

AUSTRALIAN ENERGY MARKET COMMISSION

REVIEW OF THE
ELECTRICITY TRANSMISSION
REVENUE AND PRICING RULES

TRANSMISSION REVENUE: RULE PROPOSAL REPORT

DRAFT NATIONAL ELECTRICITY AMENDMENT
(ECONOMIC REGULATION OF TRANSMISSION SERVICES) RULE 2006

FEBRUARY 2006

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Abbreviations

AARR	Annual Average Revenue Requirement
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
CAM	Cost Allocation Methodology
CAPM	Capital Asset Pricing Model
Code	National Gas Code
Commission	See AEMC
СРІ	Consumer Price Index
DEA	Data Envelope Analysis
DNSP	Distribution Network Service Provider
DRP	Draft Statement of Principles for the Regulation of Transmission Revenue (May 1999)
ECM	Efficiency Carryover Mechanism
EPO	Electricity Pricing Order (South Australia)
ESC	Essential Services Commission (Victoria)
ESCOSA	Essential Services Commission of SA
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal (NSW)
ISO	Independent System Operator
kV	kilovolt
MAR	Maximum Allowed Revenue
MCE	Ministerial Council on Energy
MNSP	Market Network Service Provider

NECA	National Electricity Code Administrator
NEL	National Electricity Law
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NER	National Electricity Rules
NETA	New Electricity Trading Arrangements
ODV	Optimised Deprival Value
Ofgem	Office of Gas and Electricity Markets (UK)
PTRM	Post Tax Revenue Model
QCA	Queensland Competition Authority
RAB	Regulatory Asset Base
RoR	Rate of Return
Rules	National Electricity Rules
SCO	Standing Committee of Officials
SRP	Statement of Principles for the Regulation of Electricity Transmission Revenues (December 2004). The SRP comprises a background paper and a consolidated version of the principles.
TFP	Total Factor Productivity
TNSP	Transmission Network Service Provider
TPA	Trade Practices Act 1974 (Cth)
TUoS	Transmission Use of Service
WACC	Weighted Average Cost of Capital

Introduction

The National Electricity Law (NEL) requires the Australian Energy Market Commission (AEMC) to amend the National Electricity Rules (NER) governing the regulation of electricity transmission revenue and prices before 1 July 2006.

Publication of this Transmission Revenue Rule Proposal (the Rule Proposal) represents the next step in the Commission's Rule change process in relation to the revenue regulation aspects of its Review of the arrangements for the economic regulation of the transmission network¹.

In the formative phase of this Review process, the Commission consciously adopted a listening stance in its consultation and has had careful regard to the views expressed during that process in preparing its formal Rule Proposal and its reasoning in support. To a substantial extent, suggestions made by network operators, market participants and energy consumers have been reflected in the Commission's Rule Proposal.

The Commission is now seeking comments from all relevant stakeholders on this Rule Proposal before preparing its Draft Determination in April 2006.

Economic regulation of electricity transmission revenue and prices is one of a number of inter-related elements of the regulatory framework that applies to the operation and performance of the National Electricity Market (NEM). Other elements of that framework include the technical performance standards specified in Chapter 5 of the NER and statutory performance requirements of the States and Territories.

This Review of the Rules for the economic regulation of electricity transmission is one element of a broader program of reform of the arrangements governing investment in, and the performance of, the national electricity transmission grid.

The Commission is currently processing a number of related Rule change proposals submitted to it by the Ministerial Council on Energy (MCE). These Rule change proposals are directed at facilitating timely and efficient transmission investments that are sufficient to meet future demand growth and reliability requirements². The MCE has also directed the Commission to review and recommend options for improved management of congestion in the transmission network. Under the auspices of the Commission, the Reliability Panel is also conducting a review of the Reliability Standard and related arrangements which influence investment to underwrite the reliability and performance of the national electricity system.

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Potential changes to the transmission pricing Rules are expected to be in place by 1 January 2007.

MCE, Regulatory Test Principles Rule change Proposal, 12 October 2005, and MCE, Last Resort Planning Power Rule change Proposal, 12 October 2005

In conducting this Review of the economic regulation of transmission services the Commission has been guided by the NEM objective – to promote an efficient, reliable and safe electricity system. Its goal has been to design a regulatory regime that will facilitate efficient investment in and operation of transmission services, thereby promoting competition and efficiency in the electricity wholesale and retail markets and the long-term interests of consumers of electricity. It has also sought to improve the environment for investment by increasing regulatory clarity and certainty through the Rules.

The Commission's Rule Proposal has also sought to develop a balanced regulatory framework which provides incentives for efficient network investment and operation. The framework is also designed to manage the potential for the exercise of market power by network operators while maintaining effective regulation with an appropriate requirement for clarity, transparency and accountability on the part of the regulator.

While recognising the need to continue direct price and revenue regulation for the shared network services in order to manage the associated market power, the Rule Proposal also establishes incentives for the competitive or negotiated supply of network services and for pursuing economic non-network solutions where that is feasible.

In line with the views expressed in many submissions, the Commission's Rule Proposal has been based primarily on existing practice and experience. The principal components of the Statement of Regulatory Principles (SRP), developed by the Australian Competition and Consumer Commission (ACCC) and adopted by the Australian Energy Regulator (AER), have been reflected in the Draft Rule, including:

- adoption of a revenue cap approach;
- a post-tax revenue model using the building blocks methodology; and
- an incentive regime to promote expenditure efficiency and service reliability.

In view of the interconnected, any-to-any features of shared transmission network services and the lumpiness of the associated capital requirements, the Commission has decided against providing for the use of alternative revenue cap methodologies based on productivity indices or benchmarks. However, the Rule Proposal requires the AER to take into account benchmarks in assessing a TNSP's capital expenditure and operating expenditure forecasts under the building blocks approach.

Consistent with the views expressed in many submissions, the Commission has elevated to the Rules key elements of the SRP. The Commission has also sought to improve the clarity, certainty and transparency of the regulatory process in framing its Rule Proposal. For example, the Draft Rule:

 codifies a propose – respond process and specifies fixed timetables for regulatory decision-making;

- provides clear guidance to be applied by the AER when exercising appropriate discretions; and
- specifies matters on which the AER must consult and areas in which its current guidelines are to be augmented.

While the Draft Rule accompanying the Rule Proposal Report is necessarily more extensive and detailed than the current Rules, this is a consequence of the measures taken to increase investment certainty and to reduce the perception of regulatory risk. In essence, to provide a more comprehensive set of Rules in order to reduce regulatory uncertainty over time.

In formulating its Rule Proposal, the Commission has sought to design a regulatory regime which best meets the requirements of the NEM objective, while striking an appropriate balance between the interests of TNSPs, market participants and final energy users. It has also sought to balance the requirement for clearer, more timely and effective regulatory processes with the need to provide the regulator with sufficient guidance, flexibility and discretion to perform its role effectively.

The Draft Rule, reflects the Commission's current thinking on the appropriate settings for the electricity transmission regulatory framework and the construction and form of the Rule required to give effect to it.

The Commission is now seeking submissions on its Rule Proposal from all interested stakeholders by 20 March 2006. The Commission is seeking views on the scope, construction and form of the Rule Proposal and the reasons it has provided in support of that approach, as well as, the detailed wording of the Draft Rules themselves.

Having considered the views expressed in submissions and conducted its own further analysis, the Commission will publish its Draft Determination and Rules in mid April 2006 for further consultation before making its final Determination in June 2006.

Interested stakeholders are invited to make comment on the issues outlined in this Paper and proposed Rules. Submissions should be received by 5pm on 20 March 2006.

Submissions can be sent electronically to <u>submissions@aemc.gov.au</u> or by mail to:

Australian Energy Market Commission PO Box H166 AUSTRALIA SQUARE NSW 1215

Fax (02) 8296 7899

1. Summary of the Rule Proposal

1.1. Contribution to the National Electricity Market Objective

The Commission's Rule Proposal for the regulation of transmission revenue has been targeted at achieving the National Electricity Market objective. The NEM objective focuses on achieving an efficient, reliable and safe electricity system for the long term interests of consumers.

The development of the Rule Proposal has also been guided by the key themes that emerged during the earlier consultation period for this Review. These key themes, as foreshadowed in the Commission's Issues Paper released in October 2005, relate to:

- Aligning incentives for TNSPs to invest in, and operate, transmission networks in a way that delivers efficient outcomes for the electricity market, market participants and consumers; and
- Increasing clarity, certainty and transparency of economic regulation so as to provide a more certain regulatory environment for efficient long-term investment.

In developing the proposed regulatory framework, the Commission has been mindful of the impacts on TNSPs and network users including connected customers, generators, retailers, as well as consumers. It has paid careful attention to the issues raised during the preliminary consultation period and has genuinely sought to address and balance the concerns and interests of stakeholders while focusing on meeting the NEM objective. Overall, the Commission considers that the Rule Proposal offers a balanced package that should facilitate more efficient network investment and operation thereby promoting competition and efficiency in the electricity wholesale and retail markets. It believes that the resulting efficiencies will provide long-term benefits for energy using industries and households in terms of more efficient prices and reliable services.

A clear requirement in developing the Rule Proposal has been to ensure that the economic regulation framework allows for TNSPs to recover the efficient costs of meeting their regulatory obligations and provides incentives for the supply of efficient and reliable services. This is a requirement in the NEL.

The Commission has given careful consideration to developing principles for the development of a comprehensive incentive framework. The Rule Proposal provides for the further development by the AER of continuous incentives to improve efficiency and service performance. In particular, there is a strong emphasis on providing incentives for TNSPs to increase reliability at times of highest value to the NEM and market participants while providing ongoing incentives to achieve cost efficiencies. The Commission has also proposed measures to improve incentives for the management by TNSPs of the potential for assets to become commercially stranded.

The Commission has focused on the potential for TNSPs to exercise market power and the appropriate form of regulation to be applied to transmission services. For the shared network services, the Commission proposes continuation of CPI-X revenue cap regulation in order to manage the associated market power. However, it proposes to introduce less intrusive forms of regulation for services that are amenable to commercial negotiation of terms and conditions or are supplied under more contestable conditions. The Commission has attempted to provide greater clarity in the definitions of transmission services and the forms of regulation to be applied to those services. This is based on the belief that clarity on the classification of services and the form of regulation that applies will potentially increase the scope for contestability in the provision of services that have less monopolistic characteristics.

The Commission has also sought to clarify the regulatory procedures and methodologies for making transmission determinations. In considering this issue, the Commission has been mindful of the widespread view in stakeholder submissions that more transparent and predictable decision-making processes would reduce the perception of regulatory uncertainty and risk and provide a more certain environment for long-term network investment. The Commission also believes that increased codification in the Rules of the procedures and methodologies to be applied provides greater regulatory certainty for TNSPs, other market participants and the AER itself.

In developing the Rule Proposal, the Commission has proposed a package of measures which it believes meets the requirements of the NEM, while striking an appropriate balance between the interests of TNSPs, network users (such as generators and retailers) and final consumers. In doing so, the Rule Proposal also addresses the key themes the Commission has identified for the review. The principal measures that in combination are expected to deliver those outcomes are summarised below.

Measures to align the interests of TNSPs with those of other market participants and consumers by providing:

- incentives for TNSPs to provide greater reliability of the system at times when it most valued:
- greater scope and incentives for the owners of transmission network services to engage in commercial negotiation of specified services; and
- the reclassification of transmission services to allow greater scope for contestability of services and non-network solutions, where appropriate. One aim being to reduce the need for more intrusive regulation.

Measures to promote efficient investments which enhance the reliability, safety and security of the national electricity system include:

- requiring the AER to accept a TNSP's forecast capital and operating expenditure estimates where they satisfy specified criteria including whether they related to compliance with regulatory obligations; and
- providing that capital costs may be included in the RAB even where they
 exceed the forecasts approved in the preceding regulatory period where

their expenditure was prudent and efficient including when that additional expenditure arose from the need to comply with regulatory obligations.

Measures to address providing greater certainty and transparency in the regulatory environment include:

- codifying the procedures for the "Propose-respond" process. Adopting a fixed period in which the AER must make decisions, and codifying the process by which TNSPs must submit their proposals and the process by which the AER undertakes its assessment;
- codifying the form of regulation and the methodology for determining regulated revenues (including by codifying the WACC) and the form of the associated incentive regimes; and
- providing guided discretion to the AER when developing Guidelines.

The Commission considers that the Rule Proposal would improve the economic efficiency of investment in and use of transmission services including in relation to reliability and security for the long-term benefit of consumers. The proposed measures provide for TNSPs to recover efficient costs, provide strong efficiency, performance and risk management incentives and make regulatory processes more transparent and predictable. The Commission considers therefore that its Rule Proposal satisfies the requirements of the NEM objective.

1.2. Key Features of the Rule Proposal

In responding to the views put to the Commission by TNSPs and others, the Rule Proposal continues economic regulation (including a revenue cap approach) for Prescribed Transmission Services. However, while providing incentives for efficient investment in and operation of the shared network, the Proposal also provides incentives for the negotiated or competitive supply of services or, for pursuing non-network solutions where feasible.

The Rule Proposal has been substantially based on the current approach to transmission regulation set out in the Statement of Regulatory Principles (SRP). The Commission recognises the considerable work and consultation undertaken by the ACCC in developing the SRP and the widespread support in submissions for continuing that general approach to regulation.

In accordance with the views in many submissions, the Rule Proposal elevates key components of the SRP into the Rules. Where the SRP does not provide a complete framework for regulation, the Commission has provided greater clarity in the Rules or further guidance to the AER where regulatory discretion is appropriate.

The Proposal has also set out a clear and certain process for conducting regulatory reviews and making revenue cap determinations. This includes codification of a Propose-respond process, specification of a fixed timetable for regulatory decision-making and provision of guidance to be applied by the AER when exercising discretion including relevant consultation procedures.

In this respect, the Commission's approach in developing the Draft Rule is closer to the construction and approach of the current Gas Pipeline Access Code which is currently under review by the MCE. While differences remain between the two regulatory frameworks, the Draft Rule proposed by the Commission would result in greater alignment in the regulation of infrastructure access between the electricity and gas markets³.

The greater clarity, certainty and transparency of regulatory processes and decision-making reflected in the Draft Rule means that it is necessarily more extensive and detailed than the current Rule. This Rule-based approach to energy regulation is consistent with the separation of Rule making and Rule administration which is a central feature of the new energy market institutional and governance arrangements established by the MCE in July 2005. It is also consistent with the view expressed in many submissions that greater regulatory clarity and certainty in the Rules would reduce the perception of regulatory risk and create a more certain environment for long-term investment in the transmission network.

Scope of regulation

The Commission believes that greater clarity is needed in the definition of transmission services that are subject to economic regulation. It believes that the lack of clarity in delineating between the types of transmission services that should be subject to a revenue cap determination under the current form of Chapter 6 of the NER and those that are subject to a less intrusive form of regulation, has resulted in an over-inclusion of services into the revenue cap. An over-inclusive approach to services that are subject to an intrusive form of economic regulation is undesirable. If the categories of services subject to a revenue cap are too broad, the cost of regulation is greater than optimal. In addition, over-inclusion of services within a revenue cap will distort market outcomes by crowding out the opportunities for competitive supply of services and commercial negotiations between TNSPs and users.

The current form of Chapter 6 of the NER also focuses on allocating costs on the basis of the *assets* of TNSPs rather than transmission *services*. The Commission has sought to develop a Rule Proposal which applies economic regulation to transmission *services* rather than transmission *assets*.

The Commission has adopted the following classifications of transmission services:

 <u>Prescribed Transmission Services</u> - use of system services supplied by the shared transmission network which meet (but do not exceed) the network performance requirements specified under any legislation of a participating jurisdiction (including instruments made or issued under such legislation eg., regulations, codes, licences) and the network

Expert Panel Review of Revenue and Network Pricing across the Energy Market established by the MCE November 2005

performance requirements set out in Schedule 5.1 of the NER (prescribed transmission services do not include negotiated transmission services or market network services); and

• Negotiated Transmission Services - connection services (entry, exit and TNSP to TNSP connection services); use of system services supplied by the shared transmission network which exceed the network performance requirements specified under any legislation of a participating jurisdiction (including instruments made or issued under such legislation eg., regulations, codes, licences) or which are above or below the network performance requirements set out in Schedule 5.1 of the NER; and use of system services in respect of agreed transmission network augmentations or extensions for loads, generators and MNSPs (negotiated transmission services do not include market network services).

Services that fall outside the definitions of Prescribed and Negotiated Transmission Services, such as consultancy services, will not be subject to any form of regulation under Chapter 6 of the NER.

The Commission considers that there has been an over-reliance on traditional regulation for transmission services, and sees a greater role for commercial negotiation. The Rule Proposal applies a two part regulatory framework:

- <u>Prescribed Transmission Services</u> are to be subject to a revenue cap -CPI-X building block approach form of regulation in a similar manner as currently applied by the AER; and
- <u>Negotiated Transmission Services</u> are to be subject to a commercial negotiation regime.

The Rule Proposal includes a fundamental change in the definition of transmission services. In recognition of this and in order to allow for stakeholder input into this issue, the Commission is proposing to establish a Working Group. The Working Group will examine and provide advice on issues relating to the categorisation of transmission services. It is intended that the outcomes from the Working Group will be completed prior to the Commission's Draft Determination of the Rule Proposal.

The Rule Proposal establishes a new regime for the resolution of disputes about the price of Negotiated Transmission Services. The Commission wishes to encourage a clearer, more commercial and expedited process for dispute resolution than is currently provided for under Chapter 8 of the NER. Consequently, Chapter 6 of the NER will contain Rules for the negotiation and determination of price for Negotiated Transmission Services.

The Rule Proposal provides that only revenue from Prescribed Transmission Services is subject to a revenue cap. The revenues earned by TNSPs from Negotiated Transmission Services will only be subject to the commercial negotiation regime.

The Commission expects that over time, as a consequence of this Rule Proposal, more assets will be outside the regulatory asset base (RAB) than is currently the case. Further, that Negotiated Transmission Services will become subject to

more competitive supply. In these circumstances the question of cost allocation (allocation of asset costs between Prescribed Transmission and Negotiated Transmission Services) will become a significant regulatory issue. Unless cost allocation is subject to regulatory oversight by the AER there is a risk that TNSPs may 'double dip' by recovering costs through both the Prescribed Transmission Services' revenue and negotiated charges or engage in cross subsidisation of services.

The Rule Proposal provides a regime for AER oversight of cost allocation between different categories of services. In the future, assets will only be rolled into the RAB when the costs of those assets are appropriately allocated to Prescribed Transmission Services in accordance with AER cost allocation principles.

Regulated revenue for Prescribed Transmission Services

The Commission proposes that Chapter 6 of the NER contain a complete methodology for making a revenue cap determination for Prescribed Transmission Services – under a Propose-respond process. The Commission believes this approach will improve the predictability and transparency, and over time, consistency, of revenue cap determinations. The methodology set out in the Rule Proposal is based on the SRP.

The Rule Proposal provides for the revenue cap to be derived from a post-tax revenue model, based on a building block approach. The Draft Rule includes the following key elements:

- The calculation of the RAB on a 'locked-in' value of the assets.
- The locked-in value of the RAB will be adjusted for each year of the regulatory period by the AER approved forecast capital expenditure.
- The RAB will be adjusted using depreciation profiles proposed by the TNSP.
- The methodology for calculating the cost of capital (based on CAPM), and a number of the parameters, will be included in the Rules. The CAPM parameters are based on those in the SRP. The parameters will be subject to review by the AER every five years.
- Operating expenditure will be based on efficient forecasts on a firmspecific basis. An efficiency benefit scheme will apply.

The Rule Proposal provides for the AER to develop a post-tax revenue model, based on the principles in the Rules and subject to consultation. This model is to be used by the AER in making revenue cap determinations.

The Commission believes that, all other things being equal, it would be better to have a less intrusive regulatory approach rather than a more intrusive regulatory approach to determining the forecast capital and operating expenditure. While there is an incentive for TNSPs to seek to maximise their revenues through the regulatory process, there is also a risk of under-investment and insufficient

operating expenditure if the determination by the Regulator is later found to be too low. The Commission has sought to balance these risks by providing that the AER must accept a TNSP's forecast expenditure if it is satisfied that the amount is a 'reasonable estimate' of the business' requirements having regard to a number of criteria including efficient costs, benchmark information and the regulatory obligations borne by the TNSP.

The regulatory period must not be less than five years but can be longer.

The Commission has not adopted the AER's 'contingent project' regime for capital expenditure, because it did not adequately address the potential need for necessary major capital projects that may have either have been unforeseen or, planned, but the timing was uncertain. Consequently the Rule Proposal provides that the revenue cap may be reopened in specified circumstances where a TNSP needs to undertake significant capital expenditure which was not provided at the commencement of the regulatory period. This will increase flexibility for infrastructure responses to market needs.

Transmission revenue is subject to adjustment in accordance with the operation of the applicable service target performance incentive scheme and cost pass throughs.

In addition to its existing guidelines on ring-fencing and annual certified accounts, the AER will consult, prepare and publish guidelines on information requirements for the transmission determination process, the public release of information, cost allocation methods, and the post-tax revenue model. Guidelines may be amended in accordance with the new consultation procedures which are set out in the Draft Rule.

Incentive mechanisms

There are essentially four incentive mechanisms in the package. These include mechanisms to encourage efficiency in capital; operating expenditure; improved reliability and availability of transmission services; and to provide incentives for better management of potential commercial stranding risk.

The Commission has continued the SRP's low powered incentive regime for capital expenditure. The actual capital expenditure of the TNSP will be rolled into the RAB at the commencement of the next regulatory period, subject to the AER's discretion to conduct efficiency and prudency reviews, in accordance with clear criteria set out in the Draft Rule. The TNSP will retain the benefit (or bear the cost) in relation to the return on capital allowed for in the revenue cap determination for any under- (over-) spend compared with forecast. In contrast to the SRP, depreciation will not form part of this incentive regime.

The details of the incentive regime for operating expenditure are to be developed by the AER but must provide a continuous incentive (equal in each year) to reduce operating expenditure below forecast levels. The principles for this incentive regime set out in the Draft Rule are consistent with the incentive mechanism set out in the SRP.

