This proposal has been widely supported by market participants. Under the proposed RIT-T, all prospective investments above a suitable cost threshold, are to be assessed under a cost-benefit framework. The purpose is to identify options which maximise the present value of net economic benefits (or minimise the present value of net economic costs) subject to meeting deterministic reliability standards (where they apply).

This approach will be consistent with either a deterministic or probabilistic approach to determining reliability standards. Hence the proposed RIT-T can accommodate a nationally consistent framework for transmission reliability standards, in whatever form that takes.

The result will be that TNSPs would be required to investigate whether an enhancement to a reliability project or a different project that met the same reliability standard, would provide additional market benefits that justified a higher cost, and select such a project if one is found. Where no options have market benefits, and hence the project is solely driven by the need to meet reliability standards, the RIT-T is effectively a “least cost” test analogous to the test applied under the ‘reliability limb’ of the current Regulatory Test.

To assist in the application of the new RIT-T, it is recommended that a consistent methodology for quantifying reliability benefits across the NEM is developed by the AER through its normal consultation procedures as part of its development of guidelines for the new RIT-T.

The Commission agrees with the point raised in the submissions that requiring TNSPs to value all reliability benefits for all projects would in some cases, increase the cost and complexity of the analysis required for the RIT-T without commensurate value to the analysis. This could result in a lengthening in the planning process for investment driven by reliability concerns. Any extra provisions in the level of reliability is an additional market benefit and should be measured to achieve the intention of the COAG Communiqué.

Another argument raised against option 1 by Grid Australia is that an approach where all reliability benefits are required to be quantified would be inconsistent with mandatory reliability standards. This is because the level of reliability delivered will be an output of the analysis, and may not be consistent with the level of reliability required to meet the jurisdiction standard. The proposed decision rule for the RIT-T, under which the most economic option required to meet deterministic reliability standards can have a negative NPV, addresses Grid Australia’s concern.

The presence of deterministic planning standards reduces the scope of options to be considered so as to exclude any options that result in non-compliance with the relevant standards. Subject to this restriction, the same cost-benefit test is applied across the range of relevant options. This helps to achieve the intention of the COAG Communiqué of a single test for all projects.

### **4.3 Inclusion of National Market Benefits**

#### **Policy recommendation**

As part of developing the new RIT-T process the Commission has also been asked to review whether the current definition of market benefits is sufficiently comprehensive to capture all national benefits rather than those focused within a region of a TNSP.

The Commission considers that the current definition of market benefits sufficiently allows for all national benefits to be assessed but recommends that the Rules provide greater prescription on the framework of the RIT-T by mandating a list of classes of market benefits and costs that a TNSP must consider in undertaking the project assessment stage. This will remove any perception that a TNSP might be cherry-picking selected market benefits and costs to include in the assessment (**RIT-T Rules, clause 5.6.5B (c)(4)**).

The identification of national benefits will also be aided through the information contained in the NTNDP, and through requiring TNSPs to hold a prior consultation on prospective projects before any assessment which includes seeking views on material classes of benefits.

### **Reasoning for policy recommendation**

The current Regulatory Test defines market benefits as “the total benefits of an option to all those who produce, distribute, and consume electricity in the NEM”. This definition requires the TNSP to take a NEM wide view in calculating the impacts of a project and hence is sufficiently broad to capture national benefits. Therefore it is considered that the concern of COAG relates to how national benefits are accounted for by TNSPs in the project assessment process, rather than any deficiencies in the definition itself.

There seems to be a propensity for the TNSPs to focus only on the impact of augmentations within a particular jurisdiction. It is intended that the new RIT-T, by amalgamating reliability and market benefits, will require TNSPs to broaden the scope of possible market benefits they consider in examining project options.

It is proposed that the Rules provide greater prescription on the dimensions of the RIT-T by mandating a list of market benefits and costs that a TNSP must consider in undertaking the project assessment stage of the RIT-T. This addresses a perception that under the current regime there is the potential for cherry-picking of classes of benefit to be quantified.

Also, to improve the transparency of project assessments, TNSPs will be required to provide information on any classes of market benefits which occur outside the TNSP’s region. In regard to this, the Commission has accepted the points made in Grid Australia submission on the NTP Public Forum Discussion Paper that requiring the TNSPs to quantify separately the value of any market benefits which occur outside its’ region will add complexity to the analysis and will require subjective, uncertain allocation of impacts across regions.<sup>62</sup>

The identification of national benefits will also be aided by the information contained in the NTNDP, and by requiring TNSPs to hold a prior consultation on prospective projects before any assessment. Market participants, including the NTP, will be able to make submissions on possible alternatives and possible market benefits associated

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<sup>62</sup> Grid Australia Discussion Paper Submission p. 15.

with a prospective investment. In addition, the AER will continue to be tasked with providing guidance and methodologies on how to estimate market benefits.

These arrangements will improve the practice of assessing market benefits associated with proposed projects and will provide transparency to stakeholders.

#### **4.3.1 Additional Market Benefit category of Option Value**

##### **Policy recommendation**

An additional category of market benefits for option value shall be added (**RIT-T Rules, clause 5.6.5B (c)(4)(viii)**).

##### **Reasons for Policy recommendation**

The Commission recommends adding an additional class of market benefits to allow any option value associated with proposed investment to be assessed. This would cover any benefits that proposed project may have for future investments and costs.

For example, a non-network investment may help to defer a network investment. This would enable the deferred network investment to benefit from improved information and therefore be more appropriately specified. Another example of option value, would be from the value of increasing the capacity of a radial line above the level to service required by the reliability planning standards to allow for the possibility new generation connecting without any future investment.

Inclusion of this class of benefit may facilitate a more strategic assessment of projects. The AER will provide clarity and explanation on how option value should be assessed and quantified in the RIT-T. The Commission also expects the NTP to provide further information on the possible option values through its development strategies outlined in the NTNDP.

The NGF supported the inclusion of option value provided that a corresponding cost category reflecting the full opportunity cost of scarce resources is also included and the AER provides clear guidelines.<sup>63</sup> Similarly, the AER supported the concept but noted that it may be used inappropriately if not sufficiently defined.<sup>64</sup> Grid Australia also supported the consideration of option value but argued against including it at this review without further guidance to the AER.<sup>65</sup>

#### **4.4 Framework for the Regulatory Investment Test**

The current Regulatory Test has two distinct planning and consultation processes (“limbs”) for selecting the most efficient transmission augmentation option. The

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<sup>63</sup> NGF Draft Paper Submission pp.7-8

<sup>64</sup> AER Draft Paper Submission p. 9.

<sup>65</sup> Grid Australia Draft Paper Submission p. 13.

COAG Communiqué required the Commission to advise on amalgamating these two regulatory test criteria for reliability and market benefits projects.

However, the current processes for mandatory reliability and discretionary market benefit investments differ not only in the decision making criteria but also in the required consultation and assessment processes, and the grounds for dispute. As noted in submissions, reliability investments have a shorter and simpler process to follow compared with market benefits investments. Therefore the Commission's task has been to develop a new test which is capable of being applied consistently across all prospective investments, irrespective of whether the primary motivation for the investment is to meet reliability standards or not.

In this regard, the Commission has developed a proposed revised framework for the application of the new RIT-T. The new framework is based on elements of the current arrangements and addresses:

- What should be the scope of projects subject to the new process?
- When and on what basis should consultation occur?
- What costs and benefits should be recognised and quantified?
- How should the range of options for consideration be identified?
- What should be the appropriate dispute resolution process?

The remaining sections of the chapter discusses the appropriate framework for the new RIT -T.

## **4.5 Scope of Projects**

### **Policy recommendations**

The Commission recommends that:

- The cost threshold for projects subject to the RIT-T should increase from \$1m to \$5m;
- That the threshold should be applied to the most expensive option which is both technically and economically feasible;
- That urgent and unforeseen investments are exempt from undertaking the RIT-T;
- Network reconfigurations which augment the network or affect service levels and cost more than \$5m are also subject to the RIT-T; and
- Projects which combine augmentation and replacement expenditure are also included if the augmentation component is more than \$5m.

It is also recommended that the exemption for funded augmentations, "like-for-like" replacement expenditure, and connection assets from having to undertake an RIT is retained (**RIT-T Rules, clause 5.6.5C (a)**).

For projects that are outside the scope of the RIT-T, the Commission recommends placing an obligation on the TNSPs to ensure the such projects are planned on the basis of minimising costs (exempt for funded augmentations) and TNSPs are required to disclose information on urgent and unforeseen projects and also on replacement expenditure projects costing more than \$5m (RIT-T Rules, clause 5.6.5C (b) and (d)).

## **Reasoning for policy recommendations**

### **Cost thresholds**

There should be a dollar threshold below which the RIT-T is not undertaken. This is a feature of the current Regulatory Test, and would appear to have merit as a means of ensuring that the administrative burden of the test remains proportionate.

The Commission recommends that the cost threshold for the scope of projects subject to the RIT-T is set at \$5m. This reflects an appropriate balance between the regulatory burden placed on TNSPs and ensuring that transmission investment proceeds in a timely manner. It is also recommended that this cost threshold is subject to a 3-yearly review (see section 4.11).

Currently all augmentation projects estimated to cost more than \$1m are subject to the Regulatory Test. The rationale for exempting small scale projects is that there is less profit potential and hence less incentive on the TNSP to favour uneconomic solutions. Furthermore such projects are subject to economic efficiency regulation under Chapter 6A of the Rules.

The Commission recognises the potential merit of an increased threshold for application of the RIT-T, given the removal of the “reliability limb”, and the implied increase in the proportion of projects that would require benefits to be quantified as part of the project assessment process.

Also it is sensible to apply the threshold to the most expensive option which is both technically and economically feasible, instead of the preferred solution. TNSPs should be encouraged to undertake project specification consultations earlier in the planning process and linking the threshold to the TNSPs preferred solution may unnecessarily delay the project assessment process. The inclusion of the terms “technically and economically” feasible addressed the point raised by Grid Australia at the Public Forum that there is always likely to be an option costing more than the threshold.

The AER considered that the \$5m is the appropriate threshold as it would enhance planning and consultation on projects which are more likely to affect the transmission network. Grid Australia disagreed and considered that the \$5m is too low as it would capture investments for which there are unlikely to be either efficient non-network alternatives or market benefits. However the Total Environment Centre (TEC) argued the opposing view and stated that market impacts will occur not only through large dramatic action but also through small incremental projects.

The TEC argued that the trigger for applying the test should remain at \$1m instead of being raised to \$5m.

It is clear that there is no simple rule of thumb threshold to classify accurately whether a project has credible non-network alternatives and/or market benefits can be made. Relatively low cost investments can have far-reaching market impacts in some instances. To achieve the objectives set out by the COAG Communiqué, such market impacts should be considered under the new project assessment process.

The Commission notes that a key benefit of the proposed RIT-T is that such market impacts are identified through market consultation, with relevant input from the NTP, at an early stage of the planning process.

The Commission considers that the \$5m threshold reflects an appropriate balance between the regulatory burden placed on TNSPs and ensuring that transmission investment proceeds in a timely manner. To prevent the disproportionate use of resources and unnecessary delays to the investment process, the proposed RIT-T contains a series of enhancements:

- The \$5m threshold will be subject to a review every three years;
- The TNSP will determine, under an objective framework, which classes of market benefits are material and require to be quantified; and
- In a number of limited circumstances, the TNSP can be exempted from undertaking the project assessment draft report.

The Commission is currently considering a related Rule change proposal from Grid Australia on changing the thresholds applied to the current Regulatory Test. Although the issues are related, there are significant differences between the current test and the proposed RIT-T. Therefore the appropriate thresholds for the RIT-T are not directly comparable for assessing the thresholds for the current test.

### **Types of investment – augmentation, replacement and reconfiguration**

Reconfiguration investments generally arise when an asset requires replacement and a TNSP identifies more efficient asset configurations to deliver required system performance associated in the particular location.

It is also considered that the scope of projects subject to the RIT-T should be expanded to include network reconfigurations, and also situations where there is scope for replacement and augmentation investment to be combined together. This addresses any concerns about a possible lack of sufficient incentives for such investment because of the potential distortions to arise because such projects are not subject to the current Regulatory Test. It has also been suggested that there is a lack of incentives for TNSPs to consider alternative non-network options when proposing to replace or reconfigure the existing transmission networks. This proposal was widely supported by market participants and TNSPs.

In March 2007, the Commission rejected a Rule change proposal submitted by Stanwell on this matter, suggesting that the issues raised would be best dealt with in

a specific review of the application of the Regulatory Test. The Commission has indicated that this Review presented an appropriate opportunity to evaluate this issue.

With respect to “like-for-like” replacement expenditure, the Commission notes that any investment decision may have scope to deliver market benefits, even if the primary motivation for the investment is to replace an existing network element such that the prevailing capability of the network is maintained. Where other options exist which might deliver greater market benefits, those options should be assessed. However, where options other than like-for-like replacement do not exist, the RIT -T should not apply. To require TNSPs to apply the RIT-T in these circumstances would represent an unnecessary regulatory burden. The Commission notes that for such replacement expenditure projects TNSPs will still be subject to the financial incentives promoting efficient behaviour under the Chapter 6A framework.

The proposed Rules have been amended to address the point made by Grid Australia at the NTP Public Forum that for projects which combine both replacement and augmentation expenditure, only projects where the augmentation component is more than \$5m will be subject to the RIT-T.

### **Urgent and Unforeseen network investment**

The Commission proposes that “urgent and unforeseen” transmission investment is exempt from the RIT-T. This addresses directly a requirement of the COAG’s Communiqué that the new regime must not reduce or adversely impact on the ability for urgent and unforeseen transmission investment.

There should be sufficient flexibility within the contingent project mechanism to accommodate large foreseen but uncommitted investments. It should also be noted that under the Chapter 6A framework, all actual capital expenditure is rolled into the regulatory asset base without ex post prudence or efficiency assessment. Therefore under the current framework, TNSPs have access to funds to undertake urgent and unforeseen investments. The proposals for the RIT-T ensures that there are no other delays driven by regulatory procedure.

Under the proposed RIT-T, all prospective projects are required to be assessed on their ability to deliver both reliability and economic market benefits. This will require more analysis and resources compared to the current arrangements where reliability projects are assessed on the basis of cost alone. Requiring such investments to go through the proposed RIT process may place at risk the TNSPs ability to deliver the necessary investment within the defined timescales, if the investment were urgent and unforeseen. This would fail to meet the objectives for the new regime set out in the COAG Communiqué.

While there is potential for this exclusion to be exploited by TNSPs, the risk is considered to be relatively low. Misuse of this exclusion will represent a failure to comply with the Rules, subject to AER enforcement measures. Further, in the absence of extenuating circumstances (such as damage to a network due to extreme weather), the exclusion for urgent or unforeseen investment represents an admission of a planning failure by the relevant TNSP, and as such will carry a reputational cost.

The Commission also notes that the likelihood of unplanned augmentations being required urgently may decrease over time under the new national transmission planning arrangements.

#### **4.5.1 Information Disclosure Requirements for certain projects outside the scope of the RIT**

Detailed information should be disclosed in the TNSP's APRs on both urgent and unforeseen projects and replacement expenditure projects which cost more than \$5m. Such information should cover the date, purpose and cost of the project.

### **4.6 Project specification consultation**

#### **Policy recommendation**

All projects subject to a RIT-T assessment will be required to go through a project specification consultation stage before any assessment of costs and benefits. The purpose of this stage is to consult on the range of materially relevant costs and benefits and the range of credible options. Market participants, including the NTP, will have the ability to comment on the possible market benefits and also possible options for consideration. The Commission recommends that the timeframe for the project consultation process should, at the minimum, be 12 weeks.

#### **Reasoning for policy recommendation**

The COAG requirement that the two "limbs" of the existing Regulatory Test are integrated into a single "limb" has implications for the consultation process underpinning the RIT-T. The current procedural differences determined by a TNSP's decision as to whether an investment is reliability or market benefits driven cannot be rolled forward in the context of a single 'limb'. A standard consultation process must apply to all projects subject to the RIT-T.

A key change effected through the Commission's Regulatory Test principles Rule change determination was the requirement for TNSPs to publish a Request for Information (RFI) on potential options when applying the market benefits limb to new large transmission assets (those likely to involve more than \$10m of capitalised expenditure). The rationale for the RFI requirement provided in the Commission's Final Rule Determination was threefold:

- to overcome the potential for gaming – both the incentive of opponents of a transmission investment to scuttle a transmission proposal by proposing unrealistic alternatives and the incentive of TNSPs to take too narrow a view of alternative options or scenarios;
- to help ensure something is built – so that augmentation options are considered against likely alternatives rather than alternatives that may not be developed; and

- to take account of regulatory failure – in that the theoretically “best” alternative may not actually proceed.

It is proposed that the new arrangements include a similar consultation stage, which is called the project specification consultation, into the RIT-T.

This consultation stage will help to ensure that all potential options are identified and considered and will enable market participants, including the NTP, to inform the TNSPs on the extent of possible market benefits associated with the proposed investment. This ensures that the key inputs into the project assessment are subject to consultation which will help to improve the application of the assessment and promote transparency.

Some TNSPs have argued against any prior consultation on the grounds that it may lead to unnecessary delays. The Commission considers that prior consultation is necessary to improve the identification of alternatives and market benefits. Any process that enables TNSPs to label a prospective investment solely as a reliability project without consultation and assessment would retain the current distinction and not be consistent with the COAG Communiqué.

The precise timing of the project specification consultation will need to be determined by each relevant TNSP. However, this should occur at an earlier point in the process than the current RFI consultation, which generally occurs when a TNSP’s preferred option is fully developed and costed. In contrast, the purpose of the project specification consultation is to identify the circumstances prompting consideration of an investment response, and to set out the range of credible options for addressing the issue. The TNSP does not need to declare a preferred option at this stage, although in some circumstances it might wish to do so.

For its draft policy proposals for the NTP Public Forum, the Commission suggested that market participants should have a minimum of 26 weeks to respond to each project specification consultation. The purpose of this timeframe is to allow sufficient time for market participants to develop viable alternatives, including non – network options. However, recognising that the possible problem is likely to be highlighted earlier in the NTNDP and also possibly the APRs, and having regard to the view expressed by Grid Australia, that the proposed 6 month timeframe is excessive and will delay investment, the Commission recommends a period of 12 weeks to allow for the project specification consultation.

## **4.7 Selection of Market Benefits and Costs to Quantified**

### **Policy recommendations**

The TNSP will be required to assess the material relevance of each class of market benefit for each credible option. For the assessment, the TNSP must quantify those classes of market benefits associated with each credible option which, in its objective judgement, have a material relevance (**RIT-T Rules, clause 5.6.5B (c) (5) and (6)**).

## Reason for policy recommendations

The Commission considers that the RIT-T should be supported by greater prescription in the Rules as to which classes of benefit and cost should be considered. This will promote consistency in application of the RIT-T, and remove any perception that results are influenced by the selective inclusion or exclusion of classes of costs or benefits.

On the approach for determining which market benefits need to be quantified under the project assessment, the Commission has evaluated two possible approaches. One approach would be to mandate the quantification of all market benefits. The alternative approach would give the TNSPs some guided discretion to decide, after a process of consultation, which classes of benefits require quantification on a case-by-case basis.

The Commission does not support mandating the quantification of all costs and benefits in all cases. It is considered that this may fail to deliver the objective of the COAG Communiqué and would not meet the criteria of good regulatory design and efficient outcomes. This is because mandating analysis could impose an unnecessary or impractical burden on transmission operators without adding value to the decision making process.

In light of the discussion at the public forum, the Commission has decided to amend its policy proposals and no longer proposes an additional cost threshold (of between \$25m to \$35m) where the quantification of benefits is mandated.

It now considers that the RIT-T shall include a quantification of all classes of market benefits which are determined to be material. All classes of market benefit shall be considered to have material relevance unless:

- A detailed explanation is presented as to why a particular class of benefit is not expected to affect the outcome of the assessment stage; or
- The cost of undertaking the analysis to quantify the benefit is demonstrated to be disproportionate (to both the estimate cost of the option and possible benefit).

The onus should be on the TNSP to demonstrate why a particular class of benefit does not need to be analysed in a particular set of circumstances. The project specification stage provides a mechanism for TNSPs to present such reasoning for consultation, prior to finalising the analytical specification of an individual RIT assessment. In making its judgement on whether a class of benefit is material, the TNSP shall have regard to the views of market participants raised during the project consultation process. The NTP is one party who might add value to this process through making submissions to the specification consultation.

This proposal will ensure proper assessment of market benefits and reduce the risk of compliance costs being unnecessarily high or the risk of unnecessary procedural delays. TNSPs will be required to assess the material relevance of each class of market benefit and inform market participants to its reasoning why it considers a

certain class of benefit is not material. Also TNSP's judgement will be subject to dispute.

## **4.8 Selection of credible options for assessment**

### **Policy recommendation**

The Commission proposes that the current arrangements for selecting credible options for discretionary market benefit investments is applied to all prospective investments under the RIT. Whether an option has a proponent will be a factor for consideration in assessing possible options, but will not in itself exclude an option from being a credible option (**RIT-T Rules, clause 5.6.5D**).

### **Reasoning for policy recommendation**

The application of a cost benefit framework requires the identification of the range of credible alternatives to be assessed. The most appropriate approach for this is for a TNSP, under an objective framework (including consultation) set out in the Rules, to determine which alternatives are credible and should be assessed under the RIT-T. The Rules should specify the definition of a credible option and require the TNSPs to apply this definition in an objective and balanced manner.

With respect to the framework for the selection of credible options, the current arrangements for identifying credible alternatives for discretionary market benefits investment are sensible and appropriate. Therefore it is proposed that such arrangements are extended to cover all projects.

The Commission considers that the proposed arrangements will give sufficient protection for TNSPs to dismiss unrealistic or insubstantial alternatives, while also ensuring that realistic and well-defined alternatives are given due consideration. The Commission notes that whether a project has a proponent would be a factor that the TNSP could have regard to when deciding whether an option is credible or not. This removes the current restriction that an option must have a proponent if it is to be considered as credible, in circumstances motivated by mandatory reliability obligations.

The Commission rejects Grid Australia argument that the proponent requirement for reliability investment must be retained.<sup>66</sup> All possible options should be assessed on their own merits and ability to address the network problem. The associated risks and liability management issues of each option would be a consideration in determining whether an option is both technically and commercially feasible.

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<sup>66</sup> Grid Australia Draft Paper Submission p. 9.

## 4.9 Project Assessment

Following a review of the submissions received on the project specification consultation, the TNSP will decide upon the credible options and material benefits to be assessed. The TNSP will carry out the cost-benefit analysis as required by the RIT-T which is developed by the AER.

The next stage will be for the TNSP to consult on the findings of the project assessment and the option which maximises net economic benefit through the publication of a project assessment draft report. The TNSP will also be required to provide reasoning for its decisions in respect to the selection of credible options and material market benefits.

To ensure timely investments it is appropriate to link the publication of the project assessment draft report to the date of project specification consultation report. It is proposed that if the TNSP elects to proceed with the investment then the project assessment draft report must be published within 12 months of the end of the consultation on the project specification. The TNSP has the option of requesting from the AER an extension to this date. In its submission to the Draft Report, Grid Australia commented that there may be very good reasons why the project assessment draft report is delayed beyond the 12 month cut-off point.<sup>67</sup>

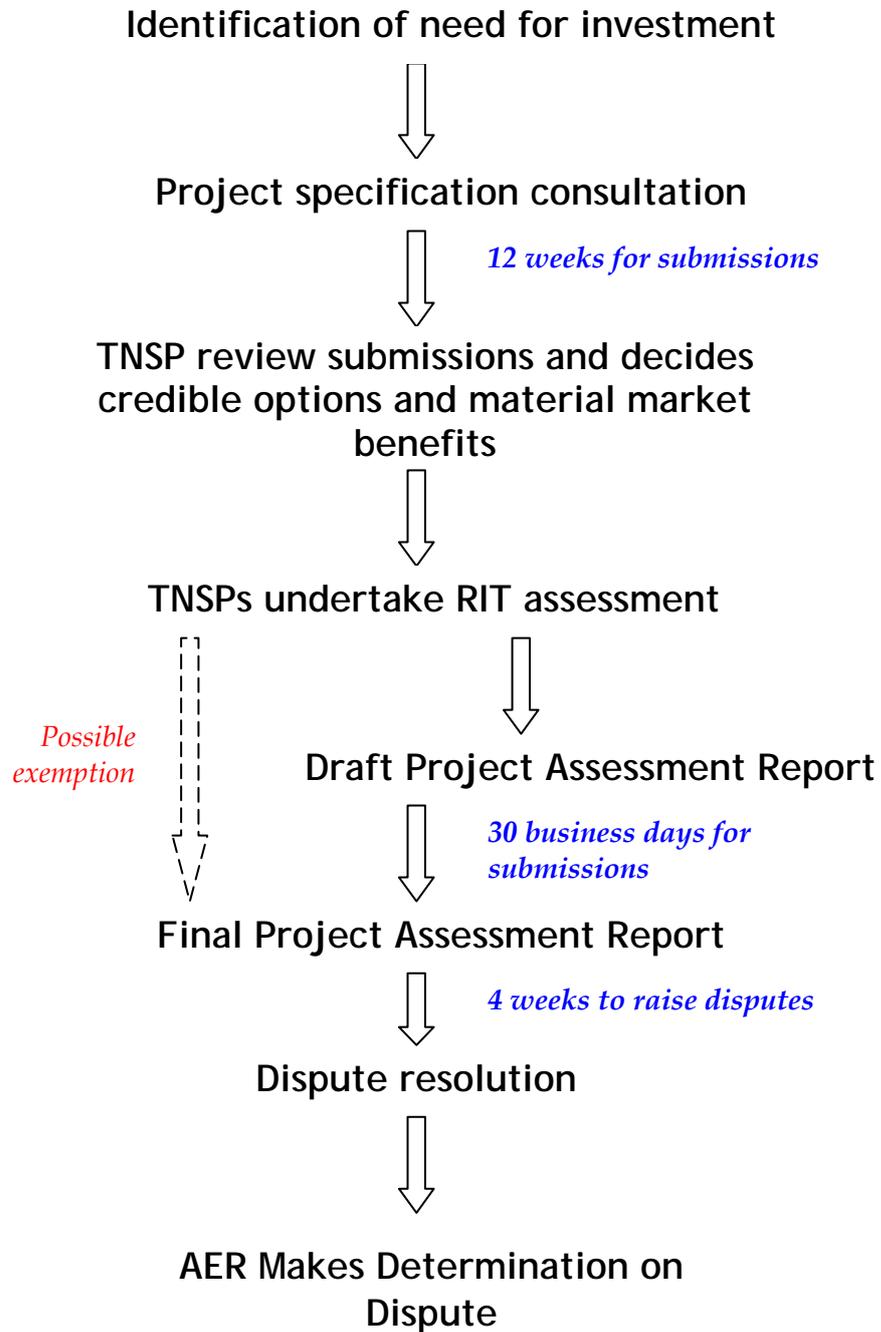
Following a review of the submissions received on the project assessment draft report, the TNSP will then issue the project assessment conclusion report which will set out the TNSP final decision on the preferred option.

Box 4.1 sets out the sequential stages to the proposed RIT-T.

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<sup>67</sup> Grid Australia Draft Paper Submission p. 15.

**Box 4.1: Regulatory Investment Test for Transmission Stages**



## 4.10 Exemption from Project Assessment Draft Report Stage

### Policy recommendation

The TNSP will be exempt from having to release a project assessment draft report if (RIT-T Rules, clause 5.6.6 (v)):

- (1) The estimated capital cost of the proposed preferred option is less than \$35m; and
- (2) The TNSP has stated its proposed *preferred option*, it reasons why it is the proposed preferred option, and that it intends to apply this exemption clause in the *project specification consultation report*; and
- (3) The TNSP considers, in accordance with clause 5.6.5 (c) (6) that the proposed preferred option and any other credible option will not have a material market benefit, and has stated this in its project specification consultation report; and
- (4) No submissions were received on the project specification consultation report which identifies additional credible options that could deliver a material market benefit.