The incentive mechanisms for performance standards are to provide incentives for TNSPs to provide greater reliability of the system at times when the system is most valued and in relation to those elements that are most important to determining wholesale spot prices. The Commission believes requiring the AER to develop such an incentive mechanism will be an important evolution in the NEM. This development is consistent with the objective of the Review in aligning the operation of the transmission grid with the market incentives of the NEM.

The Commission proposes that the reward/penalty adjustments in the incentive mechanisms for performance standards should be capped at no more than +/-1% of the revenue cap. The Commission is seeking views on this proposed cap.

In line with the greater scope for commercial negotiation between TNSPs and users, it is proposed to establish a limited regime for managing the risks of potential commercial stranding. This is a departure from the SRP. The Commission wishes to adopt a regime for the economic regulation of transmission services which provides TNSPs with an incentive to negotiate with large end-users (whose future decisions may pose a commercial stranding risk in relation to dedicated assets) for an appropriate allocation of risk between them, and which provides an effective incentive for TNSPs to negotiate a prudent discount with users, when it is efficient to do so.

The Rule Proposal provides that the AER will have the power to remove assets from the RAB, which are the subject of commercial stranding, but only where the TNSP has *not* taken steps to either:

- enter into contractual arrangements with the user to manage stranding risk (for assets where construction is committed to after 16 February 2006); or
- to offer a prudent discount to such users in appropriate circumstances.

The ability of the AER to remove assets from the RAB is limited to assets that the AER determines are no longer contributing to the provision of Prescribed Transmission Services and where the current value of those assets exceeds a certain threshold. The Commission is proposing a threshold of \$20m (in 2006 dollars) but would welcome views on other forms and levels of the potential commercial stranding threshold.

Regulatory procedures and approach

As noted earlier, the Commission proposes to codify a Propose-respond determination process to improve the transparency and predictability of the current determination procedures. The Commission proposes that:

• TNSPs will be required to submit a transmission revenue application to the AER. The TNSP revenue application must be no later than 13 months from the commencement of the proposed regulatory period for the transmission determination.

- The AER will be required to initially assess whether the TNSP's application complies with the information requirements.
- The AER will be required to publish guidelines setting out the information that must be provided with the TNSP's application and publish other instruments with which an application must comply including the post-tax revenue model to be applied by the AER, and guidelines in relation to cost allocation. The cost allocation method is to be prepared in accordance with the AER Guidelines.

Discretion is an important element of any regulatory framework, however it must be balanced with the need for certainty and clarity. While the Commission proposes to adopt a detailed framework for the making of revenue cap determinations by the AER there are a number of areas within that framework where it is appropriate for the AER to exercise discretion. These areas include the determination of forecast expenditure and the conduct of efficiency and prudency reviews. Where the Draft Rule provide for the exercise of discretion by the AER, criteria or principles are also set out to provide a framework for the AER in exercising those discretions.

The Commission believes that there are a number of areas in which the regulatory framework should be augmented with models or guidelines to be developed by the AER, these include: guidelines setting out the information that must be provided with the TNSPs' proposal; the post-tax revenue model to be applied by the AER; cost allocation principles and incentive regime mechanisms. Where the Rule Proposal provides for the development of guidelines and models by the AER the Rules require the AER to comply with a consultation process and also provide principles or criteria to guide the AER.

Savings and Transitionals

The Commission understands that savings and transitional Rules will be required in order to provide for:

- The saving of determinations by the ACCC;
- Transitional Rules to facilitate the making of a revenue cap determination in relation to Powerlink in a manner that minimises uncertainty and transitional costs for Powerlink and the AER in relation to the forthcoming revenue cap determination;
- Transitional Rules which 'grandfather' the treatment of assets which are
 used to provide services under long-term contracts by the TNSPs where
 those assets have traditionally been incorporated into the RAB but which
 may, under the Rule Proposal, be allocated to Negotiated Transmission
 Services; and
- The recognition of existing incentive mechanisms.

The Commission believes the development of savings and transitional Rules will be improved through close consultation with affected parties prior to releasing its Final Determination.

2. Framework and Approach

2.1. Obligations Under the NEL

The NEL⁴ requires the AEMC to make Rules regarding transmission revenue and pricing⁵.

The NEL does not usually permit the AEMC to both initiate and assess substantive Rule change proposals⁶. However, the transmission revenue and pricing Rules are an exception, and in recognition of this dual role, the Commission has consulted widely in the preparation of this Rule Proposal in order to inform itself fully on stakeholder views.

The subject matter for the AEMC-initiated transmission Rules is listed in items 15-24 of Schedule 1 to the NEL (Appendix 1). These items cover the regulation of both revenue and pricing for transmission services subject to a transmission determination and the incentives to make efficient operating and investment decisions. The AEMC is also required to make Rules on the principles and procedures to be followed by the AER in carrying out its economic regulatory functions.

The AEMC has an additional ongoing obligation to ensure that the Rules will continue to cover the required minimum matters as set out in the NEL into the future⁷.

The NEL⁸ places express obligations on the AEMC to ensure that the transmission revenue and pricing Rules:

- provide a reasonable opportunity for a regulated transmission system operator to recover the efficient costs of complying with a regulatory obligation;
- provide effective incentives to a regulated transmission system operator to promote economic efficiency in the provision by it of services that are the subject of a transmission determination, including:
 - The making of efficient investments in the transmission system owned, controlled or operated by it, and used to provide services that are the subject of a transmission determination; and
 - The efficient provision by it of services that are the subject of a transmission determination.

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The NEL is contained in the Schedule to the National Electricity (South Australia) Act 1996

⁵ Section. 35, NEL

⁶ Section 91(2), NEL

⁷ Section. 36, NEL

⁸ Section 35(3), NEL

- require the AER, in making a transmission revenue cap determination, to make allowance for the value of assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator and the value of proposed new assets to form part of that transmission system that are, or are to be, used to provide services that are the subject of a transmission revenue cap determination; and
- require the AER to have regard to any valuation of assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator applied in any relevant determination or decision.

These NEL obligations mirror the duties imposed directly on the AER in the NEL as to how the AER must carry out its economic regulatory functions⁹.

2.2. NEL Requirements for a Rule Proposal

The minimum content requirements for a Rule proposal, as set out in the NEL Regulation¹⁰, include:

- A statement of the issues in the Rules that is addressed by the Rule proposal;
- An explanation of how the draft Rule addresses the issues;
- A description and draft of the draft Rule; and
- An explanation as to how the Commission, as the proponent, considers the draft Rule is likely to contribute to the NEM objective.

This Rule Proposal Report presents the Commission's transmission revenue Rule Proposal, including an examination of the key issues and the reasons and consideration given to the Rule Proposal. The Commission is required to make these Rules by 1 July 2006.

2.3. The NEM Objective and Rule Making Test

The NEL sets out the overall objective for the National Electricity Market (the NEM objective)¹¹:

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⁹ Section 2 (definitions – AER economic regulatory function or power) & ss.15 &16, NEL

¹⁰ Clause 8, National Electricity Regulation

Section 7, NEL

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

The NEL also sets out the Rule making test that must be applied by the AEMC¹² in making the assessment of a proposed Rule, which states:

- "(1) The AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective.
- (2) For the purposes of subsection (1), the AEMC may give such weight to any aspect of the national electricity market objective as it considers appropriate in all the circumstances, having regard to any relevant MCE statement of policy principles."

The NEL therefore obliges the AEMC to have regard to the NEM objective, in its capacity as proponent, in developing this Rule Proposal. The Commission has focused on why it considers that the draft Rule is likely to contribute to the NEM objective, and this Rule Proposal Report addresses this in relation to specific issues and for the Proposal as a whole.

For the reasons set out in this Rule Proposal Report, the Commission considers that the Rule Proposal is capable of satisfying the NEM objective and thus, the Rule making test.

2.4. Power to Make the Proposed Rule under the NEL

The Draft Rules proposed by the Commission must fall within the AEMC's Rule making power¹³. The subject matters for the transmission revenue and pricing Rules are listed in items 15-24 of Schedule 1 to the NEL (see Appendix 1). These subject matters, along with section 34 of the NEL (the general head of power for Rule making), form the specific heads of power under which the transmission revenue and pricing Rules would be made.

The Commission is satisfied that the proposed draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 is for, or with respect to, a matter that the Commission may make a Rule under the NEL.

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¹² Section 88, NEL

Section 94(1), NEL

2.5. Policy Context

The transmission revenue Rule Proposal is occurring at a time of intense public policy debate on economic regulation in the energy market and its impact on infrastructure investment. Work by the Productivity Commission on the national and gas access regimes and the Prime Minister's Taskforce on Exports and Infrastructure has provided significant recommendations and comments on economic regulation in Australia. The MCE is continuing its national energy reform program and has initiated a number of projects that are relevant, and of interest, to the Commission in preparing this Rule Proposal.

Since the October 2005 release of the Commission's Transmission Revenue Issues Paper, the key reform projects of relevance to this Rule Proposal include:

- Consultation on the MCE Review of Decision Making in the Gas and Electricity Regulatory Frameworks;
- Ministerial deliberations regarding the possibility of certification as the national model for energy access;
- Ministerial agreement to a clear framework for the transfer of specified retail and distribution functions to a national regulatory arrangement, with enabling legislation by the end of 2006 and the transfer of economic regulation of distribution networks to the national regime by 1 January 2007;
- Establishment of an Expert Panel Review of Revenue and Network Pricing Across the Energy Market to advise on a common approach to transmission and distribution revenue and network pricing across the electricity and gas markets;
- Establishment of a Gas Market Leaders' Group to develop a gas market plan;
- Commencement of an MCE-directed Review of Congestion Management by the AEMC;
- Review of the Reliability Standard by the Reliability Panel under the auspices of the AEMC; and
- MCE Rule change proposals regarding Regulatory Test Principles and Last Resort Planning Power.

2.6. Approach to the Review

The Commission has approached the overall Review of the Electricity Transmission Revenue and Pricing Rules in an open and consultative manner¹⁴. This is the first major review process undertaken by the Commission.

Section 45, NEL sets out general process statements for a review.

The Commission is conducting the Review in two phases with Transmission Revenue Rules to be completed by 1 July 2006. The Transmission Pricing Rules are expected to be in place by 1 January 2007¹⁵.

Prior to the start of the formal Rule making process, the Commission undertook a consultation program in order to ensure that all stakeholders had sufficient opportunity to contribute. This consultation program included:

- Scoping Paper (July 2005) sought comments from stakeholders on what should be considered as part of the Review and on the proposed two phase review process. Twenty three submissions were received to the Scoping Paper.
- Issues Paper (October 2005) reflected matters identified in stakeholder submissions on the Scoping Paper and the Commission's preliminary research and analysis. Eighteen submissions were received (Appendix 2).

The publication of the Transmission Revenue Draft Rule and this Rule Proposal Report presenting the Commission's reasons represents the commencement of the formal Rule change consultation process.

2.7. Inter-relationship with the Transmission Pricing Review

The Commission is conducting the Review in two phases in order to effectively manage consultation and consideration of a complex range of issues. As foreshadowed in the Scoping Paper, there will be areas of interaction between the revenue and price phases of the Review. The Commission's revenue Rule Proposal will directly impact on the transmission pricing Rule Proposal. In general these interactions will be where the revenue-setting is governed by the way in which costs are allocated between services, and the Rules governing the quantity of revenue to be recovered each year over the regulatory control period.

Examples of where these interactions will be relevant include:

- cost allocation methodology to be developed by the AER;
- restrictions on the prices that can be charged in each year in order to comply with the revenue cap; and
- A mechanism for the resolution of disputes in relation to the pricing for Negotiated Transmission Services, but does not provide a comprehensive set of rules or principles by which those disputes are resolved. For example, this Rule Proposal does not address the question of whether 'connection' charges for generators should reflect a 'shallow' or 'deep' connection approach to cost allocation. The broader issue of 'who pays' and how charges are structured will be dealt with in the Pricing phase of the Review.

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A Regulation under the NEL is required to establish 1 January 2007 as the date by which new transmission pricing Rules will be required to be made.

In developing the Pricing Rules (which are expected to be in place by 1 January 2007), the Commission will address the interface between the revenue provisions and the pricing provisions.

3. Key Themes and Objectives

3.1. Why Regulate?

The first issue to consider is whether transmission services need to be regulated at all.

Transmission services are generally recognised as being supplied under conditions of natural monopoly or substantial market power as a result of significant economies of scale and network externalities. A more detailed discussion of the characteristics of transmission networks can be found in the Revenue Issues Paper. Due to the scale of economies involved, it is not economic to duplicate transmission networks such that there is no direct competition for transmission services. Thus while a single operator can supply network services at least cost, these conditions also confer substantial market power on TNSPs.

The impact of network externalities means that operations and augmentation in one part of the system can have an impact in other parts of the network system. The non-exclusive nature and strong inter-relationship for most transmission services makes it difficult to identify users and their impact on the shared network. This further limits the development of an effective market for transmission services.

The absence of direct users connected to the transmission networks means there is no countervailing power from the buyer side of the market to constrain the market power of TNSPs. The absence of buyer power arises in transmission because:

- most users are not directly connected and so have relatively little choice as
 to the quantity or quality of transmission services they receive
 individually;
- services are contracted by distributors who are also a natural monopoly supplier who pass through the transmission charges with little incentive to manage them; and
- the price of transmission services to end users is embedded in final electricity prices and is a relatively small proportion of the total energy charge.

The lack of direct competitors, existence of network externalities and absence of buyer power, results in a high degree of market power for transmission services. The degree of market power a network service provider has is relevant to the scope and form of regulation. The higher the degree of market power the greater the degree of regulatory oversight that is necessary. Owners of monopoly infrastructure assets may have a degree of market power for a majority of the services provided by means of the shared network. There are however services, such as connection services, where there is scope for competition, exclusiveness and negotiation with large users.

Economic regulation for transmission services is essentially focused on regulating the potential misuse of market power over price and access to those services. There was broad consensus from market participants of the need for regulation. While there were differences in the preferred degree of regulation, most respondents recognised the need for balance between keeping prices and services at efficient levels (for the benefit of participants in upstream and downstream markets and final consumers) while meeting the investment and commercial requirements for the efficient operation of the network businesses.

The Commission is mindful of submissions put to it regarding the scope and form of regulation and of the need to ensure that the benefits of regulation are greater than the costs. In addition to the direct costs of regulation, the wider costs of regulatory error can include over or under-investment in the network resulting in wholesale and retail market inefficiencies and detriments for consumers in the long run. Also, the direct regulatory costs that the Commission has in mind include the scope and quantity of information required from TNSPs and the length of the revenue cap determination period. The Commission has considered these factors in developing the Rule Proposal.

3.2. Key Themes

The Revenue Issues Paper identified two key themes that the Commission considered relevant in developing a Rule Proposal that would contribute to the achievement of the NEM objective. These themes were:

- 1. Aligning the long term incentives of transmission service providers with those of other market participants including end-users. It is particularly important that network owners and other investors have appropriate incentives to develop and operate the transmission network in an efficient manner so that prices reflect least cost production and delivery of power to end-users at the levels of reliability and security they require; and
- 2. Increasing the clarity, certainty and transparency of the regulatory framework, so as to provide a more certain regulatory environment in which investors can make efficient investment decisions which deliver market outcomes that better serve the long-term interests of consumers and promote the reliability, safety and security of the national electricity system.

In developing the Rule Proposal, the Commission has designed measures that it believes address the key themes in a balanced and comprehensive package.

Measures to encourage aligning the interests of transmission service providers with those of other market participants and consumers include:

 Providing incentives for TNSPs to provide greater reliability of the system at times when it most valued – especially in relation to these elements that are most important to determining the wholesale market spot price;

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- Providing greater scope and incentives for the owners of transmission network services to engage in commercial negotiation with large direct customers, generators and other network service providers;
- Placing greater onus on transmission service providers to manage business risk, specifically the risk of potentially stranded assets; and
- Greater scope for contestability of services and non-network solutions, where appropriate, to reduce the need for more intrusive regulation.

Measures to address providing greater certainty and transparency in the regulatory environment include:

- Codifying the procedures for the Propose-respond process;
- Adopting a fixed period in which the AER must make decisions, and codifying the process by which TNSPs must submit their proposals and the process by which the AER undertakes its assessment;
- Codifying the form of regulation and the methodology for determining regulated revenues and the form of the associated incentive regimes; and
- Providing guided discretion to the AER when developing Guidelines.

Measures to promote efficient investments which enhance the reliability, safety and security of the national electricity system include:

- Providing that the AER must accept a TNSP's forecast capital and operating expenditure estimates where they are reasonable and satisfy specified criteria including whether they relate to compliance with regulatory obligations;
- Providing that capital costs may be included in the RAB even where they
 exceed the forecasts approved in the preceding regulatory period where
 that expenditure was prudent and efficient including when that additional
 expenditure arose from the need to comply with regulatory obligations;
 and
- Codifying in the Rules the method for determining the WACC and inputs to the calculation of the WACC (subject to AER review after five years).

4. Scope and Form of Regulation

The Commission believes that there has been a tendency for an over-inclusion of the services that are subject to a revenue cap. The consequences of this include more intrusive regulation than may be warranted and the crowding out of opportunities to increase the level of contestable service provision.

Ideally, the classification of services should be based on their functional and economic characteristics rather than the assets that may be used in their delivery. The Commission believes that clearer delineation of transmission services should enable less intrusive forms of regulation to be applied to a service. where appropriate, such as greater scope for commercial negotiation, third party provision and adoption of non-network alternatives. Therefore there would be a greater level of clarity and transparency in regulation.

The Commission has proposed two separate categories of services for regulation – Prescribed Transmission Services and Negotiated Transmission Services. Prescribed Transmission Services are to be regulated by a revenue cap, CPI-X building block approach. Negotiated Transmission Services are to be regulated under a commercial negotiate-arbitrate regime. Services that fall outside the definitions of Prescribed Transmission Services and Negotiated Transmission Services, for example consultancy services, will not be subject to any form of regulation.

4.1. Current Arrangements

Classification of services

The current classification of services in the Rules is in part based on the form or manner of regulation that applies to those services and demarcated by voltages. The current definitions of prescribed services, excluded services and contestable services are circular and therefore ambiguous. For example prescribed transmission services are defined to be those services subject to a revenue cap; excluded services are defined as services, the costs and revenues for which are excluded from the revenue cap; and contestable services defined as services which are determined by the AER for a jurisdiction to be contestable.

Form of regulation

The Rules currently prescribe that the form of regulation applicable to transmission services characterised by market power is 'revenue-capping' 16. The AER has discretion to determine the form of light-handed regulation applicable to services for which sufficient competition exists to overcome monopoly characteristics.

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¹⁶ Clause 6.2.3, NER

Connection services are dealt with in the Rules by a negotiate-arbitrate regime, which includes:

- a requirement to negotiate in good faith over the level and price of the services; including provisions dealing with information disclosure of the reasonable costs of the service and the publishing of outcomes¹⁷; and
- dispute resolution under Chapter 8 of the NER in the event of a dispute. (This issue is dealt with in Section 8 of this Report).

4.2. Submissions

Classification of services

The Commission sought views on what transmission services should fall within the main form of regulatory control and services where a less intrusive form of regulation may be appropriate.

The majority indicated that the existing delineation of transmission services was appropriate, however there was some industry support for improving the definition of prescribed services as the current definition contains some circularity¹⁸. Some argued that, with the exception of providing assets that are dedicated to a particular generator or customer, defining and isolating a list of services that could conceivably be subject to an alternative regulatory arrangement was difficult,¹⁹ as was establishing a clear delineation between contestable and non-contestable services²⁰. Having prescribed services assessed on the service provided rather than the voltage used was also raised²¹. There was support for a more competitive environment, for instance construction of dedicated connection assets, as this would encourage more efficient investment²².

A number of submissions reflected the view that it was not appropriate for the AER to assess and decide whether a service should be excluded²³ or treated as 'contestable'.

Form of regulation and price control

The Commission sought views on the form of price control to be applied to TNSPs and whether there should be some degree of discretion granted to the AER to determine the form of price control.

Powerlink, 16 November 2005, p10

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¹⁷ Clause 6.5.9, NER

Electricity Transmission Network Owners (TNOs), 16 November 2005, p13

Origin Energy, 16 November 2005, p2

Major Energy Users Inc., and Major Employers Group Tasmania (MEU) 5 December 2005, p28

Enertrade, 21 November 2005, p12

TransGrid, 16 November 2005; p12; EnergyAustralia, 1 December 2005, p21; MEU, pp32-33; National Generators Forum (NGF), 18 November 2005, p2

There was general support from stakeholders for the use of a revenue cap as the primary form of transmission regulation and maintaining the building blocks approach to the calculation of the cap. Consumer and environmental groups argued that the current regime is understood and accepted by the market²⁴, and that the absence of revenue caps would result in reduced incentives for TNSPs to carry out operations within budget and could instead seek to encourage greater consumption of electricity²⁵. There was also a call for greater support for demand management via incentives²⁶. There was, however, also support for a hybrid regime²⁷.

There was no support amongst respondents for the widespread use of benchmarking, other than as an information tool,²⁸ or in conjunction with other information sources²⁹.

4.3. Proposed Rule

Classification of services

The Commission has defined the following services in a mutually exclusive manner:

- Prescribed Transmission Services use of system services supplied by the shared transmission network which meet (but do not exceed) the network performance requirements specified under any legislation of a participating jurisdiction (including instruments made or issued under such legislation eg. regulations, codes, licences) and the network performance requirements set out in Schedule 5.1 of the NER (prescribed transmission services do not include negotiated transmission services or market network services); and
- <u>Negotiated Transmission Services</u> connection services (entry, exit and TNSP to TNSP connection services); use of system services supplied by the shared transmission network which exceed the network performance requirements specified under any legislation of a participating jurisdiction (including instruments made or issued under such legislation eg. regulations, codes, licences) or which are above or below the network performance requirements set out in Schedule 5.1 of the NER; and use of system services in respect of agreed transmission network augmentations

Public Interest Advocacy Centre (PIAC), 17 November 2005, p2; Australian Energy Regulator (AER), 22 November 2005, p3

Total Environment Centre (TEC), 18 November 2005, p7

²⁶ TEC, p8

²⁷ TNOs, p25.; Ergon Energy, 16 November 2005 pp2,4,5; TransGrid, p7.; EnergyAustralia, p18.

EnergyAustralia, p36.; TNOs, p5,15.; Ergon Energy, p3.; Energy Networks Association (ENA), 30 November 2005 p9

²⁹ MEU, p20

or extensions for loads, generators and MNSPs (negotiated transmission services do not include market network services)³⁰.

The Commission has deliberately adopted a definition of Prescribed Transmission Services which is different to that contained in the current Rules. The Commission believes the current approach of defining Prescribed Transmission Services by reference to services, the charges of which are subject to the revenue cap, is circular and unhelpful. Further, the consequences of this include more intrusive regulation than may be warranted and the crowding out of opportunities to increase the level of contestable service provision.

The Commission intends that the revenue from standard use of system services supplied using the shared transmission network be subject to a revenue cap. A use of system service is a service which evacuates power from a generator or delivers power to a directly connected customer.

The charges for connection services and use of system services with performance characteristics different to those delivered by the shared network should be the subject of a commercial negotiation regime. The Commission believes that TNSPs and directly connected users should negotiate with each other to resolve the amount and form of charges to be paid by users for these services. Given that the TNSP may have a degree of market power in the delivery of these services where parties are unable to reach a commercial agreement, the question of the amount and form of charges for these services should be determined by a third party.

The Commission recognises that a significant challenge of this approach is how to define the 'standard' or 'basic' use of system service delivered using the shared network. A use of system service is a service which evacuates power from a generator or delivers power to a directly connected customer. The characteristics of a use of system service relate to issues of 'quality' and 'quantity'.

The Commission believes that Schedule 5.1 of Chapter 5 of the NER is likely to provide appropriate indicia of the 'quality' of the standard service in relation to such matters as voltage, stability, and frequency variations. In addition the Commission understands that the jurisdictions may have legislation, regulations and statutory instruments (including codes and licences) which specify the 'quality' of the standard transmission service.

Further, Schedule 5.1 appears to provide an appropriate indicia for the 'quantity' specification of the standard services from the perspective of customers. That is, the "transfer of power from generating units to Customers can withstand the impact of any single contingency with severity less than the credible contingency events stated in clause \$5.1.2.1".

Clause 5.4A of the Draft Rules (contained in the consequential amendments which are set out in Schedule 2) is designed to provide for access arrangements for generators, MNSPs and other transmission network users (including customers) in relation to transmission networks. The existing clauses 5.5 and 5.5A, which provide for access arrangements for generators and MNSPs, have been restricted in their operation to distribution networks.

Schedule 5.1 does not address the question of 'quantity' from the perspective of a generator. That is, Schedule 5.1 does not provide any service specification in relation to the power transfer performance of a transmission network for the evacuation of power from a generator. However, the NEM design is not intended to provide 'firm' access to generators and consequently it seems appropriate to the Commission that the Rules do not specify a power transfer capability to individual generators.

Given that an inherent design feature of the NEM is that generators are not provided, as of right, firm access, it appears to the Commission to be appropriate that if individual generators wish to secure a power transfer capability different to that which would be provided by a shared network that is built and operated to the standard that is specified by the standard referred to in clause S5.1.2.1 of the Rules, the charges for that augmented power transfer capability should be subject to a commercial negotiation regime.

The Commission is also aware that the practice of TNSPs in applying the current definitions of Prescribed Services and Excluded Services varies across the jurisdictions. In particular the Commission understands that different TNSPs adopt different approaches to the delineation between assets – and therefore costs – used to supply Connection Services and Prescribed Services. The consequences of this includes that charges for essentially the same Connection Services may vary widely across the NEM and the contribution of end-users (through the payment of TUOS charges) to assets used to provide connection services will also vary widely. The Commission sees no reason why the approaches to these issues should vary between different TNSPs and across the NEM.

The Commission recognises that the consequence of this approach may be that in the future more costs may be recovered by a TNSP through negotiated charges. Further that there may be assets which are used in part or in whole to provide Connection Services or use of system services with performance characteristics which are different to standard services and the costs of have historically been included in the RAB and therefore within the revenue cap.

The Rule Proposal provides that only revenue from Prescribed Transmission Services is subject to a revenue cap. The revenues earned by TNSPs from Negotiated Transmission Services will only be subject to the commercial negotiation regime. To ensure there is no cross-subsidisation or double recovery of costs by TNSPs, cost allocation rules will need to be complied with and only costs that are appropriately allocated to Prescribed Services will in the future be allowed to be rolled into the RAB.

The Commission recognises that the proposed approach to defining prescribed services represents a significant departure from the current Rules and practice. The Commission is particularly interested in receiving submissions which provide suggestions about how the approach to defining Prescribed Transmission Services can be improved.

In recognition of the need for further consultation on implementation and other issues, the Commission intends to establish a working group comprising

representatives of TNSPs, NEMMCO, generators, DNSPs and directly connected end users to review and develop the proposed definitions of Transmission Prescribed Services and Negotiated Transmission Services. It is intended that the working group finalise its findings before the completion of the Commission's Draft Determination.

Form of regulation and price control

The proposed Rules apply to the different service classifications as follows:

- <u>Prescribed Transmission Services</u> to be subject to a revenue cap CPI-X building block approach form of regulation in a similar manner to what the AER currently applies;
- <u>Negotiated Transmission Services</u> Connection Services, Shared Transmission Services with non-standard performance characteristics and Use of System Services in relation to agreed network augmentations and extensions - terms and conditions of provision to be subject to a commercial negotiation/arbitration regime (see Section 8 of this Report).

Full details of the building block methodology and the determination of each component are discussed in Section 6. The commercial negotiation framework is discussed in Section 8.

The following diagram illustrates the Commission's proposed classification of services and proposed form of regulation applicable to each service classification.

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Transmission Services Prescribed Transmission Service Negotiated Non-Regulated Transmission Transmission i.e. shared transmission Services Services system services provided to specified standard Shared Revenue cap Use of system transmission based on the services relating system services Not subject to proposed CPI-X Connection to augmentation provided to Regulation building block Services or extension of above/below approach transmission specified network standard Entry Exit Services Services Prices determined in accordance with proposed commercial negotiation regime

Diagram A: Classification of Services

4.4. Commission's Reasoning

Classification of services

The Commission sees that there is a real possibility for more transmission services to be subject to commercial negotiation between TNSPs and users.

The Commission has sought to clarify and tighten the classification of transmission services and the forms of regulation to be applied to them in order that there is a higher level of certainty for market participants.

Prescribed Transmission Services constitute those provided by shared network infrastructure, which exhibits strong economies of scale and externalities such that competition is unlikely to be feasible. Prescribed Transmission Services are also limited to those that have relatively uniform performance characteristics across the network.

The Commission considers that there are transmission services, for instance connection services and non-standard use of system services that provide scope for more commercial negotiation. The current Rules allow less intrusive regulation of services for which competition exists³¹. In practice, however, less intrusive forms of regulation do not appear to have been employed including because of the circularity in the current Rules for the definition of Prescribed Services – being services the revenue of which is subject to a revenue cap.

Form of regulation and control

The Commission considers that revenue for Prescribed Transmission Services should continue to be regulated through the revenue cap (building block) form of regulation. TNSP costs of service do not vary significantly with the quantity of services provided, especially during the term of a regulatory review, and therefore a revenue cap minimises, largely unmanageable, volume risk for TNSPs.

The Commission proposes to codify in the Rules the methodology for the calculation of transmission revenue caps. The methodology adopted by the Commission is largely based on the SRP.

Maintaining revenue caps will provide certainty and consistency to TNSPs and their customers. The building block CPI-X approach to regulation is designed to enable businesses to recover their efficient costs of operation as well as provide incentives for future cost reductions, consistent with the requirements of the NEL³².

The form of revenue cap proposed by the Commission will allow for reopening and pass-through events, and is therefore a form of hybrid or adjusting revenue cap.

The uniqueness of TNSPs' costs mean that the use of industry-wide benchmark approaches (such as DEA or TFP) to set efficient costs or expected efficiency improvements is not likely to be appropriate. However, the Commission would encourage the use of productivity indices to inform the determination of the efficient levels of forecast capital and operating expenditure. This is further discussed in Section 6.

The Commission considers that a commercial negotiation regime supported by an appropriate dispute resolution facility provides a cost effective means of determining the price and level of those services for which there is scope for contestable supply, more exclusive supply or negotiation with large users.

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³¹ Clause 6.2.3(c), NER

³² Section 35(3)(a) & (b), NEL

5. Regulatory Procedures

A key objective for the Commission is to ensure an appropriate balance between greater certainty and transparency of regulatory procedures and regulatory discretion for the AER. The Commission has aimed to increase certainty and transparency to reduce the risk of regulatory error without unnecessarily constraining the Regulator. To a significant degree the Commission has sought to codify regulatory procedures in relation to the extent of discretion and guidance for the AER in the following areas:

- the methodology by which revenue caps are determined;
- Propose-respond approach for the revenue determination process;
- the regulatory decision-making criteria;
- establishing information and cost allocation guidelines and procedures for amending AER Guidelines; and
- to further clarify the procedures for the revocation of a revenue cap.

This Section addresses these procedural issues in turn.

5.1. Direction and Guided Discretion

In a number of areas it is appropriate that the AER has discretion in determining various aspects of, and process for, economic regulation. Where the AER is given discretion under the Draft Rule, guidance for the exercise of that discretion is also provided. These include matters such as the design of incentive schemes and the Information and Cost Allocation Guidelines.

The key procedures are described in this Section.

5.1.1. Current Arrangements

The current Rules provide for a high degree of discretion, both to TNSPs in how they formulate their proposals for a revenue cap and to the AER in how it will determine a revenue cap. The Rules contain a range of layered and competing objectives and principles which the AER must seek to achieve in regulating TNSPs. The AER has considerable discretion in determining how these objectives and principles are to be reconciled or given precedence.

The AER's SRP has provided clarification of the regulatory approach the AER intends to adopt where issues have been left open by the Rules. However, the SRP is not a binding document.

5.1.2. Submissions

Generally, submissions called for greater prescription or guidance in the Rules and a reduction in the overall discretion that the AER is able to exercise³³. User groups did not support reducing the AER's level of discretion, though there was not strong support for increasing it either. There was a minority view that the Rules should include high level principles and provide the AER with discretion³⁴.

The AER is supportive of maintaining the current level of prescription currently embodied in the Rules, in concert with the SRP. In the AER's view, excessive prescription restricts flexibility and increases costs on businesses. The AER also believes the Rules must provide an appropriate level of flexibility, in part to accommodate future developments in regulatory thinking as well as the individual needs and circumstances of businesses.³⁵.

5.1.3. Proposed Rule

In summary the Draft Rule provides direction to the AER on:

- Form of regulation to be applied to Prescribed Transmission Services and Negotiated Transmission Services (as discussed in Section 4);
- Methodology for the calculation of the revenue cap for Prescribed Transmission Services (discussed in Section 6);
- The process by which disputes in relation to charges for Negotiated Transmission Services are to be resolved and the criteria to be applied (see Section 8);
- The steps in the Propose-respond process by which TNSPs make proposals and the AER assesses those proposals (discussed in Section 5.3); and
- Procedures for developing and amending AER Guidelines (dealing with information to be submitted with a TNSP's revenue cap proposal, the model to be used to calculate revenue caps, incentive regime mechanisms and cost allocation principles.

The Rule Proposal provides guided discretion in the following areas:

- Principles for the design of incentive schemes for standards of service and operating expenditure; and
- Information and Cost Allocation Guidelines and PTRM Model to be prepared by the AER in line with the Rules. A comprehensive list of Guidelines to be prepared can be found in Appendix 3.

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For example.; TEC p6; EnergyAustralia, p43; Origin Energy p5, NGF p3, TransGrid p 33.

³⁴ Ergon Energy, p1

³⁵ AER, pp3-5

5.1.4. Commission's Reasoning

The Commission believes that the policy intention of the NEM governance framework (which separated the Rule-making role from the compliance role) was to provide greater guidance in the Rules for the AER and for the AER to administer the Rules. The Rule Proposal reflects this delineation between rule making and rule administration.

Importantly, the Commission has taken into careful consideration the submissions for greater clarity, certainty and transparency in the Rules. This emerged as a consistent theme in many industry submissions.

The Commission is cognisant of the significant work and consultation undertaken by the AER in developing the SRP. The elevation of large parts of the SRP into the Rules is a means of achieving certainty and consistency for all stakeholders.

On the other hand it could be said that providing regulators with substantial degrees of discretion allows for innovation and development in regulatory practice. However, under the NEM governance framework, significant regulatory developments are more appropriately dealt with through a formal Rule change process which involves formal consultation and analysis processes that allows for involvement by all interested stakeholders.

There are areas in which it would be inappropriate to fix regulatory practice in statutory rules. In particular the Commission believes that the AER needs flexibility in determining what information should be submitted with TNSP revenue cap proposals, the form of incentive mechanisms for operational expenditure and performance that should be applied, cost allocation principles, the mechanics of rolling-forward the RAB and the form of PTRM adopted. In these areas the Rule Proposal provides for the AER to develop models and guidelines.

The Rule Proposal sets out requirements for the AER to comply with Transmission Guideline Procedures when it wishes to alter any of the Guidelines. The Procedures set out a transparent public consultation process, involving a draft and final decision with clear reasons given for its approach. This will help increase the predictability and certainty of the regulatory regime, without excessively hampering the AER when it considers that a change to a Guideline is required.

The Commission believes that the Rule Proposal provides a greater degree of direction and guidance about the regulatory principles and procedures for making revenue cap determinations. This is a feature of good regulatory design and will, over time, increase the predictability and consistency of regulatory decision making.

5.2. Information Requirements

Efficient and effective regulation of monopoly businesses requires the provision of accurate, timely and relevant information. The Commission is conscious of the need to balance the problem of information asymmetry with the administrative burden associated with providing information by TNSPs.

The AER may require information from a TNSP in a range of circumstances including to ensure that the AER has sufficient information upon which to make a revenue cap determination, to ensure compliance with a revenue cap determination to assess performance between regulatory determinations. The Commission has proposed Rules in respect of these issues.

5.2.1. Current Arrangements

The Rules are currently silent in relation to the information that a TNSP must submit to the AER as part of its proposal for a revenue cap determination.

However, the NEL and NER provide the AER with wide-ranging discretion to obtain information for regulatory purposes. The Rules require TNSPs to submit certified annual financial statements to the AER in the form and by a date determined by the AER³⁶. The current Rules also require the preparation of guidelines.

The ACCC released its Information Requirements Guidelines in June 2002, which set out information required from TNSPs to satisfy annual reporting requirements and revenue determination process. The Rules also contains confidentiality provisions.

5.2.2. Submissions

Submissions focused on information asymmetry and the ability of the AER to gather information. There was a general view that the current information gathering provisions in the Rules were extensive and sufficient for the AER's purposes³⁷, although some considered that the provisions could be refined³⁸. The implementation of a more robust and auditable information disclosure regime was raised by one submission³⁹.

Establishing an initial framework setting out information requirements and clarity about the how the information was to be used was also raised⁴⁰. There was also a view that the AER should not only rely on information provided by TNSPs but also use benchmarking⁴¹.

³⁶ Clause 6.2.5, NER

Ergon Energy, p20.; TransGrid, p37

³⁸ TNOs, p36;

Energy Users Association of Australia and Energy Action Group (EUAA), 31 January 2006, p7, 40

⁴⁰ EnergyAustralia, p48.

⁴¹ MEU, p20.

Some submissions also saw benefit in requiring the AER to issue an initial framework document for each transmission review setting out specific information requirements⁴². Others suggested that a generic set of information requirements should apply to all revenue cap determinations so that there was a consistency of approach between different determinations⁴³.

5.2.3. Proposed Rule

Consistent with the proposed regulatory procedures described in Section 5 and the clearer delineation of Prescribed Transmission Services and Negotiated Transmission Services, the Rule Proposal requires the AER to develop two Guidelines under the Rules. The Guidelines relate to information to be submitted with a TNSP Revenue Cap Proposal and Cost Allocation Principles. The documents that the AER will be required to prepare are listed in Appendix 3.

The Rule Proposal otherwise retains the current Rules which confer broad discretions on the AER in relation to the submission of annual accounts and other information with amendments relating to obtaining information regarding the Service Performance Incentive Scheme. The Scheme is discussed in Section 7.

5.2.4. Commission's Reasoning

The Commission wishes to achieve effective regulation by ensuring the AER has access to timely and accurate information from TNSPs. However, information provision needs to be balanced against the cost of providing this information by the TNSP. This cost is ultimately borne by the consumer.

Balancing the tension between information asymmetry and regulatory burden on TNSPs can be addressed somewhat by the establishment of guidelines for information requirements and cost allocation. The proposed Information and Cost Allocation Guidelines (see Appendix 3) are intended to allow the AER to collect information under the Rules in a transparent and certain process. The aim is to establish a consistent set of information requirements for revenue cap proposals and reduce the scope for ad hoc changes.

The Commission would welcome views on the appropriateness of these proposals. In particular, should there be greater guidance in the Rules in relation to the AER's general information gathering powers, consistent with the Commission's approach in other areas where the AER has discretion?

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⁴² TransGrid, p36.

⁴³ TEC, pp13-14.

Propose-respond Procedures

The Commission is required to develop Rules covering the procedures to be followed by the AER in exercising its regulatory functions⁴⁴. Increasing the clarity, certainty and transparency of regulatory procedures was strongly supported by stakeholders.

The existing regulatory procedures reflect, in practice, a Propose-respond type approach but with no formal requirements on either the TNSP or AER regarding the status of the TNSP's proposal. The Commission is proposing to prescribe a Propose-respond process in the Rule Proposal. This will also bring gas and electricity regulatory processes into closer alignment and improve the certainty and transparency of regulatory processes for revenue cap determinations.

5.3.1. **Current Arrangements**

The current Rules impose certain procedural requirements for transmission regulatory decisions. These include a requirement to publish a process and timetable for re-setting the revenue cap; provide parties with a reasonable opportunity to prepare and respond to the process; and reasonable accountability through transparency and public disclosure of regulatory processes. The AER must also publish the basis for its decisions.

The AER has published its process for regulatory determinations in Chapter 3 of the SRP. This includes an application by the TNSP; public consultation and submissions; a draft decision followed by additional consultation; and a final decision. However, this process is not binding on the AER, nor is the SRP itself.

5.3.2. **Submissions**

There was support for a Propose-respond process in submissions. It was seen to promote the NEM objective by reducing 'unjustified' regulatory interventions and improving the investment climate⁴⁵. Submissions also generally supported the Propose-respond process being Rules-based, and limiting the Regulator's ability to reject a TNSP's proposal⁴⁶. A key argument in favour of the Proposerespond process was that TNSPs know their requirements and are in the best position to make the opening proposal.

Several submissions supported a Propose-respond process⁴⁷ because it would provide greater certainty to the TNSPs as well as streamline the regulatory process. Associated with this was a benefit in requiring the AER to issue an initial framework document for each transmission review setting out specific

Item 17, Schedule 1, NEL

⁴⁵ TNOs, p46.

⁴⁶ Ergon Energy, p7 p18.; EnergyAustralia, p21.

EnergyAustralia, p48

information requirements⁴⁸. Some considered it more effective for an existing set of guidelines to be used rather than developing a new proposal at the beginning of each new revenue cap determination⁴⁹.

5.3.3. Proposed Rule

The Draft Rule contains a Propose-respond process which features a fixed 13 month timeframe and a clear consultation process. Associated with the Propose-respond process are requirements for TNSP's to prepare their proposals in a manner which complies with AER information guidelines and models.

The Propose-respond process is illustrated in Diagram B. A high level summary of the key stages of the Propose-respond process follows:

- TNSP submits to the AER a revenue proposal for prescribed transmission services and a proposed negotiation framework. The revenue proposal and the negotiation framework must comply with AER Guidelines.
- The application must be 13 months before the commencement of the next regulatory period.
- The AER conducts a preliminary assessment of the TNSP proposal. The AER assesses whether the TNSPs proposal complies with the AER's Guidelines.
- The AER must publish for consultation the TNSP's revenue proposal and negotiating framework as well as supporting information. The AER may publish an issues paper but must publish the proposed Negotiated Transmission Service Pricing Criteria for the TNSP.
- The AER makes its draft decision either approving or refusing to approve the revenue proposal and the proposed negotiation framework. The AER must call for submissions on its draft decision.
- The AER must set out the reasons for its draft decision as well as specifying the Negotiated Transmission Service Pricing Criteria. The AER is required to accept a TNSP's proposed forecast capital expenditure and operating expenditure where it is a reasonable estimate of its expenditure requirements having regard to a number of specified criteria.
- The AER must publish its draft decision and conduct a pre-determination conference to explain its decision. The TNSP may submit a revised revenue proposal or revised negotiation framework.
- The AER makes its final decision. The AER must approve a TNSP's proposal or revised proposal (following a draft decision) if:

⁴⁸ TransGrid, p36

⁴⁹ TEC, p14.

- the total revenue cap and MAR for each year have been determined in accordance with the AER's post-tax revenue model and the Rules; and
- forecast capital and operating expenditure are a reasonable estimate of the TNSP's expenditure requirements having regard to a number of specified criteria.
- The AER must approve the TNSP's proposed service performance incentive scheme and efficiency benefit sharing scheme parameters if the AER is satisfied that those parameters comply with the requirements of the relevant scheme published by the AER.
- The AER must approve the TNSP's proposed or resubmitted negotiation framework parameters for Negotiated Transmission Services if the AER is satisfied that the proposal complies with the Rules requirements.
- The AER must approve a TNSP's revised revenue proposal or negotiation framework if it contains the changes required by the AER in its draft decision, unless other changes have been made to the proposal or information provided.
- The AER must approve the length of a regulatory control period as proposed by the TNSP if it is five years.
- The AER's refusal to approve the revenue proposal will result in the substitution or amendment of the relevant values by the AER.