### Reason for policy recommendation

It is important that the new RIT-T makes appropriate and efficient use of the planning resources available to the TNSPs. The Commission considers that there are limited circumstances where requiring the TNSPs to go through the project assessment draft report consultation stage may not represent appropriate and inefficient use of resources. The Commission also notes that the COAG Communiqué stated that the new process should ensure that projects justified solely on reliability grounds are delivered in an efficient and timely manner.

In its submission to the Draft Report, Grid Australia proposed amending the RIT-T to include a two-tier process where certain projects can be fast-tracked by applying a consultation process similar to the process currently applying to small network investment. Grid Australia argued that this would enable simple reliability driven projects which do not materially affect the transfer capability of the major flow paths to be proceed quickly (for example, a transformer investment to address a local reliability need).

The Commission agrees with Grid Australia that the RIT-T should not result in an inefficient use of resources and unnecessary delay straight-forward projects. Any analysis performed by the TNSP should offer a compensating benefit. Therefore the Commission has recommend adding a provision that would exempt certain proposed projects from having to release and consult on a project assessment draft

report. Such projects would go straight to the issue of a project assessment conclusions report.

There needs to be appropriate safeguards to ensure that such an exemption is only applied in the limited circumstances. This would only be applied where the proposed option is less than \$35m and no submissions have raised other options that could deliver a material market benefits. Furthermore, the TNSP will be required to notify market participants of its intention to apply this exemption and its proposed preferred option at the project specification stage.

This proposal will continue to ensure that extensive analysis and consultation is undertaken for options that deliver material market benefits to the NEM, irrespective of the cost of the project.

#### **4.11 Review of the Cost thresholds applied in the RIT-T**

##### **Policy recommendation**

The proposed new RIT-T will use a cost value as threshold in two instances:

- A cost value of \$5m in determining the scope of projects subject to the RIT-T (**RIT-T Rules, clause 5.6.5C (a)**); or
- A cost value of \$35m in determining, among other factors, whether a project can be exempted from the project assessment draft report stage (**RIT-T Rules, clause 5.6.6 (v)**).

The Commission recommends that these costs value are reviewed by the AER every three years (**RIT-T Rules, clause 5.6.5E**).

##### **Reason for policy recommendation**

An issue which was raised in Grid Australia's Rule Change proposal to amend the Regulatory Test Thresholds was whether fixed value thresholds would continue to be appropriate when input costs vary over time. To address this, a provision should be included in the RIT-T which would enable the cost thresholds to be amended without the need to go through a formal rule change process.

The Commission recommends that a review of the cost thresholds occurs every 3 years and that this review is conducted by the AER, and includes public consultation.

This proposal is considered more appropriate than the alternative of automatically indexing the cost thresholds. A review would allow for a number of indices to be used and for market consultation as to guide which is the most appropriate. The Commission also considers that a review would provide for a more thorough analysis into the input costs of the threshold values. This would also include a consultation period where it is expected that the relevant factors from the various aspects of the industry could be obtained.

Having analysed the effects of indexation from 2002 to the present the Commission considers that the review should take place every three years as the analysis found that input costs did not vary considerably on an annual basis.

The Commission considers that the timeframes to conduct the review should allow adequate time for industry consultation, and for a thorough examination of the input costs but should not unduly delay the introduction of changes that would seek to maintain the value of the thresholds where there is a change in input costs. The Commission has therefore provided for a 16 week process, with 6 weeks allocated to the publication of a draft decision, 5 weeks allocated to consultation and 5 weeks allocated to the publication of a final decision.

The Commission considers that the AER be responsible for conducting the review. The Commission considers that this function is in accordance with the AER's current roles of monitoring, enforcing and promulgating the Regulatory Test.

## **4.12 Dispute Resolution**

### **Policy recommendation**

A single consistent framework for dispute resolution is needed to support the amalgamation of the market benefit and reliability limbs of the current regulatory test. The Commission considers that retaining the distinction in dispute resolution between different types of investment is not appropriate for an integrated test.

The Commission's task is to develop a RIT-T which is capable of being applied consistently across all prospective investments. This requires a single, consistent framework for disputes. A dispute resolution framework based on two separate "limbs" is not feasible under an integrated test.

It is recommended that the Rules contains more specification and detail on the basis for resolving disputes. The basis for assessing disputes should be whether the TNSP has complied with the Rules and the AER's RIT-T, and not on whether the best options has been selected. The AER will be required to provide its reasons for any determination (**RIT-T Rules, clause 5.6.6A**).

### **Reasoning for policy recommendation**

Under the current arrangements, only issues relating to new large transmission augmentations (projects costing more than \$10m) can be disputed. Also the dispute process and possible grounds for dispute differ depending on whether the augmentation is labelled as a reliability investment or a discretionary market benefit investments. The scope for disputes is greater for market benefits investments than for reliability augmentations.

The Commission's task has been to develop a RIT-T which is capable of being applied consistently across all prospective investments. This requires a single, consistent framework for disputes. A dispute resolution framework based on two separate "limbs" is not feasible under an integrated test.

The Commission proposes that for all transmission projects that are subject to the RIT-T, interested parties can raise disputes in relation to the application of the RIT-T assessment, including the choice of credible options, the choice of classes of benefit to quantify, the accuracy of the analysis, and the results of the RIT-T.

This recommendation will extend the scope of projects subject to dispute to now include projects costing between \$10m and \$5m. It is appropriate for all projects that are subject to the RIT-T to also be subject to the new dispute resolution. Creating a secondary higher cost threshold would not reflect good regulatory practice. Furthermore the dollar value of a project does not necessarily reflect the impact of the investment on the network.

It is also appropriate for the Rules to contain more specification and detail on the basis for resolving disputes. The Commission is concerned that the current Rules do not specify any criteria or framework governing the AER in determining disputes. This creates uncertainty for participants disputing the assessment and the affected TNSPs which might in turn deter legitimate disputes being raised.

Under the RIT-T, it is proposed that the AER's role in determining a dispute is limited to assessing whether parties have correctly applied the RIT-T in accordance with the Rules, and to directing the TNSP to amend its analysis consequently, if required. The AER's role should not, in the Commission's view, be a merits review. Further, it is important that the AER has the ability to reject disputes immediately if the grounds for dispute are invalid, misconceived or lacking in substance. This safeguard is needed to protect against parties raising baseless or vexatious disputes in order to delay projects.

The Commission accepts the point raised by the AER that 40 days may not be sufficient time to make a determination. Therefore it is recommended that the AER has an option to extend the determination process by an extra 60 days (maximum). The AER must inform all parties of the extension and does not need to seek consent of the disputing parties.

## **4.13 Other Issues relating to RIT-T**

### **4.13.1 The RIT-T in the context of climate change policy**

The context within which the RIT-T will operate is likely to be impacted by the ongoing development of policy responses to climate change. While not within the immediate scope of the review, the Commission has also considered whether the wider changes should be made in this regard in transitioning from the existing Regulatory Test to the RIT-T, i.e. to ensure that the various instruments which value carbon are treated appropriately. Two particular questions have been addressed:

- a) whether the specified classes of costs and benefits adequately cover relevant environment impacts; and

- b) whether the provision that excludes externalities from the analysis<sup>68</sup> may prevent the inclusion of related impacts of environment policies in the analysis (e.g. the obligations for retailers with regard to Renewable Energy Certificates).

It is understood that in developing the current Regulatory Test, the AER decided to remove the explicit reference to environmental costs and benefits in the definition of costs (clause 2 (c) of the existing test) on the basis that this level of detail was more appropriate for guidelines, and that a more generic reference to any costs of complying to laws, regulations and applicable administrative requirements, was more appropriate.<sup>69</sup> The AER also provided direction in relation to the treatment of environment costs in its Guidelines.<sup>70</sup>

The Commission proposes to incorporate the same provisions applied to the current test into the new RIT-T.

### **Submissions and Reasoning**

With the increasing role of climate change policy as a likely driver of economic decision-making, it is important that the design of the RIT-T is fit-for-purpose in this regard. In the Draft Report, the Commission invited views on this. The Draft Report asked whether (and how) the costs and benefits associated with an emissions trading scheme and schemes based on retailer obligations to procure specified proportions of energy from renewable sources, are captured in the current draft legal text for the RIT-T.

Market participants recognised the importance of this issue but advised against making any changes to the test at this stage. They noted that future consideration will be required once the government policies have been finalised.

Grid Australia stated that the effects of both the ETS and MRET schemes on future plausible generation patterns are already captured in the RIT-T analysis via the market development scenarios modelling.<sup>71</sup> They thought that it would be inappropriate and premature for the Commission to seek to predict policy at this stage and that it will be better to allow AER flexibility to amend guidelines once government policy is known.

AER agreed that the RIT-T needs to be consistent with the proposed ETS. However until a policy is released, it will be difficult for the AER to develop clear rules and approach to valuing the associated costs and benefits. Therefore it thought that any detailed on this should continue to reside in the guidelines not in the Rules nor Regulatory Test. However Origin Energy argued that there is uncertainty surrounding the extent to which environment costs and benefits can be included in

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<sup>68</sup> “Any cost or benefit which cannot be measured as a cost or benefit to producers, distributors, and consumers of electricity may not be included in the analysis proposed in accordance with this test”  
AER Regulatory Test Version 3, clause 10.

<sup>69</sup> AER, Final Decision, Regulatory Test Version 3 & Application Guidelines, November 2007.

<sup>70</sup> AER, Regulatory Test Application Guidelines, November 2007, part 3 (b).

<sup>71</sup> Grid Australia Draft Paper Submission p. 14.

the current assessments.<sup>72</sup> It considered that it is not clear whether compliance with an administrative obligation or a wealth transfer, takes precedence.

Origin Energy also commented that the RIT-T does not take a strategic, long term view and tends to be reactive and bias against early, large transmission investments.<sup>73</sup> This will impede the significant expansion of the grid needed to connect remote renewable generation. An scenario analysis approach which assigns probability to each scenario would better capture potential value to larger projects with higher risk but also higher benefits.

The Commission recommends maintaining the same provisions applied to the current test into the new RIT-T but notes that this issue of treatment of carbon benefits needs further consideration once the government policy is announced.

#### **4.13.1.1 Separate class of market benefit for climate change impacts**

A related issue of transparency is that whether there would be any benefit by having a separate class of market benefit for any “changes in costs through avoidance of greenhouse gas emissions and any associated carbon costs” given the increasing focus on climate change. Grid Australia argued against and stated that it saw no need for the Commission to pre-empt the details of the emission trading scheme by seeking to separately identify carbon impacts. The Commission has decided not to include a separate class of market benefit for carbon benefits in the Rules but instead give the AER the flexibility to add further classes of benefits in the RIT-T.

#### **4.13.2 Appropriate Division between Rules and Regulatory Test and Guidelines**

A key element of the process introduced following the Commission’s 2006 Determination on the MCE reform of the Regulatory Test principles rule change proposal was an improved governance structure for the Test.<sup>74</sup> Under the new structure, there are three distinct but complementary aspects to the application of the project assessment and consultation process:

- Principles on how the Regulatory Investment Test for Transmission should be applied, which are set out in the Rules;
- The Regulatory Investment Test for Transmission – which is developed by the AER in accordance with the principles set out in the Rules; and
- Guidelines for the operation and application of the Regulatory Investment Test, for Transmission which AER is required to published.

Under this framework, the Rules set out principles that the AER must adopt in promulgating the test. The purpose of this is to ensure that the test is applied in a

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<sup>72</sup> Origin Energy Draft paper Submission p. 3.

<sup>73</sup> Origin Energy Draft Paper Submission p. 4.

<sup>74</sup> AEMC, Final Rule Determination, Reform of the Regulatory Test Principles Rule, 30 November 2006.

consistent manner, which provides a level of certainty to NSPs in undertaking new network investment, while leaving sufficient discretion with the AER to promulgate the test consistent with its role as the regulator.

The Commission is proposing to expand the list of principles and to bring more prescription on the procedure and framework for the new RIT-T into the Rules. This is to ensure that the new Test is consistently applied, thereby improving certainty for all market participants in how the transmission investment projects are assessed. The Commission also considers the proposed structure will retain a level of sufficient flexibility for the AER to make and oversee the RIT-T consistent with its role as the regulator. The new RIT-T needs to be flexibility so that can it assess a range of projects of varying size and complexity.

The AER will remain responsible for making the test. Also it is proposed that greater level of description and explanation on possible methodologies, supported by examples, should be provided within the AER guidelines. This will help TNSPs in their assessment of market benefits and costs and improve the level of predictability for market participants in how RIT-T assessments are undertaken.

The Commission considers that this strikes the appropriate balance between the Rules providing the appropriate framework to achieve the policy goals for the RIT-T 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.

In its submission to the Draft Report, AER commented that the proposed increase in prescription in the Rules blurs the demarcation between the Rules and the RIT-T and may decrease the need for the AER to actually publish the RIT-T.<sup>75</sup> It thought that the proposal creates too much unnecessary overlap between the Rules and the RIT-T and does not provide sufficient flexibility.

The Commission disagrees with AER's view that the proposed Rules questions the need for an actual test to be published. The proposed Rules set out the key principles to be reflected in the Test and guidelines. The recommendations are consistent with the structure implemented by the 2006 MCE Rule Change.<sup>76</sup> The Commission considers that both the RIT-T and supporting guidelines will need to be substantially more prescribed and be more detailed than the current versions. These documents will play a key role in implementing and supporting the new arrangements and need to be comprehensive in order to help achieve the objectives contained in the COAG Communiqué.

The Commission agrees with AER that it is important that the new arrangements have sufficient flexibility to allow the AER to amend the RIT-T to respond to market developments. Therefore the Commission has amended the proposed Rule to allow the AER to add further classes of costs and benefits that must be considered under the new Test.

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<sup>75</sup> AER Draft Paper Submission p. 10.

<sup>76</sup> AEMC, *Reform of the Regulatory Test Principles*, 2006.

### 4.13.3 Demand Side Participation Review

Under the DSP Review, the Commission engaged NERA to undertake an assessment of DSP in the context of its current work program. This section discusses the recommendations made in NERA's report in relation to how the new project assessment process should be design to facilitate DSP.

NERA recommended that the new RIT-T:

- ensures that the timeframe over which DSP options are required to be presented as alternatives to a network solution is sufficient to allow these options to be considered viable;
- clearly defines how “national market benefits” should be interpreted for non-network options;
- takes into account differences in risk between network and non-network options; and
- defines an option-value benefit associated with an investment that defers a proposed network investment.

The Commission considers that its recommendations for the RIT-T addresses the points raised by NERA and supports the efficient level of DSP in the NEM. The proposed two-stage framework where the TNSP consults on the identified needs of the network before doing the project assessment and the requirement for market benefits to be assessed for any project will help to facilitate efficient DSP.

The Commission also considers that the proposed twelve week period for the project specification stage is the appropriate balance between enabling non-network service providers to present viable options and ensuring the transmission investment is completed in a timely manner.

Section 4.11.1 sets out the Commission's reasoning for including an additional class of market benefit for option value.

The remaining recommendations will be dealt with through the development of the RIT-T and guidelines by the AER. The AER when developing the new RIT-T and supporting guidelines will be required to inform on the methodologies used for valuing costs and benefits associated with each option. The guidelines will also discuss the appropriate discount rates to apply when assessing a credible option, noting that different options may have different risk profiles.

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## 5 Revenue and Pricing Framework

### Summary of our final recommendations

- That the MCE requests the AEMC to conduct further analysis and consultation on the possible approaches for a formal arrangement for inter-regional transmission charging;
- Alignment of the dates of revenue determinations for TNSPs would not deliver net benefits to the market and should not be implemented;
- That the MCE requests the AER to report on any synergies from aligning the revenue determination date for each region's transmission and distribution companies, following completion of its NSW reviews where transmission and distribution are being undertaken at the same time;
- That the AER have regard to both the NTNDP and relevant RIT-T project assessment conclusion reports when assessing the TNSP's proposed operational and capital expenditure; and
- That TNSPs are required to provide an analysis of the relationship between their revenue expenditure proposal and NTNDP development strategies, and explain any inconsistencies between their proposals and the NTNDP.

### Introduction

This Chapter sets out the Commission's recommendations on three policy issues relating to the framework for economic regulation of transmission. These issues are ancillary to the establishment of the NTP and the RIT-T, but have the potential to influence how successfully the new arrangements achieve the objective of the COAG Communiqué and drive more efficient outcomes. The three issues are: the regulatory arrangement for levying transmission charges across regional boundaries; the timing of revenue re-sets for network businesses; and the consequential changes to the Rules required to reflect appropriately the establishment of the NTP and the RIT-T.

### 5.1 Inter-regional transmission charging

#### Policy Recommendation

That the MCE requests the AEMC to conduct further analysis and consultation on the possible approaches for a formal arrangement for inter-regional transmission charging.

## Need for a formal Inter-Regional Transmission Charging Arrangement for the NEM

A key policy issue facing the development of a national and co-ordinated electricity market is how to allocate costs for projects that deliver market benefits over more than one jurisdiction. Currently a TNSP recovers its own costs in building and operating the network from customers within its region. The exemption provided in the Rules (clause 3.6.5(a) (5)) is for inter-regional charges to be established through inter-governmental negotiation and agreement.

The Commission highlighted the weaknesses of the current regime for inter-regional charging in its 2006 review of economic regulation for transmission, although it did not provide explicit recommendations at that time. The Commission has re-evaluated this position in the context of the NTP review, including in the light of the report prepared by the Brattle Group on international experience in transmission planning arrangements.<sup>77</sup> The Brattle report identified the absence of robust arrangements for inter-regional charging as a significant generic barrier to co-ordinated planning of efficient transmission investment across different regions. Brattle stated that the existence of cost allocation mechanisms that allow for transfers between transmission operators, minimises the creations of “winners and losers” enhances the chances of successful co-operation and provides improved locational incentives. Brattle noted that most overseas systems have evolved towards formal cost transfer mechanisms and moved away from the traditional methodologies that only allowed transmission operators to earn revenue from its own customers.

It is noted also that Grid Australia raised concerns about the Brattle report, and in particular the extent to which experience in other markets was relevant to the particular settings of the NEM.<sup>78</sup>

The Commission remains of the view that the current arrangement represents a weakness in the regulatory framework that should be addressed, and one which is directly relevant to the NTP and the RIT-T. There are two potential problems:

- First, the **risk of sub-optimal investment plans**. Based on a strict economic analysis, an individual TNSP should be indifferent between projects that benefit consumers in its jurisdiction and projects that benefit consumers in another jurisdiction. There is no explicit difference in the revenue treatment of such investments. However, there might be ‘softer’ influences on TNSP behaviour, if particular investments impose costs but confer no benefits on local consumers.
- Second, the **dilution of cost-reflective price signals** to users of the transmission network. This is more clear-cut. The constrained ability to levy transmission charges across jurisdictional boundaries represents a direct barrier to attaining

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<sup>77</sup> Brattle, International Review of Transmission Planning Arrangements, Report for the AEMC, October 2007.

<sup>78</sup> Grid Australia letter to AEMC, 13 November 2007, regarding National Transmission Planning Arrangements Review – Publication of the Brattle and Firecone Reports. This can be accessed from the AEMC website, [www.aemc.gov.au](http://www.aemc.gov.au)

cost-reflective charges. Cost-reflective charges are important because they have the potential to promote efficient decision-making by market participants.

The absence of an effective regime for inter-regional charging also has distributional impacts which might be considered to be inequitable, i.e., consumers in one region paying higher electricity bills to fund network investment which benefits consumers in another region. While these are less directly relevant from the strict perspective of economic efficiency, they might be relevant considerations in the wider context of regulatory consistency and stability. It should be noted that the size of these transfers between classes of consumers under the current regime might be expected to be increasing over time as the NEM, in general, becomes more inter-connected.

Stakeholders agreed that a formal arrangement for an inter-regional charging mechanism is needed to promote the efficiency of the NEM but differed in opinion as to whether it was appropriate for the Commission to consider this as part of the NTP Review.

ESIPC thought that the current weakness for current TUoS arrangements not to apply inter-regionally leads to a disincentive on TNSP to invest in augmentations that have non-local benefits.<sup>79</sup> They stated that the ability to transfer costs across regions is a pre-requisite to an effective national transmission scheme. Grid Australia stated that greater levels of interconnection will make the deficiencies in the current state-based pricing regime more apparent and hence some treatment of TUoS is appropriate.<sup>80</sup>

The Commission considers that the implementation of a formal and transparent inter-regional transmission charging arrangement is essential to the development of a national and co-ordinated transmission grid. ERIG reached a similar conclusion stating in its final report that the development of an efficient and robust inter-jurisdictional TUoS payment system will be necessary as the development of the transmission grid takes on a more national focus, especially with the increase likelihood of future interconnection needed to support the development of a efficient and strategic grid.<sup>81</sup>

### **Possible Options for an inter-regional charging framework**

In designing a framework for inter-regional changing, the following generic questions need to be answered:

- What costs are being recovered?
- How are the costs allocated between TNSPs?
- How are the charges levied between TNSPs reflected in transmission charges to users?

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<sup>79</sup> ESIPC Draft Report Submission pp. 1-2.

<sup>80</sup> Grid Australia Draft Report Submission pp. 19-20.

<sup>81</sup> ERIG, Final Report to COAG, January 2007, p.180.

In the Draft Report, the Commission presented the following four possible inter-regional charging options:

- **Option 1:** The costs of new investment in assets to enhance the interconnected network are shared between the relevant adjacent TNSPs (**Interconnection cost sharing**);
- **Option 2:** The costs of new investment in assets to enhance the interconnected network are shared between all TNSPs in the NEM (**NEM-wide interconnection cost sharing**);
- **Option 3:** Each TNSP charges its neighbouring TNSP as if (and to the extent that) it is a load (**Load export charge**); and
- **Option 4:** The regulated revenue allowances of all TNSPs are pooled and the recovered through a single, NEM-wide charging methodology (**NEM-wide methodology**).

These options are specified in further detailed in Appendix E.

Consultancy reports on this issue were also released. The Brattle Group provided a report on possible approaches to inter-regional charging system based on international experience and Frontier advised on the application to the NEM of each of the four options specified by the Commission.<sup>82</sup>

### **Submissions to the Draft Report**

Stakeholders were in agreement that further analysis and consultation is required on this issue and that it would be inappropriate for the Commission to make a final recommendation on a preferred option. The NGF commented that this issue warrants more consideration and analysis than contained in the draft report.<sup>83</sup> Other issues such as SRA proceeds allocation and cross border risk allocation need also to be considered. Both the NGF and ESIPC advised against the AEMC making a final resolution of the issue and suggested that it recommend to the MCE to conduct a more comprehensive review with defined principles. ERAA suggested that further thought and policy directions from the MCE needed to be provided to progress this issue.<sup>84</sup>

Submissions also commented on the relative merits of the four options. Grid Australia stated that in its preliminary view, the load export charge (option 3) was preferable and was relatively more straightforward to implement.<sup>85</sup> Likewise ERAA commented that option 3 would be a logical, incremental change to the existing TUOS pricing methodology.<sup>86</sup> However ERAA stated whether or not it gives rise to rational, stable and justifiable prices would need to be rigorously tested before

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<sup>82</sup> Both the Brattle and Frontier's reports can be accessed from the AEMC Website. [www.aemc.gov.au](http://www.aemc.gov.au)

<sup>83</sup> NGF Draft Report Submission p. 8.

<sup>84</sup> ERAA Draft Report Submission p. 6.

<sup>85</sup> Grid Australia Draft Report Submission p. 21.

<sup>86</sup> ERAA Draft Report Submission p. 6.

it could be seriously considered for implementation. ERAA also commented that options 1 and 2 are based upon a beneficiary pays approach which has been rejected and therefore it suspected that such options would turn out to be unsatisfactory or unworkable.<sup>87</sup>

NGF considered that none of the four options was clearly superior to the others from the point of view of economic efficiency.<sup>88</sup> VENCORP expressed support for a national approach and therefore favoured the NEM-wide charging methodology option.<sup>89</sup>

### **Initial Assessment of the Possible Options**

The various possible approaches for introducing an inter-regional transmission charging arrangement must be assessed against the following criteria:

- Promoting economic efficiency over time;
- promote good regulatory practice by enhancing;
  - stability and predictability – that is, transmission prices should be stable and predictable enough to enable market participants to make long term decisions; and
  - transparency – the process for setting prices should be as transparent as practicable to give participants confidence that pricing outcomes will be consistent with the NEM Objective and the Rules
- minimising implementation costs and risks; and
- consistency and application to the current NEM arrangements.

In its Transmission pricing Rule Determination, the Commission stated that economic efficiency is achieved when transmission charges seeks to recover sunk costs as well as provide efficient investment decisions.<sup>90</sup> Option 4, of introducing a NEM wide methodology, would ensure that transmission charges fully reflect the costs of all transmission assets to serve loads across the NEM and therefore would achieve the most accurate locational signals of the four options.

However option 4 would represent a fundamental charge to current market design. It would require a mandated uniform methodology for transmission pricing across the NEM and therefore would remove the flexibility TNSPs have to set charges which reflect local conditions within the overarching framework set out in Chapter 6A of the Rules. It would also create substantial implementation risk and costs and may lead to changes to TNSPs' methodology.

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<sup>87</sup> ERAA Draft Report Submission p. 6.

<sup>88</sup> NGF Draft Report Submission p. 8.

<sup>89</sup> VENCORP Draft Report Submission p. 9.

<sup>90</sup> AEMC 2006, *National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22*, 21 December 2006, Sydney.

Therefore at this time, the Commission advises that although option 4 would deliver the most efficient pricing signals it should not be implemented as it is a disproportionate response to the problem being addressed. The benefits of an inter-regional charging arrangement are better achieved without such a fundamental change to the market design.

However it is recognised that as the market evolves and addresses the new climate change framework the rationale for introducing an uniform NEM wide methodology may increase. Therefore this position against option 4 may need to be re-assessed in the context of the review the MCE intends to direct the Commission on the implications of climate change policies, such as the Emission Trading Scheme, for the market Rules.

The initial view of the Commission is that the load export charge option is the best option. It provides for load customers in importing regions to make a contribution towards the costs of assets in exporting regions, thereby conferring some price signals as to where prospective loads should locate. It is also relatively simple to apply and would not require significant changes to current transmission revenue and pricing arrangements. However more analysis is required to fully understand the implications of adopting this option.

The disadvantage with the two interconnector cost sharing options (bilateral cost sharing and NEM-wide cost sharing) is that they impose charges that recover sunk costs on importing region customers. Such charges are unlikely to provide a good proxy for long run marginal costs and hence are unlikely to promote dynamic (or allocative) efficiency. Both options are also likely to impose significant administrative burdens and likely disputes since an objective methodology or an independent body would be required to identify 'new interconnector assets'.

However more analysis is required to fully understand the relative distribution effects of introducing the load export charge. Unlike the interconnector sharing options, the load export charge option will apply both to existing and new interconnector assets and therefore will result in an initial re-distribution of costs across the NEM. Also the Commission considers that stakeholders should be given a further opportunity to consider the issues and input into process of identifying the preferred approach.

Therefore the Commission advises that the MCE should request the Commission to conduct further analysis and consultation on the possible approaches for a formal arrangement for inter-regional transmission charging and to report back on:

- the recommended approach to inter-regional charging with necessary Rule changes;
- appropriate implementation and transition issues, and
- the application of the recommended approach to the current NEM arrangements.

## 5.2 Simultaneous Reviews for TNSPs Revenue Determination

### Policy recommendation

The Commission is recommending not to introduce alignment of TNSP revenue determinations because it considers that the associated costs of alignment are substantial and benefits referred in the ERIG Report will instead be achieved through the establishment of the NTP function and the continuing application of the Chapter 6A revenue Rules.