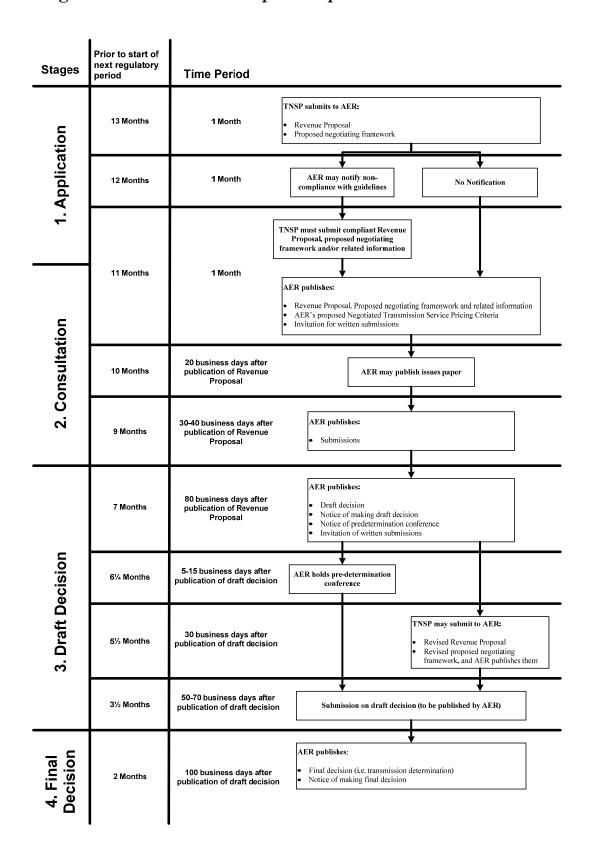
5.3.4. Commission's Reasoning

The Propose-respond process codifies the comparable regulatory practice under the SRP. The key reason for codifying a Propose-respond process is to provide certainty, transparency and timeliness of regulatory procedures. This will benefit all stakeholders in the regulatory process.

Transparent and timely processes reduce regulatory risk which is a key requirement for effective regulation. The fixed timetable will provide certainty about the dates for regulatory decisions knowing there is no scope for delays. The TNSPs will have an incentive to provide its best available information and the AER will be required to assess the proposals in a timely manner. This will improve the efficiency, and in the Commission's view, the quality of regulatory decisions.

The Commission considers the codification of such a process as a necessary evolution in the regulation of transmission networks. An added advantage is that it better aligns the processes for electricity and gas which will be of benefit to all stakeholders in regulatory processes.

Diagram B: Timeline for Propose-respond Procedures



5.4. Regulatory Decision Criteria

A key aspect of the Propose-respond process, as described in Section 5.3 is the regulatory decision criteria. The regulatory decision criteria provide the basis on which the AER decides whether it will accept or reject a TNSP's proposal. The Commission has taken into consideration a range of views, including recent regulatory thinking on this issue^{50 51}.

Consistent with its aim to provide regulatory certainty and transparency, the Commission proposes to make the criteria for the approval or rejection of a TNSP's revenue cap proposal explicit and transparent.

5.4.1. Current Arrangements

In practice the Regulator makes its decision only after it has had the benefit of the TNSP's proposal and submissions, expert reports, industry and public submissions, and its own analysis

In coming to its view on the appropriate amount of revenue to be earned by the TNSP, the Regulator considers the revenue needs by weighing up the objectives and principles in the Rules. However, the objectives and principles set out in the current Rules are conflicting, in many cases ambiguous and do not provide a complete framework and methodology for determining a revenue cap.

5.4.2. Submissions

Several submissions discussed the appropriate regulatory decision criteria in the context of the choice between the current approach and the reasonable range approach to determining the value of the WACC and/or the total revenue cap. The application of a reasonable range approach had support from some stakeholders.

Some user groups considered that the application of the reasonable range approach would unfairly result in higher prices and this would increase the amount of disputation about a regulatory determination (particularly over the methodology used to determine the range)⁵². Other submissions noted that the application of the reasonable range approach would increase⁵³ or reduce⁵⁴ regulatory certainty.

Productivity Commission (2001), Review of the National Access Regime, Inquiry Report, Report No. 17, http://www.pc.gov.au/inquiry/access/finalreport/access.pdf

Productivity Commission (2003), Review of the Gas Access Regime, Inquiry Report, No. 31, 11 June 2004 http://www.pc.gov.au/inquiry/gas/finalreport/gas2.pdf

⁵² MEU, p90, EUAA p34

⁵³ ENA, p12.

TransGrid p39.; MEU, p90.

5.4.3. Proposed Rule

The Commission has sought to codify (either in the Draft Rule or in the AER Models or Guidelines) the methodology by which a number of the components of the building block approach are determined. Where components are amenable to codification, the decision making criteria for the AER is simply whether the Rule or Model or Guidelines have been complied with. That is, in making a decision under the Rules in relation to these matters there is little if any scope for the exercise of discretion by the AER.

The areas in which the Commission has sought to codify the methodology by which a number of the components of the building block approach are determined include:

- The form of Post-Tax Revenue Model (to be published by the AER after consultation);
- The opening value of the RAB (which are listed in the Draft Rules) and the model for rolling forward and indexation of the RAB to be developed by the AER;
- The value of the WACC;
- Cost of corporate income tax;
- Depreciation; and
- Revenue increment or decrement due to efficiency sharing benefits scheme and performance incentive scheme (to be published by AER after consultation).

The Rule Proposal provides that the AER has the discretion to review capital expenditure incurred in the preceding regulatory period before it is rolled into the RAB. The Draft Rule specifies the matters the AER is to have regard to in exercising that discretion. See the further discussion of this issue in Section 6.

The Rule Proposal also provides that the AER must accept a TNSP's proposed forecast capital and operating expenditure if the proposed expenditure is a 'reasonable estimate' of the TNSP's requirements having regard to a number of specified criteria.

In coming to its view as to whether the forecast capital and operating expenditure proposal is reasonable, the AER considers the extent to which the proposal reflects reasonably efficient costs. The AER will be required to make its assessments by considering the NEL objectives for transmission regulation and other relevant criteria.

The AER would rely on a range of data sources in coming to its view including, for example, expert reports it has commissioned, industry and public submissions and other internal and external research and analysis it may choose to draw upon.

If the AER is of the view that the TNSP's proposal is not a reasonable estimate, the AER may reject the TNSP's proposal and substitute its own estimate for forecast capital and operating expenditure. In doing so, the AER is obliged to provide reasons why it considers the TNSP's proposal is not a reasonable estimate and why it considers its own estimate is reasonable.

5.4.4. Commission's Reasoning

Under the current Rules, the criteria for making regulatory decisions have not always been clear. Further, there has been criticism levelled at the degree of 'precision' that regulators seem to be attempting to achieve when making regulatory decisions⁵⁵. It has been suggested that the greater degree of precision sought by regulators the greater the risk of regulatory error.

However, the Commission has not been persuaded about the practicality of the 'reasonable range' approach suggested by some stakeholders in determining the value of the WACC or the value of the revenue cap.

In establishing a framework for regulatory decision criteria, the Commission is seeking to reduce the scope for regulatory risk in a number of areas. It has been suggested that a high level of regulatory discretion increases the risk of more drawn out processes. The Commission considers that the combination of the codification in the Draft Rule of the building block revenue cap methodology, adoption of a reasonable estimate approach to forecast capital and operating expenditure along with the Propose-respond process will lessen this risk.

However, the AER requires guided discretion to assess and determine forecasts that encourage efficiency through least cost operations and timely and prudent investment in capital. The Commission considers that the reasonable estimate approach will achieve a balance between the need for predictability in decision making and discretion. In assessing the reasonableness of estimates the AER will be guided by the NEM objective and s. 16(2) of the NEL.

By establishing the reasonable estimate approach, the Commission acknowledges the inexact nature of estimating forecasts for operating and capital costs that are incurred years after being determined during a regulatory review. Providing clarity on the decision criteria will allow the TNSP to better target the information they provide to the AER.

5.5. Cost Allocation Method

The Rule Proposal seeks to provide clarity in relation to which services are the subject of traditional economic regulation and which are to be provided under a commercial negotiation framework or are to be completely unregulated.

Exports and Infrastructure Taskforce (2005), Australia's Export Infrastructure, Report to the Prime Minister.

The Commission is keen to encourage network users to use the commercial negotiation framework to secure transmission services. This requires a clear basis for the allocation of costs between services that are subject to the revenue cap and those that are not. Therefore the Commission recognises the need to develop a cost allocation methodology. The Draft Rule includes the development of clear Cost Allocation Guidelines by the AER with TNSPs submitting a cost allocation methodology to the AER for approval.

The Commission has considered the issue of the appropriate level of guidance to be included in the Draft Rule in relation to cost allocation in order to provide a robust platform for this approach.

5.5.1. Current Arrangements

The current Rules do not contain any clear requirements in relation to the allocation of the cost of assets between different services, and particularly between prescribed services and non-prescribed services. Under the AER's Ring-fencing Guidelines, the cost allocation method between different types of services is effectively carried out by the TNSP and relies on the TNSP allocating costs on an appropriate basis.

The current Rules contain the cost allocation principles based on asset type using the Cost Reflective Network Pricing (CRNP) Model or modified CRNP in the Part C of the Rules. However, the CRNP Model is directed to allocating costs between different classes of users, partially on a locational basis, rather than allocating costs between Prescribed Services and other services.

5.5.2. Submissions

Only two stakeholder submissions directly addressed the issue of cost allocation. One called for increased clarity with regard to the way revenue is allocated in the development of tariffs⁵⁶, and for the AER to examine actual tariffs to ensure they accurately reflect costs. The other⁵⁷ stated that information requirements and accounting guidelines should not pre-empt service providers' preferred method of cost allocation. However, submissions more generally called for greater clarity with regard to the AER's information requirements.

5.5.3. Proposed Rule

The Draft Rule incorporates the following provisions in relation to cost allocation:

 The AER must, by 31 December 2006, make Cost Allocation Guidelines relating to the preparation by a TNSP of its cost allocation methodology. These Guidelines are to be developed subject to the consultation procedure set out in the Rules;

⁵⁶ MEU, p.86

⁵⁷ AGL, 28 November 2005, p.5

- Each TNSP must submit to the AER for its approval its cost allocation methodology, in line with the principles in the Rules and the Cost Allocation Guidelines issued by the AER;
- The cost allocation methodology submitted by a TNSP must set out the detailed principles and policies used by a TNSP to allocate costs between different categories of service;
- The following principles apply to cost allocation methodologies:
 - Where costs are directly attributable to a particular category of transmission service, costs must be allocated to that service; and
 - Where costs are not directly attributable to a particular service (i.e., joint or common costs), they should be allocated to that service:
 - (a) on a causation basis; or
 - (b) where a causation basis cannot be established without undue cost and effort, on the basis of a well-accepted cost allocation methodology;
- The TNSP may amend its cost allocation methodology from time to time;
 and
- A TNSP must comply with the cost allocation methodology that has been approved by the AER.
- Only capital and operating expenditures which are appropriately allocated to Prescribed Services under the cost allocation methodology can be included in the building blocks used to determine the revenue cap.

5.5.4. Commission's Reasoning

The Commission believes that a robust cost allocation methodology is part of the necessary framework for effective commercial negotiations in relation to Negotiated Transmission Services. It also guards against cost shifting by the TNSP between regulated and Negotiated Transmission Services. Such cost shifting would give the TNSP a competitive advantage in the provision of services that may be contestable (since not all of the costs of the competitive service would be recovered from that service).

The building block revenue requirement relates to the cost associated with assets that provide shared transmission services. Many of the costs of providing transmission services are fixed and common costs. These costs contribute to the provision of both Prescribed and Negotiated Transmission Services. Therefore it is necessary to have a transparent process by which assets are allocated to categories of service, in order to determine the costs to be taken into account in regulating prescribed services and to prevent cross-subsidies.

This need for robust cost allocation methodologies is common in the economic regulation of network industries. In the telecommunications sector, the ACCC

has issued the Telecommunications Industry Regulatory Accounting Framework, which sets out detailed cost allocation requirements.

The Draft Rule sets out general criteria that should be adopted by the AER in developing its Cost Allocation Guidelines.

The Draft Rule also requires the TNSP to develop and publish a cost allocation methodology, in line with these principles and cost allocation guidelines to be developed by the AER. The TNSP's cost allocation methodology must also be consistent with the Transmission Ring-fencing Guidelines, as prepared by the AER in accordance with the existing Rules⁵⁸. The AER is to approve the TNSP's cost allocation methodology. The TNSP is to adhere to this cost allocation methodology in submitting its Revenue Application to the AER.

5.6. Revocation of a Revenue Cap

The Commission considered whether the criteria set out in the current Rules for when a revenue determination may be revoked should be modified and, if so, in what manner. Apart from clarification of some of the criteria, the Commission's proposal remains unchanged from the current Rules, with one exception designed to improve certainty. The Rule Proposal involves the removal of the criteria relating to a change in ownership of a TNSP.

5.6.1. Current Arrangements

The current Rules set out the circumstances in which a revenue determination can be revoked by the AER during a regulatory period⁵⁹. Where a revenue cap determination has been revoked, the current Rules allow the AER to make a new revenue cap determination, to apply for the remainder of the period ⁶⁰.

5.6.2. Submissions

The question of when a revenue cap determination may be revoked was not explicitly canvassed in the Issues Paper, and was not generally raised in submissions.

5.6.3. Proposed Rule

The Draft Rule provides that:

- The AER may revoke a revenue cap determination in the following circumstances:
 - Where the revenue cap determination was set on the basis of false or materially misleading information provided to the AER; and

⁵⁸ Clause 6.10.2(a), NER

⁵⁹ Clause 6.2.4(d), NER

⁶⁰ Clause 6.2.4 (e), NER

- Where there was a material error in the setting of the revenue cap determination and the prior written consent of the relevant Transmission Service Provider has been obtained by the AER;
- Where the AER revokes a revenue cap determination, then it must make
 a new revenue cap determination in substitution for the revoked
 determination, to apply for the remainder of the regulatory period; and
- Where the revocation is as a result of a material error, the new revenue cap determination made by the AER must only vary from the revoked revenue cap determination to the extent necessary to correct the relevant error.

5.6.4. Commission's Reasoning

The circumstances under which the AER may revoke and remake a revenue cap determination are a key part of the overall regulatory approach for transmission. These circumstances should be clearly set out in the Rules, in order to increase the certainty and transparency associated with the regulatory regime, and to maintain the 'incentives' under an incentive regime.

The Commission considers that the current provisions in relation to revocation in the Rules adequately capture the circumstances under which a revenue determination could be revoked and remade. The Rule Proposal therefore reflects the current Rules, with one exception. Currently the Rules provide for a revenue cap determination to be revoked following a substantial change of ownership of network assets. The Commission considers that a core principle of good regulation is that it is neutral with respect to ownership. The Commission has therefore not included this provision in the Rule Proposal.

The Rule Proposal also clarifies that, where a revenue cap determination is revoked as a result of a material error, the new revenue cap determination made by the AER can only vary from the original determination by the amount necessary to correct the error. In contrast, where the revocation is as a result of the provision of misleading information by the TNSP, the new revenue cap determination is not limited to solely adjusting for the impact of the misleading information. The Commission considers the broader scope of the redetermination to be appropriate in these circumstances, as it provides additional incentives on the TNSP to ensure that they do not provide misleading information.

The Commission would welcome submissions on whether the current drafting in relation to revocation provisions is sufficiently clear. In particular, if there would be benefit in further defining what constitutes a 'material error'.

The Commission notes that the current Rules allow the AER to revoke a determination in relation to a material error only where it has obtained the written consent of affected parties. This provision is very broad and is likely to be unworkable in practice. The Commission therefore proposes to modify the provision to refer only to the written consent of the relevant TNSP. However, the Commission is concerned that the requirement to obtain the written consent

of the TNSP may be inappropriate, since the TNSP may be reluctant to give such consent where the material error is to its advantage.

The Commission would therefore welcome views from market participants on whether this requirement should be modified to a requirement on the AER to only consult with the affected TNSP.

The Commission has separately allowed in the Draft Rule for a revenue cap determination to be reopened where a TNSP considers that it needs to undertake additional capital expenditure during a regulatory period in order to meet regulatory obligations or where that expenditure has satisfied the Regulatory Test, and where that expenditure cannot be accommodated within the capital expenditure forecast included in the revenue cap. This is discussed separately in Section 6.

6. Regulated Revenue

6.1. Regulated Revenue for Prescribed Transmission Services

The Rule Proposal provides a complete method for the determining a revenue cap for Prescribed Transmission Services. The principles for calculating the parameters of the revenue cap are to be included in the Rules and will be binding.

The Commission has adopted a revenue cap based on the building block approach to regulating revenue for Prescribed Transmission Services. The Commission acknowledges that the ACCC undertook an extensive consultation program as part of its development of the SRP and has taken this into consideration. The Commission has carefully considered the extent to which the principles and approach in the SRP should be elevated to the Rules and whether any of the elements of that approach require modification. The Rule Proposal is substantially based upon the SRP.

Where the SRP does not set out a complete methodology for determining a revenue cap, the Commission has sought to supplement it with guiding principles in the Draft Rule. The Commission believes this will enhance the certainty and transparency of regulatory decision making.

This will improve the transparency of regulatory decisions for the benefit of all stakeholders. Over time, the economic regulation of TNSPs will become consistent and predictable, thereby creating a stable and more certain investment environment. This stability and certainty will support sustaining security and reliability for all consumers.

6.1.1. Regulatory Asset Base and Capital Expenditure

The regulatory treatment of historic and forecast capital expenditure is crucial in influencing investment certainty. The Rule Proposal in relation to the RAB and capital expenditure cover three main areas:

- 1. The mechanics of the roll-forward of the RAB from one regulatory period to the next;
- 2. The treatment of actual past capital expenditure; and
- 3. The forecast of capital expenditure for the new regulatory period.

The Commission has provided for greater direction in the Rule Proposal on the methodology for determining the RAB through a lock-in approach and a consequent roll-forward of the RAB. The Commission recognises that the current open-ended provisions in the Rules, which specifically allow for

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optimisation, increase the uncertainty in the regulatory regime, which may in turn act as a disincentive for investment.

The Commission has considered the level of guidance the AER should be given in assessing forecast capital expenditure submitted by the TNSPs and the circumstances under which the AER should be able to reject the forecasts. In proposing to lock-in the value of the RAB for each TNSP in the Rules, the Commission is mindful of the need to ensure the accuracy of these values. The Commission is seeking further views on the opening RAB values and, in particular, whether the values reflect prescribed services or whether they also contain values for Negotiated Transmission Services.

6.1.1.1. Current Arrangements

The current Rules provide a relatively wide degree of discretion for the AER in determining the opening asset base. Importantly, the current Rules allow for the subsequent revaluation of assets, once they have entered the asset base⁶¹.

The SRP states that the AER's preferred approach to asset valuation is to lock-in the value of the opening asset base of the prior regulatory period, but adjust for inflation and depreciation⁶². There are currently no specific Rules relating to the establishing of an initial asset base for MNSPs who convert to regulated status.

The SRP provides for the AER to roll-in the actual value of capital expenditure, subject to a review that such expenditure complies with the requirements of the Rules⁶³. However, the SRP does not provide any guidance on how the AER will determine whether actual capital expenditure complies with the Rules.

Under the SRP, projects which are large and uncertain can be identified at the time of a regulatory determination as 'excluded projects'⁶⁴. The capital expenditure associated with such projects is not incorporated in the revenue cap. Where a TNSP needs to incur capital expenditure in relation to an excluded project during a regulatory period, the AER will determine the revenue requirement associated with that project, and the required revenue in the following regulatory period will be adjusted to accommodate this amount.

6.1.1.2. Submissions

There was general support from industry for the lock-in approach to determining the opening RAB, as set out in the SRP, rather than a revaluation approach⁶⁵. A majority view was that the lock-in approach would reduce TNSP uncertainty.

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Clause 6.2.3(d)(4)(iv), NER

⁶² SRP section 4.2

⁶³ SRP background paper, December 2003p.55

⁶⁴ Ibid., pp.57-60

ENA, p8.; Ergon Energy, p13.; TransGrid, p23. VENCorp, 18 November 2005, p2;

The majority of submissions supported the assessment of capital expenditure on an ex ante basis⁶⁶. However, several submissions raised concerns with the current ex ante arrangements and recommended more prescription in how forecast capital expenditure is to be assessed and when and how ex post evaluation of projects will be applied⁶⁷.

6.1.1.3. Proposed Rule

The Commission's Rule Proposal incorporates the following approach:

- A requirement that the AER adopt a roll-forward approach in determining the opening RAB;
- The specification of key principles to be adopted in undertaking the rollforward:
 - The value of the RAB for each TNSP as at the opening of the most recent regulatory period is to be locked in, with no scope for revaluation, except to adjust for the use of estimated rather than actual capital expenditure at the time of the last regulatory determination; and
 - Actual expenditure which is assessed by the AER to be prudent and
 efficient must be rolled-into the RAB, regardless of whether that
 expenditure is above or below forecast capital expenditure for that
 regulatory period;
- In limited circumstances, the RAB may be adjusted in accordance with the incentive mechanisms⁶⁸;
- The AER is required under the Rules to determine and publish a model of the roll-forward of the RAB. The AER may revise this model at any time, subject to complying with the consultation procedures set out in the Rules;
- The Rules set out criteria that the AER is to have regard to in assessing the prudency and efficiency of investment;
- The Rules set out general principles that the AER is to apply in determining the opening asset base for an MNSP that converts to regulated status; and

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AGL, p2.; AER, pp7-8.; Energy Australia, p27.; Ergon Energy, p10.; TransGrid, pp18-19.; PIAC, p3 VENCorp p2, Origin Energy pp3-4

⁶⁷ EnergyAustralia, pp27-28.; TransGrid, pp18-19,22; TNOs,pp34-35.

In very limited and confined circumstances the potential commercial stranding incentives provide for adjustments to the RAB.

• In relation to determining forecasts of future capital expenditure, the Rules provide for a presumptive approval of capital expenditure for reliability augmentations, projects that are required to meet regulatory obligations and projects that have satisfied the Regulatory Test.

Under the Rule Proposal a TNSP's revenue proposal must include a forecast of capital expenditure for each year of the regulatory period which the TNSP considers reasonably meets its requirements to:

- Efficiently meet expected demand for Prescribed Transmission Services over the period;
- Comply with all regulatory obligations;
- Maintain the quality, reliability and security of supply of prescribed transmission services; and
- Maintain the quality, reliability and security of supply of the transmission system through the supply of transmission services.