The NTP will take a NEM wide view to planning and therefore be able to provide advice and information, through the annual NTNDP, to enable the AER to take a market view when assessing each TNSP's revenue determination. Furthermore the contingency project mechanism enables the AER to align revenue allowance triggers to bring the costs of inter-regional investment into TNSPs allowed revenue, even when the revenue periods for the respective TNSPs are not aligned.

### Reasoning for policy recommendation

The MCE Terms of Reference requested the Commission to give "consideration of alignment of regulatory periods to further reinforce the national character of the planning arrangements".

The ERIG report stated that the current arrangement of sequential revenue cap determinations limits national co-ordinated investment because individual TNSP revenues were determined in isolation and this situation may neglect opportunities for inter-regional investment planning. The current arrangements were also considered to impinge upon the regulator's capacity to evaluate costs to determine efficient expenditure levels.

The proposed NTNDP, which is updated annually, is a more targeted and effective response to the concerns of ERIG than aligning TNSP revenue periods. The annual NTNDP will identify potential inter-regional investments and will discuss how investments in one network could impact on investment requirements of the other networks. This will enable the AER to take a NEM wide view when setting each TNSPs revenue allowance. Also it is not clear what additional information beyond the NTNDP could be obtained by the AER from simultaneous revenue reset periods.

Furthermore, the contingency project mechanism allows for large inter-regional projects to be handled in a streamlined manner even where revenue periods are not aligned. This mechanism enables an aligned trigger for funding of such projects. The Commission also notes that there are practical difficulties with the alignment proposal and would require extensive transition arrangements and could take up to 12 years to achieve.

In reaching its position, the Commission has had regard to the views of participants. All submissions received were against this proposal and raised significant practical difficulties. The AER argued against alignment because it would create onerous resourcing constraints on its regulatory functions and it noted that it would not be

possible to align the control periods until 2019.<sup>91</sup> The EUAA stated that the practicality of simultaneous reviews is questionable due to resource requirements.<sup>92</sup> The APA Group raised the risk that the AER would adopt a “one size fits all” approach to different types of network and considered that there will be hidden costs in aligning the revenue reset periods.<sup>93</sup>

A number of submissions raised the alternative proposal of aligning each regions’ transmission and distribution revenue determinations, especially once the AER takes over responsibility for distribution. In the Draft Report, the Commission commented that such alignment could be beneficial to the market and would reflect the joint planning framework set out in Chapter 5 of the Rules. Table 5.1 details the current revenue re-set periods for transmission and distribution in each state.

**Table 5.1: Simultaneous Revenue Reviews for Transmission and Distribution**

State	Current Regulatory Period (Transmission)	Current Regulatory Period (Distribution)	Difference (in years) between Regulatory Periods
Queensland	2007-2012	2005-2009	3
South Australia	2003-2008	2005-2010	2
Victoria	2003-2008	2006-2010	2
New South Wales	2004-2009	2004-2009	0
Tasmania	2004-2009	2008-2012	3

Ergon Energy was opposed to the proposal to align determination periods for TNSPs and DNSPs because it claimed that it would impose significant costs on the transitioning network service providers and lead to significant pressure on AER’s resourcing capabilities to conduct concurrent determinations.<sup>94</sup> Similarly, Energex did not support the alignment of distribution and transmission re-sets as it could result in a ‘one size fits all’ approach due to resourcing constraints on the regulator.<sup>95</sup>

The AER noted that it is about to commence the regulatory resets for the New South Wales transmission and distribution business simultaneously and this would be instructive as to whether alignment of transmission and distribution should be applied more broadly across the NEM.<sup>96</sup> Therefore instead of advising the MCE to initiate a formal review into this, the Commission recommends that the MCE requests the AER to report on possible alignment, after it has completed its NSW reviews.

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<sup>91</sup> AER Scoping Paper Submission pp. 10-11.

<sup>92</sup> EUAA Scoping Paper Submission p. 31.

<sup>93</sup> APA Group Issues Paper Submission p. 4.

<sup>94</sup> Ergon Energy Draft Report Submission p. 1.

<sup>95</sup> Energex Draft Report Submission p. 1.

<sup>96</sup> AER Draft Report Submission p. 11.

## 5.3 Other Changes to Chapter 6A

### 5.3.1 Regulatory Investment Test and the AER Revenue Determination Process

#### Policy Recommendation

That the AER also have regard to relevant RIT-T project assessment conclusion reports when assessing the TNSP's proposed operational and capital expenditure (RIT-T Rules, [20] and [21]).

#### Reasons for Policy Recommendation

During this Review, some market participants have raised the issue of how the Regulatory test interacts with the AER revenue determinations.

Under Chapter 6A, in determining whether the TNSP revenue proposals meet the criteria of an efficient and prudent operator, the AER is required to have regard to a number of different factors. However, whether or not a project has passed the regulatory test is not one of the factors. Although it is a requirement for the TNSPs to identify in its revenue proposals any proposed expenditure which is for a project that has already passed the regulatory test.<sup>97</sup> Also under the current arrangements, the regulatory test does have specific application to the triggering of approval for contingent projects and also for any expenditure incurred outside the ex-ante revenue allowance.

With the implementation of a new national transmission planning function and the proposed new RIT-T, the Commission considers it is important to assess the role of the project assessment process within the revenue determination framework. The Commission notes the ERIG report which stated that the links between the regulatory test and the economic regulatory regime are tenuous at best and that the role of the regulatory test with the TNSP's regulatory period needs to be considered.

The Commission proposes that the list of factors that the AER must have regard in assessing the TNSP's proposed operational and capital expenditure is amended to include, where applicable, any RIT-T project assessment conclusion reports associated with any project that form part of the revenue proposal. The project assessment conclusion report will contain substantial information on the economic justification of the project which will assist the AER in its determination.

This proposed amendment does not mean that all projects that form part of a TNSP revenue proposal must have passed the RIT-T. Nor should it force a TNSP to apply a project-by-project approach in setting out its proposals for its investment requirements. Also the analysis performed by the AER in setting the ex-ante revenue allowance is vital to the current regulatory regime and the RIT-T process should not be a substitution to that process.

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<sup>97</sup> Clause 6A 6.7.

Therefore it is proposed that the information contained in any relevant project assessment conclusion reports is another factor, among the other specified factors, that the AER will consider in approving a TNSP's revenue proposal.

### **5.3.2 NTP input into the AER Revenue Determination Process**

#### **Policy Recommendations**

That the AER also have regard to the NTNDP when assessing the TNSP's proposed operational and capital expenditure (**Rules, Schedule 2 [13], Clause 6A. 6.6 and 6A. 6.7**).

That TNSPs are required to provide an analysis of the relationship between their revenue expenditure proposal and NTNDP development strategies, and explain any inconsistencies between the TNSP proposals and the NTNDP (**Rules, Schedule 2 [5], Clause 5.6.2A**).

#### **Reasons for Policy Recommendations**

The MCE Terms of Reference states that "AER will have regard to the Plan and the advice of the NTP when making revenue determinations, and the TNSPs when putting forward to revenue proposals to the AER, to demonstrate that projects are aligned with the Plan". The Commission considers that two amendments to Chapter 6A are needed to implement this policy.

First, when submitting capital expenditure proposals to the AER, TNSPs should be obliged to provide an analysis of the relationship between their proposal and the development strategies contained in the most recent NTNDP, in particular where there are significant variances between the TNSP proposals and the NTNDP. In the Commission's view, this increases the extent to which TNSPs are accountable for their investment proposals and decisions.

Second, the Rules should oblige the AER to have regard to, amongst other factors, the NTNDP and the advice of the NTP. This will only be one of the factors that the AER is required to take into consideration when making a revenue determination.

These proposed amendments are set out in Section 6 of the other amendments section to the NTP legal drafting contained in Appendix C (ii).

## 6 Inter-Regional Planning Committee Functions

Summary of our final recommendations:

- The IRPC performs a number of useful functions to the market. Such functions will be retained to the extent that they are not rendered redundant by the establishment of the NTP;
- AEMO, acting as the NTP, will become responsible for the IRPC functions;
- In exercising these functions, the AEMO will be subject to the NTP objective and supporting considerations, and also have regard to any input from the NTP Advisory Committee. It is also recommended that the AEMO is required to have regard to the views of the JPBs when undertaking such functions;
- The Last Resort Planning Power (LRPP) continues under the new arrangements. The Commission will remain responsible for exercising the LRPP with the NTP assuming the role of the IRPC in providing advice to the AEMC in respect of the LRPP; and
- The requirement for the publication of criteria on assessing whether a project is a reliability augmentation is removed from the Rules.

### Introduction

The Inter Regional Planning Committee (IRPC), which is made up of representatives from NEMMCO and each of the Jurisdiction Planning Bodies (JPBs), is tasked with various functions in the Rules. The functions are often technical in nature and cover a wide range of operational and planning activities. The COAG Communiqué states that the proposed National Transmission Planning arrangements will replace the IRPC and this chapter sets out how the Commission recommends these functions are incorporated into the new national planning framework.

### Policy Recommendations

The IRPC performs a number of useful functions to the market and the Commission advises that, to the extent that they are not made redundant by the new NTP arrangements, such functions should continue and that the AEMO, acting as the NTP, should now become responsible for the IRPC functions (**Rules, Schedule 2 Clause 5.6.3**).

### Reasons behind Policy Recommendations

The COAG Communiqué required that the role of the IRPC be transferred to the NTP. The Commission considers that the proposed NTP governance arrangements will ensure that the functions are exercised under an appropriate and transparent framework. Transferring the functions to a single body compared to maintaining a committee of different organisations with shared responsibility, will also reflect better regulatory design and accountability principles.

It is recommended that the JPBs continue to be involved in these functions through providing support and advice to the NTP. Therefore the NTP will be required to have regard to the views of the JPBs when undertaking these functions.

The IRPC function of providing advice to the Commission in respect of the exercise of the LRPP will be transferred directly to the NTP. Transferring the advisory function from the JPBs to the NTP may lead to the advice being perceived as having greater independence.

The Commission advises against the LRPP being transferred to the NTP and also the NTP having a more active planning responsibility with respect to inter-regional projects. A more activist role for the NTP would be inconsistent with the governance framework decided by COAG that assigns responsibility and accountability for investment to TNSPs. In addition, market participants raised a number of concerns with the NTP having such additional responsibilities.

The LRPP should therefore continue to reside with the Commission with the AEMO taking over the IRPC advisory role. COAG has committed to reviewing the effectiveness of the new NTP arrangements after five years of operation. The Commission advises that the role of the LRPP within the arrangements and whether the LRPP should be transferred to the NTP should be re-examined at that time.

These recommendations reflect the proposals contained in the Draft Report. No submissions raised any issues with the proposed recommendations. ERAA supported the proposed transfer of IRPC responsibilities to the NTP as it should benefit from an independent body taking over its roles.<sup>98</sup> Grid Australia supported the Commission's position that the current NER provisions are sufficiently clear as to what constitutes a reliability augmentation.<sup>99</sup> Grid Australia supported the Commission's position that the NTP will not have an activist role for inter-regional projects and noted that the NTP's strategic view will itself result in a greater focus for inter-regional options.<sup>100</sup>

It is considered that the recommendations reflect proper regulatory practice and ensure that the IRPC functions will be undertaken in an efficient and transparent manner.

The remainder of this chapter discusses the individual IRPC functions in more detail and explains the Commission's recommendations on how each function should be incorporated into the new arrangements.

## **6.1 Advice on the exercise of the Last Resort Planning Power**

Currently the IRPC is required to provide advice to the AEMC regarding the LRPP, which allows the AEMC to direct TNSPs to undertake the Regulatory test, where a planning failure is identified. The advisory role will be transferred to the NTP under

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<sup>98</sup> ERAA Submission p 5

<sup>99</sup> Grid Australia Submission p 21

<sup>100</sup> Grid Australia Submission p 22

the new arrangements. Such advice is likely to be perceived as having greater independence coming from the NTP, as compared to the IRPC, since the latter is predominantly constituted by the JPBs who are primarily responsible for planning failures. Also the analysis and information provided in the NTNDP will help to improve the decision making framework.

The LRPP will continue to have a role under the new planning arrangements. Market participants in their submissions agreed that although the existence of the NTP may reduce the risk of planning failure it will not remove it entirely.

While the new RIT-T and NTNDP will encourage transmission investments with market benefits to be identified and undertaken by TNSPs, they cannot ultimately compel such investment; nor can TNSPs be forced to undertake the RIT-T. The risk, albeit a reduced one, of planning failure still remains. The LRPP will therefore continue to provide a safeguard against planning failure.

The question of whether the Commission is best placed to undertake the role of the LRPP was considered in the Issues Paper. There are concerns however with alternative arrangements conferring either the AER or the NTP with this role. In the former case, a LRPP may conflict with the AER's role in developing RIT-T and assessing RIT-T applications in certain circumstances. In the latter case, an NTP which has a more activist role, i.e. in directing TNSPs to undertake the RIT-T, would be inconsistent with a governance framework that assigns responsibility and accountability for investment to TNSPs.

It is prudent therefore that the responsibility of the LRPP remains with the Commission at this stage. COAG has committed to reviewing the effectiveness of the new NTP arrangements after five years of operation. The Commission advises that the role of the LRPP within the arrangements and whether the LRPP should be transferred to the NTP should be re-examined at that time.

## **6.2 Other technical and operational functions**

### **6.2.1 Providing Assistance to NEMMCO for the preparation of the SOO and ANTS**

Clauses 5.6.3 (a) (1) and (2) require the IRPC to provide such assistance as NEMMCO reasonably requests in connection with the preparation of the Statement of Opportunities (SOO) and the carrying out of the ANTS Review respectively.

In its submission to the Issues Paper, NEMMCO stated that the obligations codified in the Rules should be on individual organisations rather than groups, because it is difficult to make groups accountable for the actions of individual organisations.<sup>101</sup>

Publication of the SOO will be the responsibility of AEMO under the new arrangements. It is considered that the AEMO should continue to have the ability to seek assistance from the jurisdictions, as long as such assistance is reasonably

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<sup>101</sup> NEMMCO, Submission to the NTP Arrangements Issues Paper, 18 December 2007, p.5.

required. The Commission also agrees with NEMMCO that the obligation to provide assistance should be placed on individual JPBs and not on a collective committee. Therefore it is recommended that clause 3.13.3 (s) is changed to reflect this. The proposed amendments is contained in Schedule 2 [2] of the NTP Rules.

The NTNDP will replace the ANTS. The obligations placed on JPBs and TNSPs to provide information and assist in the preparation of the annual Plan were discussed in section 2.5 of this Report.

### **6.2.2 Providing Assistance to the AEMO for SOO Load Forecasts**

On 26 June 2008, the Commission made a final rule determination in relation to the NEM Reliability Settings, Information, Safety Net and Directions. The Rule was originally proposed by the Reliability Panel.<sup>102</sup>

This Rule change placed an additional obligation on the IRPC. The IRPC will now be required to provide assistance to NEMMCO when it reports to the Reliability Panel annually on the accuracy of demand forecasts in the most recent SOO.

The Commission recommends that for the implementation of the NTP, the obligation to assist in the preparation of the SOO Load Forecast Report is now placed on each individual JPB. This incorporates this additional obligation into the new NTP arrangements in a manner that best achieves the purpose of the new rule.

### **6.2.3 Material inter-network Impact Criteria and Technical Augmentation Reports for material inter-network projects**

The Rules placed two obligations on the IRPC relating to augmentations projects that may have inter-regional impacts. Firstly, the IRPC is required to publish an objective set of criteria for assessing whether a proposed network is reasonably likely to have a material inter-network impact. Secondly, the IRPC may be requested by a TNSP to publish an augmentation technical report on projects which are classified as having a material inter-network impact under the published criteria. The TNSP will only request the IRPC to produce a report if it has not received consent from the affected TNSP(s) for the proposed augmentation.

The Rules currently define material inter-network impact as:

“ A material impact on another TNSP’s network, which impact may include (without limitation): a) imposition of power transfer constraints within another TNSP’s network or b) adverse impact on the quality of supply in another TNSP’s network.”

These criteria add clarity to the definition through specifying technical requirements to determine whether an investment in one region materially affects either the ability

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<sup>102</sup> The Reliability Panel is a specialist body within the AEMC and comprises industry and consumer representatives. It is responsible for monitoring, reviewing and reporting on the safety, security and reliability of the national electricity system and advising the AEMC on such matters.

of another region's TNSP to transfer power or the quality of supply provided by the TNSP. The assessment of a material impact is required under planning and approval processes for augmentations include new large and new small network projects and funded augmentations. This assessment against the criteria gives each TNSP a right to object to projects that it considers materially affects their respective network. Also the ability to request the IRPC to publish a report provides a framework and procedure for resolving disputes between TNSPs on these matters.

The IRPC published its final determination on criteria for assessing a material Inter-Network Impact on 21 October 2004 based on principles provided by the National Electricity Code Administrator.

It is clear that the rationale for having such criteria remains under the new arrangements. Likewise, a TNSP should continue to have the ability to request a technical augmentation report, although the Commission understands that no such reports have ever been requested. The Commission proposes that both these functions are transferred to the NTP under the new arrangements.

Under the proposed new arrangements, the NTP will have the ability to amend the criteria having regard to the views of JPBs and in accordance with the Rules Consultation Procedures. It is recommended that the provision for the Commission to provide guiding objectives and principles for such criteria continues under the new arrangements. The Commission does not currently have any plans to amend the existing guiding objectives and principles established by NECA.

Under the current arrangements, market participants have the right to dispute a TNSPs determination as to whether a project has a material inter-network impact under the regulatory test. It is recommended that this ability is retained under the RIT-T (see section 4.12 of this Report).

#### **6.2.4 Reliability Augmentation Criteria**

Under clause 5.6.3(1), the IRPC must develop and publish an objective set of criteria for assessing whether a proposed transmission augmentation is a reliability augmentation.<sup>103</sup> In developing such criteria, the IRPC must have regard to guiding objectives and principles provided by the Commission.

One purpose of such criteria is to protect against TNSPs labelling augmentations which are discretionary, uneconomic market benefit investments as reliability augmentations in order to get such projects through the Regulatory Test. Under the current Rules, parties can dispute whether a proposed reliability project satisfies the IRPC guidelines and this affords some protection against mis-classification. The

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<sup>103</sup> A reliability augmentation is defined in Rules as "an augmentation which is necessitated principally by inability to meet the minimum network performance in Schedule 5.1 or in relevant legislation, regulations or any statutory instruments of a jurisdiction".

benefits of such criteria are to guide participants raising disputes and to guide the AER in making determinations on such disputes.<sup>104</sup>

As explained in chapter 4 of this Report, under the RIT-T, the current reliability and market benefits limbs will be amalgamated into a single cost-benefit decision making rule. However a distinction in assessment is retained to allow for any necessary reliability augmentations which have a negative NPV to be approved. Therefore, in theory, the risk of a TNSP incorrectly classifying uneconomic discretionary projects as reliability augmentations remains under the new arrangements.

To date, the Commission has not provided any guiding objectives and the IRPC has not published any criteria in guidelines. The question of having such criteria was raised during the 2006 Reform of the Regulatory Test Principles Rule change.<sup>105</sup> At that time, the IRPC stated that the requirement to provide an objective set of criteria for defining reliability augmentation is unnecessary and should be deleted. The IRPC noted that it had attempted to draft such criteria before but it was unable to develop such a set of criteria. The Commission ruled that this issue was out of scope of that Rule Change Proposal.

The Commission considers that it is necessary to retain the ability for market participants to dispute whether a project is a reliability augmentation. This will provide a discipline on TNSPs to properly identify whether a project is required to meet a mandatory reliability standard. However it is also judged that the current definition of reliability augmentation in the Rules is tight enough to remove any ambiguity and therefore the rationale and benefit for requiring the publication of criteria is not clear.

Therefore it is recommended that the requirement for the publication of criteria on assessing whether a project is a reliability augmentation is removed from the Rules. Instead, the AER has the ability to provide further guidance on this matter in its RIT-T guidelines if it considers that such guidance would improve the application and process of the test.

### **6.2.5 Inter-Network Test Guidelines and Recommendations**

An inter-network test verifies the magnitude of the power transfer capability of more than one transmission network. The purpose of the test is to improve certainty on power system performance and it can be triggered when either an augmentation, new generation or load is commissioned. A test can also be triggered when setting changes that are applied to critical control systems, or when events occur that are not adequately explained by the power system model. To conduct the test a definition of the technical envelope of network power system capability is required.

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<sup>104</sup> TNSPs are also required to specify which proposed projects are reliability augmentations in their revenue determination proposal under clause 6a.6.7 (b) (4).

<sup>105</sup> AEMC, Reform of the Regulatory Test Principles Rule 2006, Final Determination, 30 November 2006.

The IRPC has the responsibility of publishing guidelines and determining when an inter-network test may be required, and also advising NEMMCO on the arrangements to conduct an inter-network test.

The arrangements for inter-network tests, as set out in clause 5.7.7 of the Rules are very detailed and specify the different parties' responsibilities and the test procedures. There is no reason to change this clause under the NTP implementation.

In February 2008, the IRPC published its final determination on the inter-network test guidelines. The existing guidelines should continue under the new arrangements, with the NTP having the ability to vary the current guidelines. Any revisions to the current guidelines must be done in accordance with the Rules Consultation Procedures and the NTP must have regard to the views of JPBs. Furthermore the JPBs should retain the ability to make recommendations to AEMO on the draft test programs.

NEMMCO raised some concerns regarding the proposed legal amendments for the inter-network testing arrangements noting the changes would alter the opportunities for JPBs to provide input into the process and also remove some of the mandatory deadlines. NEMMCO provided some suggested revisions to address these concerns.<sup>106</sup> The Commission accepts the points raised by NEMMCO in relation to inter-network testing arrangements and have addressed them in the proposed legal drafting (**Rules, Schedule 2, Clause 5.7.7**).

### **6.2.6 Basslink Commissioning Report**

Under Clauses 5.2.3 (h1) to (h3) of the Rules, the IRPC was required to advise NEMMCO of requirements for Basslink connection. In the course of providing such advice, the IPRC was required to do a technical review of the proposed interconnector and publish a report.

As this function has been completed, this clause is now redundant and should be deleted from the Rules.

### **6.2.7 Parameter Settings Disputes Resolution**

Before the commissioning of new or replacement equipment by either load or generator, the connection participant and NSP must agree on the parameter settings if that equipment is reasonably expected to affect the power system. If both parties cannot reach agreement then under clause 5.8.3 (d), the matter is referred to IRPC to make a ruling.<sup>107</sup>

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<sup>106</sup> NEMMCO Submission to the NTP Draft Report, p.7.

<sup>107</sup> IRPC decision to be given within 20 business days and the majority decision of IRPC must be final.

This function will be transferred to the NTP under the new arrangements who will be required to have regard to the views of the JPBs when reaching a decision on parameter setting disputes.

### **6.2.8 Working Groups**

To assist in undertaking its role and co-coordinating inter-network planning, the IRPC has established a series of working groups (see Box 6.1). Such working groups act as a forum for transmission planners and NEMMCO to discuss and agree upon common methodologies and approaches.

Such working groups provide a source of technical expertise and should continue under the new arrangements. The Commission would expect that AEMO would establish and maintain such groups to advise and support it in undertaking its functions. However codifying such working groups in the Rules and placing an obligation on market participants to actively engage in such working groups may be counter productive. If a market participant is unwillingly made part of a working group that participant is unlikely to cooperate with or usefully contribute to that group. Working groups, which maintain active participant involvement through common interest, will be more effective.

## **6.3 Inter-Regional Projects**

There may be a perception that the IRPC has wider responsibilities regarding inter-regional augmentations. Although the IRPC acts as a forum for the JPBs to discuss such projects, the Commission notes that under the Rules the IRPC does not have any formal function regarding the planning of cross-border projects.

The possibility of the NTP being assigned a more activist role in relation to the planning of such projects, through, for example, acting as a co-ordinator or monitor, was raised in the NTP Issues Paper. However it is not clear what benefits such additional involvement would deliver, especially as no evidence has been put forward to demonstrate that TNSPs cannot effectively work together on inter-regional projects. Therefore the Commission does not recommend tasking the NTP with an activist role in regard to inter-regional projects and notes that NTP will provide information and analysis on potential cross border projects through both the NTNDP and its submissions to RIT-T assessments.

### **Box 6.1: IRPC Working Groups**

- 1. Market Simulation Working Group (MSWG):** The MSWG provides advice on matters relating to market simulations. It also contributes to the ongoing development of market simulation skills and expertise as well as the improvement of tools and techniques.
- 2. Plant Modelling Working Group (PMWG):** The PMWG is a technical advisory group to the IRPC. The group provides advice on the modelling techniques to be used by TNSPs. It provides technical guidelines for a consistent approach to be used for limit equations. It also is responsible for the transfer of each TNSP's system model. The members consist primarily of technical experts from the jurisdictional planning bodies. The IRPC may also invite any other party that may have an interest, or may make a contribution to a particular project.
- 3. Flow Path Working Group (FPWG):** The FPWG contributes to coordination of planning activities in the NEM through contributions to and feedback on the ANTS.
- 4. Load Forecasting Reference Group (LFRG):** The LFRG is responsible for ensuring that the Energy and Maximum Demand Projections in the SOO (and APR) are on a consistent basis.
- 5. Test Working Group:** The Test Working Group provides advice to the IRPC on inter-network tests and assists the test co-ordinator in conducting these tests.

## **6.4 Summary**

Table 6.1 provides a summary of the Commission's recommendations regarding the incorporation of the current functions performed by the IRPC within the new arrangements.

**Table 6.1: IRPC Functions under NTP Arrangements**

<b>Function</b>	<b>Clause</b>	<b>Recommendation</b>
To provide assistance to NEMMCO on the SOO	5.6.3 (a) (1) and 3.13.3(s)	Each JPBs will be required to give assistance to NTP.
To provide assistance to NEMMCO on the ANTS	5.6.3 (a) (2)	The NTNDP replaces the ANTS.
To provide reasonable assistance to NEMMCO for the SOO Load Forecast Report	5.6.3 (9)	Responsible now directly assigned to each jurisdiction planning representative.
Material Inter Network Impact Criteria	5.6.3 (a) (3) and (i)	Current IRPC guidelines retained. The NTP has responsibility for amending current guidelines.
Publish Technical Augmentation Reports for Material Inter-Network Impact Augmentation	5.6.3 (a) (4) and (j)	Responsibility to publish reports transferred to the NTP.
To develop and publish reliability augmentation criteria.	5.6.3 (a) (5) and (l)	To remove requirement to publish reliability augmentation from the Rules. AER has the ability to provide further guidance in guidelines.
To specify the arrangements for inter-network tests	5.7.7 (k) and (o)	Existing guidelines may be varied by NTP through Rules consultation procedures and have regard to views of JPBs. Each JPB have the ability to make recommendations to NEMMCO on draft test programs.
To advise NEMMCO of the requirements for Basslink connection	5.2.3 (h1) to (h3)	Clause deleted from the Rules.
To make a resolution ruling regarding a dispute relating to power system parameter settings	5.8.3 (d)	Responsibility transferred to the NTP. The NTP shall have regard to the views of JPBs in reaching a decision on such disputes.

## 7 Implementation

The MCE Terms of Reference requested the Commission to conduct a review into the development of a detailed implementation plan for the new national planning arrangements. This chapter presents the Commission's advice on implementation and transition issues for the proposals, in the context of the related task of implementing the AEMO.

### 7.1 NTP Functions and Powers

The NTP functions will be one of the functions assigned to the AEMO. AEMO is scheduled to commence operations on 1 July 2009 with the NEMMCO Board retaining all current responsibilities until 30 June 2009.