The AER must accept the forecasts (subject to meeting a reasonable estimate criterion) in a number of circumstances including:

- Adherence to the principles and policies in Cost Allocation Methodology for TNSPs;
- Compliance to the Guidelines (relating to information) in relation to revenue proposal (Refer to Appendix 3);
- If the identified project expenditure is a reliability augmentation; required for regulatory obligations; or passes the Regulatory Test. (These factors are subject to the following requirement); and
- If the AER, determines that the forecasts are reasonable. In making this determination, the AER is to take into consideration a range of issues including reasonable estimates of benchmark expenditure.

The Rule Proposal provides a complete framework for delineation between capital costs incurred in supplying Prescribed Transmission Services and Negotiated Transmission Services by providing that:

- Approved forecast capital expenditure should only be in relation to Prescribed Services in accordance with the cost allocation methodology;
- Only capital expenditure incurred in the preceding period in relation to Prescribed Services as per the Cost Allocation should be rolled into the RAB;
- Costs which have not been included in the RAB (including because they
 were previously allocated to Negotiated Transmission Services under the
 Cost Allocation Methodology) can be incorporated in the RAB in the
 future where changes in circumstances are such that they become

- appropriately allocated to the RAB under the Cost Allocation Methodology;
- Costs in the RAB can not, in future, be allocated to Negotiated Service charges; and
- Where costs would otherwise be allocated under the Cost Allocation Methodology to Negotiated Transmission Services but have historically been in the RAB due to arrangements prior to 16 February 2006 between TNSPs and specific end-users (where the Excluded Services charges paid by those users did not cover all or part of those costs – notwithstanding that those costs were incurred in part or in whole in supplying these Excluded Services) those costs may continue to be in the RAB and recovered through charges for Prescribed Services.

6.1.1.4. Commission's Reasoning

Determination of the RAB

In relation to the determination of the RAB, the Commission agrees with the majority of submissions that a higher level of guidance should be included in the Rules in order to increase the level of investment certainty. The current provision in the Rules for periodic optimisation reduces the certainty of the regulatory regime, given the lock-in approach set out in the SRP.

The potential for periodic optimisation of assets raises uncertainty, which in turn is likely to dampen incentives to invest. The periodic optimisation approach is also information intensive and subjective. Arguments in favour of periodic optimisation of the RAB typically focus on the incentives for efficient investment provided under such an approach. However, the strength of incentives for efficiency depends on the extent of clarity around when/if assets will be optimised.

The Commission does not support periodic optimisation of the RAB, for the reasons given above. The Draft Rule therefore codifies the current lock-in approach in the SRP to determining the RAB, with additional guidance on the criteria to be adopted in undertaking any prudency review of actual expenditure⁶⁹.

The starting point for the lock-in of the RAB is the opening asset base as already determined in the current regulatory determinations applying to the TNSPs. The dollar values of these initial RABs are set out in the Draft Rule for clarity (Appendix 4). The Commission has taken these values from the values set out in the existing determinations, ⁷⁰ and has not made its own assessment of the RABs

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The Draft Rule also propose that depreciation not be incorporated as part of the incentive regime applied to capital expenditure, as discussed later in this section which means that the operation of the roll-forward would not be exactly the same as currently described in the SRP.

The exception is Murraylink, where the value of the opening RAB as set out in the ACCC's determination was subsequently modified by agreement between the ACCC and MTC, see http://www.aer.gov.au/content/item.phtml?itemId=661230&nodeId=file42ba26f01a147&fn=Letter%20revocation%20and%20substitution%20(7%20April%202004).pdf

for each TNSP. The Draft Rule requires these RAB values to be adopted for the purposes of the roll-forward. The exception is where these RAB figures have been based on an estimate of capital expenditure, rather than actual capital expenditure, then at the time of the next revenue cap determination they should be adjusted to reflect actual capital expenditure, and to remove any benefit/penalty associated with the return on capital associated with the difference between actual and estimated expenditure ⁷¹.

The Commission understands that the opening asset base as already determined in the current regulatory determinations applying to the TNSPs are not intended to contain costs which are recovered through charges for Negotiated Services. However, the Commission has not undertaken a review of the values of the RABs to independently assess whether this is the case. Given that the Commission intends that only shared network costs are included in the RAB and are recovered through charges for Prescribed Transmission Services in the future, it is concerned that TNSPs are not able to double count costs in the future.

Consequently, the Commission wishes specifically to receive submissions in relation to the question of whether there are costs currently included in the TNSPs' RABs which should be allocated to Negotiated Transmission Services and revenues in respect of those costs are currently being recovered through negotiated or legacy arrangements with individual users.

For any new TNSPs (excepting those which are MNSPs converting to regulated status), the opening asset base is to be the prudent and efficient value of the assets used to provide the prescribed transmission services, as determined by the AER having regard to the matters set out in the Rules.

Principles to be applied in rolling-forward the RAB

The Draft Rule sets out a number of high level principles that are to be applied in rolling-forward the asset base. However, it does not comprehensively prescribe the methodology to be adopted for the roll-forward. Rather, the Draft Rule requires the AER to develop and publish a model of the roll-forward, consistent with the principles set out in the Rules and subject to consultation. This model must then be applied by the AER in making a revenue cap determination. The Commission considers this an appropriate balance between providing greater clarity in the Rules on methodology, whilst providing flexibility for the regulator, in consultation, to determine the appropriate mechanics.

As part of the roll-forward of the RAB, the Draft Rule requires the AER to adjust the RAB to reflect outturn inflation. However, under the post-tax nominal

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This approach is consistent with the general principles set out in the Draft Rule (6.2.3(c)(4)(iii) and (iv)) that, where information on actual capital expenditure is unavailable at the time of the regulatory determination (typically the last year of the regulatory period), an estimate of expenditure should be used, and there should be a subsequent adjustment in undertaking the roll-forward in the subsequent regulatory period. The removal of any benefit or penalty associated with differences between estimated and actual values is intended to remove any adverse incentives in relation to the estimation process.

framework, TNSPs are compensated for inflation via a nominal return on capital. In order to ensure that the TNSPs are not over-compensated for inflation, the impact of the indexation of the RAB needs to be removed in calculating the building block revenue requirement. This is allowed for in the Rule Proposal and reflects current AER practice. The Commission notes that currently the AER combines depreciation and indexation of the RAB into what it terms 'economic depreciation'.

The Draft Rule requires the roll-forward to take account of actual, rather than forecast, capital expenditure, but also give the AER discretion to determine whether actual capital expenditure was prudent and efficient. The Draft Rule does not mandate the AER to conduct a prudency and efficiency review but when the AER elects to do so it must have regard to the criteria specified in the Rules. The SRP also allows for a prudency review, but does not set out the criteria that the AER will adopt in undertaking that review. This increases uncertainty and dampens incentives to invest.

The Draft Rule therefore sets out criteria which the AER must adopt in assessing whether actual investment is prudent and efficient. These criteria relate to whether the Regulatory Test was applied by the TNSP (and, if so, whether the proposed project satisfied the Regulatory Test), whether the TNSP undertook the project in a manner consistent with good business practice and the desirability of minimising investment uncertainty for the TNSPs, whilst at the same time providing incentives to avoid undertaking inefficient capital expenditure.

Importantly, the Draft Rule does not require that the value of the project as included in the Regulatory Test be included as the value of the project that is to be taken by the AER as being efficient. There are a number of reasons why the actual cost incurred by the TNSP may differ from the estimated project cost used by the TNSP at the time at which it applied the Regulatory Test, and which do not imply that the actual cost incurred is then imprudent. The Regulatory Test needs to be applied before the TNSP puts the contracts to construct that project out to tender, and usually before the TNSP undertakes the Environmental Impact Statement (EIS) associated with the project. Both the tendering of contracts, and changes to the project arising out of the EIS process, may impact on the project cost.

The Draft Rule also requires that the assessment of the prudency and efficiency of investment needs to take into account information that was available to the TNSP at the time the investment decision was made. This is to avoid opening up the TNSP to unnecessary risk that its actual investment costs will not be rolled into the RAB, where later information comes to hand or expected market developments do not materialise. This principle means that the Regulatory Test is not to be re-applied in assessing the prudency of investment.

Finally, the Draft Rule provides for capital expenditure incurred in an earlier period, but not included in the RAB, to be rolled into the RAB in a subsequent regulatory period, under two circumstances:

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- 1. where that capital expenditure was previously determined by the AER not to be prudent and efficient, but is subsequently determined by the AER to be prudent and efficient (eg, as a result of increased demand); or
- 2. where that capital expenditure was previously used to provide Negotiated Transmission Services, but has now become part of the shared transmission network used to provide Prescribed Transmission Services such capital expenditure can be included in the RAB only to the extent that the AER determines to be prudent and efficient and is appropriately allocated to those services under the AER approved Cost Allocation Methodology.

The Commission notes that the proposal in (1) is similar to the 'speculative investment' provisions in the Gas Code.

The proposal in (2) recognises that the classification of assets in relation to either Negotiated or Prescribed service may change over time, as the network changes. In particular, assets that were previously dedicated to one user may become part of the shared network, as the transmission system becomes augmented. Where this occurs, it is appropriate for those assets to be included in the RAB so that their cost is recovered from all users.

The converse has not been allowed for in the Draft Rule, i.e., assets cannot be reclassified and taken out of the RAB from Prescribed Services to allocate then to Negotiated Transmission Services. The Commission recognises that assets that were once used as part of the shared network may over time become dedicated to one user, as demand patterns change. However, given that the user's locational decision has already been made, there is nothing to be gained by providing a price signal to that user via a negotiated charge, and requiring that user to pay for the entire cost of the asset, when it had not previously been doing so, would increase investment risk for the user.

Rules relating to capital expenditure forecasts

The Draft Rule includes provisions relating to the derivation of forecasts of capital expenditure over the regulatory period. In particular the Draft Rule provides for the presumptive approval of capital expenditure for projects that are either reliability augmentations, required in order to meet regulatory obligations or are projects that have passed the Regulatory Test⁷². However, all expenditure forecasts, both for these categories of projects and others, are subject to review by the AER. The Draft Rule sets out the factors that the AER is required to take into account in assessing the forecasts. These factors include reasonable estimates of the benchmark capital expenditure that would be incurred by an efficient TNSP. As discussed in Section 4 general benchmarking may be of limited applicability to the overall regulatory approach applied to TNSPs.

The Commission notes that not all proposed reliability augmentation may have been subject to the regulatory test at the time of a revenue determination, particularly those required towards the end of the forthcoming regulatory period.

However, the use of benchmarking can be a useful guide to efficient capital expenditure for particular categories of assets, eg, substation costs.

Cost Allocation of RAB Between Types of Services

The Commission's understanding is that the RAB established for each TNSP reflects only those assets that provide prescribed services. Where assets are used to provide contestable services, or non-contestable services under a negotiated contractual arrangement, these assets are not included in the RAB.

Under Part 6C of the Rules, the annual average revenue requirement (AARR) of the TNSP is to be allocated between different services in determining transmission prices. The AARR is an amount that is not to exceed the MAR,⁷³ as determined by the AER in accordance with the Rules. The Rules state that the AARR is to be allocated between entry services, exit services, transmission use of system services and common services⁷⁴. However, it is the Commission's understanding that the entry and exit services referred to are only those services for which there is no negotiated connection agreement in place, and where the value of the associated assets is therefore included in the RAB⁷⁵.

The value of connection assets for which there is a negotiated connection agreement in place is not included in the RAB, and the revenue from those connection agreements is not included in the AARR. Similarly, the Rules state that generator access and MNSP access charges do not form part of the AARR⁷⁶. and all contestable assets are also outside of the revenue cap⁷⁷ (and therefore the RAB).

Moving forward, the approach in the Rule Proposal is to clearly delineate the scope of Prescribed Transmission Services covered by the revenue cap. The RAB should only include the value of assets associated with the provision of these services consistent with the Cost Allocation Principles published by the AER and the Cost Allocation Methodologies discussed in Section 5.

6.1.2. Return on Capital

The key issue that the Commission has considered in relation to the return on capital is how to provide increased certainty and an appropriate environment to encourage future investment. In particular, the Commission is proposing that the use of the Capital Asset Pricing Model (CAPM) be elevated to the Rules. It has also concluded that the value of key components of the WACC should be set out in the Rules, and that a five-yearly review of these values be undertaken, with a

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Clause 6.3 NER

⁷⁴ Clause 6.3.1 and Schedule 6.2 NER

See for example Transend Transmission Pricing Policy, Issue V3.0, October 2005, p.6

⁷⁶ Clause 6.5.3(b) NER

⁷⁷ Clause 6.2.4(f) NER

requirement for those values to then be applied to all regulatory reviews, in order to provide greater certainty.

The Commission has decided that a post-tax approach should continue to be adopted in calculating the WACC (and for financial modeling in general), and in the interests of certainty and stability, be specified in the Draft Rule.

6.1.2.1. Current Arrangements

The current Rules require that the AER must take into account the weighted average cost of capital of the TNSP, having regard to the risk adjusted cash flow rate of return required by investors in commercial enterprises facing similar business risks⁷⁸. They also require that the AER have regard to the need to provide a 'fair and reasonable' risk-adjusted cash flow rate of return,⁷⁹ and that the benchmark returns are consistent with the method of valuation of new assets and revaluation, if any, of existing assets⁸⁰.

The SRP details the AER's approach to calculating an appropriate rate of return. The SRP sets out the formula the AER proposes to use to calculate the WACC, which is a nominal, post-tax vanilla WACC. The SRP also states that the AER intends to continue using the CAPM model to estimate the cost of equity, and establishes the value of the parameters to be adopted in the model, or the methodology to be used in determining the value of parameters.

6.1.2.2. Submissions

Submissions focused on the level of prescription in the Rules with regard to the methodology and assumptions (to calculate the cost of capital) rather than the inclusion of particular parameter values in the Rules⁸¹. Other submissions noted that the Rules provide detailed guidance to the AER in relation to how the regulatory return is to be set and that the SRP should be deemed the original guideline for the input assumptions and methodology⁸². A number of submissions highlighted that prescribing WACC inputs reduces the flexibility of the regulator, such as its ability to respond to new information⁸³ or to undertake a benchmarking exercise of the WACC⁸⁴.

⁷⁸ Clause 6.2.4(c)(4), NER

⁷⁹ Clauses 6.2.3(d)(4) and 6.2.4(c)(5), NER

⁸⁰ Clause 6.2.3(d)(4)(v), NER

⁸¹ AGL p3

⁸² TNOs, pp39-40.

Origin Energy, p5

⁸⁴ MEU, p.8

6.1.2.3. Proposed Rule

The Draft Rule:

- requires the AER to determine the cost of capital using the weighted average cost of capital on a nominal post-tax basis, and specify the formula to be adopted by the AER;
- requires the AER to measure the required return on equity using the CAPM;
- enshrines the principles that the rate of return should reflect the return required by investors in a commercial enterprise with a similar nature and degree of systematic risk as that faced by the TNSP, and that it should be established by reference to parameters applicable to a benchmark efficient TNSP and not the individual circumstances of a particular TNSP;
- sets out the initial methodology/values of specified parameters that are to be adopted. These are to apply for all AER determinations for the five years following the introduction of the Rules; and
- requires the review of the parameters (and associated methodologies, where relevant) by the AER every five years, subject to a consultation process. The revised parameters are to then apply to all AER decisions for the next five year period.

6.1.2.4. Commission's Reasoning

The Commission considers that increased guidance in the Rules for the calculation of the rate of return would increase certainty and thereby the long term interest of consumers by ensuring an appropriate level of investment. It notes also that there are limitations in the availability of market evidence which would support a change to the value of a number of the parameters used in the CAPM model. In these circumstances review of these WACC parameters in each regulatory determination process has little benefit and simply contributes to uncertainty about the return on past investments.

The Commission also recognises that the rate of return has been subject to considerable debate in recent years, culminating in the approach set out in the SRP. The Commission has therefore reflected the current SRP approach in the Rule Proposal.

The Draft Rule requires the AER to adopt a post-tax, nominal WACC using the CAPM. The post-tax nominal model reflects current AER practice. The Commission notes that the post-tax approach addresses concerns regarding over-compensation for tax in the early years of asset life, due to accelerated depreciation provisions for tax purposes which continue to apply to some TNSP assets.

The Commission notes that as part of the convergence of energy sector regulation, the convergence in modelling approach across different energy businesses would improve the ability to compare returns between different regulatory regimes. All of the TNSPs and the gas transmission businesses, as well as gas and electricity distribution businesses in Queensland, are currently regulated on a post-tax nominal basis. Regulators in other jurisdictions have adopted a mixture of pre-tax and real approaches. The Commission therefore does not consider that changing the basis on which electricity transmission is regulated from a post-tax nominal approach would assist the overall regulatory convergence process for the energy sector.

The Commission recognises that regulatory practice and financial theory in this area is likely to evolve. Therefore parameters to be used in calculating the return on capital are set in the short term providing greater short-term stability, while being capable of review in the medium and longer-term.

However, the Commission is also aware that there is no single answer, given the diversity of analysis of market parameters of the CAPM elements. In these circumstances, extensive and continuing debate on the appropriate WACC parameters simply increases uncertainty and undermines incentives to invest. In order to improve stability and certainty, the Commission sees merit in limiting the frequency with which the values of WACC parameters are revisited. The Rule Proposal therefore locks-in a set of parameter values (and associated methodologies) for five years, and requires these values to be used for all TNSP revenue determinations within that five year period. There is then a requirement in the Rule Proposal for a periodic review of these parameters (and associated methodologies) by the AER every five years.

The Commission's proposal is that most of the parameter values and methodologies set out in the SRP form the basis of the parameter values and methodologies that are locked in by the Rules for the first five year period.

With regard to the debt risk premium, some market participants have argued that the A credit rating currently adopted by the AER is unduly influenced by the public ownership of some of the TNSPs. The Commission considers that a principle of good regulatory design is that the nature of ownership (i.e., whether public or private) should not affect the outcome of regulatory determinations. The value for the debt risk premium should therefore be established independent of ownership and be consistent with market circumstances for large scale infrastructure assets.

In that context, the Commission considers that the appropriate credit rating for regulated transmission assets is an 'investment grade' rating which includes assets with ratings of between BBB- and AAA. The Commission also notes that there is not a mechanistic relationship between the assumed gearing ratio and the appropriate credit rating for a benchmark transmission business with the latter being influenced by a range of other factors.

The Commission has considered recent regulatory decisions in relation to the debt risk premium, the credit ratings of a range of energy network businesses, their diverse ownership and corporate structure circumstances and credit ratings

applicable to infrastructure asset investments. In light of this, the Commission has concluded that an appropriate credit rating for a benchmark electricity transmission business within the investment grade range is BBB. A BBB credit rating achieves an appropriate balance between the interests of consumers in relation to price and ensuring that there are sufficient incentives on TNSPs to undertake efficient investment.

6.1.3. Depreciation

The key issues for the Commission in relation to depreciation are:

- whether the Rules should provide a greater degree of clarity in relation to the way in which depreciation is to be calculated in making a regulatory determination; and
- whether depreciation schedules should be proposed by the TNSP or determined by the AER.

The Commission is proposing that the TNSP proposes a depreciation schedule that complies with the principles set out in the Rules.

The Commission has also considered the link between depreciation and the future commercial stranding of assets, and proposed a limited commercial stranding regime⁸⁵.

6.1.3.1. Current Arrangements

Currently the Rules do not provide any explicit guidance to the AER in relation to the approach to calculating depreciation. The SRP makes no statement on the AER's approach to depreciation, except that it is an input into both the calculation of a TNSP's maximum allowable revenue and RAB.

6.1.3.2. Submissions

Submissions from industry highlighted that regulatory depreciation must permit the value of investment to be recovered over time and this should be incorporated in the Rules. It was further proposed that the Rules allow negotiation between the AER and TNSPs over depreciation schedules where that may facilitate smoother cash flows. Furthermore, it was noted and that the Rules should not require an explicit link between the appropriate rate of depreciation and the threat of regulatory stranding ⁸⁶.

In contrast, several submissions cautioned against including too great a degree of guidance in the Rules, preferring to require the Regulator to approve a TNSP's approach to depreciation if it falls within a reasonable range and proposed that the method and timing should be at the discretion of the service provider⁸⁷.

The appropriateness of including depreciation as part of the incentive arrangements for capital expenditure is discussed in Section 6.3.

⁸⁶ EnergyAustralia, p37.; TNOs, p23.; TransGrid, p29.

Ergon Energy, p15.; AGL, p3.

6.1.3.3. Proposed Rule

The Draft Rule set out the following approach to the calculation of depreciation for the purposes of determining the allowed revenue for a TNSP:

- The TNSP is to propose depreciation schedules;
- The proposed depreciation schedules are to comply with principles set out in the Rules, namely:
 - Each asset (or group of assets) is to be depreciated over its economic life; and
 - Each asset is to be depreciated only once, and the sum of total allowed depreciation over the life of an asset (in real terms) is to equal the initial value at which the asset entered the RAB;
- Provided that the depreciation schedules submitted by the TNSP do comply with the principles set out in the Rules, the AER is to use these depreciation schedules in calculating depreciation for the TNSP;
- If the depreciation schedules submitted by the TNSP do not conform
 with the principles in the Rules, then the AER is to calculate depreciation
 for the TNSP on the basis of its own depreciation schedules, which are to
 conform with the principles in the Rules; and
- Where any asset (or group of assets) is dedicated to one transmission network user (or small group of users) and has a current depreciated value of more than \$20m (in 2006 dollars), the TNSP is to depreciate that asset on a straight line basis over the life at which that asset was first included in the RAB.

6.1.3.4. Commission's Reasoning

The Commission considers that increasing the degree of guidance in calculating depreciation will increase transparency and certainty. However, it is also mindful that too high a degree of guidance would reduce the flexibility of TNSPs and the AER to alter the level of depreciation, where such change may be beneficial, for example, in terms of smoothing revenue requirements between regulatory periods.

The Rule Proposal provides discretion for the TNSPs to propose appropriate depreciation schedules, subject to conforming with certain high level principles. The Commission considers that the discretion to propose alternative depreciation schedules appropriately lies with the TNSPs rather than with the regulator, as it is the TNSPs that have the best knowledge of the condition and likely future utilisation of their assets. It also reflects current practice, although the Rule Proposal provides a degree of guidance on the principles depreciation schedules should be designed to satisfy, which is not currently present. Given that the

Commission has decided against incorporating depreciation as part of the incentive arrangements for capital expenditure the classification of assets for depreciation purposes requires less oversight by the regulator, since it will not be inappropriately influenced by the incentive regime.

The Commission notes that TNSPs may take into account the expected future pattern of demand in proposing depreciation profiles for large network assets. The appropriate planning horizon for such assets may be relatively long, with the result that such assets display low utilisation initially. In such circumstances, the TNSP may propose to defer depreciation on those assets, in order to smooth tariff profiles over time. The Draft Rule would accommodate such an approach.

The Commission considers that the proposed approach to depreciation accords with the overall Propose-respond process. The approach is similar to that adopted under the Gas Code.

As discussed in Section 7.4, the Commission has incorporated incentive arrangements designed to encourage TNSPs to adopt a more commercial position in dealing with the risk of future potential commercial stranding of assets. In order for such incentives to be effective, it is important that TNSPs are not able to avoid the risk of commercial stranding by continuing to include the affected assets in the RAB and instead adopting accelerated depreciation. The Rules therefore explicitly preclude the adoption of accelerated depreciation for those assets that are identified in the Rules as potentially removable from the RAB.

6.1.4. Operating Expenditure

Under the building block approach, the AER is required to determine the expected value of forecast operating expenditure for each TNSP in relation to Prescribed Transmission Services over the relevant regulatory period.

6.1.4.1. Current Arrangements

Currently the Rules provide for a reasonable return given efficient operating and maintenance practices, and the need for the regulatory regime to promote efficient operating and maintenance practices within the transmission sector.

The SRP states that the AER will continue the practice of relying primarily on historic and forecast operating expenditures of the TNSP in question in setting operating expenditure allowances, but may look at the potential to make greater use of exogenous benchmark data in setting operating expenditure allowances.

6.1.4.2. Submissions

Industry submissions were in favour of basing operating expenditure allowances on firm-specific cost drivers⁸⁸. Most submissions supported an incentive-based approach to forecast operating expenditure. There was general support for an ex

⁸⁸ TNOs, p35.; TransGrid, p20.

ante approach to operating expenditure⁸⁹, though it was noted that regulators in the past have adopted expenditure allowances that imply substantial prospective efficiency gains – and in cases have set extremely challenging (if not impossible) targets for gains ⁹⁰.

There was support for the Rules prescribing the criteria the AER must take into account when determining the appropriateness of operating expenditure forecasts⁹¹. Benchmarking was viewed as a tool to assist the regulatory assessment of efficient costs.

6.1.4.3. Proposed Rule

Under the Draft Rule, a TNSP's revenue proposal must include a forecast of operating expenditure for each year of the regulatory period which the TNSP considers reasonably meets its requirements to:

- Efficiently meet expected demand for prescribed transmission services over the period;
- Comply with all regulatory obligations;
- Maintain the quality, reliability and security of supply of prescribed transmission services; and
- Maintain the quality, reliability and security of supply of the transmission system through the supply of Prescribed Transmission Services.

The AER must accept the forecasts (subject to meeting a reasonable estimate criterion) if;

- they are for expenditure that is properly allocated to prescribed transmission services in accordance with the Cost Allocation Methodology; and
- they comply with the Guidelines (relating to information) in relation to the revenue proposal (Refer to Appendix 3).

In determining whether the forecast operating expenditure is a reasonable estimate of the TNSP's requirements, the AER must take into consideration a range of issues including reasonable estimates of benchmark expenditure

6.1.4.4. Commission's Reasoning

The paramount consideration in setting efficient operating expenditure is recognising the need for the TNSP to comply with its regulatory obligations and to maintain secure and reliable supply.

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PIAC, p3.; AER, p8.; Ergon Energy, p11.; EnergyAustralia, pp30-32, TransGrid p22

⁹⁰ TNOs, p36

⁹¹ AGL, p3

The approach in the Rule Proposal allows the AER to take into account a range of factors in assessing whether the TNSP's proposal contains a reasonable estimate of its forecast operating expenditure. This is also consistent with the capital expenditure determination process.

6.1.5. Approach to Tax

The issue of whether the return on capital (and the approach to modelling generally) should be established on a pre-tax or post-tax basis has been discussed in Section 6.1.6. The post-tax approach currently adopted by the AER and which is proposed to be elevated to the Rules by the Commission, requires an estimate of a TNSPs' cost of taxation to be incorporated as a separate line item in the building block revenue requirement. The key issues for the Commission in relation to estimating the cost of taxation are the extent of guidance that should be provided in the Rules and, whether the cost of tax should be based on benchmark assumptions or on an estimate of the TNSP's actual tax position.

6.1.5.1. Current Arrangements

The current Rules do not contain any guidance in relation to the treatment of company taxation in making a regulatory determination. The SRP establishes a post-tax regime where the required compensation for company tax is provided as a separate element of the building block revenue requirement. However, it does not provide any further guidance on how this tax element is to be calculated.

6.1.5.2. Submissions

The TNOs submitted that the taxation allowance should reflect benchmark assumptions about key inputs, such as available interest deductions, revenues and expenses and tax depreciation allowances. It was also submitted that there should be an incentive for TNSP's to optimise their tax position, and therefore the cost of tax should be estimated on synthetic tax values rather than actual tax position⁹².

6.1.5.3. Proposed Rule

The Rule Proposal contains the following:

- High level guidance on how the cost of tax should be estimated, i.e., based on benchmark parameters and not a TNSP's actual tax costs:
 - Estimated corporate income tax payments for a TNSP must be determined by the AER on the basis of the TNSPs tax liability multiplied by (1- γ), where γ is the assumed utilisation of imputation credits; and
 - A TNSP's tax liability is to be calculated as its taxable income multiplied by the statutory corporate tax rate;

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⁹² TransGrid, p32.; Ergon Energy, p16.

- A requirement for the regulatory model developed by the AER to specify how taxation will be calculated for the purposes of determining the building block revenue requirement;
- γ is deemed to be equal to 0.5, consistent with the SRP;
- The value of γ is to be reviewed by the AER every five years, in accordance with the review procedure set out in the Rules, and the resulting value is to be applied to all TNSP regulatory determinations for the following five years.

6.1.5.4. Commission's Reasoning

The Commission considers that the benchmark approach to calculating the cost of tax should be continued, in order to provide an incentive for TNSPs to try to minimise their tax costs (eg, by adopting a more tax efficient capital structure than the assumed benchmark). The direct calculation of a TNSP's tax costs would be highly complex, and would remove any incentive for TNSPs to adopt more efficient capital structures.

As a result, the Draft Rule makes reference to the calculation of the cost of debt in relation to a benchmark efficient TNSP.

The Draft Rule sets the initial value of the assumed utilisation of imputation credits (γ) at 0.5, the value established in the SRP, but allows for this value to be reviewed every five years. This approach provides an appropriate balance between increasing certainty and allowing flexibility for this value to be refined in future. However, the Commission recognises that the value of γ has been subject to less extensive consultation than have the WACC parameters in recent years.

The Draft Rule does not prescribe the approach to be taken in calculating the estimated cost of tax for a TNSP. Rather, the AER will be required to set out its approach as part of its regulatory model. The Commission's preliminary view is that the detailed calculation should be a matter left to the discretion of the AER, subject to the principles in the Rules and a requirement on the AER to consult on and publish its proposed model. The Commission would be interested in views from stakeholders as to whether the proposed degree of guidance in the Rules in this area is appropriate, or whether increased clarity regarding the methodology to be adopted is warranted.

6.1.6. Post-tax Revenue Model

The Commission considered that there is benefit in including an appropriate degree of prescription in the Rules about how the MAR for a TNSP should be calculated from the building block components, and the substance of the guidance that should be included in the Rule.

Consistent with the aim of achieving transparency and consistency, the Commission sees merit in requiring the AER to develop and publish a Post-tax Revenue Model (PTRM) for its approach to modelling for revenue proposals.

The Commission has considered whether the assessment of revenue proposals against financial ratios would be beneficial as part of the determination process.

6.1.6.1. Current Arrangements

Currently, the Rule does not contain any guidance on the modelling approach the AER is to adopt in making a revenue cap determination. The Rules require that the AER is to publish reasonable details of its quantitative methodologies⁹³. The AER has published a generic version of its PTRM model, and an accompanying explanatory Handbook⁹⁴.

The current Rules require the AER to have regard to the on-going commercial viability of the transmission industry and any other relevant financial indicators⁹⁵.

6.1.6.2. Submissions

It was submitted that, properly used, the development of financial indicators provides the regulator the ability to benchmark the calculated WACC against returns under competitive pressures and to ensure that the outworkings of the calculation provide for a financially viable NSP⁹⁶.

It was also raised that financial ratios act as a reasonableness check to ensure that, despite the best efforts of a regulator to provide a sustainable commercial revenue stream, the revenue cap determination does not place undue financial hardship upon the TNSP⁹⁷. When used to measure the effect on the TNSP's credit position, financial ratios may also assist in determining an appropriate level of debt margin to be included in the calculation of the WACC, although such an approach can be circular.

6.1.6.3. Proposed Rule

The Draft Rule sets out the following in relation to the approach to be taken to calculating the revenue requirement for a TNSP:

- The AER is to adopt a post tax revenue approach;
- The AER is to publish a model of how it will determine the revenue requirement for the TNSP, consistent with the principles set out in the Rules, subject to the consultation provisions set out in the Rules. The AER may update this model at any time, subject to the same consultation procedures;

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⁹³ Clause 6.2.6(a), NER

⁹⁴ AER, PTRM – Electricity Module and Handbook, August 2005

⁹⁵ Clause 6.2.4(c), NER

⁹⁶ MEU,p73.

⁹⁷ EnergyAustralia, p42.

• The TNSP is to populate the model published by the AER in submitting its Revenue Proposal.

The Draft Rule specifies that:

- The NPV of the expected MAR in each year for the TNSP must equal the NPV of the building block revenue requirement in each year;
- The expected MAR for the final year of the regulatory period must be as close as reasonably possible to the building block revenue established for that year;
- The model is to determine a MAR (in dollar terms) for a TNSP for the initial year of the regulatory period; and
- The expected MAR for the subsequent years of a regulatory period are to be calculated by escalating the MAR for that TNSP for the previous year using a CPI-X methodology.

The Draft Rule does not incorporate any requirement on the AER to undertake financial ratio analysis as part of a regulatory determination.

6.1.6.4. Commission's Reasoning

The Commission considers that the precise manner in which the AER calculates the revenue requirement from the building block elements is of key importance to the TNSPs and network users. The publication by the AER of its PTRM, and the accompanying explanatory Handbook, has improved the certainty and transparency associated with the calculation of revenue determinations. The Commission therefore considers that there are benefits in terms of transparency and certainty of codifying in the Rules the requirement on the AER to publish its regulatory model, and to adhere to this model when making a revenue cap determination.

However, the Commission also appreciates the potential need for flexibility in the modelling approach. The Rule Proposal therefore allows for the model published by the AER to be modified at any time, subject to the consultation procedures set out in the Rules, and provided that the model complies with the principles set out in the Rules.

In relation to the principles to be adopted by the AER in deriving its model, the Draft Rule contains a number of higher-level principles that are to apply to the modelling, as summarised in the previous section. The majority of these principles codify the AER's current approach.

The Commission has also proposed that the MAR for the final year of the regulatory period be as close as reasonably possible to the building block revenue established for that year. The aim of this Rule is to ensure that, if the TNSP's expenditure does indeed match the expenditure that has been assumed in the building blocks, prices in the final year of the regulatory period will reflect costs

in that year, and will not require a significant adjustment in the first year of the subsequent regulatory period.

Under the Commission's Propose-respond process, it is the TNSP that will propose the X-factor for each year of the regulatory period. The AER must approve this X-factor, providing that it complies with the principles set out in the Rules, and the AER's published model. An issue for the Commission is whether the Rule Proposal should incorporate any restrictions on the X-factors to be proposed by the TNSPs, such as requiring the X-factors to be equal in each year. Such restrictions are typically adopted by regulators in order to smooth the impact on pricing in each year.

There are currently restrictions in the Rules that limit the impact on price changes from any one year to the next. The Commission's initial view is that additional restrictions on the X-factors do not appear necessary, and the TNSP should have the flexibility to propose the revenue profile over the period that it considers best reflects the needs of its users. The Commission expects that the TNSP would consider the impact on users as part of that decision. However, the Commission expects to reconsider the question of whether restrictions should be included in the Rules in relation to the X-factors once it has reviewed the pricing provisions in Chapter 6 of the NER, and in particular Rule 6.5.5.

The Commission has considered whether the principles in relation to the modelling of costs and revenues should go further than the high level principles discussed above. There is a balance to be struck between the level of guidance in the Rules and the flexibility the AER has to settle on the most appropriate modelling approach. The Commission has decided at this stage not to incorporate further guidance in the Rules. This decision is motivated by a belief that any residual issues in relation to the modelling approach adopted by the AER are most appropriately considered and resolved via the consultation process for the development of the model.

However, the Commission considers it appropriate to flag that there are a number of concerns in relation to the current PTRM adopted by the AER, and in particular in relation to the assumed timing of revenues and costs in the model.

The AER's current PTRM generally assumes that all revenues and costs occur on the last day of each regulatory period 98. This has a number of implications:

• By assuming depreciation occurs at the end of the year and calculating the return on capital on the basis of the opening RAB at the start of the year, the current PTRM ignores the depreciation allowance provided to TNSPs in each year. The current PTRM also defers revenues by capitalising the return on new capital expenditure into the RAB.

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The only exception is for new capital expenditure, which the current PTRM implicitly assumes occurs on average in the middle of the regulatory year.

- By assuming that revenues occur at the end of the year, the current PTRM model provides an implicit timing benefit to TNSPs in relation to return on capital; and
- The current PTRM does not allow for depreciation of new capital expenditure in the year in which that capital expenditure occurs.

The Commission considers that the first point highlights an inconsistency in the timing assumptions built into the current model that should be addressed going forward. Other regulators, including ESCOSA and the ESC, have recognised this inconsistency and addressed it in their modelling for recent regulatory decisions⁹⁹.

The issue of the implicit timing benefit associated with the return on capital (the second point above) has been acknowledged by the ACCC, ESC, ESCOSA and the ICRC¹⁰⁰. These regulators have determined that this benefit is likely to be offset by the fact that they have not included an allowance for working capital in their determinations. The Commission considers that the working capital requirements for a TNSP are likely to be materially lower than that for a distribution business, given that a TNSP has a much smaller number of large customers, who make regular monthly payments. As a result, it is not clear that in the case of a TNSP, the non-inclusion of a working capital requirement would offset the timing benefit associated with the assumptions underlying the return on capital calculation. In any event, the Commission considers that it would be more appropriate for the model to more accurately capture actual payment timings, and to make an allowance for working capital, as appropriate. The Commission understands that IPART's modelling in its most recent regulatory determination for the electricity distributors in NSW did explicitly correct for this timing issue.

Finally, the current PTRM defers depreciation on new capital expenditure until the year after the expenditure occurred, which is inconsistent with the expected asset's life. The Commission notes that other regulators do allow for depreciation of a new asset in the year in which it occurs.

The Commission welcomes comments from interested parties on whether it would be appropriate for the Rules to explicitly incorporate guidance in relation to the assumptions to be made on the timing of costs and revenues in the regulatory model, or whether it is appropriate to leave this to the AER to determine as part of the development of the model.

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⁹⁹ ESCOSA, 2005-2010 Electricity Distribution Price Determination: Part A: Statement of Reasons, April 2005, p.122

See for example, ACCC, Access Arrangements proposed by Epic Energy South Australia Pty Ltd for the Moomba to Adelaide Pipeline System: Final Decision, 12 September 2001, pages 29-30; Allen Consulting Group, Working Capital - Relevance for the Assessment of Reference Tariffs: Report to the ACCC, March 2002; ESCOSA, 2005 - 2010 Electricity Distribution Price Determination Part A - Statement of Reasons: Decision, April 2005 p.123

The Commission notes that there is increased clarity in the Rules in relation to the approach the AER is to take in determining the various components of the revenue cap. The guidance in the Rule does not extend to the AER's use of financial ratios as a decision tool. However, the Rule does not preclude the AER from undertaking financial ratio analysis to illustrate the expected impact of its determinations, to the extent that the AER considers such analysis relevant.

6.2. Reopening of Revenue Cap for Capital Expenditure

The Commission has considered whether there should be provision in the Rules for a revenue cap to be reopened when the TNSP becomes aware that additional capital expenditure will be required during a regulatory period compared to that forecast. Allowing for a reopening provision may address concerns either that TNSPs delay appropriate investment, where such investment has not been incorporated in the forecast underlying the revenue cap, or that, where they do invest, the TNSP becomes subject to an inappropriate penalty.

6.2.1. Current Arrangements

The current Rules set out the conditions under which a revenue cap can be revoked by the AER during a regulatory period¹⁰¹. These circumstances do not include where additional capital expenditure to that forecast is required.

Under the SRP, large and uncertain projects can be identified at the time of a regulatory determination as 'excluded projects'. The threshold for such projects is that the associated forecast error would represent at least 10% of the capital expenditure benchmark¹⁰². The capital expenditure associated with such projects is not incorporated in the revenue cap. However, where a TNSP does need to incur capital expenditure in relation to an excluded project during a regulatory period, the AER will determine the revenue requirement associated with that project, and the required revenue in the following regulatory period will be adjusted to accommodate this amount¹⁰³.

6.2.2. Submissions

Several submissions supported revenue reopeners.¹⁰⁴ One of these submissions noted that the Rules should provide flexibility to reopen or amend a TNSP's revenue cap¹⁰⁵. The TNOs requested that the Rules provide for the application of the SRP revenue reopener¹⁰⁶. There was also support for revenue reopeners to be

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¹⁰¹ Clause 6.2.4, NER

The SRP also states that the AER may determine that projects that do not meet this threshold also qualify as 'contingent projects'.

SRP – background paper, December 2003, p.57-60

AER, p9; TransGrid, p19; ENA, p8; Origin Energy, p4, VENCorp, p3

¹⁰⁵ AER, p9

¹⁰⁶ TNOs, p27

allowable under an ex ante regime for pre-defined *force majeure* events that are outside the control of the TNSP¹⁰⁷.

However, other submissions offered an opposing view.¹⁰⁸ Issues highlighted in the submissions included that the potential for reopening a determination (except in the case of material error) will weaken the incentive characteristics of the regulatory regime and only act to increase uncertainty and that events with material financial impact are best addressed through pass-through arrangements. In addition, another submission noted that reopening introduces an asymmetry in favour of the TNSP to the detriment of the consumer.

6.2.3. Proposed Rule

The Draft Rule contains the following provisions:

- A TNSP may apply to the AER to reopen a revenue cap, where it wishes
 to undertake certain capital expenditure that has not been included in its
 forecast capital expenditure for the regulatory period;
- The TNSP may only apply for such a reopening where the project is either a reliability augmentation, required to satisfy an applicable regulatory obligation, or where it has satisfied the Regulatory Test;
- In all cases the value of the proposed project must be at least 5% of the value of the TNSP's RAB;
- The AER must only re open a revenue cap where it is satisfied that the TNSP is not reasonably able to fund the additional capital expenditure within its forecast capital expenditure, and to require it to be funded within its forecast capital expenditure would detrimentally affect the ability of the TNSP to operate the transmission system safely and; and
- Where the AER reopens a revenue cap determination it must substitute it
 with a new revenue cap for the remainder of the period, which varies
 from the original only to the extent necessary to accommodate the
 additional capital expenditure and any resulting impact on required
 operating expenditure.

6.2.4. Commission's Reasoning

The regulatory framework should provide incentives for the TNSPs to undertake efficient capital expenditure necessary to ensure the safe and reliable operation of the transmission system. However, the Commission is concerned that, under the current Rules, a TNSP may have an incentive to delay required expenditure in excess of that forecast for the regulatory period, since expenditure in excess of forecast levels will result in the TNSP incurring a penalty. The current arrangements do not allow for such developments.

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VENCorp, p3

MEU, p.53; Ergon Energy, pp.10-11; EnergyAustralia, pp.29-30; EUAA, p34

The Commission has sought to ensure that legitimate, but unforeseen, capital expenditure requirements relating to regulatory obligations or emergencies can be addressed under the form of regulation.

The Commission notes that under the Rule Proposal, the penalty that a TNSP faces for expenditure in excess of forecast is limited to the foregone return on the additional capital expenditure, as all actual prudent expenditure will be rolled into the RAB at the time of the next regulatory determination and the TNSP will receive the full amount of depreciation on that expenditure. However, the Commission considers that it is still undesirable to have a disincentive to undertake new capital expenditure, when the need for that expenditure only becomes apparent during the regulatory period. This needs to be balanced against the desirability of providing an incentive for the TNSP to achieve efficiencies in capital expenditure, as provided for under the overall CPI-X regulatory framework, where the revenue cap is only re-set periodically.

The Commission notes that the current excluded project provision in the SRP does not adequately address this risk, since excluded projects need to be identified at the beginning of the regulatory period.

The Commission therefore proposes to include in the Rules a provision for a revenue cap to be reopened where a TNSP identifies the need for significant additional capital expenditure, where this expenditure is either in relation to a reliability augmentation, necessary in order to meet regulatory obligations, or where the project has passed the Regulatory Test. In order to limit the frequency of such reopenings and to ensure that they do not undermine the overall CPI-X incentive framework, the Commission has attached a materiality threshold to the application for a reopening. The Commission would particularly welcome submissions on the appropriate level of this materiality threshold, and whether it should be specified as a dollar number or as a percentage of the TNSP's RAB.

6.3. Pass Through Arrangements

The issue for the Commission in relation to cost pass through provisions is whether the Rules should prescribe the approach that the AER is to adopt in relation to cost pass through, or whether these provisions should stand outside of the Rules.