The transition to AEMO is being managed by an Implementation Steering Committee (ISC) which is liaising with the MCE. The ISC is chaired by SCO, and includes the CEOs of NEMMCO, VENCORP, GMC and REMCO. The current focus of this Committee is to assess the key legal considerations, including legislative changes required to implement AEMO and options for AEMO company structures.

The Commission is recommending that the NTP functions and powers are implemented through a combination of legislative amendments to the NEL (Appendix C(i)) and a series of amendments to the NER (Appendix C(ii)). These amendments will form part of the general package of reforms necessary to implement AEMO, and will therefore need to be accommodated within the wider set of legislative changes being developed by the ISC.

In developing its proposed legal drafting for the NTP, the Commission made a number of assumptions about AEMO implementation. It was assumed that the current NER provisions on registered participants to provide categories of information to NEMMCO will continue to apply and that AEMO will be required to prepare and publish a budget before the beginning of each financial year. It is also assumed that appropriate general provisions relating to:

- the immunity from liability of the AEMO,
- the treatment of confidential information provided to the AEMO, and
- annual auditing of the AEMO functions,

will apply to the NTP functions and powers.

#### 7.1.1 Transition Arrangements

The Commission has included a series of proposed Rule changes to manage the appropriate transition to the new arrangements. These relate to the transfer of the

IRPC functions to the NTP and also the inclusion of the NTNDP within the AER revenue reset determination process (see schedule 3 of Appendix C(ii)).

The Commission has identified the date (and form) of the first NTNDP as a key implementation issue, potentially requiring action by the ISC and MCE in the short term. The content and scope of the NTNDP will be greater than the current ANTS and will require additional modelling capabilities and resources compared to the ANTS. An appropriate framework for managing the transition from producing the last ANTS to the first NTNDP is required.

In its submission to the Draft Report, NEMMCO has indicated that a 14 months period is required for the production of the first NTNDP and have advised that it will only be feasible to produce the first plan by December 2010.<sup>108</sup>

The Commission considers that, if practicable, it will be of benefit to the market for the first NTNDP to be published by December 2009. There is potential for significant change in the market over timeframe of the NTNDP, including as a result of climate change policies, and there is therefore value in considering the implications for the strategic development of the transmission network sooner rather later. Publication of an NTNDP in December 2009 would, however, require a number of facilitating steps not currently provided for, including:

- Early clarification to NEMMCO on what model of NTP and NTNDP the MCE intends to implement, and by when;
- A mechanism to enable NEMMCO to incur and recover costs prior to the establishment of the AEMO associated with preparations for the publication of the first NTNDP;
- A mechanism to “turn off” NEMMCO’s existing obligations in respect of producing the October 2009 ANTS; and
- A mechanism to recognise that the first NTNDP might be more limited than subsequent NTNDPs, due to pressure of time and resources, and to enable the AEMO to prioritise certain elements of the NTNDP in the first year in a manner consistent with the NTP’s objective.

The Commission recommends that the MCE considers the merits of these facilitating actions, as soon as practicable. The alternative would appear to be a first NTNDP in December 2010.

## **7.2 Regulatory Investment Test for Transmission**

Significant Rule changes are required to implement the proposed new Regulatory Investment Test for Transmission (RIT-T). However, no amendments to the NEL are proposed. The RIT-T is, therefore, separable from the perspective of implementation from the establishment of the AEMO (and the NTP).

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<sup>108</sup> NEMMCO submission to the AEMC NTP Review Draft Report, 30 May 2008 (copy attached).

The Commission considers that it might be appropriate and expedient to progress the implementation of the RIT-T through the Rule change process, rather than through the process of AEMO implementation. This would appear to have a number of benefits. First, it reduces the scope of the task of AEMO implementation, and therefore the risk of potential delay. Second, it enables an earlier implementation of the RIT-T than would otherwise be the case, which in turn enables the AER to begin the important process of developing new guidelines earlier. Third, it provides stakeholders with a further opportunity to comment on the detailed legal text before it is implemented in the Rules.

The MCE can request the fast tracked Rule change process for the rules amendments that have previously been consulted on as part of the MCE Directed Review. The Commission may decide to fast track such a rule change proposal if:

- the proposal reflects, or is consistent with, the relevant recommendation contained in the MCE directed review; and
- there was adequate consultation with the public by the Commission on the content of the relevant recommendation or relevant conclusion during the MCE directed review.

Once a fast tracked Rule making process has been approved by the Commission, the proposal is consulted on once (rather than twice) before a final Rule determination is made. This reduces the period of time between the start of consultation on the proposal and the issuing of a Final determination to twelve weeks.

### **7.2.1 Transition Arrangements**

It is proposed that the current version of the regulatory test will continue to apply to any project assessment analysis or related process commenced prior to the promulgation of the new Regulatory Investment Test for Transmission.

Therefore for projects which the TNSP has either set out the matters required under clause 5.6 in their APRs or has either issued an Application Notice or a Request for Information which continued their assessment under the current regulatory test.

The Commission recommends that the AER is allowed 12 months to develop the new project assessment test and associated guidelines.

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## **8 The role of NTP and RIT-T in the NEM regulatory and market design**

This chapter describes how the NTP and RIT-T relate to the wider regulatory and market architecture of the NEM. It sets out the main elements of the regulatory and market design for transmission and the wholesale market, and identifies the main areas of likely impact and influence of the NTP and the RIT-T.

A tightening supply and demand balance, and the likelihood of continuing growing demand, means that significant new investment in generation capacity and network infrastructure will be needed. Policy responses to climate change, including an Emissions Trading Scheme (ETS) will have a significant, but uncertain, impact on the underlying economics of generation investment decisions – and may also influence the operation of existing generation capacity, including decisions to operate or close.

Co-optimisation of generation and transmission in this environment is a challenge. The NTP and the RIT will improve the information base and process of scrutiny for many of these investment decisions, which in turn will make efficient outcomes more likely. The role of the NTP in particular, in considering and planning for a number of different long term scenarios, has the potential to add significant value to the NEM. Other changes may also be required, however, to ensure that the market architecture and rules continue to promote efficient outcomes for consumers. An understanding of how the component parts of the market architecture, including the NTP and the RIT-T, relate to each other and interact is key to understanding and assessing the need for further change.

### **8.1 Framework for Transmission**

This section describes the framework for transmission regulation in the NEM, and discusses how the NTP and the RIT-T will impact or influence this framework. It discusses in turn transmission investment planning, the setting of revenue allowances for transmission companies, and the methods of charging for transmission.

#### **8.1.1 Investment planning**

The responsibility for planning transmission investment in the NEM rests with TNSPs and JPBs. These organisations are responsible for network planning in specified geographical areas and are required to plan to certain specified standards, e.g. related to reliability of supply under credible network scenarios, such as the loss of a transmission line. The framework of planning across the jurisdictions of the NEM is currently under review by the Commission. In particular, the Commission is consulting, through the Reliability Panel, on establishing a new nationally consistent framework for reliability planning. This has the potential to improve consistency between investment planning across jurisdictions.

As discussed in Chapter 2, there is also a ‘safety net’ in place to address investment planning failure by TNSPs. This is the Last Resort Planning Power (LRPP), and provides for the AEMC to direct a TNSP to undertake a regulatory test.

The NTP and RIT-T are focused directly on strengthening the processes under which transmission investment decisions are made. This is therefore the area of activity in the NEM most impacted by the NTP and RIT-T. The impact is, however, through the publication of information which TNSPs, and market participants, can use for investment purposes.

While TNSPs will continue to be accountable for investment decisions, the NTP through development of the NTNDP will be able to contribute to investment planning by providing a more nationally integrated and long term perspective on transmission requirements, supported in particular by deep and comprehensive scenario planning. This addition to the current regulatory arrangements takes on considerable importance in the context of tightening supply and demand balance and the uncertain impacts of climate change policies, such as the 2020 Mandatory Renewable Energy target (MRET 2020) and foreshadowed Emissions Trading Regime (ETS), on the development of the transmission network and power system more generally.

The new RIT-T amalgamates reliability and market benefits and thereby supports an integrated assessment of costs and benefits for investment proposal put forward by TNSPs. A more streamlined process for resolving disputes will also be introduced under the new national planning arrangements. These measures will help ensure that any new investment in the network maximises benefits to the NEM while at the same time meeting reliability standards.

The requirement for broader and deeper calculation of market benefits under the RIT-T will strengthen incentives for TNSPs to assess and undertake the considerable transmission investment likely to be necessary for connecting significant volumes of low emissions and renewable generation capacity in the medium to long term, as policy measures such as MRET 2020 and ETS begin to take effect.

### **8.1.2 Revenue Allowances**

TNSPs regulated revenues are determined every five years by the AER, consistent with principles and process defined in the Rules. The current framework for transmission revenue resets, which was put in place in 2006 following a review by the AEMC, has the following characteristics:

- Base allowance – set to recover the costs over a five year period of existing assets, capital expenditure and operation and maintenance, including a reasonable return on capital employed.
- Contingent allowance – an allowance for capital expenditure required for specific large projects triggered by particular events.

- System service incentive – an allowance, between 1 and 5 per cent of regulated revenue, which can be varied depending on network performance of the TNSP and focused on ensuring network performance is maximised at times when the market most needs it.

The revenue allowances are set *ex ante* and there is a financial incentive for each TNSP to beat the costs implicit in setting the revenue allowances. TNSPs are rewarded for out performance and penalised for under performance relative to the capped revenue allowance. At the end of each revenue re-set period the revenue allowances are rolled forward based on the value of actual (as opposed to forecast) capital expenditure. A TNSP does not, therefore, retain cost efficiencies (or over-runs) indefinitely. The efficiency incentive for capital expenditure includes both depreciation and the cost of capital in the calculation of the associated rewards and penalties, with the aim of reducing the incentive for inefficient profiling of capital expenditure over the regulatory period.

The NTP and the process of the RIT-T will complement the revenue cap efficiency incentives above. First, the NTP will have the ability to make submissions to the AER and RIT-T consultations. Second, the improved information in the NTNDP will be useful to the AER and TNSPs as a reference point in developing and assessing forecasts of capital expenditure. This will be formalised by requiring TNSPs in making submissions to the AER to make reference to and explain differences between their forecast of capital expenditure and the NTNDP.

The capital expenditure efficiency incentives should also complement the development of the NTNDP. A key input into the NTNDP is the actual and proposed investments of TNSPs. Therefore, to the extent the revenue cap incentives improve the efficiency of TNSPs actual investment proposals this should enhance the quality of the information in the NTNDP, and ensures it represents as far as practicable efficient network development.

The NTNDP may also provide an important interaction with the contingent projects mechanism. The annual review cycle of the NTNDP could provide early indication of possible contingent projects that might arise during a TNSPs regulatory cap period, which may contribute to streamlining the approval process for such projects. This should be of considerable value in an investment environment of substantial uncertainty as to the future timing, location and quantum of low emissions generation entry. This will clearly, in turn have significant implications for future development of the network.

The RIT-T will also have a number of direct and indirect impacts on the process of setting revenue allowances for transmission companies. First, it will represent a body of evidence (which has been subject to public consultation) on the relative costs and benefits of different options for addressing transmission issues efficiently. This information is relevant to the AER in making determinations on efficient levels of forecast capital expenditure. This is most directly relevant in circumstances where the specific project being subject to the RIT-T is also a component part of a revenue reset proposal for capital expenditure. Second, and more generally, the presence of the RIT-T as a more rigorous process designed in part to reduce the informational asymmetry between TNSPs and other stakeholders might influence the capital expenditure forecasts provided by TNSP to the AER.

### **8.1.3 Transmission Planning**

A TNSP is responsible for determining how it recovers its allowed revenue, subject to compliance with the principles and process specified in the Rules. This framework was revised in 2006 following a Review by the Commission.

In the 2006 Review the Commission confirmed the current approach to transmission pricing, which reflects a "shallow charging" policy for generators. The sunk and fixed costs of transmission are recovered from consumers with a mix of 'postage stamp' and locational charges, while generators pay for connection costs (those costs specifically required to connect the generator to the network). Generators may negotiate to pay for deeper reinforcement to the network where such investment is required to facilitate a desired enhanced level of transmission service for that generator, or if without that reinforcement, the generator would be in breach of its technical standards. While generators do not pay locational use-of-system charges, the pricing framework does allow for transmission rebates and discounts in certain circumstances which will influence locational decisions.

The NTP will need to take account of how generators and loads are likely to respond to current and future transmission prices in providing a credible perspective on the future generator behaviour, and therefore the configuration and evolution of the network.

There is also an important interaction between the RIT-T and the transmission pricing framework. Any transmission investment which is required to connect generation to the network will only pass the RIT-T if it has net market benefits, or represents the most efficient way to meet reliability planning standards. Generators therefore will need to factor the cost of transmission into their locational decisions. Seeking connection at a point on the network which is congested, and for which the RIT-T case for augmentation cannot be made, will result in higher costs or more despatch risk for the generator. This is a form of locational signal which should, in conjunction with the transmission pricing framework, promote efficient decision-making.

## **8.2 The Wholesale Market**

The wholesale market in the NEM is a gross pool design. All electricity must be traded via the pool. The market is dispatched by NEMMCO every five minutes, and settled every 30 minutes. Market participants also enter into contracts derived from outcomes in the wholesale spot market, e.g. for the supply of volume of electricity at a price referenced to one of the regional prices in the wholesale spot market.

### **8.2.1 Wholesale market price signals and investment decisions**

There are a multiplicity of factors that influence investment decisions, and their location, including for example fuel costs, access to fuel, access to transmission, transmission charging and environmental and other planning consents. A further

key factor is expectations regarding wholesale market dispatch and pricing outcomes, and in particular how they are influenced by network limitations or congestion on the network.

Dispatch and pricing outcomes themselves are influenced over time by investment decisions by market participants, e.g. to invest in new generating capacity, or to retire existing capacity. Economic signals derived from the wholesale market will have an influence over these investment decisions. Market participants will be interested in economic signals relating to 'volume risk' and 'price risk' in the spot market generated through network limitations and congestion on the network, which is priced between regions although not within regions under the NEM market design.

Volume risk is the risk of not knowing the volume of electricity you will be dispatched by the system operator to produce in any given 5-minute dispatch interval. Price risk (or 'basis risk') is the risk of being settled at a price that is different to the price you have contracted at. This is a particular issue when the contract price is referenced to a price in a different region, e.g. because the customer you are selling to is located in a different region. These risks will influence the location and investment decisions of market participants and such risks would increase in magnitude if congestion on the network increases.

While congestion on the network has not been a significant source of inefficiency in NEM to date, whether this remains the case will depend on the effectiveness of the transmission regulatory investment framework, and the combined interaction of the NTNDP, the RIT-T and LRPP. This is likely to be of increasing relevance, and more challenging, in the context of significant new investment and change in the location and mix of generation.

Large changes in the location and mix of generation, and therefore the pattern of power flows across the transmission network, may require significant reinforcement to the existing transmission system. Future entry of new generation may also require extension of the network to remote locations to accommodate access to renewable resources. The ability of the transmission regulatory arrangements to be able to deal with these challenges will therefore be of considerable importance.

In this context the NTP and RIT-T should be able to make an important contribution. Information contained within the NTNDP, such as current and future congestion, transmission development strategies under a range of scenarios, and the information generated under the new RIT-T consultation process, should enhance the ability of TNSPs to identify and respond to transmission issues. In addition such information should improve the ability of investors and market participants to assess the risks of transmission access and decide on where and when to invest in a carbon constrained world.

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## APPENDIX A: Stakeholder Issues on NTP Draft Report Proposals NATIONAL TRANSMISSION PLANNER ISSUES

Topic	Issue	Organisation	Response
Legal drafting - Split between NEL and NER	Proposed Split is inconsistent with the NEM architecture. There is too much detail in the NEL. The Detail on how AEMO is required to perform the NTP functions should be moved to the NER. The AEMC should have regard to the Expert Panel report to MCE on Energy Access Pricing which commented on the appropriate division between NEL and NER	VENCorp	<b>Not Accepted</b> - There are three sections to the proposed NEL clauses - the NTP framework, NTPAC provisions, and Information Powers. The NTP framework and Information powers parts enshrines the key principles with detail on processes in the Rules. Therefore these parts are consistent with the current NEM architecture. A case could be made against the NTPAC provisions, and that it would reflect better legal drafting to move the NTPAC provisions to the Rules. However given the importance of the NTPAC and credibility the NTPAC gives to the NTP functions, we advise that the NTPAC provisions remain in the Law. Also it would be inappropriate to split the NTPAC provisions between the NEL and NER
Legal drafting - Split between NEL and NER	The Role of the NTP and the shape of the NTNDP is likely to evolve over time therefore might be better to put more into the Rules than the Law thus providing more flexibility and a more streamlined mechanism for updating the NTP scheme	ESIPC	
Legal drafting - Split between NEL and NER	The NTP Advisory Committee details should be set out in the Rules not in the Law. Putting it into the Rules would make it easier to amend.	VENCorp, NEMMCO	
Legal drafting - NER	The NER drafting should be flexible enough to accommodate the natural evolution of the NTP role.	VENCorp	<b>Not Accepted</b> - The NER can be amended via the normal Rule Change process. This will allow for the NTP role to evolve when appropriate and consistent with the NEO
NTP Objective	NTP objective should be phrased in terms of 'power system' rather than only in terms of transmission. Proposed objective does not explicit match the COAG objective and it is inappropriate to make the focus of the NTP solely on transmission and not the power system	Grid Australia	<b>Not Accepted</b> - There is no need to explicitly state "power system". The NTP will consider generation and non-network alternatives planning for the NTNDP to be consistent with the NEO.
NTP Objective	Too narrow. It excludes short term to medium term timeframes, grid operational issues and local or regional grid development issues. The narrow definition of the NTP objective means that possible additional functions for the NTP, as it evolves over time, will be rejected under the Rule Change process without a change to the NTP objective	NGF	<b>Not Accepted</b> - It is important that the NTP has sufficient, clear boundaries on its functions. Additional functions for the NTP can still be added via the normal Rule Change process as long they contribute towards the National Electricity Objective.
NTP considerations	The list of factors that the NTP must have regard should be expanded to include a) focus on strategic, long term, high level planning, and b) avoiding duplication of the planning which NSPs have to do to meet reliability standards	Grid Australia	<b>Not Accepted</b> - The NTP objective is to contribute to the NEO. This ensures that the NTP will perform its undertake its functions in an efficient manner. It is not appropriate to state that the NTP must avoid duplication

Topic	Issue	Organisation	Response
NTP Advisory Committee	The NTPAC is not necessary for ensuring that the NTP role have suitable visibility, focus and expertise within the boarder scope of AEMO. Give AEMO the responsibility to decided upon the establishment of any advisory group.	NEMMCO	<b>Not Accepted-</b> Consider that the establishment of a NTPAC is an important component of the NTP framework and should be enshrined in legislation. The NTPAC will ensure that the NTP functions have suitable focus, visibility and expertise within the boarder scope of AEMO functions.
NTP Advisory Committee	Unnecessary to specify Advisory Committee in Law or Rules. AEMO Board should be left to decide what committees it requires to perform its functions.	AER	
NTP Advisory Committee	Not convinced with rational for advisory committee. Objectives would be better met through assigning the NTP functions to a AEMO subcommittee. NTPAC could obstruct rather than promote the NTP role.	ERAA	
NTP Advisory Committee	Governance Arrangements too prescriptive. Against proposal that NTPAC members should only include one member of AEMO.	VENCorp	<b>Not Accepted</b> - The proposed drafting allows for both a staff member of AEMO and a board member of AEMO to be both on NTP AC.
NTP Advisory Committee	Membership should not be limited to 5. Suggest that the AEMO Board has more flexible to decide the optimum size.	NGF	<b>Partly Accepted</b> - Suggest changing draft to state that the NTPAC must have at least five members. This will give the AEMO Board the option to add further members if it considers appropriate
NTP Advisory Committee	It is unclear how the NTPAC it intended to provide input and oversight into the NTNDP process. The NEL provision is not reflected in the Rules	VENCorp,	<b>Accepted-</b> This clause has been deleted. The function of the NTPAC is to assist AEMO in the NTP functions. It is up to the AEMO Board to determine the precise role of NTPAC
NTP Advisory Committee	More clarification on the dual reporting/governance arrangement between NTPAC and AEMO board is needed. Suggest moving NTPAC provisions to the Rules.	ESIPC	<b>Not Accepted-</b> The proposal is to give the AEMO Board the flexibility to determine the manner in how the NTPAC will assist it in fulfilling the NTP functions
NTP Advisory Committee - 5 year review	Suggest that the proposed 5-year review of the NTPAC is expand to include all NTP roles and structure. Also that the review commences 3 years after the establishment date for the AEMO	NGF	<b>Noted</b> - The proposed 5-year review by COAG will address these issues
NTP Functions - submissions on RIT and AER	It is not necessary for the NEL to explicitly state that the AEMO has the ability to make these submissions.	VENCorp	<b>Not Accepted</b> - As this is an important function, it should be explicitly stated

Topic		Issue		Organisation		Response	
NTP Functions - submissions on RIT and AER	The Law limits AEMO ability to make submissions to these process if they relate to national transmission grid. You should not be limited the AEMO Board ability to make submission. It may want to make comments not as the NTP but in relation to its other functions	VENCorp	Accepted - change clause to reflect that only when the AEMO acts as the NTP should the constraint of having to relate to the national transmission grid apply.				
NTP Functions - submissions on RIT and AER	Instead of having the discretion, the NTP should be required to make submissions to the RIT-T on augmentations that materially affect NTFPs	AER	Not Accepted - Not sure what value this would deliver. It is expected that all the valuable advice from the NTP on such projects would already be in the NTNDP. Not sensible to force a party to make submissions when it may not add value				
NTP Functions - advise to MCE	It is inappropriate for the MCE to be able to direct the NTP to undertake reviews. The NTP is an operational body not a policy making body. Better for the MCE to ask AEMC to conduct reviews and for AEMC to seek advice from the NTP.	ERAA	Not Accepted - The NTP will be an independent body of expertise and the MCE should have the ability to seek reviews from it.				
Content of NTNDP	The NTP should be a complete planner, identifying future issues, developing options and then evaluating these on technical and economic grounds. Not clear if proposed NTNDP would achieve this.	ERAA	Not Accepted - The proposed content of the NTNDP plus the NTP objective and considerations will ensure that the NTNDP is a quality document and will add value to the market. There is sufficient balance between prescribing the NTNDP output and giving the NTP the discretion to determine the extent of the analysis.				
Content of NTNDP	Needs more specification on output for the short-term planning period. NTP analysis in short term should be comparable to the analysis required in the RIT. Otherwise it would be too easy for TNSP to depart from NTNDP through more detailed analysis	ERAA	Not Accepted - It is not appropriate for the NTP to replace nor duplicate TNSPS short term planning. This would be inconsistent with the Terms of Reference. It may be good reasons for the TNSP to depart from the NTNDP and this needs to be explained in both the AER revenue determination and in the TNSPs APPS				
Content of NTNDP	Including analysis of congestion pricing is not a core function of transmission planning and could divert the NTP into unrelated or tangential work areas. Generator mis-pricing information might be more suitable content for SOO.	ERAA	Not Accepted - Congestion data is an important input into transmission planning and the proposed requirement is to provide a summary of the Congestion information resource maintained by AEMO. WE don't consider that NTP focus nor resources will be diverted away from its core purpose				
Content of NTNDP	Content is too minimalist and have provided AEMO with too much latitude in how they deliver the NTNDP. Suggest the inclusion of a 'value function' would enable integrated demand and supply planning and more information for demand side and embedded generation	EUAA	Not Accepted - Parties have the opportunity to comment on the NTNDP during the consultation process for preparing the NTNDP. This will inform the NTP as to whether the output meets the expectations of the market.				

Topic		Issue		Organisation		Response	
Content of NTNDP	More latitude should be given to the AEMO Board to determine the scope and outputs of the NTNDP and also the timing of publication	NGF		Not Accepted - The proposed structure of the NTNDP is needed to ensure that the NTNDP meets the COAG objectives. The right balance has been achieved between giving the NTP discretion and from being overly prescriptive. The AEMO has sufficient flexibility to ensure that the NTNDP is credible and consistent with market expectations			
NTP Budget and work plan consultation	The consultation on the annual work plan and budget for the NTP should be aligned with the consultation on the entire AEMO budget. AEMO board should have the discretion to determine date	NEMMCO		Accepted - It would be effective and efficient to align any consultation on the NTP budget and work-plan with the wider consultation on the AEMO budget, as long as the estimated NTP costs were separately identified. Consideration of whether the intended arrangements for AEMO budget consultation will be consistent with the AEMC proposals is needed.			
Publication of the Draft NTNDP	Consultation on a draft plan has a limited value and restricts the analysis required to produce a credible NTNDP. The process of preparing the NTNDP will require a substantial authoring and review process after the analysis. Given the short time between draft and final it would not be feasible for the NTP to re-work analysis for the final report. This consultation stage should be removed	NEMMCO		Accepted - The NTNDP will be subject to substantial authoring and internal reviewing processes by AEMO. This consultation will limit the available time for modelling and analysis and will affect the quality of the NTNDP. Parties have the ability to comment on previous year NTNDP during the input consultation at the start of the next year.			
Publication of the Draft NTNDP	Publication of a draft version will be a useful step for the industry to have the opportunity to input into the process and correct any errors of fact	ESIPC, TEC					
NTNDP name	Suggest the term NTNDP to be rather unwieldy. Suggest alternative of National Grid Plan	NGF		Not Accepted -Although we have some sympathy for this the NTNDP term was specified by COAG.			
Relationship between NTP and TNSP planning methodologies	Policy Recommendations does not ensure that there will be consistency in planning approaches across the NTNDP and RIT. Suggest that the AER must have regard to the NTNDP approach when developing RIT guidelines	ERAA		Not Accepted - The AER will use its own judgement on the appropriate approach to developing the RIT-T guidelines			
Information gathering powers	NTP Powers need to be both boarder and more flexible. Advise against have a one-off collection methodology and process of continuous engagement between the NTP and TNSPs is needed.	Grid Australia		Not Accepted -Proposed Clause 5.6.3 (i) requires the JPBs to provide such assistance as the AEMO reasonably requests for the NTP functions. This will enable continuous engagement and discussions between NTP and JPBs. Also we would expect the AEMO Board to form a working group of TNSPs to carry on the technical work of the IRPC.			
Information gathering powers	NTP needs to have the ability to get information from more sources that TNSPs. New generators, large customer loads and DNSPs can frequently have an impact on NTFPs	ESIPC		Not Accepted- AEMO will get sufficient information from other parties from it other functions and activities (e.g., SOO)			

Topic	Issue	Organisation	Response
Information gathering powers	Too much prescriptive in how NTP will get its information. An annual information process is not sufficient. The AEMO Board should be given more latitude in its ability to call on JPBs and TNSPs for assistance	NGF	<b>Not Accepted</b> - An annual information collection reflects good regulatory practice and helps the working relationship between the NTP and TNSPs
Information gathering powers	Sought an express prohibition on AEMO for the disclosure of information it received in its capacity as the NTP	Grid Australia	<b>Noted</b> -The provisions on AEMO information will be addressed under the AEMO implementation work.
Information gathering powers	NTP powers should be expanded to include generators, especially prospective generators. Note that under clause 5.3.8 TNSPs cannot share the information they receive as a result of connection applicants. The bias on information provision solely by TNSP reflects an inappropriate focus on transmission network and not the power system	Grid Australia	<b>Not Accepted</b> - Under clause 5.3.8 TNSP are required to share the confidential information with NEMMCO.

## REGULATORY INVESTMENT TEST ISSUES

Topic	Issue	Organisation	Response
Amalgamating the two limbs	Allowing TNSPs to add benefits on top of a mandated reliability standards, instead of incorporating reliability benefits into the total assessment is likely to lead to construction of augmentations over and above what is actually required by the market	VENCorp	Not Accepted- The overall test is to select the project which maximises net economic benefits. Any projects that deliver extra reliability above the deterministic standard would only pass the RIT-T if the extra benefits outweigh any extra costs.
Amalgamating the two limbs	More clarification on the proposal that only incremental reliability benefits be evaluated for deterministic reliability standards. Not clear now this would work.	ERAA	Accepted- more clarification included in final report
Scope of Projects - Cost Threshold	A provision in the Rules which prevents a TNSP from being able to break down an integrated network solution to an identified need so that it is deemed to multiple projects in order to escape the RIT-T is needed	NGF	Accepted - New clause 5.6.5 (e) added
Scope of Projects - Cost Threshold	\$5m is the appropriate threshold	AER	The AEMC considers that \$5m is the appropriate threshold. There are sufficient safeguards to ensure that the analysis required and resources use is appropriate to the individual project. The cost thresholds will be subject to an 3-yearly review
Scope of Projects - Cost Threshold	\$5m threshold is too low especially since input costs have at least doubled since the initial \$10m threshold was introduced. Also this threshold will capture investments which are unlikely to have efficient non-network alternatives nor material market impacts (i.e., transformers to local load)	Grid Australia	
Scope of Projects - Cost Threshold	For projects between \$5-35m, advice the introduction of a two tiered scheme which applies different process for projects which materially affects the capability of major transmission corridors. Only these projects will be subject to the full RIT-T. Other projects with only local impacts would have a more streamlined approval process.	Grid Australia	
Scope of Projects - Cost Threshold	Threshold should be lowered to \$1m for projects, and conceded that the \$1m threshold could be the minimal level for initial analysis. It advocated this position because it was concerned that demand side responses in smaller augmentations may be overlooked.	TEC	

Topic		Issue		Organisation		Response	
Scope of Projects -like for like replacement expenditure	TNSPs should be require to undertake the project consultation phase on all replacement expenditure costing more than \$5m in order to identify potential non-network options and if so, then a full RIT-T process should apply	NGF	Not Accepted - This will result in unnecessary and costly analysis without much benefit and could delay projects. Instead we propose that more information about large scale replacement projects are included in the APRs.				
Scope of Projects - Reconfigurations	The legal drafting is not clear on what constitutes an reconfiguration project. Are projects which affect service quality but not augment the network included in the test?	NGF	Accepted - More clarification to be added in the legal drafting				
Scope of Projects - Reconfigurations	The propose RIT-T does not address Stanwell concerns about the degradation of pre-existing network services to individual network users that can occur as a result of unilateral TNSP decisions to modify their networks	NGF	Not Accepted - This issue of compensation for generators was not considered as part of this Review				
Projects excluded from the RIT-T to be done on least cost basis	No need for this requirement. Sufficient economic incentive on TNSPs to be efficient under Chapter 6A. This proposed addition appears to have little practical impact.	Grid Australia	Not Accepted - This clause increases the accountability on TNSPs to plan on least cost basis				
Determination of credible options	When TNSPs make investment decisions, they should, from the beginning, seek out demand side responses first and foremost, before considering suggestions for augmentation	TEC	This issue is being considered under the TEC Rule Change Proposal				
Determination of credible options	TNSP have too much discretion under proposed arrangements. They are unlikely to be objective in seeking and evaluating non-network options	NGF	Not Accepted - The proposed RIT-T will improve the level of transparency and accountability on TNSPs investment decisions.				
Quantification of material market benefits	For projects more than \$25m, the TNSP should be mandated to quantify all classes of benefits. This should be standard best practise for projects of this size	AER	Not accepted- In this Draft Report, we argued that this could result in unnecessary, and costly analysis which could delay reliability projects.				
Project Specification Consultation	TNSPs should be able to consult on project specification via their APRs. This would enable TNSPs to cover several investment projects in one document than having to do separate reports for each	Grid Australia	Accepted - The use of consultation via the APRs would raise in the NTP Public Forum Discussion Paper but was not explicitly reflected in the draft report legal text.				
Project Specification Consultation	Too much unnecessary information is required to be provided by the TNSP for this stage. Recommend that TNSP should provide only be required to provide the sufficient information necessary for a non-network alternative provider to adequately respond plus other information, if practical. This will lessen the resourcing requirements on TNSPs	Grid Australia	Partly Accepted - information should be appropriately sufficient to inform participants				

Topic	Issue	Organisation	Response
Project Specification Consultation	It is not clear what is intended by the requirement to publish the TNSP's initial assessment of the relevance of the materiality of each class of market benefit. This implies a de-facto cost-benefit analysis which would increase costs without any benefit.	Grid Australia	Partly Accepted - The intention in the drafting was for the TNSPs to give an initial indication of which magnitude of classes of benefits are likely to be material. This will help parties to make informed submissions on possible credible options and associated market benefits. Requiring them to attempt to quantify the extent of the materiality at this early stage is unnecessary and employs TNSPs resources.
Project Specification Consultation	A longer period that is greater than 12 weeks is sought to allow for formulation of non-network solutions	TEC	Not Accepted - 12 weeks is sufficient. The NTNDP will help to identify future investment needs at a early stage
Draft Project Assessment must be published 12 months after end of project specification	There may be good reasons why the project assessment consultation is delay passed 12 months. Suggest that the TNSPs have the ability to seek an extension from the AER for this time constraint	Grid Australia	Accepted -AER will be able to apply extensions, where appropriate.
Project Assessment -NPV methodology	The proposed clause which requires the TNSPs to consider costs over the "operating life of the credible option" mandates a NPV approach over the completed life. However there may be instances where the TNSP only considers costs over a selected, shorter period.	Grid Australia	Accepted - This is too much prescription in the Rules and is better dealt with in the AER guidelines
Project Assessment Draft Report Consultation	The consultation period should be 30 business days not the proposed 4 weeks	AER	Accepted - current consultation period on TNSP proposed regulatory test assessment is 30 days. The new arrangements should be consistent with this.
Timeframe between Project Assessment Draft report consultation and Final Report	Disagreed with the requirement for the final report to be published within 4 weeks of draft assessment report consultation. There should be sufficient time for the TNSP to resolve possible disputes and react to submissions. A short timeframe increases the risk of disputes being raised. As TNSPs have the incentive to proceed in a timely manner there is no need to have a fix deadline	Grid Australia	Accepted - It is not sensible to rush publication of the Final Report and the TNSPs should be given sufficient time to address submissions. There is no fix deadline in the current arrangements. Suggest removing any explicit deadline.
Proponent for credible option	The Rules should explicitly state that for projects driven by reliability standards, there needs to be a proponent for the project to be considered credible option at the Draft Project Assessment Stage. Accept that all project should be considered on its merits before that stage	Grid Australia	Accepted - Clause 5.6.6 (k) states that for a reliability augmentation the preferred option must have a proponent.
Architecture of the RIT- T; Prescription of RIT in Rules	The proposed increased in prescription in the Rules blurs the demarcation between the Rules and Test may decrease the need for the AER to publish the Test. Proposal creates too much unnecessary overlap. Question the need for a test to be published by the AER	AER	Not Accepted - The 2006 MCE Regulatory Test Principles Rule change proposal established the three distinct but complementary aspects to the application of the test. Staff consider that there is still a need to a separate Test outside of the Rules.

Topic		Issue		Organisation		Response
Current Regulatory Test for Distribution NSPs	Does not envisage that there are complications from having different project assessment processes for distribution and transmission	Ergon Energy	Noted- maintain separate test for distribution and transmission			
Current Regulatory Test for Distribution NSPs	The current regulatory test should also be maintained for dual function transmission assets (assets which provide support to the higher voltage network whilst having no material market impact). This will prevent undue regulatory burden	Energy Australia	Accepted - to be consistent with the AEMC determination on Energy Australia rule change proposal, dual function assets should be assessed under the distribution regulatory test.			
Current Regulatory Test for Distribution NSPs	There is a need to clarify which test should apply to a joint project assessment. Often a load network limitation can be address either through transmission or distribution investment or a combination of both	Grid Australia	Accepted - More clarification added to Draft Rule. The proposed concept is that if need arises on the transmission network then the project should go through the new RIT-T. other projects addressing other needs will be subject to the current test.			
Current Regulatory Test for Distribution NSPs	There has been very little consideration of the appropriate test for DNSPs. Suggest that AER should review the current regulatory test and application guidelines if the current test is only going to be applied to DNSPs	Energyex	Accepted - Maintaining the current test for distribution is, at best, a transitional arrangement. Understand that MCE is considering the regulatory framework for distribution.			
Current Regulatory Test for Distribution NSPs	A full consideration of the appropriate test for distribution is needed but is out of scope of the NTP Review. AEMC should recognise that the current Test should only be used as a transitional measure for DNSPs as it was develop mainly for transmission	AER				
Dispute Resolution - timeframe to raise disputes	Parties should have 30 business days not the proposed 4 weeks to raise disputes. The current arrangements allows them 30 days	AER	Not Accepted - 4 weeks is sufficient . Parties should be encourage to raise disputes as soon as possible after publication of the final report.			
Dispute Resolution	Parties should be able to raise disputes on TNSP determination of credible options early in the process then at the end of the Project assessment final report	NGF	Not Accepted - Having two separate dispute resolution stages would unnecessary delay the project planning and assessment process and could give parties an opportunity to seek to delay the process.			
Dispute Resolution	Compliance with the Rules should also include compliance with the spirit and intent as well as the substance of both the Rules and any regulatory instrument issued by the AER	NGF	Not Accepted - The current drafting is sufficient.			
Dispute Resolution	Given the information asymmetry the onus should be on the TNSP to demonstrate compliance rather than on the disputing party to demonstrate that the TNSP has failed in complying with the Rules. Requiring the TNSP to demonstrate compliance should not involve an undue amount of additional work.	NGF	Not Accepted - The current drafting is sufficient.			

Topic	Issue	Organisation	Response
Dispute Resolution	If the outcome of a dispute requires the AER to direct a TNSP to amend matters in a project assessment final report, the AER should publish detailed reasons for why it gave that direction.	Grid Australia	Accepted - the AER should be required to publish its reasons.
Dispute Resolution	Definition of 'interested parties' should be developed. Also clarification as to whether non-government organisations can qualify as an 'interested party'	TEC	Not Accepted - drafting is sufficiently clear
Dispute Resolution - AER determination timeframe	Proposed time of 40 days to resolve any dispute is insufficient. Currently it is 30 days for reliability disputes and 120 days for market benefits disputes. At a minimum, AER should have 12 weeks.	AER	Partly Accepted - Maintain 40 days but give AER the option to extend timeframe if it considers necessary. AER must inform parties of any decision to extend dispute determination
Promulgation of RIT-T and new guidelines	We need at least 9 to 12 months to promulgate the RIT-T and associated guidelines after the commencement of the new Rules	AER	Accepted - AER should be granted 12 months to do the new test and guidelines
Inclusion of Option Value category	Support option value provided that a corresponding cost category reflecting the full opportunity cost of scarce resources is also included and the AER provides clear guidelines.	NGF	Recommend that the category of Optional Value is included. This will allow the TNSPs to take a more strategic, long term view of investment and therefore will be consistent with COAG objectives. The AER should be able to provide clarity on how option value should be measures. Also the NTP will have an important role to play here and should improve the understanding of option value of act as a discipline on any misuse of this provision.
Inclusion of Option Value category	Support the concept but may be used inappropriately if not sufficiently defined	AER	
Inclusion of Option Value category	Supports consideration of option value as a possible benefit but this has not been fully thought out nor consulted on. Also not fair to provide little guidance to the AER on how Option Value should be applied	Grid Australia	

Topic		Issue		Organisation		Response	
Ability of RIT to support climate change policy	There is uncertainty surrounding the extent to which environment costs and benefits can be included. It is not clear whether compliance with an administrative obligation or a wealth transfer, takes precedence.	Origin	Recommend no changes to the proposed drafting and address issues as part of the Climate Change Review Project. AER will have the flexibility to amend the Test and guidelines once government policy is known.				
Ability of RIT to support climate change policy	The RIT does not take a strategic, long term view and tends to be reactive and bias against early, large transmission investments. This will impede the significant expansion of the grid needed to connect remote renewable generation. An scenario analysis approach which assigns probability to each scenario would better capture potential value to larger projects with higher risk but also higher benefits	Origin					
Ability of RIT to support climate change policy	The effects of both the ETS and MRET schemes on future plausible generation patterns are already captured in the RIT-T analysis via the market development scenarios modelling. It is inappropriate and premature for the Commission to seek to predict policy at this stage. Better to allow AER flexibility to amend guidelines once government policy is known.	Grid Australia					
Ability of RIT to support climate change policy	The RIT-T needs to consistent with the proposed ETS. However until a policy is released, it will be difficult for the AER to develop clear rules and approach to valuing the associated costs and benefits. Therefore any detailed on this should continue to reside in the guidelines not in the Rules nor Test	AER					
Cost Allocation for Privately funded Transmission Assets	The current cost allocation arrangements provides little incentive for private participants to come forward and fund transmission. The requirement for significant up-front costs and uncertain around timing and quantum of future contributions from other users may prove too big of a hurdle. This will also impede the development of transmission grid to support remote renewable generation. Suggest introducing the California solution which addresses the up-front funding problem	Origin	Noted - This issue is out of scope for the NTP Review.				

## Submissions to NTP Draft Report: Other Issues

Topic	Issue	Organisation	Response
SOO Publication Date	Agreed that the publication date of the SOO be bought forward but suggest a 30 August date instead of 30 June to ensure a high quality document	NEMMCO	Accepted - This will ensure that the SOO is a quality document. We would still expect that the SOO content will be fully reflected in the NTNDP
Alignment of DNSP and TNSP revenue re-sets	This proposal would impose significant costs on the NSPs and put significant resource requirements on AER. Does not believe that the benefits, which have yet to be demonstrated, would outweigh these costs.	Ergon Energy	Noted -This issue requires further consideration and analysis before any conclusive recommendation could be made to the MCE. The current AER parallel determinations of the NSW TNSP and DNSP revenue resets will highlight any synergies and costs from having simultaneous determinations for regional NSPs. Final Report, notes that alignment may have possible net benefit but further consideration is needed and that the AER should report to the MCE on possible alignment following completed of the NSW determinations. This will be instructive to whether alignment is beneficial.
Alignment of DNSP and TNSP revenue re-sets	Does not support alignment since it could result in own size fits all regulatory approach due to AER resource constraints. The costs of alignment would outweigh any benefits	Energex	
Alignment of DNSP and TNSP revenue re-sets	AER is about to commence the regulatory resets for the NSW transmission and distribution businesses simultaneously. This will be instructive as to the possible benefits and impacts of TNSP and DNSP alignment	AER	
Inter Regional TUOS	For any review of cross-border TUOS options to be constructive, the policy objectives need to be explicit and the relationship with related market design elements (allocation of SRA proceeds) need to be articulated. Need more policy direction	ERAA	Accepted - Further analysis and stakeholder consultation is needed on selecting the most appropriate arrangement for the NEM. Final Report advises that the MCE requests a further review into this.
Inter-Regional TUOS options	More analysis and time plus modelling of the four options needed. Would lean towards an Uniform NEM wide charging approach	VENCorp	
Inter-Regional TUOS options	More analysis and modelling required in order to select the best option. This is an important issue and further work is needed. Advise against presenting a recommendation to the MCE and instead request a further review	ESIPC	
Inter-Regional TUOS options	Options 1 and 2 (interconnector-sharing) are based on the beneficiary pays principle and where rejected in the NECA TUOS pricing Review. Option 3 needs to be rigorously tested before it could be seriously considered for implementation. Option 4 needs to be discussed by MCE.	ERAA	

Topic		Issue	Organisation	Response
Inter-Regional TUOS options	This issue warrants more consideration and analysis than contained in the draft report. Other issues such as SRA proceeds allocation and cross border risk allocation need also to be considered. Advice against the AEMC making a final resolution of the issue but to recommend to the MCE to conduct a more fully review with defined principles	NGF		
Inter-Regional TUOS options	Why has the AEMC decided that inter-regional TUOS was within scope of this review but not access arrangements? We want an explanation for this apparent inconsistency. We urge the AEMC to advise the MCE to conduct a review into access arrangements for generators	NGF		
Inter-Regional TUOS options	This substantive matter has been introduced late in the Review which has limited time for effective evaluation and consultation. Would initially favour option 3 (load export charge) but more work is required. Interconnector sharing options are likely to lead to disputes	Grid Australia		
Implementation	Concern that AEMC policy recommendations may get lost or diluted within the MCE AEMO implementation process. The AEMC, in its final report, should urge the MCE to consult on the legislative amendments and that the AEMC will be allowed to work closely with the MCE in this process	ERAA		<b>Noted</b> -The Implementation Steering Committee is progressing AEMO implementation
Transition	NTNDP is very different to the ANTS and an appropriate framework for managing the transition is needed. With the decisions and processes required to develop the first NTNDP, it would only be feasible to produce the first plan by 2010	NEMMCO		<b>Noted</b> -AEMC considers that a first NTNDP by December 2009 is possible but requires a series of actions.
Transition	A sensible transitional arrangement which enables the AER adequate time to develop the new test and guidelines before the new arrangements take effect is needed	Grid Australia		<b>Accepted</b> - Advise that the same approach used for the 2006 reforms of the regulatory test is applied. This would give AER 12 months to develop the new RIT-T and associated guidelines before the new test takes effect. The current test will continue to apply to projects which have commenced consultation under the Rules

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## **B Summary of Related Reforms**

This Appendix presents the key policy reforms and Reviews that relate to the National Transmission Planner Review. The key reforms since October 2005 which set the context for the National Transmission Planner Review are:

### **B.1 Rule changes in respect of the Economic Regulation of Transmission Services:**

In November 2006, following a process of consultation and review, the Commission made a set of changes to the Rules to put in place a new regime of economic regulation for transmission.<sup>109</sup> The purpose of these changes was to improve the incentive regime under which transmission service providers operate and to clarify how different services are to be classified and priced. In particular the new Rules required the AER to develop and implement a regime of financial incentives and penalties to encourage TNSPs to make available transmission capacity and services at times of most value to users and consumers. The new Rules permit up to 5% of revenue to be subject to the TNSPs performance under the incentive regime. The AER published its service incentive scheme for TNSPs in March 2008.<sup>110</sup>

### **B.2 Last Resort Planning Power (LRPP):**

In March 2007, the Commission made a change to the Rules to put in place the LRPP. The LRPP enables the Commission to direct a party to undertake a Regulatory Test assessment in respect of an identified new network investment. Its purpose is to ensure timely and efficient interregional transmission investment.<sup>111</sup>

### **B.3 Review of Regulatory Test Principles:**

The Commission made a Final Rule Determination on the Rule change for the Reform of Regulatory Test Principles on 30 November 2006.<sup>112</sup> The Rule change will allow the Regulatory Test to operate more effectively by providing greater policy guidance for the promulgation of the Regulatory Test while increasing the certainty and transparency of the application of the Regulatory Test. The Rule makes the market benefits limb of the Test simpler. It achieves this through the provision of an information mechanism for alternative projects and requiring that the comparison of the proposed investment be made only against identified alternatives rather than all possible alternatives. The Commission considers that this will lead to greater incentives for TNSPs to utilise the market benefits limb of the Regulatory Test and this will facilitate investments to relieve congestion.

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<sup>109</sup> AEMC 2006, *National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, Rule Determination, 16 November 2006, Sydney, and AEMC 2006, *National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006*, 21 December 2006, Sydney.

<sup>110</sup> AER 2008, *Electricity Transmission Network Service Provider Service Target Performance Incentive Scheme*, March 2008.

<sup>111</sup> AEMC 2007, *National Electricity Amendment (Transmission Last Resort Planning) Rule 2007*, Rule Determination 8 March 2007, Sydney and AEMC 2007, *Last Resort Planning Guidelines*, 10 July 2007.

<sup>112</sup> AEMC 2006, *Reform of Regulatory Test Principles*, Rule Determination, 30 November 2006, Sydney.

#### **B.4 Comprehensive Reliability Review:**

The Commission has requested the Reliability Panel to undertake a comprehensive and integrated review of the effectiveness of National Electricity Market (NEM) reliability settings, including whether there may be a need to improve or change them. The panel focused on whether an adequate level of generation and bulk transmission was being made available. In June 2007, an additional request was made by the MCE to provide advice on strengthening the market's ability to manage generator inputs. The panel has released a second interim report in August 2007, and published its final decision in December 2007.<sup>113</sup>

#### **B.5 Congestion Management Review :**

On 16 June 2008, the Commission published its Final Report on the Congestion Management Review.<sup>114</sup> The MCE directed the Commission to review and make recommendations on improved arrangements for managing physical and financial trading risks associated with material network congestion. In its Final Report, the Commission sets out the current congestion management regime and looks at key issues and likely drivers for change that may impact on the congestion management regime in the future.

In addition, the Final Report recommends four specific areas for Rule changes to the MCE. If implemented, these Rule changes will: formalise NEMMCO's use of fully co-optimised network constraints; amend the Rules governing the funding of negative settlement residues so as to reduce uncertainty for holders of Inter-Regional Settlement Residue (IRSR) units; establish a new Congestion Information Resource (CIR), to be published by NEMMCO; and clarify and strengthen the Rules governing the rights of generators who fund transmission augmentations as a means of managing congestion risk.

#### **B.6 Demand Side Participation Review:**

The objective of this Review is to determine whether there are barriers or disincentives within the Rules for the efficient uptake of demand side participation in the NEM. This Review will follow a three stage process: Stage 1- a review of current work program insofar as it may affect demand side participation; Stage 2- a review of the Rules to ascertain any barriers to demand side participation; and Stage 3- a broader analysis of any other barriers that may inhibit the uptake of demand side participation in the NEM more generally. On 16 May 2008, the Commission published its Final Report for Stage 1 of the Review<sup>115</sup> and an Issues Paper for Stage 2 of the Review.<sup>116</sup>

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<sup>113</sup> AEMC Reliability Panel 2007, *Final Report, Comprehensive Reliability Review*, December 2007, Sydney.

<sup>114</sup> AEMC 2006, *Final Report, Congestion Management Review*, June 2008, Sydney.

<sup>115</sup> NERA Economic Consulting, *Review of the role of Demand Side Participation in the National Electricity Market*, Stage 1 Final Report, May 2008, Sydney.

<sup>116</sup> AEMC 2008, *Review of Demand-Side Participation in the National Electricity Market*, Stage 2: Issues Paper, 16 May 2008, Sydney.



## NTP Final Report – Appendix C (i)

### National Electricity Law Amendments for National Transmission Planner 2008

#### DEFINITIONS – TO BE INCLUDED IN NATIONAL ELECTRICITY LAW

##### Section 2

**AEMO Board** means the board of directors of the AEMO.

**general planning information order** means an order made by the AEMO in accordance with Division [3] that requires each transmission system operator of a specified class to provide to the AEMO the information specified in the order.

**national transmission grid** means the interconnected electricity transmission systems in this jurisdiction and the other participating jurisdictions.

**National Transmission Planner Advisory Committee** means the committee of persons established by the AEMC Board under section [2][1](1).

**NTP considerations** means the matters set out in section [7AB].

**NTP functions and powers** means the functions and powers referred to in section [1][1](1).

**NTP objective** means the objective set out in section [7AA].

**planning information instrument** means a general planning information order or a planning information notice.

**planning information notice** means a notice prepared and served by the AEMO in accordance with Division [3] that requires the transmission system operator named in the notice to provide to the AEMO the information specified in the notice.

**transmission system operator** means an owner, controller or operator of a transmission system that forms part of the national transmission grid.

##### Section 7AA – NTP objective

The NTP objective is to contribute to the achievement of the national electricity objective in a manner that promotes the efficient, strategic and co-ordinated long term development of the national transmission grid.

##### Section 7AB – NTP considerations

The NTP considerations are:

- (a) best practice in the planning of electricity transmission networks;
- (b) changes in technology that are relevant to the national transmission grid;

- (c) the availability, price and technical feasibility of different fuel sources for the generation of electricity;
- (d) the Acts of any participating jurisdiction, or any instruments made or issued under or for the purposes of any such Act, that relate to the supply or use of energy, including Acts or instruments that relate to the protection of the environment; and
- (e) alternatives to the augmentation of the national transmission grid, including reductions in the demand for electricity, the installation of local generating systems and the use of forms of energy other than electricity.

## **AUSTRALIAN ENERGY MARKET OPERATOR (AEMO) – PROVISIONS TO BE INCLUDED IN NATIONAL ELECTRICITY LAW**

### **Division [1] Australian Energy Market Operator – NTP functions and powers**

#### **[1] Functions and Powers**

- (1) In addition to its other functions and powers, the AEMO also has the following functions and powers (the "NTP functions and powers") -
  - (a) to prepare and publish each year, in accordance with the Rules, a plan for the development of the national transmission grid;
  - (b) to maintain and make available to the public, in accordance with the Rules, a database containing information used to prepare the plans referred to in paragraph (a);
  - (c) at the direction of the MCE, to conduct a review into any matter relating to the development of the national transmission grid;
  - (d) at the request of the AEMC, to provide advice in relation to the development of the national transmission grid;
  - (e) subject to subsection (2), to make submissions, in accordance with the Rules, to transmission system operators as part of any consultation process that those operators are required to undertake under the Rules in connection with the identification and evaluation of possible investment projects relating to the national transmission grid and any alternatives to such projects;
  - (f) subject to subsection (2), to make submissions, in accordance with this Law and the Rules, to the AER in respect of the making of any transmission determination;
  - (g) to direct the National Transmission Planner Advisory Committee to conduct a review into, or provide advice on, any matter relating to the development of the national transmission grid; and
  - (h) any other functions and powers conferred on it under this Law and the Rules that are identified as NTP functions and powers in this Law or the Rules.
- (2) In performing and exercising its NTP functions and powers under subsections (1)(e) and (f), the AEMO may only make submissions that pertain to possible investment projects

relating to the national transmission grid that would be likely to materially change the capability of the grid to transport significant amounts of electricity.

- (3) The AEMO has power to do all things necessary or convenient to be done for or in connection with the performance of its functions.

**[2] Objective**

In performing or exercising the NTP functions and powers, the AEMO must -

- (a) have regard to the NTP objective;
- (b) have regard to any advice provided to the AEMO Board by the National Transmission Planner Advisory Committee; and
- (c) take into account the NTP considerations.

**[3] Reviews directed by the MCE**

The MCE may give a written direction to the AEMO that the AEMO conduct a review into any matter relating to the development of the national transmission grid.

**[4] Resources for the National Transmission Planner Advisory Committee**

The AEMO must make available reasonable resources to enable the National Transmission Planner Advisory Committee to perform its functions.

***[Note: it is assumed that the National Electricity Law will include appropriate general provisions relating to:***

- ***the immunity from liability of the AEMO; and***
  - ***the treatment of confidential information provided to the AEMO,***
- that apply to the NTP functions and powers]***

**NATIONAL TRANSMISSION PLANNER ADVISORY COMMITTEE – PROVISIONS TO BE INCLUDED IN NATIONAL ELECTRICITY LAW**

**Division [2] National Transmission Planner Advisory Committee**

**[1] Establishment and functions**

- (1) The AEMO Board must establish a committee of persons to be known as the National Transmission Planner Advisory Committee.
- (2) The National Transmission Planner Advisory Committee has the following functions -
  - (a) to assist the AEMO Board in the performance and exercise of the NTP functions and powers; and
  - (b) at the direction of the AEMO Board, to conduct a review into, or provide advice on, any matter relating to the development of the national transmission grid.

**[2] Objective**

In performing its functions, the National Transmission Planner Advisory Committee must -

- (a) have regard to the NTP objective; and
- (b) take into account the NTP considerations.