The subject of cost pass through provisions was not explicitly canvassed in the Issues Paper, but is an important component of the overall regulatory regime.

6.3.1. Current Arrangements

The current Rules do not set out any principles regarding arrangements for the pass through of costs during a regulatory period.

The ACCC incorporated pass through arrangements in its TNSP determinations.

The SRP sets out the AER's preference for a revenue cap reopening mechanism to take account of events that could significantly alter the revenue required by a TNSP during a regulatory period. However the AER has recently issued a

Position Paper that proposes to incorporate a pass-through mechanism in the SRP ¹⁰⁹.

6.3.2. Submissions

One of the submissions noted that adjustments during a revenue determination to address the financial impact of an unexpected event are best addressed through cost pass-through arrangements rather than reopeners. In particular, if contingent projects remain part of the new Rules, these projects should be subject to pass through and not reopening.¹¹⁰

Other submissions noted that pass through arrangements (such as apply to network support payments) are not subject to the same level of incentive based regulation. ¹¹¹ It is believed that this leads to a bias in favour of network over nonnetwork solutions. ¹¹² In addition, a submission acknowledged that the current mechanisms reward deferral in capital expenditure, but this is the only incentive for non-network solutions. ¹¹³

6.3.3. Proposed Rule

The Draft Rule incorporates the following provisions:

- Rules permitting the TNSPs to apply for a pass through of additional costs during a regulatory period resulting from certain defined events;
- Rules permitting the AER to require the TNSP to pass through reductions in costs during a regulatory period resulting from certain defined events;
- The events for which a TNSP can apply for (or the AER can require) a pass through are:
 - Insurance events¹¹⁴;
 - Change in tax events;
 - Terrorism events;
 - Service standard events; and

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AER, Position Paper, Pass-through and revenue cap reopeners, 21 December 2005

EnergyAustralia, p.29

TransGrid, p.16; TRU Energy, International Power, Loy Yang Marketing Management Co, NRG Flinders (The Group), p.14

¹¹² The Group, pp.14-15

¹¹³ TransGrid, p.16

Note that an Insurance Event may occur where insurance becomes unavailable or only becomes available on materially different terms (in either of these cases the materiality threshold does not apply) (Refer to the definition of "Insurance Event" in the Draft Rules)

- Network (Grid) Support;
- Cost pass through events must meet a materiality threshold, defined as an impact on costs in any one regulatory year of more than 1% of the TNSP's MAR for that year. The exception is for network (grid) support, where a pass through application does not have to meet the same materiality threshold; and
- The Rules specify the process with which the TNSP and AER are to comply in making and assessing a cost pass-through application, respectively, the criteria that are to be applied and the manner in which the AER is to determine how an allowed pass through amount is to be recovered from (returned to) users.

6.3.4. Commission's Reasoning

The objective of a cost pass through mechanism is to provide a degree of protection for the TNSP from the impact of unexpected changes in costs, outside of its control, that arise during a regulatory period. Such a mechanism lowers the risks faced by the TNSP, which would otherwise have to be compensated for in the calculation of regulated revenues.

The Commission considers that cost pass through provisions are an important component of the overall regulatory framework. As such, it would improve the certainty surrounding the regulatory arrangements to also incorporate provisions relating to cost pass through in the Rules.

The Commission notes that the cost pass through provisions adopted by Australian regulators in recent years have shown a high degree of conformity, both in the events for which pass throughs may be made and the process to be followed. The AER's recent Position Paper largely codifies its current practice with respect to pass through provisions for the TNSPs, all of which currently have pass through provisions applying in their regulatory determinations.

The Draft Rule aims to codify current practice, as set out in the AER Position Paper, subject to a number of exceptions.

The first exception is that the Draft Rule allows for the AER to require a TNSP to pass through cost reductions associated with given events occurring. This is consistent with the current arrangements applying to TNSPs.

The Commission considers that it is possible that there will be some events (such as a reduction in a tax) that would result in cost reductions for a TNSP, and for which the TNSP may not itself apply for a pass through. The Draft Rule therefore makes provision for the AER to also be able to initiate a pass through application. Parties other than the TNSP and the AER are not able to make applications, to avoid the risk that a large number of spurious applications could be made.

The second exception is that the Draft Rule does not incorporate the 'Other Events' category for pass through proposed by the AER in its Position Paper. The AER Position Paper proposes that a TNSP could apply for additional events

to be subject to cost pass through, subject to the approval of the AER before a revenue cap begins. Such an approach is unlikely to be appropriate under the Commission's 'Propose-respond' process, as the AER would no longer have an 'approval' role in relation to including additional events as triggers for a cost pass through.

The Commission is aware that the AER has proposed to include 'other events' in recognition that currently some TNSPs have changes in Grid Support Payments included as allowed cost pass through events in their relevant regulatory determinations. TNSPs have pointed to the difficulties of forecasting required grid support payments. Not allowing for a pass through of unexpected fluctuations in these costs may act as a disincentive for TNSPs to adopt non-network solutions.

However, the Commission agrees with the AER that not all changes in grid support costs need to represent an external cost change beyond the control of the TNSP. In particular, where a TNSP substitutes a grid support arrangement in place of capital expenditure that has already been included in its regulated allowed revenue, it would be inappropriate to treat this as an additional cost.

As a result, the Commission has included in the Draft Rule a pass through category for Network (Grid) Support, although has limited the changes in costs that may be applied for under this pass through category to rule out the situation described above.

The Commission further notes that AER has proposed a materiality threshold for cost pass through events in its Position Paper, and the same provision is reflected in the Draft Rule. The exception is for network (grid) support, where it is not proposed that applications need meet the same materiality hurdle. The Commission considers that the proposed materiality threshold would be too high in relation to network (grid) support, given that the inclusion of a pass through for these costs is intended to remove any disincentive for non-network solutions that may exist as the result of difficulties in cost forecasting.

The current arrangements applying to TNSPs do not incorporate a materiality threshold arrangement. The Commission agrees with the AER that the incorporation of a materiality threshold is likely to limit the applications that may be made under the mechanism, consistent with a view that it is only substantive changes in costs that should be covered by the mechanism.

7. Incentive Mechanisms

7.1. Standards of Service

The NEL requires the Commission to make Rules in relation to incentives for efficient operating and investment decisions. Linked to this is the impact on standards of performance.

The Commission believes that there is a particular need to provide incentives to TNSPs to facilitate operations that are in line with the wholesale market. This ultimately is in the long-term interest of consumers. The Commission believes that a key role of economic regulation is to supplement the regulatory obligations with targeted incentives.

The Commission considers that the AER's current TNSP service incentive scheme goes some way towards providing TNSPs with the appropriate incentives.

7.1.1. Current Arrangements

The AER has developed service standards guidelines to provide financial incentives for more efficient network performance by TNSPs. These incentives are primarily designed to promote efficient timing (i.e., off-peak), and minimise the duration, of planned outages. The service standard guidelines are based on TNSPs' historical performance on five measures. These include transmission circuit availability; average outage duration; and frequency of 'off-supply' events. The guidelines set firm-specific performance targets for each TNSP. Other measures were identified (inter- and intra-regional constraints) but no targets set for any firm.

The maximum revenue at risk has been set at +/- 1% and is generally based on symmetric rewards and penalties above and below the target, respectively, with collar and cap levels of performance.

However, the AER stopped short of developing market-linked performance measures, such as linking a TNSP's revenue to the impact of its operating behaviour on market outcomes. The reasons for this were difficulties in establishing causes of market impacts and difficulty in valuing the market impact.

7.1.2. Submissions

Many submissions identified the links that service standards have with inputs and outputs¹¹⁵, and the need to link service standards with customer expectations¹¹⁶. There was also the link between service standards and jurisdictional outcomes¹¹⁷, with some noting that service standards will differ between firm and jurisdiction,

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Ergon Energy,,p.8; ENA,, p.7

AGL, pp.2-3; MEU, pp.34-35; Ergon Energy,,p.8

EnergyAustralia, p.22; Powerlink,, p.10

and indeed across a network region depending on jurisdiction economic and location factors.¹¹⁸

The AER's submission cautions codifying any service incentive regime, due to its current relatively fluid and untested status. The AER also referred to its recent work on developing measures for market impacts, with the potential for financial incentives based on such measures in the future. The TNSPs' submissions appear to suggest a level of comfort with the AER's approach to date.

7.1.3. Proposed Rule

The proposed Rule provides that the AER must develop and publish a service target performance incentive scheme that complies with the following principles:

- It should provide incentives for TNSPs to provide greater reliability of the system at times when the system is most valued, and in relation to those elements that are most important to determining spot prices.
- The reward/penalty adjustment to the TNSP's MAR is to be no more than +/-1%.
- The Scheme should take account of TNSPs' regulatory obligations, other incentive schemes operating on the TNSP; and the age and ratings of TNSPs' network assets.
- In addition, the AER must also simultaneously publish the required parameters for the scheme. TNSPs must provide values in their revenue proposals for those parameters that are published 15 months prior to the start of their next regulatory period.
- Finally, the AER must develop and publish the first service target incentive scheme by 31 December 2006 and may amend the scheme in accordance with the transmission guideline procedures.

7.1.4. Commission's Reasoning

The jurisdictional and Rules requirements for service provision impose either absolute obligations with little incentive for TNSPs to deliver better performance than the minimum or vague and ambiguous standards which do not provide incentives for improved performance.

In addition, the AER recognised the need to develop service performance incentives that reward TNSPs for behaving in ways that increase the value that users gain from the network, such as scheduling outages at off-peak times.

The Commission notes that the existing AER incentive scheme is intended to drive operating decisions as opposed to capital expenditure decisions. The ACCC found it too difficult to develop market-linked performance measures at that time. However, it indicated an intention to continue to develop the scheme by:

¹¹⁸ TransGrid,, p.12

- raising the 'incentive cap' above the current 1% of revenue;
- including measures that take into account the amount of energy delivered;
- including the impact of TNSPs' capital programs in setting targets;
- including specific interconnector and connection point performance in targets;
- taking into account of critical times and circuits in the scheme; and
- including customer focused incentives such as processing connection enquiries¹¹⁹.

The Commission agrees that the existing scheme could, and should, continue to be developed.

The Commission believes that exposing TNSPs to the full value of market impacts of their decisions is inappropriate, and indeed undesirable, given that they are not market participants and do not control all of the factors that affect the magnitude of those market impacts.

However, more could be done to focus incentives on encouraging planned outages at times and locations that minimise the cost to the market and network users. Therefore, the Commission believes that the existing incentive scheme should continue to be developed to ensure that TNSPs have effective incentives to provide greater reliability of the system at times when the system is most valued and in relation to those elements that are most important to determining spot prices.

In this context, the Commission recognises that there is a tension between:

- Encouraging TNSPs to schedule outages (and publish conforming outage plans) at times they reasonably believe (in advance) will impose least cost to the market and comply with those schedules irrespective of changes to market conditions that later transpire; and
- Encouraging TNSPs to schedule outages at times they reasonably believe will impose least cost to the market, but then alter those timings if market conditions change in a way to suggest that it may be beneficial to do so.

In such cases, there may be a trade-off between:

- Minimising costs to the market in the short term, which may be achieved by deferring the outage; and
- Maintaining the long term credibility and value of the published outage schedule in order to encourage participants to mitigate their costs of planned transmission outages.

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ACCC (2004), Statement of principles for the regulation of transmission revenues, Service standards guidelines, Decision, November, p.12

The AER should take account of these considerations in developing incentive schemes in a manner consistent with the proposed Rules. However, at a minimum TNSPs should have clear incentives to plan outages having regard to providing greater reliability of the system at times when the system is most valued and in relation to those elements that are most important to determining spot prices.

Within this context, the Commission considers it appropriate that the AER has broad discretion in developing the form and application of TNSP incentive schemes. The principles contained in the Draft Rule ensures that the scheme covers a significant but not excessive share of a TNSP's regulated revenues and takes account of the TNSP's regulatory obligations and other incentive schemes as well as the age and ratings of its equipment. Importantly, in aiming towards a scheme that is based on market impacts the AER should avoid undermining the fundamental principle that the TNSP should act in a manner that is neutral to all network users.

7.2. Capital Expenditure – Low-powered Incentives

The Commission has considered the appropriate incentives that should be provided in relation to capital expenditure, in order to encourage efficient expenditure whilst ensuring that TNSPs are not unduly penalised for expenditure which exceeds forecasts, when such expenditure is required in order to meet applicable regulatory obligations. The Commission noted that such incentives will be directly affected by the approach taken to determining the RAB.

The Commission has considered the extent to which the TNSPs face appropriate incentives to implement non-network solutions, where these are the most efficient alternative.

7.2.1. Current Arrangements

The current Rules impose a number of requirements in relation to incentives for efficient investment. The AER is required¹²⁰ to develop an incentive-based regulatory regime that provides a fair and reasonable return on efficient investment. The current Rules¹²¹ also require the regulatory regime to provide TNSPs with incentives to increase efficiency. The AER is also required¹²², in making a revenue cap determination, to have regard for the potential for efficiency gains in capital costs.

Under the SRP, the AER has implemented what it has termed an ex ante approach to capital investment, which provides a 'low-powered' incentive in relation to efficient capital expenditure. In effect, the approach set out in the

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¹²⁰ Clause 6.2.2, NER

¹²¹ Clause 6.2.3, NER

¹²² Clause 6.2.4, NER

SRP rewards a TNSP for expenditure below forecast levels, by not adjusting regulated revenues to remove the benefit of the return earned in that regulatory period on the higher forecast of capital expenditure. Conversely, where capital expenditure is above regulated levels, the higher expenditure is incorporated into the RAB (subject to the review noted above), but the TNSP is not compensated for the foregone return associated with that additional capital expenditure, providing a (limited) penalty on such an over-spend. In addition, the SRP proposes to roll-forward the RAB based on actual depreciation, rather than the depreciation allowed for at the time of the previous regulatory determination. This means that an under-(over-)spend in relation to capital expenditure will result in less (more) depreciation than allowed for in revenues being deducted in rolling forward the RAB, again providing a benefit (penalty) to the TNSP.

7.2.2. Submissions

Overall, there was no support for mandated ex post assessment of capital expenditure, as it was seen as potentially introducing delays¹²³ or excessive levels of micro management¹²⁴. There was, however, a positive view regarding an ex post review of expenditure from some user groups on prudency and efficiency grounds.¹²⁵ Individual submissions agreed that, if such a regime were to be mandated, TNSPs should be able to ensure certainty as to how the Regulator will treat an investment (eg, through binding regulatory agreement)¹²⁶. Alternatively, such a regime should only be implemented at the request of the TNSP¹²⁷ and not mandated by the Regulator.

There was support for the symmetrical incentives proposed in the SRP¹²⁸, though the use of low-powered incentives was also noted in one submission as potentially discouraging demand side management and generation support¹²⁹. Attention was drawn to the existing provisions for a dynamically adjusting revenue cap as a means of adjusting capital expenditure during the regulatory period¹³⁰. Furthermore, it was noted that depreciation should not form part of the incentive arrangements.

7.2.3. Proposed Rule

The Draft Rule contains the following provisions, which impact the incentives a TNSP faces with regard to capital expenditure:

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Powerlink, p.11
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EnergyAustralia.,p.33

¹²⁵ MEU, p.57

TransGrid, , p.30

Powerlink, p11.

Ergon Energy, p10.

VENCorp, p.2

¹³⁰ AER, p.9

- The RAB is to be determined on the basis of a lock-in approach, with only minimal provisions for optimisation;
- In rolling forward the RAB, the Rules allow, but do not require for the AER to undertake a prudency and efficiency review, and set out the criteria that the AER is to have regard to in undertaking this review;
- The Rules set out a low-powered incentive on capital expenditure, which allows the TNSP to retain the benefit (or requires it to bear the cost) in relation to the return on capital allowed for in the regulatory determination associated with any under- (over-)spend on actual capital expenditure compared with the forecast. Depreciation does not form part of this incentive; and
- The TNSP can apply for a reopening of a revenue cap where it needs to undertake capital investment to meet its regulatory obligations, and where such expenditure cannot be accommodated within the expenditure forecast.

7.2.4. Commission's Reasoning

The Commission notes that a number of different provisions in the Rules will impact on TNSPs' incentives to undertake efficient capital expenditure.

The approach taken to establishing the RAB will impact a TNSP's incentives. The Commission has decided against adopting a periodic optimisation approach to the RAB (see the discussion in Section 6.1). Instead the Draft Rule reflects the lock-in approach in the SRP. However, under the lock-in approach, the AER is still able to conduct a prudency review of actual capital expenditure prior to rolling it into the RAB. This approach provides an incentive for a TNSP to ensure that its actual expenditure is efficient, as inefficient expenditure will not be incorporated in the RAB. The Draft Rule also incorporates criteria which the AER must have regard to in undertaking a prudency and efficiency review. The Commission considers that this improves certainty in relation to the operation of the review regime, which in turn counteracts any adverse incentives on the overall level of investment.

The roll-forward approach based on actual capital expenditure (subject to a prudency and efficiency review) also means that where the TNSP needs to spend more than the capital expenditure forecast, this higher level of expenditure (provided it is efficient) gets incorporated into the RAB and the TNSP is only penalised to the extent of the foregone WACC for the remainder of the regulatory period. This reduces any disincentive that may otherwise exist for a TNSP to undertake capital expenditure in excess of the forecast, where such expenditure is indeed efficient. Moreover, the Rules contain a provision for the TNSP to apply for a reopening of the revenue cap where additional capital investment is required to meet regulatory obligations, and this cannot be accommodated within the current capital expenditure forecast (see Section 6.2).

The roll-forward approach set out in the Draft Rule allows the TNSP is able to retain the benefit of the return on capital allowed in the regulatory determination, even where actual expenditure is below the level forecast at the time of the determination. Conversely, as noted above, where the TNSP over-spends in relation to the forecast, it would be subject to a penalty in terms of the return foregone on the additional capital expenditure during the regulatory period. At the end of the regulatory period, the additional expenditure (assuming it is efficient) would be rolled into the RAB and the TNSP would then begin to earn a return on it.

Under this approach, the TNSP has a low-powered incentive to reduce its capital expenditure below forecast levels (and to avoid over-spending its forecast) during the regulatory period, which falls towards the end of the regulatory period. The difficulties with forecasting future capital requirements, which may be highly uncertain, particularly towards the end of the regulatory period, and the fact that capital expenditure is typically of a 'lumpy' nature, means that providing a more high-powered incentive regime for capital expenditure risks inappropriately rewarding TNSPs for differences between actual and forecast outcomes that are not in fact related to efficiencies.

The Commission notes that the incentive regime set out in the Draft Rule mirrors closely that set out in the SRP. However, there is one difference, in that the Draft Rule does not incorporate depreciation within the incentive mechanism. By incorporating depreciation into the incentive regime, a TNSP is rewarded (penalised) most for under- (over-)spending on short-lived assets. The TNSP becomes in effect subject to an expenditure cap (and an incentive regime) in respect of each different asset category, rather than in relation to its overall capital program. This provides an incentive for TNSPs to shift the allocation of reported actual capital expenditure away from short-lived assets (thereby gaining an efficiency benefit) and towards long-lived assets (incurring a penalty, which will be less than the benefit). This in turn implies the need for greater regulatory scrutiny of proposed depreciation profiles and the classification of assets for reporting purposes. The Commission considers that such incentives are inappropriate, and has therefore not adopted this approach in the Draft Rule.

In relation to incentives for non-network investment, the Commission notes that where a TNSP is able to implement a non-network solution as a substitute for capital investment that has been incorporated into its revenue cap, at a lower cost, it would receive the benefit of doing so via the additional return allowed on the higher assumed capital expenditure. In addition, the Draft Rule allows for a cost pass through for differences between expected and actual grid support payments. This counteracts any disincentives to adopt non-network solutions arising from difficulties in forecasting required payments, and the consequential risk that operating cost forecasts will be exceeded.

The Commission also notes that the Regulatory Test has a fundamental role to play in ensuring that non-network alternatives are adequately considered in assessing network augmentations. The Regulatory Test is outside of the scope of this Review. However, the Commission is currently considering the Regulatory

Test as part of the MCE Rule change Proposal regarding the Regulatory Test Principles.

7.3. Operating Costs – Efficiency Benefit Scheme

The incentive power of an operating expenditure efficiency regime relates to what proportion of the value of any efficiency saving made by the firm it is allowed to retain and for how long. In the absence of any mechanism for firms to retain efficiency gains made in one period into the next, TNSPs have weaker incentives to make efficiency savings as they progress through a regulatory period.

The Commission is proposing that the AER develop and publish an efficiency benefit sharing scheme. The publication of the scheme will provide clarity and stability. The Commission expects that the incentive scheme developed by the AER as part of the SRP would form the basis of the scheme under the new Rules.

7.3.1. Current arrangements

The current Rules provide for the promotion of efficient operating and maintenance practices within the transmission sector. The ACCC's previous revenue cap determinations have allowed TNSPs to take some of the benefits of actual operating expenditure below target forecast levels into the next period. However, the mechanism for benefit sharing has changed more recently from a smoothing mechanism (a glide path) approach to an efficiency carryover approach.

7.3.2. Submissions

Incentive mechanisms were generally supported by submissions, with a number in favour of arrangements which allow TNSPs to retain some share of operating expenditure reductions below target levels¹³¹. Variations on this included basing arrangements on company specific, rather then economy wide, indices¹³² and awarding a share of market detriment or benefit¹³³. One submission indicated doubt that carry over provisions were feasible given the complexity of capital expenditure and operating expenditure arrangements¹³⁴. There was relatively strong support for expenditure incentive arrangements to be clearly provided for in the Rules¹³⁵.

7.3.3. Proposed Rule

The proposed Rule provides that:

The Group, pp.8-10; TransGrid, p.20; MEU, p.54; Ergon Energy, p.11

¹³² TransGrid, p.20

¹³³ The Group, p.10

EnergyAustralia, p.30

Ergon Energy, p11.; TNOs, p.23

- The AER must develop and publish an efficiency benefit sharing regime in respect of operating expenditure below (or above) forecast levels having regard to:
 - The need to provide a continuous incentive; (equal in each year of the regulatory period) to reduce operating expenditure;
 - The desirability of rewarding TNSPs for efficiency gains and penalising them for efficiency losses; and
 - Any incentives of TNSPs to inappropriately capitalise operating expenditure;
- The AER must also simultaneously publish the required parameters for the scheme;
- A TNSP must provide values in its revenue proposal for those parameters that are published 15 months prior to the start of its next regulatory period; and
- The AER must develop and publish the first efficiency benefit sharing scheme by 31 December 2006 and may amend the scheme in accordance with the transmission Guideline Procedures.