**[3] Membership and terms and conditions of appointment**

- (1) The National Transmission Planner Advisory Committee must consist of a chairperson and at least 3 other members appointed by the AEMO Board.
- (2) The chairperson and the other members of the National Transmission Planner Advisory Committee must be persons whom the AEMO Board considers:
  - (a) are suitable for appointment on the basis that they have knowledge, experience or abilities relating to the planning of the national electricity system; and
  - (b) together represent a diverse and balanced mix of such knowledge, experience and abilities.
- (3) The chairperson:
  - (a) subject to subsection (4), may be a member of the AEMO Board; and
  - (b) must be and remain independent of businesses engaged in the industries regulated under this Law.
- (4) Not more than two members of the National Transmission Planner Advisory Committee may be officers or employees of the AEMO.
- (5) The members of the National Transmission Planning Advisory Committee will be appointed on such terms and conditions as the AEMO Board determines.

**[4] Review**

By no later than the end of the fifth year after Division [2] comes into operation, or earlier if requested to do so by the MCE, the AEMC must:

- (a) conduct a review of the functions and operation of the National Transmission Planner Advisory Committee; and
- (b) recommend to the MCE any changes that the AEMC considers are required in relation to the functions and operation of the National Transmission Planner Advisory Committee, including whether there is a need for the continuing existence of the National Transmission Planner Advisory Committee.

**INFORMATION GATHERING POWERS – PROVISIONS TO BE INCLUDED IN NATIONAL ELECTRICITY LAW**

**Division [3] Information gathering powers**

- (1) If the AEMO considers it reasonably necessary for the performance or exercise of the NTP functions and powers, it may -
  - (a) make a general planning information order; or
  - (b) serve a planning information notice on a transmission system operator.

- (2) In considering -
- (a) whether to make a general planning information order or to serve a planning information notice; and
  - (b) what information or documents are to be requested to be provided to the AEMO in accordance with a general planning information order or a planning information notice,
- the AEMO must have regard to the reasonable costs that are likely to be incurred in complying with the order or notice.
- (3) A planning information instrument -
- (a) must:
    - (i) specify the information or documents, or categories of information or documents, that are required to be provided to the AEMO and the time by which they must be provided; and
    - (ii) comply with the requirements of the Rules;
  - (b) may specify the manner and form in which the information and documents described in the instrument are required to be provided to the AEMO;
  - (c) in the case of a general planning information order, must specify the class of transmission system operator to whom the order applies; and
  - (d) in the case of a planning information notice, must name the transmission system operator to whom it applies.
- (4) Without limiting subsection (3) -
- (a) the information that may be required to be provided to the AEMO may include:
    - (i) historic, current and forecast information; and
    - (ii) information that is or may be derived from other information in the possession or control of the transmission system operator; and
  - (b) the planning information instrument may specify that the information or documents described in the instrument are to be provided to the AEMO on an annual basis or some other basis.
- (5) A general planning information order must be published on the AEMO's website as soon as practicable after it is made and, on its publication, a transmission system operator must comply with the order unless it has been given an exemption under subsection (7).
- (6) On being served with a planning information notice, a transmission system operator must comply with the notice.
- (7) The AEMO may, by written notice, exempt a transmission system operator from complying with a general planning information order -
- (a) unconditionally or on specified conditions; or
  - (b) wholly or to the extent as is specified in the exemption.

- (8) A transmission system operator must not, in purported compliance with a planning information instrument requiring that operator to provide information to the AEMO, provide information to the AEMO that the operator knows is misleading in a material particular.
- Maximum penalty: \$10,000
- (9) A transmission system operator -
- (a) must not refuse to comply with a planning information instrument on the grounds of any duty of confidence; and
  - (b) by complying with a planning information instrument, incurs no liability for breach of contract, breach of confidence or any other civil wrong.
- (10) The AEMO –
- (a) may only use information or documents provided to the AEMO in accordance with this Division [3] for the purpose of performing and exercising the NTP functions and powers; and
  - (b) may disclose that information or those documents to the National Transmission Planner Advisory Committee for the purpose of enabling the National Transmission Planner Advisory Committee to assist the AEMO in the performance and exercise of the NTP functions and powers, in which case the National Transmission Planner Advisory Committee may only use that information or those documents for that purpose.

## **SCHEDULE 1 – AMENDMENTS TO BE INCLUDED IN NATIONAL ELECTRICITY LAW**

Insert additional heads of power as follows:

### **National transmission planning**

- 30E The preparation and publication of an annual plan relating to the development of the national transmission grid.
- 30F The maintenance and publication of a database containing information used to prepare the annual plans referred to in item 30E.
- 30G The collection of information required for the preparation of the annual plans referred to in item 30E.
- 30H The preparation of a work plan in relation to the performance of the NTP functions and powers.

Amend item 33 to include the following new paragraph (c):

- (c) the National Transmission Planner Advisory Committee; or

**NTP Final Report – Appendix C (ii)**

**National Electricity Amendment (National Transmission Planner)  
Rule 2008**

**Schedule 1** contains amendments to the National Electricity Rules to provide for the preparation and publication of an annual national transmission network development plan and associated matters.

**Schedule 2** contains amendments to other clauses in the Rules as a result of the proposed new transmission planning arrangements for the national electricity market.

**Schedule 3** identifies savings and transitional provisions that will be required consequent upon the implementation of the proposed new transmission planning arrangements.

## Schedule 1 National Transmission Planning

### [1] New rule 5.6A National Transmission Planning

After rule 5.6, insert:

#### 5.6A National Transmission Planning

##### 5.6A.1 Preliminary Consultation

- (a) By no later than 30 January each year, the *AEMO* must *publish*:
- (1) a document that sets out the *NTNDP inputs* that it proposes to use in the preparation of the *NTNDP* that is to apply in the following year;
  - (2) its proposed work-plan for the *NTP functions and powers* for the following *financial year*; and
  - (3) a document that summarises the material issues arising from any submissions received on the proposed work-plan for the current *financial year* as published under subparagraph (2) and the *AEMO's* response to each of those issues.
- (b) At the same time as it *publishes* the documents referred to in paragraph (a), the *AEMO* must *publish* an invitation for written submissions to be made to the *AEMO* on:
- (1) the proposed *NTNDP inputs*;
  - (2) the content of the *NTNDP* that applies in the current year, including the location of the current and potential *national transmission flow paths* identified in that *NTNDP*; and
  - (3) the proposed work-plan for the *NTP functions and powers* for the following *financial year*.
- (c) Any person may make a written submission to the *AEMO* on the proposed *NTNDP inputs*, the content of the *NTNDP* that applies in the current year, or the proposed work-plan within the time specified in the invitation referred to in paragraph (b), which must not be earlier than *30 business days* after the invitation is *published*.

**5.6A.2 Publication of NTNDP**

- (a) By no later than 31 December each year, the *AEMO Board* must *publish* the *NTNDP* that is to apply in the following year.
- (b) In providing advice and making recommendations to the *AEMO Board* in relation to the content of the *NTNDP* that is to be *published* under paragraph (a), the *NTPAC* must:
  - (1) take into account the submissions made in response to the invitation referred to in clause 5.6A.1(b);
  - (2) consider the matters set out in paragraph (d); and
  - (3) have regard to the documents set out in paragraph (e).
- (c) In preparing the *NTNDP* that is to be *published* under paragraph (a), the *AEMO* must:
  - (1) take into account the submissions made in response to the invitation referred to in clause 5.6A.1(b);
  - (2) have regard to the advice and recommendations of the *NTPAC*;
  - (3) consider the matters set out in paragraph (d); and
  - (4) have regard to the documents set out in paragraph (e).
- (d) The matters referred to in subparagraphs (b)(2) and (c)(3) are:
  - (1) the quantity of electricity which flowed, the periods in which the electricity flowed, and *constraints*, on the *national transmission flow paths* over the year that precedes the year in which the *NTNDP* is to apply;
  - (2) the forecast quantity of electricity which is expected to flow, the periods in which the electricity is expected to flow, and the magnitude and significance of future *network losses* and *constraints*, on the current and potential *national transmission flow paths* over the year in which the *NTNDP* is to apply or such other period to which a scenario that is used for the purposes of the *NTNDP* applies;
  - (3) the projected capabilities of the *national transmission grid*, and the *network control ancillary services* required to support the existing and future capabilities of the *national transmission grid*, under each of the scenarios that is being used for the purposes of the *NTNDP*;

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- (4) relevant intra-jurisdictional developments and any incremental works which may be needed to co-ordinate *national transmission flow path* planning with intra-jurisdictional planning; and
  - (5) such other matters as the *AEMO Board*, in consultation with the *participating jurisdictions*, considers are appropriate.
- (e) The documents referred to in subparagraphs (b)(3) and (c)(4) are:
- (1) the most recent *Annual Planning Reports* that have been *published*;
  - (2) the most recent *statement of opportunities* that has been *published*;
  - (3) the most recent [Gas statement of opportunities] that has been [published]; and
  - (4) the then current *revenue determination* for each *Transmission Network Service Provider*.
- (f) A *NTNDP* that is *published* under paragraph (a) must:
- (1) contain a review of the efficient development of the *national transmission grid* for a planning horizon of at least 20 years from the beginning of the year in which the *NTNDP* applies;
  - (2) take into account all *transmission elements* which are part of, or materially affect, the transmission capability of any current or potential *national transmission flow paths*;
  - (3) identify a range of credible scenarios for the geographic pattern of the demand for, and supply of, electricity for the planning horizon of the *NTNDP*;
  - (4) identify the location of the current *national transmission flow paths* and specify their transmission capability;
  - (5) identify the location of the potential *national transmission flow paths* over the planning horizon of the *NTNDP* under each of the scenarios referred to in subparagraph (3);
  - (6) specify a development strategy for each current and potential *national transmission flow path* in accordance with clause 5.6A.3;
  - (7) include a summary of the information specified in rule 3.7A in relation to congestion on each current *national transmission flow path*;

*[Drafting Note: The Commission is proposing to amend Rule 3.7A to introduce a congestion information resource]*

- (8) include a consolidated summary of the *augmentations* proposed by each *Transmission Network Service Provider* in the most recent *Annual Planning Reports* they have *published* and an analysis of the manner in which the proposed *augmentations* relate to the *NTNDP* and any previous *NTNDP*; and
- (9) summarise the material issues arising from the submissions received in response to the invitation referred to in clause 5.6A.1(b) (1) and (2), explain how those issues have been addressed in the *NTNDP* and give reasons for not addressing any of those issues in the *NTNDP*.
- (g) The *AEMO* must *publish* the first *NTNDP*, which will be the *NTNDP* that applies in 2010, by no later than 31 December 2009.
- (h) If, after the *publication* of the most recent *NTNDP*, the *AEMO* becomes aware of information relating to a matter referred to in subparagraph (d)(4) or clause 5.6A.3(c)(ii) that is materially different to that of which it was aware at the time it *published* that *NTNDP*, the *AEMO* must, as soon as practicable after it becomes aware of that materially different information, *publish* that information.

### **5.6A.3 Development strategies for national transmission flow paths**

A development strategy for a current or potential *national transmission flow path* that is specified in a *NTNDP* in accordance with clause 5.6A.2(f)(6) must:

- (a) be proposed for each of the scenarios referred to in clause 5.6A.2(f)(3);
- (b) to the extent reasonably practicable and appropriate, be consistent with:
  - (i) the co-optimisation of *network* and non-*network* investment;
  - (ii) the maximisation of the net economic benefit to all those who produce, consume and transport electricity to the *market*; and
  - (iii) the service standards that are linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments*;
- (c) take into account the following matters:

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- (i) the current or likely capacity of the *national transmission flow path*, and the need to increase that capacity to relieve current or likely *constraints* and congestion points;
  - (ii) technically feasible *network* and *non-network* options (including additional *generation* and demand side options) for relieving such current or likely *constraints* or congestion points; and
  - (iii) possible market benefits associated with each of the options identified under subparagraph (c)(ii); and
- (d) include a high level assessment as to:
- (i) which of the options, or combination of options, identified under subparagraph (c)(ii) provides the most efficient strategy for the development of the *national transmission grid* under each of the scenarios referred to in clause 5.6A.2(f)(3); and
  - (ii) the manner in which each such option, or combination of options, relates to the overall development of the *power system*.

### **5.6A.4 NTNDP database**

- (a) The *AEMO* must maintain and make available to the public a database (the 'NTNDP database') that includes *NTNDP inputs* used by it in preparing the most recent *NTNDP*.
- (b) The *NTNDP inputs* for a *NTNDP* include, without limitation:
  - (1) assumptions made about the cost of fuel used for the generation of electricity (including gas and coal);
  - (2) the conversion factors used to relate the consumption of a given quantity of fuel to the production of electricity using that quantity of fuel;
  - (3) assumptions about the capital costs associated with the generation of electricity;
  - (4) prevailing location of generation capacity;
  - (5) assumptions about the price of carbon; and
  - (6) electricity demand forecasts.

### **5.6A.5 Information collection**

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- (a) *A general planning information order:*
  - (1) must only require *Transmission Network Service Providers* to provide the information or documents specified in the order once a year;
  - (2) must not require *Transmission Network Service Providers* to provide information or documents that they have already provided to the *AEMO* in circumstances where the *AEMO* is authorised to use that information or those documents for the purpose of performing its functions under this rule 5.6A; and
  - (3) must comply with the *NTNDP information request guidelines*.
- (b) *A planning information notice:*
  - (1) must not require the *Transmission Network Service Provider* on which it is served to provide information or documents that it has already provided to the *AEMO* in circumstances where the *AEMO* is authorised to use that information or those documents for the purpose of performing its functions under this rule 5.6A; and
  - (2) must comply with the *NTNDP information request guidelines*.
- (c) The *AEMO* must prepare and *publish* guidelines (the '*NTNDP information request guidelines*') that specify:
  - (1) the information and documents, or categories of information or documents, that may be required to be provided under a *planning information instrument*; and
  - (2) the manner and form in which any such information and documents are required to be provided.
- (d) The *AEMO* must prepare and *publish* the *NTNDP information request guidelines* in accordance with the *Rules consultation procedures*.
- (e) The *AEMO* must prepare and *publish* the first *NTNDP information request guidelines* within 6 months of the commencement of this rule 5.6A and there must be a set of *NTNDP information request guidelines* in force at all times after that date.
- (f) The *AEMO* may from time to time in accordance with the *Rules consultation procedures* amend or replace the *NTNDP information request guidelines*.

- (g) As soon as practicable after a *Transmission Network Service Provider* becomes aware that any information provided by it to the *AEMO* pursuant to a *planning information instrument* has changed materially, the *Transmission Network Service Provider* must provide the revised information to the *AEMO* and the reasons for the revisions.

**5.6A.6 Additional NTP functions and powers**

In addition to the *NTP functions and powers* identified in the *National Electricity Law*, the *NTP functions and powers* include the functions and powers of the *AEMO* under clause 5.6.3.

**5.6A.7 Jurisdictional planning bodies**

The *jurisdictional planning bodies* must provide such assistance to the *AEMO* as the *AEMO* reasonably requests in connection with the performance and exercise by the *AEMO* of the *NTP functions and powers*.

**[2] Chapter 10 New definitions**

In Chapter 10, insert the following definitions in alphabetical order:

**AEMO**

The Australian Energy Market Operator, which is established under section [#] of the *National Electricity Law*.

**AEMO Board**

Has the meaning given in the *National Electricity Law*.

**general planning information order**

Has the meaning given in the *National Electricity Law*.

**jurisdictional planning body**

Such entity as is nominated from time to time by the relevant *Minister* of a *participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

**jurisdictional planning representative**

Such *representative* from the *jurisdictional planning body* for a *participating jurisdiction* as is nominated from time to time by that *jurisdictional planning body* as the *jurisdictional planning representative* for that *participating jurisdiction*.

**national transmission grid**

The sum of all *connected transmission systems* within the *participating jurisdictions*.

**NTNDP**

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A plan for the development of the *national transmission grid* that is *published* by the *AEMO Board*, and that applies in a year, in accordance with clause 5.6A.2(a).

### **NTNDP database**

The database that the *AEMO* is required to maintain and make available under clause 5.6A.4.

### **NTNDP information request guidelines**

The guidelines prepared and *published* by the *AEMO* under clause 5.6A.5(c).

### **NTNDP inputs**

The data, assumptions, forecasts, methodological approaches, and scenarios for the supply of and demand for electricity, that are used in the preparation of a *NTNDP* under rule 5.6A (see also clause 5.6A.4(b)).

### **NTP functions and powers**

Has the meaning given in the *National Electricity Law*.

### **NTPAC**

The committee established by the *AEMO Board* in accordance with section [#] of the *National Electricity Law*.

### **planning information instrument**

Has the meaning given in the *National Electricity Law*.

### **planning information notice**

Has the meaning given in the *National Electricity Law*.

**Schedule 2 Amendments consequent upon new national transmission planning arrangements**

**Other amendments to the National Electricity Rules**

**[1] Clause 2.11.3 Budgeted revenue requirements**

After clause 2.11.3(b)(4), insert:

- (4a) the *AEMO's* expenditures in relation to the performance and exercise of the *NTP functions and powers*;

**[2] Clause 3.13.3 Standing data**

In clause 3.13.3(q), omit the words "31 October" and substitute the words "31 August".

Omit clause 3.13.3(r) and substitute:

If, after the *publication* of the most recent *statement of opportunities*, significant new information becomes available to the *AEMO* relating to the matters covered by subparagraphs (q)(1), (2) or (3), the *AEMO* must, as soon as practicable, *publish* that information in a descriptive form that is consistent with the *statement of opportunities*.

Omit clause 3.13.3(s) and substitute:

- (s) The *AEMO* may by written notice request any *jurisdictional planning body* to provide the *AEMO* with any information or documents reasonably available to it that the *AEMO* requires for the purpose of performing its functions under paragraphs (q) or (r) and the *jurisdictional planning body* must comply with that notice.
- (s1) The *AEMO* may only use information or documents provided in accordance with paragraph (s) for the purpose of performing its functions under paragraphs (q) or (r).

After clause 3.13.3(v), insert:

- (w) The *jurisdictional planning bodies* must provide such assistance to the *AEMO* as the *AEMO* reasonably requests in connection with the preparation of the report referred to in paragraph (u).

**[3] Clause 5.2.3 Obligations of network service providers**

Omit clauses 5.2.3(h1), (h2) and (h3) and substitute:

[Deleted]

**[4] Clause 5.6.2 Network Development**

Omit clause 5.6.2(b) and substitute:

Each *Transmission Network Service Provider* must conduct an annual planning review with each *Distribution Network Service Provider connected* to its *transmission network* within each *region*. The annual planning review must:

- (1) incorporate the forecast *loads* submitted by the *Distribution Network Service Provider* in accordance with clause 5.6.1 or as modified in accordance with clause 5.6.1(d);
- (2) include a review of the adequacy of existing *connection points* and relevant parts of the *transmission system* and planning proposals for future *connection points*;
- (3) take into account the most recent *NTNDP*; and
- (4) consider the potential for *augmentations*, or non-*network* alternatives to such *augmentations*, that are likely to provide a net economic benefit to all those who produce, consume and transport electricity in the *market*.

In clause 5.6.2(n), omit the words "to the *Inter-regional Planning Committee*, and".

**[5] Clause 5.6.2A Annual Planning Report**

In clauses 5.6.2A(b)(4)(v) and 5.6.2A(b)(5)(ii), omit the words "*Inter-regional Planning Committee*" and substitute the word "*AEMO*".

In clause 5.6.2A(b)(5)(ii), omit the words "clause 5.6.3(j)" and substitute the words "clauses 5.6.3(j) and (j1)".

In clause 5.6.2A(b)(5)(iii), omit the words:

In assessing whether a new *small transmission network asset* is a *reliability augmentation*, a *Transmission Network Service Provider* must consider whether the new *small transmission network asset* satisfies the criteria for a *reliability augmentation published* by the *Inter-regional Planning*

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*Committee* in accordance with clause 5.6.3(l) (if any such criteria have been published by the *Inter-regional Planning Committee*).

In clause 5.6.2A(b)(5), omit the matter "." and substitute the word "; and", and after that clause insert:

- (6) the manner in which the proposed *augmentations* referred to in subparagraphs (4) and (5) relate to the most recent *NTNDP* and the development strategies for current or potential *national transmission flow paths* that are specified in that *NTNDP*.

### [6] **Clause 5.6.3 Inter-regional planning committee**

Omit clause 5.6.3 (including the heading) and substitute:

#### **5.6.3 National Transmission planning related functions**

- (a) The functions of the *AEMO* include to:
  - (1) **[Deleted]**
  - (2) **[Deleted]**
  - (3) *publish* an objective set of criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* in accordance with clause 5.6.3(i);
  - (4) prepare and *publish*, in accordance with clauses 5.6.3(j) and (j1), *augmentation technical reports* on proposed *transmission network augmentations* that are reasonably likely to have a *material inter-network impact*;
  - (5) **[Deleted]**
  - (6) *publish* guidelines to assist *Registered Participants* to determine when an *inter-network test* may be required, in accordance with clause 5.7.7(k); and
  - (7) **[Deleted]**
  - (8) provide advice to the *AEMC* as requested in relation to the exercise of the *last resort planning power*.

Note: The functions and powers of the *AEMO* under this clause 5.6.3 are *NTP functions and powers* (see clause 5.6A.6)

- (b) **[Deleted]**

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- (c) **[Deleted]**
- (d) **[Deleted]**
- (e) **[Deleted]**
- (f) **[Deleted]**
- (g) **[Deleted]**
- (h) **[Deleted]**
- (i) The *AEMO* must develop and *publish*, and may vary from time to time, an objective set of criteria for assessing whether or not a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*, in accordance with the *Rules consultation procedures*. In developing the objective set of criteria referred to in this clause, the *AEMO* must have regard to the relevant guiding objectives and principles provided by the *AEMC* and the advice of the *jurisdictional planning representatives*.
- (j) Immediately upon receipt of a written request for an *augmentation technical report* on a proposed *transmission network augmentation* that is reasonably likely to have a *material inter-network impact*, being a report that:
  - (1) includes sufficient information to enable the *AEMO* to carry out a review pursuant to this clause 5.6.3(j); and
  - (2) is accompanied by payment of any reasonable fees to recover the *AEMO's* direct costs and expenses of the preparation of the *augmentation technical report*,the *AEMO* must:
  - (3) undertake a review of all matters referred to it by the *Transmission Network Service Provider* in order to assess the *augmentation proposal*;
  - (4) consult with the *jurisdictional planning representatives* in relation to the *augmentation proposal*; and
  - (5) after taking into account the recommendations of the *jurisdictional planning representatives*, determine:
    - (i) the performance requirements for the equipment to be *connected*;

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- (ii) the extent and cost of *augmentations* and changes to all affected *transmission networks*; and
  - (iii) the possible material effect of the new *connection* on the *network power transfer capability* including that of other *transmission networks*.
- (j1) Within 90 *business days* of the receipt of a written request under paragraph (j) (or within such other period as may be agreed by the *Transmission Network Service Provider* and the *AEMO*), the *AEMO* must *publish an augmentation technical report* that sets out:
  - (1) the determinations of the *AEMO* referred to in subparagraph (j)(5);
  - (2) the information considered; and
  - (3) the assumptions used.
- (k) For the purposes of clause 5.6.3(j1), the period in which the *AEMO* must *publish an augmentation technical report* will be automatically extended by the period of time taken by the *Transmission Network Service Provider* to provide additional information requested by the *AEMO*.
- (k1) The *AEMO* may by written notice request any *Transmission Network Service Provider* to provide the *AEMO* with any additional information or documents reasonably available to it that the *AEMO* requires for the purpose of performing its functions under paragraphs (j) or (j1) and the *Transmission Network Service Provider* must comply with that notice.
- (k2) The *AEMO* may only use information or documents provided in accordance with paragraph (k1) for the purpose of performing its functions under paragraphs (j) and (j1).
- (l) **[Deleted]**
- (m) Should the objective set of criteria referred to in clause 5.6.3(i) be changed after a *project assessment draft report* has been made available to *Registered Participants* and the *AEMO*, then the relevant *Network Service Provider* is entitled to choose whether the new criteria, or the criteria that existed at the time the *project assessment draft report* was made available to *Registered Participants* and the *AEMO*, are to be applied.

- (n) The *AEMC* must provide the *AEMO* with guiding objectives and principles for the development by the *AEMO* of the criteria for assessing whether or not a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* under clause 5.6.3(i).

**[7] Clause 5.6.4 Last Resort Planning Power**

In clause 5.6.4(e), the heading that immediately precedes clause 5.6.4(e), and clauses 5.6.4(g)(1), (o)(3) and (4), omit the words "*Inter-regional Planning Committee*" and substitute the word "*AEMO*".

Omit clauses 5.6.4(f) and (o)(2) and substitute:

**[Deleted]**

In clause 5.6.4(g), omit the words "*Annual National Transmission Statements*" and substitute the word "*NTNDPs*".

**[8] Clause 5.6.5 Annual National Transmission Statement**

Omit clause 5.6.5.

**[9] Clause 5.6.6B Construction of Funded Augmentations**

In clause 5.6.6B(b)(3), omit the words "*Inter-regional Planning Committee*" and substitute the word "*AEMO*", and omit the words "clause 5.6.3(j)" and substitute the words "clauses 5.6.3(j) and (j1)".

**[10] Clause 5.7.7 Inter-network power system tests**

In item 5 of chart 1 in clause 5.7.7(a), omit the words "*Inter-regional Planning Committee* or".

Omit clauses 5.7.7(f)-(s) and substitute:

- (f) If the *AEMO* receives a notice under clause 5.7.7(e), then it must provide a copy of the notice to each *jurisdictional planning representative* and consult with each *jurisdictional planning representative* about the potential impact of the development or activity.

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- (g) The *AEMO* or the *Relevant TNSP* in respect of a development or activity may notify the *Proponent* of the development or activity that the *AEMO* or the *Relevant TNSP* believes an *inter-network test* is required in relation to that development or activity.
- (h) The *AEMO* or the *Relevant TNSP* may only give a notice under clause 5.7.7(g) if the *AEMO* or the *Relevant TNSP* considers that:
  - (1) the development or activity may have a material impact on the magnitude of the *power transfer capability* of more than one *transmission network* and, in the circumstances, an *inter-network test* is required; or
  - (2) if the *AEMO* has *published* guidelines under clause 5.7.7(k), an *inter-network test* is required having regard to those guidelines and the surrounding circumstances.
- (i) If the *Relevant TNSP* gives a notice under clause 5.7.7(g), then it must also promptly give a copy of the notice to the *AEMO*.
- (j) A *Registered Participant* undertaking a development or activity listed in chart 1 must provide such information to the *AEMO* or the *Relevant TNSP* in respect of the development or activity as the *AEMO* or the *Relevant TNSP* reasonably requests in order to make an assessment under this clause 5.7.7.
- (k) The *AEMO* may develop, *publish* and amend from time to time, in accordance with the *Rules consultation procedures*, a set of guidelines to assist *Registered Participants* to determine when an *inter-network test* may be required.
- (l) If the *AEMO* has *published* guidelines in accordance with clause 5.7.7(k), then the *AEMO* and the *Relevant TNSP* must consider those guidelines in determining whether an *inter-network test* is required under clause 5.7.7(g) or 5.7.7(n).
- (m) If the *AEMO* or the *Relevant TNSP* gives notice under clause 5.7.7(g), then the *Proponent* must, in consultation with the *AEMO*, prepare a draft *test program* for the *inter-network test* and provide it to the *AEMO*, each *jurisdictional planning representative* and the *Relevant TNSP* (if the *Relevant TNSP* gave the notice given under clause 5.7.7(g)).

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- (n) If the *AEMO* determines that an *inter-network test* is required for a reason contemplated in item 5 or 6 of chart 1, then it must prepare a draft *test program* for the *inter-network test* in consultation with the *jurisdictional planning representatives* and provide that draft *test program* to each *jurisdictional planning representative*.
- (o) If a *jurisdictional planning representative* considers that any changes should be made to a draft *test program* that has been provided to it under clause 5.7.7(m) or 5.7.7(n), then that *jurisdictional planning representative* must, within a period of not more than 10 *business days* after being provided with the draft *test program*, make a recommendation to the *AEMO* that identifies the changes that it proposes should be made to the draft *test program*.
- (p) The *AEMO* must:
  - (1) *publish* a copy of the draft *test program* and any relevant changes recommended by any *jurisdictional planning representative* and invite interested *Registered Participants* to make written submissions;
  - (2) only accept as valid submissions received not later than the date specified in the notice *publishing* the copy of the draft *test program* (not to be less than 14 *days* after the date of *publication*); and
  - (3) provide the *jurisdictional planning representatives* with copies of all valid submissions and seek any further recommendations they may have.
- (q) **[Deleted]**
- (r) The *AEMO* must determine and *publish* in accordance with clause 3.13.13 the *test program* for an *inter-network test* after taking into account the recommendations of the *jurisdictional planning representatives* and any valid submissions received from *Registered Participants*.
- (s) In determining the *test program*, the *AEMO* must so far as practicable have regard to the following principles:
  - (1) *power system security* must be maintained in accordance with Chapter 4;

- (2) the variation from the *central dispatch* outcomes that would otherwise occur if there was no *inter-network test* should be minimised;
- (3) the duration of the tests should be as short as possible consistent with test requirements and *power system security*; and
- (4) subject to subparagraphs (1), (2) and (3), the test facilitation costs borne or payable under paragraph (aa) by the *Proponent* should be minimised.

In clause 5.7.7(ad), omit the words "*Inter-regional Planning Committee*" and substitute the word "*AEMO*".

**[11] Clause 5.8.3 Control and production settings for equipment**

In clause 5.8.3(d), omit the words "*Inter-regional Planning Committee*" and substitute the word "*AEMO*", and omit the word "majority".

**[12] Clause S5.1.2.3 Network service between regions**

In clause S5.1.2.3, omit the word "5.6.5" and substitute the word "5.6A".

**[13] Clauses 6A.6.6 and 6A.6.7 Forecast operating expenditure and Forecast capital expenditure**

After clause 6A.6.6(e)(11), insert:

- (12) the most recent *NTNDP* and any submissions made by the *AEMO*, in accordance with the *Rules*, on the forecast of required operating expenditure of the *Transmission Network Service Provider*.

After clause 6A.6.7(e)(11), insert:

- (12) the most recent *NTNDP* and any submissions made by the *AEMO*, in accordance with the *Rules*, on the forecast of required capital expenditure of the *Transmission Network Service Provider*.

*(Drafting Note: These clauses are also being amended under the proposed Regulatory Investment Test for Transmission-see appendix D)*

**[14] Clause 6A.10.1 Submission of proposal, framework, pricing methodology and information**

After clause 6A.10.1(c), insert:

- (c1) The *Revenue Proposal* must also include an explanation of how it is consistent with the most recent *NTNDP* and, if it is inconsistent with the most recent *NTNDP*, the reasons for that inconsistency.

**[15] Clause 9.28.3 System Planning**

Omit clause 9.28.3(ab) and substitute:

**[Deleted]**

**[16] Chapter 10 Substituted definitions**

Omit the following definition and substitute:

**augmentation technical report**

A report by the *AEMO* on an *augmentation* under clauses 5.6.3(j) and 5.6.3(j1).

**[17] Chapter 10 Deleted definitions**

In Chapter 10, omit the following definitions:

**annual national transmission review or ANTS review**

The review conducted by *NEMMCO* in accordance with clause 5.6.5.

**Annual National Transmission Statement or ANTS**

The statement *published* by *NEMMCO* in accordance with clause 5.6.5.

**Convener**

The *representative* appointed by *NEMMCO* in accordance with clause 5.6.3 to convene the *Inter-regional Planning Committee*.

**Inter-regional Planning Committee**

The committee established in accordance with clause 5.6.3.

**Schedule 3 Savings and Transitional Rules**

**11.22 Rules consequent on making of the National Electricity Amendment (National Transmission Planner) Rule 2008**

**11.22.1 Definitions**

In this rule 11.22:

**Amending Rule** means the National Electricity Amendment (National Transmission Planner) Rule 2008.

**commencement date** means the date the Amending Rule commences operation.

**new National Electricity Rules** means the National Electricity Rules as in force on and from the commencement date.

**old National Electricity Rules** means the National Electricity Rules as in force immediately prior to the commencement date.

**11.22.2 Jurisdictional planning bodies and representatives**

- (a) On and from the commencement date, the entity that, for the purposes of clause 5.6.3(b)(2) of the old National Electricity Rules, was treated as having *transmission system* planning responsibility in a *participating jurisdiction* immediately prior to the commencement date is deemed to be the *jurisdictional planning body* for that *participating jurisdiction* under the new National Electricity Rules until the relevant *Minister* nominates a different entity under the new National Electricity Rules.
- (b) On and from the commencement date, the *representative*:
- (1) from the entity that, for the purposes of clause 5.6.3(b)(2) of the old National Electricity Rules, was treated as having *transmission system* planning responsibility in a *participating jurisdiction* immediately prior to the commencement date; and
  - (2) who was a member of the *Inter-regional Planning Committee* immediately prior to the commencement date,

is deemed to be the *jurisdictional planning representative* for that *participating jurisdiction* under the new National Electricity Rules until another person is nominated for that purpose under the new National Electricity Rules.

**11.22.3 Criteria and guidelines published by the Inter-regional Planning Committee**

- (a) Any criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*, being criteria which are *published* by the *Inter-regional Planning Committee* under clause 5.6.3(i) of the old National Electricity Rules and which apply immediately prior to the commencement date, are deemed to be the criteria that are *published* by the *AEMO* under clause 5.6.3(i) of the new National Electricity Rules except to the extent that such criteria are subsequently varied by the *AEMO* on or after the commencement date.
- (b) Any guidelines for assisting *Registered Participants* to determine when an *inter-network test* may be required, being guidelines which are *published* by the *Inter-regional Planning Committee* under clause 5.7.7(k) of the old National Electricity Rules and which apply immediately prior to the commencement date, are deemed to be the guidelines that are *published* by the *AEMO* under clause 5.7.7(k) of the new National Electricity Rules except to the extent that such guidelines are subsequently amended by the *AEMO* on or after the commencement date.

**11.22.4 Augmentation technical reports**

- (a) Where a written request for an *augmentation technical report* has been received by the *Inter-regional Planning Committee* under clause 5.6.3(j) of the old National Electricity Rules, that written request is deemed to have been received by the *AEMO* under clause 5.6.3(j) of the new National Electricity Rules.
- (b) Where fees have been paid to the *Inter-regional Planning Committee* under clause 5.6.3(j) of the old National Electricity Rules, those fees are

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deemed to have been paid to the *AEMO* under clause 5.6.3(j) of the new National Electricity Rules.

- (c) Where a review has been undertaken by the *Inter-regional Planning Committee* under clause 5.6.3(j) of the old National Electricity Rules, that review is deemed to have been undertaken by the *AEMO* under clause 5.6.3(j) of the new National Electricity Rules.
- (d) A determination that has been made by the *Inter-regional Planning Committee* under clause 5.6.3(j)(1) of the old National Electricity Rules is deemed to be a determination of the *AEMO* under clause 5.6.3(j)(5) of the new National Electricity Rules.
- (e) Where a period has been agreed between a *Transmission Network Service Provider* and the *Inter-regional Planning Committee* under clause 5.6.3(j)(2) of the old National Electricity Rules, that period is deemed to have been agreed between the *Transmission Network Service Provider* and the *AEMO* under clause 5.6.3(j1) of the new National Electricity Rules.
- (f) Where information has been requested by the *Inter-regional Planning Committee* under clause 5.6.3(k) of the old National Electricity Rules, that information is deemed to have been requested by the *AEMO* under clause 5.6.3(k) of the new National Electricity Rules.
- (g) Any *augmentation technical report* that has been *published* by the *Inter-regional Planning Committee* under clause 5.6.3(j) of the old National Electricity Rules is deemed to be an *augmentation technical report* that has been *published* by the *AEMO* under clause 5.6.3(j1) of the new National Electricity Rules.

### **11.22.5 Last Resort Planning Power**

For the purposes of clause 5.6.4(g)(2) of the new National Electricity Rules:

- (a) where no *NTNDP* has been *published* by the *AEMO Board* in accordance with clause 5.6A.2(a) of the new National Electricity Rules, clause 5.6.4(g)(2) shall be taken to refer to the two most recent *Annual National Transmission Statements* that have been *published* under clause 5.6.5 of the old National Electricity Rules; and

- (b) where only one *NTNDP* has been *published* by the *AEMO Board* in accordance with clause 5.6A.2(a) of the new National Electricity Rules, clause 5.6.4(g)(2) shall be taken to refer to that *NTNDP* and the most recent *Annual National Transmission Statement* that has been *published* under clause 5.6.5 of the old National Electricity Rules.

#### **11.22.6 First NTNDP**

The *AEMO* must use all reasonable endeavours to ensure that the *NTNDP* referred to in clause 5.6A.2(g) of the new National Electricity Rules substantially complies with the requirements set out in rule 5.6A of the new National Electricity Rules but, recognising that this *NTNDP* will be the first *NTNDP* to be *published* under rule 5.6A of the new National Electricity Rules and that the methodology and processes needed to prepare a *NTNDP* are relatively complex, any failure of that *NTNDP* to comply with those requirements will not be a breach of the *Rules*, will not give rise to any liability on the part of the *AEMO* and will not affect the validity of that *NTNDP*.

#### **11.22.7 Inter-network power system tests**

- (a) Where a copy of a notice has been given to each member of the *Inter-regional Planning Committee*, or the *Inter-regional Planning Committee* has been consulted, under clause 5.7.7(f) of the old National Electricity Rules, a copy of that notice is deemed to have been given to each *jurisdictional planning representative* or each *jurisdictional planning representative* is deemed to have consulted (as the case may be) under clause 5.7.7(f) of the new National Electricity Rules.
- (b) Where a copy of a notice has been given by a *Relevant TNSP* to each member of the *Inter-regional Planning Committee* under clause 5.7.7(i) of the old National Electricity Rules, a copy of that notice is deemed to have been given to the *AEMO* under clause 5.7.7(i) of the new National Electricity Rules.
- (c) Where a draft *test program* has been submitted to each member of the *Inter-regional Planning Committee* under clause 5.7.7(m) of the old National Electricity Rules, that draft *test program* is deemed to have been provided to the *AEMO* and each *jurisdictional planning representative* under clause 5.7.7(m) of the new National Electricity Rules.

- (d) Where a draft *test program* has been submitted to each member of the *Inter-regional Planning Committee* under clause 5.7.7(n) of the old National Electricity Rules, that draft *test program* is deemed to have been prepared in accordance with, and provided to each *jurisdictional planning representative* under, clause 5.7.7(n) of the new National Electricity Rules.
- (e) Any recommendations made by the *Inter-regional Planning Committee* under clause 5.7.7(o)(2) of the old National Electricity Rules, as amended (if at all) by the *Inter-regional Planning Committee* under clause 5.7.7(q) of the old National Electricity Rules, are deemed to be the recommendations of the *jurisdictional planning representatives* under clauses 5.7.7(o)(2), 5.7.7(p)(1) and 5.7.7(r) of the new National Electricity Rules.
- (f) Where, under clause 5.7.7(ad) of the old National Electricity Rules, an officer has been nominated by the *Inter-regional Planning Committee* for the purposes of coordinating an *inter-network test*, that officer is deemed to be the officer nominated by the *AEMO* for the purposes of that test under clause 5.7.7(ad) of the new National Electricity Rules.
- (g) Where, under clause 5.7.7(ad) of the old National Electricity Rules, the *Inter-regional Planning Committee* has determined pre-approved guidelines for the purposes of an *inter-network test*, those guidelines are deemed to be pre-approved guidelines that have been determined by the *AEMO* for the purposes of that test under clause 5.7.7(ad) of the new National Electricity Rules.

#### **11.22.8 Control and protection settings for equipment**

If a matter has been referred to the *Inter-regional Planning Committee* under clause 5.8.3(d) of the old National Electricity Rules and the *Inter-regional Planning Committee* has not given a decision in respect of that matter by the commencement date, that matter is deemed to have been referred to the *AEMO* under clause 5.8.3(d) of the new National Electricity Rules and the *AEMO* must give its decision in respect of that matter within 20 *business days* after he commencement date, which decision is to be final.

**11.22.9 Revenue Proposals**

- (a) Clauses 6A.6.6(e)(12) and 6A.6.7(e)(12) of the new National Electricity Rules only apply in respect of a *Revenue Proposal* which has been submitted to the *AER* under clause 6A.10.1 of the new National Electricity Rules more than 20 *business days* after the commencement date.
  
- (b) Clause 6A.10.1(c1) of the new National Electricity Rules only applies in respect of a *Revenue Proposal* which has been submitted to the *AER* under clause 6A.10.1 of the new National Electricity Rules more than 20 *business days* after the commencement date.

## **Appendix D: Proposed Rule Changes for Regulatory Investment Test for Transmission**

### **Draft National Electricity Amendment (Regulatory Investment Test for Transmission Investments) Rule 2008**

#### **1. Title of Rule**

This Rule is the *Draft National Electricity Amendment (Regulatory Investment Test for Transmission Investments) Rule 2008*.

#### **2. Commencement**

This Rule commences operation on [insert date].

#### **3. Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 1.

**Schedule 1      Amendment of National Electricity Rules**

**[1]      Chapter 10   Omit Definitions**

Omit the following definitions:

**new large network asset**

**new large transmission network asset**

**new network investment**

**new small network asset**

**new small transmission network asset**

**new transmission network investment**

**[2]      Chapter 10 – Substitute Definitions**

In Chapter 10, omit the following definitions, or sections of existing definitions (whichever is relevant), and substitute:

**considered project**

- (3) as applicable:
  - (i) the *augmentation* project has passed the *regulatory investment test for transmission*;
  - (ii) in respect of a *transmission investment* which has not been subject to a *regulatory investment test for transmission*, an intention to proceed with the project has been published in the *Network Service Provider's Annual Planning Report*; or

**Generator transmission use of system, Generator transmission use of system service**

- (b) use of a *transmission investment* for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

**interested party**

- (b) Notwithstanding the definition in 1. above, in clauses 5.6.6 and 5.6.6A a person including an end user or its *representative* who, in the *AER's* opinion, has, the potential to suffer a material and adverse market impact from the *transmission investment* that is the *preferred option* identified in the *project assessment conclusions report*.

**[3] Chapter 10 New definitions**

Insert the following new definitions in alphabetical order:

**cost threshold**

Has the meaning given in clause 5.6.5E(a).

**cost threshold consultation period**

Has the meaning given in clause 5.6.5E(d).

**cost threshold determination**

Has the meaning given in clause 5.6.5E(e).

**cost threshold review**

Has the meaning given in clause 5.6.5E(a).

**credible option**

The *transmission investment* option (or group of options) that:

- (a) addresses the *identified need*;
  - (b) is (or are) commercially feasible; and
  - (c) can be implemented in sufficient time to meet the *identified need*,
- and is (or are) identified as a *credible option* in accordance with clause 5.6.5D(a).

**identified need**

The reason why the *Transmission Network Service Provider* proposes to undertake a particular investment in respect of its *transmission network*.

**preferred option**

The *credible option* that maximises the present value of net economic benefits to all those who produce, consume and transport electricity in the *market*.

**project assessment conclusions report**

The report prepared under clause 5.6.6(o)

**project assessment draft report**

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The report prepared under clause 5.6.6(i).

### **project specification consultation report**

The report prepared under clause 5.6.6(c).

### **reconfiguration investment**

Investment undertaken by a *Transmission Network Service Provider* which:

- (a) re-routes one or more paths of the *network*; and
- (b) has, or is likely to have, a material impact to *Network Users*
- (c) is not motivated primarily by the need to *augment* the *network*.

### **regulatory investment test for transmission**

The test developed and *published* by the *AER* in accordance with rule 5.6.5B, as in force from time to time, and includes amendments made in accordance with rule 5.6.5B.

### **regulatory investment test for transmission application guidelines**

The guidelines developed and *published* by the *AER* in accordance with Rule 5.6.5B as in force from time to time, and includes amendments made in accordance with Rule 5.6.5B.

### **replacement network asset**

A proposed new asset of a *Transmission Network Service Provider* that is planned to replace any existing element of its *transmission network*.

### **transmission investment**

Expenditure on assets or services which is undertaken by a *Transmission Network Service Provider* or any other person to address an *identified need*.

## **[4] 5.6.2 Network Development**

Omit clause 5.6.2 (e) and substitute:

Each *Network Service Provider* must:

- (1) extrapolate the forecasts provided to it by *Registered Participants* for the purpose of planning and where this analysis indicates that any relevant technical limits of the *transmission or distribution systems* will be exceeded,

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either in normal conditions or following the contingencies specified in schedule 5.1;

- (2) when planning investment in *dual function assets* or *transmission investment* which is designed to ensure that a *distribution network* meets the level required by the minimum *power system security and reliability standards*,

notify any affected *Registered Participants* and *NEMMCO* of the expected time required to allow the appropriate corrective network *augmentation* or non-*network* alternatives, or modifications to *connection facilities*, or the investment referred to in subparagraph (2), to be undertaken.

*[drafting note: the above clause uses the term "dual function asset" which is being introduced into the National Electricity Rules by the National Electricity Amendment (Economic Regulation of Transmission Services undertaken by Distribution Network Service Providers) Rule 2008 No. 3.]*

### **[5] 5.6.2 Dual function assets and transmission investment to support distribution network**

Insert after 5.6.2(e):

- (e1) For the avoidance of doubt, paragraphs (f) - (m) apply to the investments referred to in subparagraph (e)(2).

### **[6] 5.6.2A Annual Planning Reports - replacement network assets**

In clause 5.6.2A, omit subparagraph (b)(5) and substitute:

for all proposed *replacement network assets* which the *Transmission Network Service Provider* reasonably estimates to have an estimated capital cost in excess of \$5 million (as varied in accordance with a *cost threshold determination*), the following information:

- (i) the date from which it is proposed that the *replacement network asset* will become operational;
- (ii) the purpose of the *replacement network asset*; and
- (iii) the total cost of the *replacement network asset*; and.

*[Drafting note: clause 5.6.3 will be omitted under the National Transmission Planner review which will be implemented before or concurrently with this Rule change. As a*

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*result, references in this clause to new large transmission asset or new small transmission asset will be omitted.]*

### **[7] Annual Planning Reports - urgent and unforeseen network issue**

Insert a new clause 5.6.2A(b)(6):

any information required to included in an *Annual Planning Report* by clause 5.6.5C(c) in relation to a *transmission investment* which is determined to be required to address an urgent and unforeseen *network* issue.

### **[8] 5.6.4 Last Resort Planning Power**

In clause 5.6.4(c), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[9] 5.6.4**

In clause 5.6.4(h)(2), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[10] 5.6.4**

In clause 5.6.4(j), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[11] 5.6.4**

In clause 5.6.4(l), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[12] 5.6.5A Regulatory Test**

Omit the heading “Regulatory Test” and insert “Regulatory test for distribution network investments”.

### **[13] 5.6.5A**

In clause 5.6.5A(b), omit the words “*new network investments*” wherever occurring and substitute “*new distribution network investment*”.

### **[14] 5.6.5A**

In clause 5.6.5A(c), omit the words “*new network investment*” wherever occurring and substitute “*new distribution network investment*”.

### **[15] 5.6.5A**

Omit subparagraph 5.6.5A(c)(4).

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### [16] 5.6.5A

In clause 5.6.5A(c), renumber subparagraphs (c)(5), (c)(6), (c)(7) and (c)(8) to (c)(4), (c)(5), (c)(6) and (c)(7) respectively.

### [17] 5.6.5A

In clauses 5.6.5A(d) and (g) replace references to "*transmission consultation procedure*" with references to "*distribution consultation procedures*".

### [18] New rule 5.6.5B Regulatory investment test for transmission

After clause 5.6.5A, insert:

#### 5.6.5B Regulatory investment test for transmission investment

##### Principles

- (a) The AER must develop and *publish* the *regulatory investment test for transmission* pursuant to the *transmission consultation procedures* in accordance with this rule 5.6.5B.
- (b) The purpose of the *regulatory investment test for transmission* is to identify the *preferred option*.
- (c) The *regulatory investment test for transmission* must:
  - (1) be based on a cost-benefit analysis that is to include an assessment of reasonable scenarios of future supply and demand were each *credible option* to be implemented compared to the situation of no *transmission investment* options being implemented;
  - (2) not require a level of analysis that is disproportionate to the scale and likely impact of each of the *credible options* being considered;
  - (3) be able to be applied in a predictable, transparent and consistent manner;
  - (4) require the *Transmission Network Service Provider* to consider the following classes of market benefits that could be delivered by the *transmission investment* option in assessing the present value of net economic benefits to all those who produce, consume and transport electricity in the *market* of each *transmission investment* option:
    - (i) changes in fuel consumption arising through different *generation dispatch*;

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- (ii) changes in voluntary *load* curtailment;
- (iii) changes in involuntary *load shedding*, with the market benefit to be considered using a reasonable forecast of the value of electricity to consumers;
- (iv) changes in the *Transmission Network Service Provider's* costs due to:
  - (A) differences in the timing of new *plant*;
  - (B) differences in capital costs;
  - (C) differences in the operational and maintenance costs;  
and
  - (D) differences in the timing of *transmission investment*;
- (v) changes in *transmission* losses;
- (vi) changes in *ancillary services* costs;
- (vii) competition benefits;
- (viii) any optional value gained or foregone from implementing that *transmission investment* option with respect to the likely future investment needs of the *market* where this value has not already been included in the other classes of market benefits; and
- (ix) other classes of benefits that are:
  - a) determined to be relevant by the *Transmission Network Service Provider* or
  - b) specified as a class of market benefit in the *regulatory investment test*;
- (5) include a quantification of all classes of market benefits which are determined to be material in the *Transmission Network Service Provider's* reasonable opinion;
- (6) require a *Transmission Network Service Provider* to consider all classes of market benefits as material unless it can show otherwise in the *project assessment draft report* (or, in respect of a proposed *preferred option* which is subject to the exemption contained in clause 5.6.6(v), the *project assessment consultation report*) by demonstrating:

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- (i) that a particular class of market benefit will not affect the outcome of the assessment of each *transmission investment* option; or
  - (ii) that the cost of undertaking the analysis to quantify the market benefit is disproportionate to the scale, size and potential benefits of each *transmission investment* option being considered in the report;
- (7) with respect to the classes of market benefits set out in subparagraphs (4)(ii) and (iii), ensure that, if the *credible option* is a *reliability augmentation*, the quantification assessment required by paragraph (5) will only apply insofar as the market benefit delivered by the *transmission investment* option is above the minimum standard required by a *reliability augmentation*;
- (8) require the *Transmission Network Service Provider* to quantify the following classes of costs:
- (i) costs incurred in constructing or providing the *credible option*;
  - (ii) operating and maintenance costs in respect of the *credible option*;
  - (iii) the cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the *credible option*; and
  - (iv) any other class of costs determined to be appropriate for inclusion in the *regulatory investment test for transmission* by the AER;
- (9) provide that any cost or market benefit which cannot be measured as a cost or market benefit to generators, *Distribution Network Service Providers* or consumers of electricity may not be included in any analysis under the *regulatory investment test for transmission*;
- (10) specify:
- (i) the method or methods permitted for estimating the magnitude of the different classes of market benefits;
  - (ii) the method or methods permitted for estimating the magnitude of the different classes of costs;

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- (iii) the method or methods permitted for estimating market benefits which may occur outside the *region* in which the *Transmission Network Service Provider's network* is located; and
  - (iv) the appropriate method and value for specific inputs, where relevant, for determining the discount rate or rates to be applied; and
- (11) reflect that the *credible option* that maximises the present value of net economic benefits to all those who produce, consume and transport electricity in the *market* may, in some circumstances, be a negative value where the *preferred option* is a *reliability augmentation*.

### **Regulatory investment test for transmission guidelines**

- (d) At the same time as the *AER* develops and *publishes* a proposed *regulatory investment test* under the *transmission consultation procedures*, the *AER* must also develop and *publish* guidelines for the operation and application of the *regulatory investment test* (the *regulatory investment test for transmission application guidelines*) pursuant to the *transmission consultation procedures* in accordance with the requirements of this rule 5.6.5B.
- (e) The *regulatory investment test application guidelines* must give effect to and be consistent with:
  - (1) this rule 5.6.5B and rules 5.6.5C and 5.6.5D, and provide guidance on the operation and application of the *regulatory investment test*; and
  - (2) rules 5.6.6, 5.6.6A and 5.6.6AA, and provide guidance on the process to be followed in applying the *regulatory investment test for transmission* and how disputes raised in relation to the *regulatory investment test for transmission* and its application will be addressed and resolved.
- (f) The *regulatory investment test for transmission application guidelines* must provide guidance, and worked examples, as to:
  - (1) what constitutes a *credible option*;
  - (2) the acceptable methodologies for valuing costs of a *credible option*;
  - (3) what constitutes an externality under the *regulatory investment test for transmission*;

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- (4) the classes of benefits to be considered for the purposes of clause 5.6.5B(c)(4);
  - (5) the suitable modelling periods and scenario development;
  - (6) the acceptable methodologies for valuing the market benefits of a *credible option* referred to in clause 5.6.5B(c), including valuing *inter-regional* market benefits;
  - (7) the appropriate sensitivity analysis to be conducted in respect of all *credible options*;
  - (8) the appropriate discount rates to apply to the assessment of a *credible option*, reflecting that different *credible options* may have different risk profiles; and
  - (9) when a person is sufficiently committed to a *reliability augmentation* to be characterised as a proponent for the purposes of clause 5.6.6(d).
- (g) The AER must develop and *publish* the first *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* by ***[insert date which is 12 months from commencement of this Rule]***, and there must be a *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* in force at all times after that date.
- (h) The AER may, from time to time, amend or replace the *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* in accordance with the *transmission consultation procedures*. The AER must publish any amendments to, or replacements of, the *regulatory test* or *regulatory investment test for transmission application guidelines*.

### **5.6.5C Transmission assets subject to the regulatory investment test**

- (a) A *Transmission Network Service Provider* must apply the *regulatory investment test for transmission* to a proposed *transmission investment*, except in circumstances where:
- (1) the proposed *transmission investment* is required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* as described in paragraph (b);
  - (2) the estimated capital cost of the most expensive *transmission investment* option to address the relevant *identified need* which is

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technically and economically feasible is less than \$5 million (as varied in accordance with a *cost threshold determination*);

- (3) the proposed *transmission investment* relates to maintenance or replacement and is not intended to *augment* the *transmission network* (including *replacement network assets*);
- (4) the proposed *transmission investment* is a *reconfiguration investment* which the relevant *Transmission Network Service Provider* reasonably estimates to have a estimated capital cost of less than \$5 million (as varied in accordance with a *cost threshold determination*);
- (5) the maintenance, or replacement expenditure also results in an *augmentation* to the *network*, and the estimated capital cost for the *augmentation* component of the *transmission investment* is less than \$5 million (as varied in accordance with a *cost threshold determination*), as allocated by the *Transmission Network Service Provider* in accordance with recognised cost allocation methodologies and any applicable *AER* guidelines under rule 6A.19;
- (6) the *transmission investment* will be a *dual function asset*;
- (7) the *transmission investment* which is designed to ensure that a *distribution network* meets the level required by the minimum *power system security and reliability standards*;
- (8) the *transmission investment* will be a *connection asset*; or
- (9) the cost of the *transmission investment* is to be recovered through charges in relation to *negotiated transmission services*.

*[drafting note: the above clause uses the term "dual function asset" which is being introduced into the National Electricity Rules by the National Electricity Amendment (Economic Regulation of Transmission Services undertaken by Distribution Network Service Providers) Rule 2008 No. 3.]*

- (b) For the purposes of paragraph (a)(1) above, a *transmission investment* will be required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* if:
  - (1) it is necessary that the *transmission investment* be operational within 3 to 6 months of the *Transmission Network Service Provider* identifying the *identified need*;

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- (2) the event causing the *identified need* was not reasonably foreseeable by, and was beyond the reasonable control of, the *Transmission Network Service Provider*;
  - (3) a failure to address the *identified need* is likely to materially adversely affect the *reliability* and *secure operating state* of the *transmission network*; and
  - (4) it is not a *contingent project*.
- (c) If a *transmission investment* is determined to be required to address an urgent and unforeseen *network* issue as described in paragraph (b), the *Transmission Network Service Provider* must provide the following information in its *Annual Planning Report*:
- (1) the date when the *transmission investment* becomes operational;
  - (2) the purpose of the *transmission investment*; and
  - (3) the total cost of the *transmission investment*.
- (d) With the exception of *funded augmentations*, for each *transmission investment* to which the *regulatory investment test for transmission* does not apply in accordance with paragraph (a)(1)-(9), the *Transmission Network Service Provider* must ensure, acting reasonably, that the *transmission investment* is planned and developed at least cost over the life of the investment.
- (e) A *Transmission Network Service Provider* must not treat different parts of an integrated solution to an *identified need* as individual *transmission investments* for the purposes of determining whether the *regulatory investment test for transmission* applies to an individual *transmission investment*.

### 5.6.5D Identification of a *credible option*

- (a) In applying the *regulatory investment test for transmission*, a *Transmission Network Service Provider* must consider, in relation to all *identified needs* other than those described in clauses 5.6.5C(a)(1)-(9), all genuine and practicable possible *transmission investment* options that could reasonably be classified as *credible options*, taking into account, without bias:
- (1) energy source;
  - (2) technology;
  - (3) ownership;

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- (4) the extent to which the *credible option* enables *intra-regional* or *inter-regional* trading of electricity;
  - (5) whether it is a *network* or *non-network* option;
  - (6) whether the *credible option* is intended to be regulated;
  - (7) whether the *credible option* has a viable proponent; or
  - (8) any other factor which the *Transmission Network Service Provider* reasonably considers should be taken into account.
- (b) The absence of a proponent does not exclude a potential *transmission investment* option from being considered a *credible option*.

### 5.6.5E Review of Costs Thresholds

- (a) Every 3 years the *AER* must undertake a review (*cost threshold review*) of the changes in the input costs used to calculate the estimated capital costs referred to in clauses 5.6.2A(b)(5), 5.6.5C(a)(2), (4) and (5) and 5.6.6(v)(1) for the purposes of determining whether the amounts of:
- (1) in excess of \$5 million referred to in clause 5.6.2A(b)(5);
  - (2) less than \$5 million referred to in clause 5.6.5C(a)(2);
  - (3) less than \$5 million referred to in clause 5.6.5C(a)(4);
  - (4) less than \$5 million referred to in clause 5.6.5C(a)(5);
  - (5) less than \$35 million referred to in clause 5.6.6(v)(1),
- (each a *cost threshold*) need to be changed to maintain the value of the *cost thresholds* over time by adjusting those *cost thresholds* to reflect any increase or decrease in the input costs since:
- (5) **[insert commencement date of Rule]** in respect of the first *cost threshold review*; and
  - (6) the date of the previous review in respect of every subsequent *cost threshold review*.
- (b) Each *cost threshold review* is to be commenced by the *AER* on 31 July of the relevant year, with the first such review to be initiated in **[insert year of first review]**.

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- (c) No later than 6 weeks following the commencement of a *cost threshold review* the *AER* must *publish* a draft determination outlining:
  - (1) whether or not the *AER* has formed the view that any of the *cost thresholds* need to be amended to reflect increases or decreases in the input costs to ensure that the value of the *cost thresholds* is maintained over time;
  - (2) its reasons for determining whether or not the *cost thresholds* need to be varied to reflect increases or decreases in the input costs;
  - (3) if there is to be a variation in a *cost threshold*, the amount of the new *cost threshold* and the date from the new *cost threshold* will take effect; and
  - (4) its reasons for determining the amount of the new *cost threshold*.
- (d) At the same time as it *publishes* the draft determination under paragraph (c), the *AER* must *publish* a notice seeking submissions on the draft determination. The notice is to specify the period within which written submissions can be made (*cost threshold consultation period*). The *cost threshold consultation period* must be no less than 5 weeks.
- (e) The *AER* is to consider any written submissions received during the *cost threshold consultation period* in making its final determination in respect of the matters outlined in paragraph (c). This final determination must be made and *published* by the *AER* by no later than 5 weeks following the end of the *cost threshold consultation period*.

### [19] 5.6.6 – Applications to establish new large transmission network assets

Omit rule 5.6.6 and substitute:

#### 5.6.6 Regulatory investment test for transmission procedures

- (a) In addition to the procedures to make a *connection* to a *network* in rule 5.3, the *Transmission Network Service Provider* must comply with the access arrangements and procedures set out in this rule 5.6.6 and in rule 5.6.6A.
- (b) A *Transmission Network Service Provider* who proposes to make a *transmission investment*, other than a *transmission investment* of the

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type described in clauses 5.6.5C(a)(1)-(9), must consult all *Registered Participants*, *NEMMCO* and *interested parties* regarding the *transmission investment* in accordance with this rule 5.6.6.

### **Project specification consultation report**

- (c) A *Transmission Network Service Provider* must prepare a report (the *project specification consultation report*), which must include:
- (1) a description of the *identified need*;
  - (2) the assumptions used in identifying the *identified need* (including, in the case of a *reliability augmentation*, why the *Transmission Network Service Provider* considers a *reliability augmentation* necessary);
  - (3) technical characteristics of the *identified need* that a non-*network* option would be required to deliver, such as:
    - (i) the size of *load* reduction;
    - (ii) location; and
    - (iii) operating profile;
  - (4) if applicable, reference to any discussion on the description of the *identified need* or the possible *credible options* in respect of that *identified need* in the most recent *National Transmission Network Development Plan*;
  - (5) a detailed description of all possible *credible options* that address the *identified need*, which may include, without limitation, alternative *transmission* options, *interconnectors*, *generation*, demand side management, *market network services* or other *network* options;
  - (6) for each possible *credible option*, information about:
    - (i) the technical characteristics of the *credible option*;
    - (ii) whether the possible *credible option* is reasonably likely to have a material *inter-regional* impact;
    - (iii) the classes of market benefits that the *Transmission Network Service Provider* considers could be material in accordance with 5.6.5B(c)(6), together with details (if any) of why the *Transmission Network Service Provider*

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- considers that these classes of market benefits could be material;
- (iv) the estimated construction timetable and commissioning date; and
  - (v) to the extent practicable, the total indicative capital and operational costs.
- (d) The *Transmission Network Service Provider* must make available to all *Registered Participants*, *NEMMCO* and other *interested parties* the *project specification consultation report* and any preliminary or supplementary information that is likely to assist *interested parties* to engage constructively in the consultation process outlined in this rule.
- (e) The *Transmission Network Service Provider* must:
- (1) provide a summary of the *project specification consultation report* to *NEMMCO*; and
  - (2) upon request by an *interested party*, provide a copy of the *project specification consultation report* to that person within 3 *business days* of the request.
- (f) Within 3 *business days* of receipt of the summary, *NEMMCO* must *publish* the summary of the *project specification consultation report* on its website.
- (g) The *Transmission Network Service Provider* must seek submissions from *Registered Participants*, *NEMMCO* and *interested parties* on the *credible options* presented, and the issues addressed, in the *project specification consultation report*.
- (h) The submission period referred to in paragraph (g) must be not less than [12] weeks from the date that *NEMMCO publishes* the summary of the *project specification consultation report* on its website.
- (i) A *Transmission Network Service Provider* could discharge its obligation under paragraph (d) to make the *project specification consultation report* available by including the *project specification consultation report* as part of its *Annual Planning Report*.

### **Project assessment draft report**

- (j) If the *Transmission Network Service Provider* elects to proceed with the *transmission investment*, within 12 months of the end of the consultation period referred to in paragraph (h), or such longer time as is agreed by the *AER*, the *Transmission Network Service Provider* must

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prepare and make available to all *Registered Participants, NEMMCO* and *interested parties* a report (the *project assessment draft report*), having regard to the submissions received, if any, under paragraph (g). The *project assessment draft report* must include:

- (1) a description of each *credible option* assessed;
- (2) a summary of, and commentary on, the submissions to the *project specification consultation report*;
- (3) a quantification of the costs, including a breakdown of operating and capital expenditure, and material classes of market benefit for each *credible option*;
- (4) a detailed description of the methodologies used in quantifying each class of market benefit and cost;
- (5) reasons why the *Transmission Network Service Provider* has determined that a class or classes of market benefit are not material;
- (6) the identification and value (quantified in aggregate across the *participating jurisdictions*) of any class of market benefit estimated to arise outside the *Transmission Network Service Provider's region*;
- (7) the results of a net present value analysis of each *credible option* and accompanying explanatory statements regarding the results;
- (8) the identification of the proposed *preferred option*;
- (9) for the proposed *preferred option* identified under subparagraph (8) above, the *Transmission Network Service Provider* must provide:
  - (i) details on the technical characteristics;
  - (ii) the estimated construction timetable and commissioning date;
  - (iii) the indicative costs;
  - (iv) if the proposed *preferred option* is likely to have a *material inter-regional network impact*, and if the *Transmission Network Service Provider* has received an *augmentation technical report*, that report; and

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- (v) a statement and the accompanying detailed analysis that the *preferred option* satisfies the *regulatory investment test for transmission*.
- (k) If a *Transmission Network Service Provider* elects to proceed with a *transmission investment* which is a *reliability augmentation*, it can only do so where the proposed *preferred option* has a proponent. The identity of that proponent must be included in the *project assessment draft report*.
- (l) A *Transmission Network Service Provider* could discharge its obligation under paragraph (j) to make the *project assessment draft report* available by including the *project assessment draft report* as part of its *Annual Planning Report*.
- (m) The *Transmission Network Service Provider* must:
  - (1) provide a summary of the *project assessment draft report* to *NEMMCO*; and
  - (2) upon request by an *interested party*, provide a copy of the *project assessment draft report* to that person within 3 *business days* of the request.
- (n) Within 3 *business days* of receipt of the summary, *NEMMCO* must *publish* the summary of the *project assessment draft report* on its website.
- (o) The *Transmission Network Service Provider* must seek submissions from *Registered Participants*, *NEMMCO* and *interested parties* on the preferred option presented, and the issues addressed, in the *project assessment draft report*.
- (p) The submission period referred to in paragraph (o) must be not less than 30 *business days* from the date that *NEMMCO publishes* the summary of the report on its website
- (q) Within [4] weeks of the end of the submission period set out in paragraph (p), at the request of an *interested party*, the *Transmission Network Service Provider* must use its best endeavours to meet with the *interested party* if:
  - (1) after having considered all submissions, the *Transmission Network Service Provider*, acting reasonably, considers that the meeting is necessary or desirable; or
  - (2) a meeting is requested by two or more *interested parties*.

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### **Project assessment conclusions report**

- (r) As soon as practicable after the end of the consultation period for the *project assessment draft report* referred to in paragraph (q), the *Transmission Network Service Provider* must prepare and make available to all *Registered Participants*, *NEMMCO* and *interested parties* a report (the *project assessment conclusions report*), having regard to the submissions received, if any, under paragraph (p) and the matters discussed at any meetings held, if any, under paragraph (q). The *project assessment conclusions report* must set out:
- (1) the matters detailed in the *project assessment draft report* as required in paragraph (j); and
  - (2) a summary of, and the *Transmission Network Service Provider's* response to, submissions received, if any, from *interested parties* sought under paragraph (o).
- (s) The *Transmission Network Service Provider* must:
- (1) provide a summary of the *project assessment conclusions report* to *NEMMCO*; and
  - (2) upon request by an interested party, provide a copy of the *project assessment conclusions report* to that person within 3 *business days* of the request.
- (t) Within 3 *business days* of receipt of the summary, *NEMMCO* must *publish* the summary of the *project assessment conclusions report* on its website.
- (u) A *Transmission Network Service Provider* could discharge its obligation under paragraph (r) to make the *project assessment conclusions report* available by including the *project assessment conclusions report* as part of its *Annual Planning Report*.

### **Exemption from project assessment draft report for transmission investments that do not provide material market benefits.**

- (v) A *Transmission Network Service Provider* is exempt from paragraphs (j) to (q) if:
- (1) the estimated capital cost of the proposed *preferred option* is less than \$35 million (as varied in accordance with a *cost threshold determination*);
  - (2) the *Transmission Network Service Provider* has identified in its *project specification consultation report*:

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- (A) its proposed *preferred option*;
  - (B) its reasons why it is the proposed *preferred option*;  
and
  - (C) that its *transmission investment* has the benefit of this exemption.
- (3) the *Transmission Network Service Provider* considers, in accordance with clause 5.6.5B(c)(6), that the proposed *preferred option* and any *other credible option* in respect of the *identified need* will not have a material market benefit for any of the classes of market benefit specified in clause 5.6.5B (c) (4), and has stated this in its *project specification consultation report*; and
  - (4) the *Transmission Network Service Provider* forms the view that no submissions were received on the *project specification consultation report* which identified additional *credible options* that could deliver a material market benefit.
- (w) The *Transmission Network Service Provider* must address in the *project assessment conclusions report* any issues that were raised in relation to a proposed *preferred option* to which paragraph (v) applies during the consultation on the *project specification consultation report*.

### **[20] 5.6.6A Disputes in relation to application of regulation investment text**

Omit rule 5.6.6A and substitute:

- (a) *Registered Participants, the AEMC, Connection Applicants, Intending Participants, NEMMCO and interested parties* may, by notice to the *AER*, dispute conclusions made by the *Transmission Network Service Provider* in the *project assessment conclusions report* in relation to:
  - (1) the application of the *regulatory investment test for transmission*;
  - (2) the basis on which the *Transmission Network Service Provider* has classified the *transmission investment* as being a *reliability augmentation*; or
  - (3) the *Transmission Network Service Provider's* assessment regarding whether the *transmission investment* will have a *material inter-network impact*, in accordance with any criteria for a *material inter-network impact* that are in force at the time of the preparation of the *project assessment conclusions report*.

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- (b) A dispute under this clause may not be raised in relation to any matters set out in the *project assessment conclusions report* which:
  - (1) are treated as externalities by the *regulatory investment test for transmission*; or
  - (2) relate to an individual's personal detriment or property rights.
- (c) The party disputing a conclusion made in the *project assessment conclusions report* (a **disputing party**) must within 30 days of the date of publication of the *project assessment conclusions report*:
  - (1) give notice of the dispute in writing setting out the grounds for the dispute (the **dispute notice**) to the *AER*; and
  - (2) at the same time, give a copy of the *dispute notice* to the *Transmission Network Service Provider*.
- (d) Subject to paragraph (e)(3), within 40 days of receipt of the *dispute notice* (or within an additional period of up to 60 days where the *AER* notifies interested parties that the additional time is required to reach a determination because of the complexity or difficulty of the issues involved), the *AER* must either:
  - (1) reject any dispute by written notice to the person who initiated the dispute if the *AER* considers that the grounds for the dispute are invalid, misconceived or lacking in substance; or
  - (2) subject to paragraph (f), make and *publish* a determination:
    - (i) directing the *Transmission Network Service Provider* to amend the matters set out in the *project assessment conclusions report*; or
    - (ii) stating that, based on the grounds of the dispute, the *Transmission Network Service Provider* will not be required to amend the *project assessment conclusions report*.
- (e) In making a determination under subparagraph (d)(2) above, the *AER*:
  - (1) must only take into account information and analysis that the *Transmission Network Service Provider* could reasonably be expected to have considered or undertaken at the time that it performed the *regulatory investment test for transmission*;
  - (2) must *publish* its reasons for making a determination;

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- (3) may request further information regarding the dispute from the disputing party or the *Transmission Network Service Provider* (in which case the period of time for rejecting a dispute or issuing a determination under paragraph (d) is extended by the time it takes the relevant party to provide the requested further information to the *AER*); and
  - (4) may disregard any matter raised by the disputing party or the *Transmission Network Service Provider* that is misconceived or lacking in substance.
- (f) The *AER* may only make a determination under subparagraph (d)(2)(i) if it determines that:
- (1) the *Transmission Network Service Provider* has not correctly applied the *regulatory investment test for transmission* in accordance with the *Rules*;
  - (2) the *Transmission Network Service Provider* has erroneously classified the proposed *transmission investment* as being a *reliability augmentation*;
  - (3) the *Transmission Network Service* has not correctly assessed whether the *transmission investment* will have a *material inter-network impact*, or
  - (4) there was a manifest error in the calculations performed by the *Transmission Network Service Provider* in applying the *regulatory investment test for transmission*.
- (g) A disputing party or the *Transmission Network Service Provider* (whichever is relevant) must as soon as reasonably practicable provide any information requested under paragraph (e)(3) to the *AER*.

### **[21] Determination that new large transmission asset satisfies regulatory investment test for transmission**

After clause 5.6.6A, insert:

#### **5.6.6AA Determination that new large transmission asset satisfies regulatory investment test for transmission**

- (a) Where a *transmission investment* is not a *reliability augmentation* and the conclusion in the *project assessment conclusions report* is not in dispute, the *Transmission Network Service Provider* may request, in writing to the *AER*, that the *AER* make a determination as to whether the *transmission investment* satisfies the *regulatory investment test for transmission*.

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- (b) The *AER*:
- (1) must, within 120 *business days* of receipt of the request from the applicant, subject to paragraph (c), make and *publish* a determination, including reasons;
  - (2) must use the findings and recommendations in the *project assessment conclusions report* in making its determination under subparagraph (1);
  - (3) may request further information from the *Transmission Network Service Provider*; and
  - (4) may have regard to any other matter the *AER* considers relevant.
- (c) The relevant period of time in which the *AER* must make a determination under either clause 5.6.6A(d)(2) or paragraph (b) is automatically extended by the period of time taken by the *Transmission Network Service Provider* or a disputing party to provide any additional information requested by the *AER* under this rule 5.6.6AA, provided:
- (1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and
  - (2) the *Transmission Network Service Provider* or the disputing party provides the additional information within 14 *business days* of receipt of the request.

### **Costs determinations**

- (d) Where the *AER* engages a consultant to assist in making a determination under this rule 5.6.6AA, the *AER* may make a costs determination.
- (e) Where a costs determination is made, the *AER* may:
- (1) render the *Transmission Network Service Provider* an invoice for the costs; or
  - (2) determine that the costs should:
    - (i) be shared by all the parties to the dispute, whether in the same proportion or differing proportions; or
    - (ii) be borne by a party or parties to the dispute other than the *Transmission Network Service Provider* whether in the same proportion or differing proportions; and

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(iii) the *AER* may render invoices accordingly.

- (f) If an invoice is rendered, the *AER* must specify a time period for the payment of the invoice that is no later than 30 *business days* from the date the *AER* makes a determination under paragraph (d).

### **[22] 6A.6.6 Forecast operating expenditure**

In subparagraph 6A.6.6(e), delete the word “and” from subparagraph (9) and the “.” from subparagraph (10) and insert a new subparagraph after subparagraph (10):

; and

- (11) any relevant *project assessment conclusions report* required under rule 5.6.6.

### **[23] 6A.6.7 Forecast capital expenditure**

In subparagraph 6A.6.7(e), delete the word “and” from subparagraph (9) and the “.” from subparagraph (10) and insert after subparagraph (10):

; and

- (11) any relevant *project assessment conclusions report*.

### **[24] 6A.6.7**

In clause 6A.6.7(b)(4), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[25] Schedule 6A.2 Regulatory Asset Base**

In Schedule 6A.2.1(e)(2)(ii), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[26] Schedule 6A.2**

In Schedule 6A.2.2(3), omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[27] Schedule 6A.2**

In Schedule 6A.2.3(a)(3)(ii) omit the words “*regulatory test*” wherever they occur and insert “*regulatory investment test for transmission*”.

### **[28] 8.2.1(h)(13) - Application of dispute resolution provisions**

Omit clause 8.2.1(h)(13) and substitute:

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a dispute of a kind referred to in clause 5.6.6A

**[29] 9.3.2 Network Service Provider**

In clause 9.3.2(a)(4), omit the words “*new large transmission asset*” and substitute “*transmission investments that are subject to the regulatory investment test for transmission*”.

**[30] 9.3.2**

In clause 9.3.2(a)(4), omit the row relating to clause 5.6.6A.

**[31] 9.28.3 System Planning**

Omit clause 9.28.3(ac), and substitute:

- (ac) *A Transmission Network Service Provider, who proposes to establish a transmission investment that is subject to the regulatory investment test for transmission under rule 5.6.5B, must provide the ESIPC with a draft of the project specification consultation report required under rule 5.6.6 10 business days prior to providing a summary of the report to NEMMCO.*

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**[32] Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission Investment) Rule 2008**

**11.#.1 Definitions**

For the purposes of this rule 11.#:

**Amending Rule** means the National Electricity Amendment (Regulatory Investment Test for Transmission Investment) Rule 2008 No. #.

**commencement date** means the date on which the Amending Rule commences operation.

**current application** means any action taken or process initiated under the *Rules* which relies on or is referenced to the *regulatory test* and is not completed as at *[insert date which is 13 months after commencement date]*.

**initiated** means:

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- (a) in respect of a *new large transmission network asset* (as defined prior to the commencement date), that an application notice has been made available in respect of that asset in accordance with clause 5.6.6(c) (as in force prior to the commencement date); and
- (b) in respect of a *new small transmission network asset* (as defined prior to the commencement date), that consultation has been commenced in respect of that asset in accordance with clause 5.6.6A(a) as in force prior to the commencement date).

**old clause 5.6.5A** means clause 5.6.5A of the Rules (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

### 11.#.2 Amending Rules does not affect existing regulatory test

- (a) For the period from commencement date to *[insert date which is 13 months after commencement date]*:
  - (1) clauses 5.6.5B-E have no effect in respect of *transmission investment*; and
  - (2) old clause 5.6.5A, and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of *transmission investment*.
- (b) From *[insert date which is 13 months after commencement date]*:
  - (1) clauses 5.6.5B-E have no effect in relation to; and
  - (2) old clause 5.6.5A, and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of,  
  
any current application.

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## Appendix E Possible Options for an Inter-Regional Transmission Charging Mechanism

The Commission has identified four possible options to implement a formal cross-border payment mechanism for transmission investment. The four options are:

- **Option 1:** The costs of new investment in assets to enhance the interconnected network are shared between the relevant adjacent TNSPs (Interconnection cost sharing);
- **Option 2:** The costs of new investment in assets to enhance the interconnected network are shared between all TNSPs in the NEM (NEM-wide interconnection cost sharing);
- **Option 3:** Each TNSP charges its neighbouring TNSP as if (and to the extent) it is a load (Load export charge); and
- **Option 4:** The regulated revenue allowances of all TNSPs are pooled and then recovered through a single, NEM-wide charging methodology (NEM-wide methodology).

This Appendix describes each of the options and also comments on possible alternatives which the Commission considered not to be assessed further.

### 1.1.1 Option 1 – Interconnection cost sharing

Under Option 1, the costs associated with new interconnection assets are identified and allocated amongst the relevant pair of TNSPs. A methodology is required for determining the identity of the relevant pair of TNSPs. In most cases, this will probably be straight-forward, but in other cases it might be more subjective, e.g. when an investment impacts on the flow capability of two interconnectors. Option 1 also requires a method for determining which proposed assets should be shared across the two regions. This could either be through a simple objective rule, as in the US where all assets above 330 kV are deemed to be interconnection assets. Alternatively, it could be through a more detailed, technical assessment on a case-by-case basis of the particular characteristics of the asset in question. The responsibility for determining what constitutes inter-connection assets could be assigned to a third party, e.g. AEMO, possibly using the existing IRPC criteria for determining whether a project has a material inter-network impact.

Option 1 would also require a method for establishing how the total costs of the asset are to be shared between the two TNSPs. A simple sharing rule, e.g. 50-50, could be used. Alternatively, a more complex, and cost reflective, methodology, might be adopted, e.g. based on load flow analysis. Experience from continental Europe suggests that more complex sharing rules are difficult to agree on, and can cause delays to implementation. Finally, Option 1 would require a method for determining how the additional charges levied on each TNSP would be recovered by that TNSP from network users in its area. The more consistent approach in the

context of the NEM would be to leave this decision with the relevant TNSP to be incorporated in a cost-reflective manner in its charging methodology more generally.

### **1.1.2 Option 2 – NEM-wide interconnection cost sharing**

Option 2 is an extension of option 1 where instead of the identified assets being shared across the adjacent regions, the costs of all new interconnection assets across the NEM are allocated across all TNSPs. Such an approach would reflect the notion that any interconnection benefits the whole market and not just two regions. It might also reflect a recognition of the practical difficulty in some instances of attributing a particular investment accurately to a pair of TNSPs. Option 2 may require a central body to administer the resulting payments between TNSPs, in contrast to Option 1 where the settlement could be arranged bilaterally.

### **1.1.3 Option 3 – Load export charge**

For Option 3, each TNSP calculates an export charge to be applied to any flow on the interconnector. Therefore each interconnector would be treated as if it was a load at the boundary of the region. This export charge is levied on the importing TNSP who then recovers the costs of the charge from its own customers. This export charge would cover the cost of both existing and new assets which contribute to the export flow. This contrasts with Options 1 and 2, which limit the charges only to recover the costs of new interconnection assets. The differences in actual charges between Option 3 and Options 1 and 2 will, therefore, be more acute in the first instance.

A load export charge could be introduced simply through extension of the existing transmission pricing methodology for loads. Currently, load within each region is subject to charges for: prescribed exit charges; prescribed common transmission services; and prescribed TUoS services – including both a locational and a non-locational component.

The possible approaches for the TNSP to recover the inter-regional charge are common across options 1, 2 and 3. The choice is whether the importing TNSP should either recover the charge through the non-locational component, and hence smear it across all its customers, or through the locational component of its prescribed TUoS charge.

### **1.1.4 Option 4 – Uniform NEM-wide charging methodology**

Option 4 would result in a common methodology for the calculation and imposition of transmission charges in respect of all new and existing assets across the NEM. Hence the NEM would become one single transmission pricing region. A centralised arrangement would be established to ensure that the revenue collected is properly distributed across the TNSPs.

Option 4 would represent a fundamental change to the current arrangements and would require developing and implementing a uniform methodology across the entire NEM. This would go against the Commission's decision in the Chapter 6A transmission pricing review to minimise the extent of prescription in the Rules and

permit each TNSPs to adapt their pricing methodology to suit local conditions.<sup>117</sup> Like option 2, this approach would require a centralised mechanism to administer the distribution of revenue among the TNSPs. This could either be done via a centralised independent body or via a contractual agreement amongst TNSPs.

### **1.1.5 Other options not being progressed**

In its Chapter 6A review on transmission pricing, the Commission raised another possible approach of splitting the Inter-Regional Settlement Residue (IRSR) auction proceeds equally between the exporting and importing regions.<sup>118</sup>

Although such an approach would partially recognise the benefit that the importing region's network users gain from the exporting TNSP's network, and could easily be implemented, it is not a inter-regional charging mechanism and the Commission has decided not to include it in its assessment. Under this approach, the transfer between regions is not linked to either the cost of or the benefit received from the asset and therefore would not reflect any economic signals. Also it would not seem to be sensible to link recovery of an interconnection investment to the pool of revenue of IRSR auction proceeds, since an additional interconnection investment could lead to a decrease in IRSR auction proceeds.

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<sup>117</sup> AEMC 2006, *National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22*, Rule Determination, 21 December 2006, Sydney.

<sup>118</sup> *Ibid.*, p. 57.

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