7.3.4. Commission's Reasoning

The glide path mechanism was based on taking the difference between forecast and actual expenditure for a particular year (usually the last or second last year of a regulatory period) and basing benefit sharing for the next regulatory period on that difference. This creates the risk of providing incentives for TNSPs to shift operating expenditure around to maximise their revenues without producing any lasting savings.

The efficiency carryover mechanism (ECM) approach outlined in the SRP allows the TNSP to get the benefit (or loss) from underspend (or overspend) for a rolling five year period. This is more likely to promote real operating cost efficiencies than the glide path approach used in the first ElectraNet and PowerNet decisions.

However, the Commission is reluctant to prescribe the precise methodology for application of an ECM in the Rules. Neither the Victorian Tariff Order, nor the Electricity Pricing Order (EPO) in South Australia nor the Gas Code prescribe the benefit sharing mechanism in precise detail. Instead, the Commission has developed Rules that:

- require the AER to implement a benefit sharing mechanism for operational cost savings; and
- set out the relevant principles that should apply to ensure the regime promotes the NEM objective, such as the:

- desirability of rewarding TNSPs for efficiency gain, taking account of TNSPs' incentives to capitalise operating expenditure; and
- the importance of encouraging savings to be made whenever it is efficient to do so (i.e., not just when it suits the interests of the regulated business). For instance a continuous incentive, as specified in the EPO.

7.4. Commercial Negotiation Incentives

The Commission has considered what incentives should appropriately be given to the TNSP, both in order to minimise the likelihood of assets becoming commercially stranded and to ensure that the risk of such stranding is borne by the user concerned, rather than all users generally. Commercial stranding refers to a situation in which assets are no longer utilised, as a result of the transmission network users who utilised those assets no longer being connected to the transmission system¹³⁶.

The Commission notes that the current Rules make provision both for TNSPs to effectively manage the risk of commercial stranding (through entering into negotiated contracts with users, rather than incorporating these assets into the RAB) and to lower the likelihood of such stranding occurring (through offering prudent discounts). However, the Commission is concerned TNSPs do not have incentives to use these provisions, since under the roll-forward approach to the RAB set out in the SRP the TNSPs, do not face the risk that assets that are the subject to commercial stranding will be removed from the RAB.

7.4.1. Current Arrangements

Under the current Rules, TNSP's are able to construct assets dedicated to one user (or small group of users), either as a 'contestable service' or as an 'excluded transmission service' or (in the case of generators) as a negotiated generator access charge. In each of these cases, the assets would not enter the RAB for prescribed services, and the TNSP would recover the cost of those assets through the charges agreed as part of a negotiated contract with the user, and not via regulated charges. In order to manage the risk of the assets becoming commercially stranded, the TNSP may structure its charges such that it recovers the cost of the assets over a period shorter than the standard life of the asset.

Where assets dedicated to one user (or a small group of users) have entered the RAB, under the current Rules TNSPs are able to negotiate the payment of a lower price for transmission services for a given user, and to recover all or part of that reduced price from other users, provided that the reduction complies with the AER's Guidelines for the Negotiation of Discount Transmission Charges. 138

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¹³⁶ The potential for commercial stranding is only likely to occur in limited and confined circumstances.

Chapter 10, glossary 'contestable services', NER

¹³⁸ Clauses 6.5.8(b) & (c), NER

It may be that by offering such a discount, the user decides to remain connected to the system and the assets avoid becoming commercially stranded.

As discussed in Section 6.1, the current Rules do not currently prescribe the approach to be taken in determining the opening asset base, and explicitly allow for the optimisation of assets¹³⁹. However, the SRP sets out the AER's preference for a lock-in of the asset base, which would preclude any removal of assets from the RAB where those assets become commercially stranded.

7.4.2. Submissions

Some submissions noted that adding the risk of commercial stranding to a TNSP is largely unnecessary¹⁴⁰. While others allude to the fact that the risk of commercial stranding, if imposed, should be reflected in a higher capital return¹⁴¹, others submit that where accelerated depreciation is allowed, this would reduce the required rate of return¹⁴².

It was also noted that provisions should allow assets that have been stranded to be allowed to re-enter the RAB where appropriate¹⁴³.

7.4.3. Proposed Rule

The Draft Rule allows the AER to remove assets which are the subject of commercial stranding from the RAB, but only where the TNSP has not taken steps to either:

- enter into contractual arrangements with the customer to manage the risk of such stranding (for assets the construction of which is committed to after 16 February 2006); or
- to offer a prudent discount to such users (in respect of assets the construction of which was committed before or after 16 February 2006).

The ability of the AER to remove the value of assets from the RAB is limited to assets that the AER determines are no longer contributing to the provision of Prescribed Transmission Services and where the current value of those assets exceeds \$20m (in 2006 dollars).

7.4.4. Commission's Reasoning

For the majority of assets in the shared network, commercial stranding as described above would be unlikely to occur, since the same assets are utilised to provide Prescribed Services to a large number of users. As discussed in the

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¹³⁹ Clause 6.2.3(iv), NER

TransGrid p29; VENCorp, p2

AGL, p3; EnergyAustralia, p26

¹⁴² MEU, pp66-68

¹⁴³ AGL, p2

Issues Paper, a key physical feature of the electricity transmission network is that it is an any-to-any system connecting a large number of users, in contrast to a point-to-point system such as gas transmission.

However, there may be assets which are effectively dedicated to one user, or to a small group of users, and where commercial stranding is therefore a possibility. For example, a user may elect to build its own assets to by-pass the transmission system, or the user or users to which the assets are dedicated may cease operation.

Where there is a risk that assets may become commercially stranded, that risk may be appropriately borne by the user to who wants the assets constructed. Under the proposed Draft Rule, a TNSP is able to construct assets dedicated to one user (or small group of users) as a Negotiated Service. As a result, the assets would not enter the RAB for Prescribed Transmission Services, and the TNSP would recover the cost of those assets through the charges agreed as part of a negotiated contract with the user.

In order to manage the risk of the assets becoming commercially stranded, the TNSP may structure its charges such that it recovers the cost of the assets over a period shorter than the standard life of the asset. Under such an arrangement it is the user that bears the risk of commercial stranding.

Similar provisions exist in the current Rules, i.e., the TNSP is able to construct the assets under a negotiated arrangement with the end-user, and the assets would therefore not enter the RAB. However, these provisions have not been extensively used. It appears that TNSPs have little incentive to enter into negotiated arrangements for these assets, rather than incorporate them into the RAB and recover their costs through Prescribed Services, since the TNSP will recover the full cost of these assets in both cases.¹⁴⁴

Who bears the risk of assets becoming commercially stranded therefore depends on whether these assets may be removed from the RAB if such stranding occurs. If they are removed, then it is the TNSP that bears the risk (and will therefore have an incentive to take steps to mitigate that risk). Conversely, if the assets remain in the RAB, then the cost of those assets will be spread across all users, and the TNSP will not bear any of the risk of the assets becoming commercially stranded.

The current Rules also allow for the TNSP to offer a lower price to a user (or group of users) for Prescribed Transmission Services, when such a discount would be prudent, and to recover the cost of that discount from other users. Provided that the discounted charges the user pays still contribute to the overall fixed costs of the transmission system, all transmission users are better off as a result of the user continuing to stay connected to the network, and the assets not becoming stranded. However, as noted above, although these provisions exist in the current Rules, they have not been extensively used. TNSPs currently have

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Subject to any initial prudency review of the assets at the time at which they are first rolled into the RAB.

little incentive to agree to 'prudent discounts' with a user, to the extent that any assets that do become commercially stranded remain in the RAB, since the TNSP receives the same total revenue whether it offers the prudent discount or not.

The Commission's Rule Proposal is therefore intended to provide an incentive to TNSPs to act more commercially in relation to assets that are at potential risk of commercial stranding, either through treating these assets as a part of a Negotiated Service or (where the assets have been included in the RAB) through offering a prudent discount to users, in circumstances where the users may otherwise either bypass the network or cease operations/re-locate. This incentive is provided through provisions in the Rules to allow the AER to remove assets from the RAB, where the TNSP has not sought to manage the risk of stranding by entering seeking to enter into commercial arrangements with the relevant user(s)¹⁴⁵ or to offer a prudent discount (for both existing and future assets). The Draft Rule also precludes a TNSP from accelerating depreciation on these assets, in order to ensure that the TNSP cannot avoid this incentive (see Section 6.1.3).

The Commission recognises that the provision for the AER to remove assets from the RAB results in a degree of uncertainty, which may in turn dampen incentives to invest. However, the proposed Rules provide a high degree of clarity around the circumstances in which assets may be removed from the RAB, and those circumstances are very limited. In addition, there is a materiality provision in the Rules, so that assets may only be removed when their current value is above a specified level. The Commission has proposed that this level be \$20m (in 2006 dollars). There is a careful balance between ensuring that the Draft Rule only applies to substantive assets, 46 whilst at the same time setting the threshold at a meaningful level. The Commission also recognises that the same dollar value may not be appropriate in relation to different TNSPs, since the size of the RAB varies considerably between TNSPs. The Commission would particularly welcome submissions on the appropriate size of this materiality provision.

In addition, the risk of assets being removed from the RAB is one which is under the control of the TNSP, since removal of assets can only occur where the TNSP has not sought to either enter into appropriate contractual arrangements, or has not sought to offer a prudent discount. In each case, it is the action of the TNSP in seeking to offer a negotiated service/prudent discount that is relevant, and not the eventual outcome.

Notwithstanding that the risk of asset removal is expected to be one which is under the control of the TNSP, the proposed Rules also provide that where the TNSP faces additional risk which it cannot manage as a result of the provisions for assets to be removed from the RAB, this risk is not one that is covered by the WACC as calculated in accordance with the Draft Rule and needs to be

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This provision is only proposed to apply to new investments, since for existing investments the decision as to whether to classify those assets as part of a Prescribed Transmission Service or Negotiated Service has already been taken.

Recognising that prudent discounts on transmission pricing will only have a material impact on the commercial viability of users where they are a significant proportion of a business' overall costs.

compensated for via the inclusion of an additional revenue line-item in the building block calculation.

As a result, the Commission considers that the risk to which TNSPs are exposed as a result of the proposed Rules is limited but that exposing dedicated assets to the risk of removal from the RAB provides a stronger commercial incentive to TNSPs to appropriately address the risk of commercial stranding.

8. Commercial Negotiation Arrangements

The commercial negotiation framework for Negotiated Transmission Services requires an effective, efficient and timely dispute resolution process. The Commission considers that current dispute resolution provisions under Chapter 8 of the NER are not well suited to the resolution of disputes in relation to the pricing of services arising from commercial negotiations.

8.1. Current Arrangements

The current Rules provide for certain services to be provided on a negotiated basis. Where disputes arise in relation to such negotiations, there are dispute resolution provisions set out in cl.8.2 of the NER. The Commission understands that these arbitration provisions have never been invoked in relation to resolving access disputes and has not been made aware of any other instances in which they have been invoked.

8.2. Submissions

There was support amongst stakeholders for a negotiate-arbitrate model as an alternative form of regulation. Particular services, such as the direct provision of high voltage supply to a major industrial customer, were seen as being likely to involve negotiation between two well informed parties and as such well suited to alternative forms of control such as negotiate-arbitrate or price monitoring¹⁴⁷. Security requirements associated with existing switchyards and equipment was highlighted by one submission as an exclusion to this kind of alternative arrangement¹⁴⁸.

Some user groups¹⁴⁹ noted a lack of real competition or the virtual exclusion of consumers from the negotiation process meant that very few aspects of a TNSP's core business were currently amenable to negotiation.

8.3. Proposed Rule

The procedures for determining the negotiation framework as part of the transmission determination have been discussed in Section 5.3.

The negotiating framework must be consistent with the relevant provisions in Chapter 5 of the NER in relation to the negotiation of connection services and access arrangements for generators and MNSPs, as well as the new 5.4A

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Ergon Energy, p3

EnergyAustralia, p.19

¹⁴⁹ MEU, p.29

provisions¹⁵⁰. As part of each transmission determination, the AER must set out the criteria that are to be applied by the relevant TNSP in negotiating prices for the provision of negotiated transmission services, and are also to be applied by the commercial arbitrator in resolving any dispute over negotiated prices in that regulatory period.

The criteria established by the AER must comply with pricing principles that are set out in the Rules.

A commercial arbitration mechanism is to be applied in resolving disputes on the price to be paid for Negotiated Transmission Services. The key features of this mechanism is that it requires the appointed dispute resolution panel (comprising a single arbitrator) to be skilled in dispute resolution techniques, and to make a decision on price, which is binding on all parties, within 30 business days of the dispute being referred to it by the AER;

The commercial arbitrator is to have regard to the negotiated transmission service pricing criteria set out by the AER (discussed above) in resolving a dispute. Under ss.71(2) and (3) of the NEL, the relevant provisions of the Commercial Arbitration Act in each jurisdiction apply to a determination by the commercial arbitrator.

The Draft Rule does not make any changes to the provisions for the negotiation of services set out in Chapter 5 of the NER. .

8.4. Commission's Reasoning

An important aspect of an effective negotiation framework is that it operates against a backdrop of an appropriate dispute resolution mechanism. The presence of such a mechanism can improve incentives for all participants in the negotiation process to act in a reasonable manner.

The Commission is concerned that the current dispute resolution provisions under Clause 8.2 of the Rules are cumbersome and not well suited to the timely resolution of disputes arising from commercial negotiations for the provision of Negotiated Transmissions Services.

As a result, the Rule Proposal incorporates a streamlined dispute resolution mechanism. The Commission's Rule Proposal is a more effective and timely process suited to commercial negotiation requirements. The Commission does not propose any changes to the provisions for the negotiation of services set out

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Note Clause 5.4A of the Draft Rules (contained in the consequential amendments which are set out in Schedule 2) is designed to provide for access arrangements for generators, MNSPs and other transmission network users (including customers) in relation to transmission networks. The existing clauses 5.5 and 5.5A, which provide for access arrangements for generators and MNSPs, have been restricted in their operation to distribution networks.

in Chapter 5 of the NER. All that is proposed is that the manner in which disputes over pricing arising out of those negotiation processes are settled¹⁵¹.

This means that disputes over terms and conditions (as opposed to price) will be determined in accordance with the Chapter 8 dispute resolution process. While this is unsatisfactory, it is a consequence of the description of the powers conferred on the AEMC to make the transmission

revenue and pricing regulation rules.

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9. Savings and Transitional Provisions

The savings and transitional Rules should provide clarity and certainty to TNSPs and other affected persons in managing the change to the new Rules. Therefore, the Commission is examining issues that need to be supported or provided for in the savings and transitional Rules, and the best approach to the management of these issues.

9.1. Submissions

Submissions centred on certainty in respect of past, current and future investment decisions. There was strong support for the principle that commitments made under current arrangements should not be frustrated by amendments to the Rules¹⁵². Nor should a move to new Rules disadvantage TNSPs in respect of current revenue determinations¹⁵³.

The AEMC was also asked to consider future revenue resets in transitional provisions where TNSPs have passed the point-of-no-return in preparing a revenue application¹⁵⁴.

9.2. Proposed Rule

Savings and transitional provisions will apply to previous and current revenue determinations and to revenue determinations made before 1 January 2007. These provisions will therefore encompass the Directlink determination which is currently at draft determination stage.

The Commission acknowledges that Powerlink has already begun significant preparatory work under existing regulatory arrangements for its next determination which commences in 2007. The Rules will need to allow for some transitional arrangements for the AER and Powerlink in setting a determination from 1 July 2007. In particular, elements surrounding the process for a revenue determination will not be implemented in time to meet Powerlink's timeframe.

Nevertheless, the Commission is open to discussion on the right level of transitional arrangements that may apply to Powerlink's next determination. The Commission looks forward to discussing this issue further with the AER and Powerlink with a view to finalising an agreed outcome.

Savings and Transitional provisions will also apply to the treatment of assets and asset values which as at 16 February 2006 had a value in the RAB or are

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EnergyAustralia, p56

Ergon Energy, p22

Powerlink, p12

committed on the basis that they would be a prescribed service under the existing Rules and regulatory arrangements.

The Rule Proposal allows reopening provisions in clause 6.2.12 to be applied for current determinations despite the fact that other aspects of the current determination will be saved.

Consequential amendments are contained in Schedule 2 of the Draft Rules. The drafting the pricing rules (which are expected to be in place by 1 January 2007) will address the interface between the revenue provisions and the pricing provisions; the expansion of the pricing provisions to cover connected TNSPs; the changed scope of Prescribed Transmission Services and the impact of this changed scope on adjustments to the revenue cap, and the scope for negotiating charges for prescribed transmission services.

The Commission seeks comments on the proposed changes to the jurisdictional derogations. In particular, the Commission is interested in views on the potential need to entirely recast the Victorian derogations in so far as they relate to the regulation of transmission revenue and prices.

9.3. Commission's Reasoning

The Commission is mindful that substantial investment in long term assets should not face the risk of retrospective amendment every time an amendment to the Rules is considered.

Based on submissions the Commission has sought to strengthen investment certainty by retaining the value of assets made in previous determinations, retaining the revenue outcomes of previous and current determinations and ensuring due process for TNSPs and the AER where resources are already committed to a regulatory process.

The Commission has allowed reopener provisions as the exception to the grandfathering of past and current regulatory decisions. On balance, the Commission formed a view that reopener provisions encourage efficient investment in essential infrastructure which is in the genuine interests of providers and recipients of transmission services.

In relation to incentive mechanisms, the Commission acknowledges that the TNSPs are currently operating under certain incentive regimes, and that the transition provisions in the Rules will need to set out the extent to which the current incentives will be preserved for the purposes of the next determinations for each TNSP. Specifically, TransGrid is currently operating under the incentive regimes set out in the SRP, which include depreciation as an element of the incentive in relation to capital expenditure.

The other TNSPs are not yet operating under the incentive regime in the SRP. However, the SRP states that in rolling forward the asset base at the time of the next review, the AER intends to preserve the ex post approach in the DRP for

these businesses¹⁵⁵. However, the SRP does not make explicit what this means in relation to the treatment of the return on and return of capital expenditure in conducting the roll-forward. The Commission will need to further consider this issue in preparing the final version of the Rules.

155 AER, SRP, p.130

Appendix 1: Schedule 1 to NEL items 15-24

- The regulation of revenues earned or that may be earned by owners, controllers or operators of transmission systems from the provision by them of services that are the subject of a transmission determination.
- The regulation of prices charged or that may be charged by owners, controllers or operators of transmissions systems for the provision by them of services that are the subject of a transmission determination, and the methodology for the determination of those prices.
- Principles to be applied, and procedure to be followed, by the AER exercising or performing an AER economic regulatory function power.
- The assessment, or treatment by the AER, of investment in transmission systems for the purposes of making a transmission determination.
- 19 The economic framework and methodologies to be applied by the AER for the purposes of item 18.
- The mechanisms or methodologies for the derivation of the maximum allowable revenue or prices to be applied by the AER in making a transmission determination.
- The valuation, for the purposes of making a transmission determination, of assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator, and of proposed new assets to form part of a transmission system owned, controlled or operated by a regulated transmission system operator, that are, or are to be, used in the provision of services that are the subject of a transmission determination.
- The determination by the AER, for the purpose of making a transmission determination with respect to services that are the subject of such a determination, of
 - a. a depreciation allowance for a regulated transmission system operator; and
 - b. operating costs of a regulated transmission system operator; and
 - c. an allowable rate of return on assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator.
- Incentives for regulated transmission system operators to make efficient operating and investment decisions.
- 24 The procedure for the making of a transmission determination by the AER, including
 - a. the publication of notices by the AER; and

- b. the making of submissions, including by the regulated transmission system operator to whom the transmission will apply and by affected Registered participants (within the meaning of section 16 (3); and
- c. the publication of draft and final determinations and the giving of reasons: and
- d. the holding of pre-determined conferences.

Appendix 2: Submissions Received

- 1. AGL
- 2. Australian Energy Regulator
- 3. Electricity Transmission Network Owners
- 4. EnergyAustralia
- 5. Energy Networks Association
- 6. Energy Users Association Australia and Energy Action Group
- 7. Enertrade
- 8. Ergon Energy
- 9. Hydro Tasmania
- 10. Major Energy Users Inc and Major Employers Group Tasmania
- 11. National Generators Forum
- 12. Origin Energy
- 13. Powerlink
- 14. Public Interest Advocacy Centre
- 15. Total Environment Centre
- 16. TransGrid
- 17. TRUenergy/International Power/Loy Yang Marketing Management Co/NRG Flinders
- 18. VENCorp

Appendix 3: AER Guidelines, Schemes and Models

Under s.34(3)(e) of the NEL, the Commission has been given the power to confer a function on the AER to "make or issues guidelines, tests, standards, procedures or any other document in accordance with the Rules". The documents that the AER will be required to prepare are summarised in this Attachment.

The listed guidelines, schemes and models are subject to the Transmission Guidelines Procedures. The Procedures outline the consultation approach the AER must take in developing the new documents and any future amendments to the Guidelines. The Procedures are discussed in Section 5 of this Report.

Each of the documents listed below is to be prepared by 31 December 2006.

AER Guidelines, Schemes and Models

Name of document

Information Guideline. This will contain:

- Form of TNSP revenue proposal or negotiating framework;
- Information audit or verification requirements;
- Consent for public disclosure of information;
- Capital expenditure information;
- Operating expenditure information; and
- Additional information and matters (RAB, depreciation schedule, X factors, length of control period).

Cost Allocation Guideline:

- Guide to TNSP for preparation of its Cost Allocation Methodology.
- TNSPs' cost allocation methodology must also be consistent with the AER's existing Transmission Ringfencing Guidelines.

Service Performance Target Incentive Scheme

Efficiency Benefit Sharing Scheme

Post Tax Revenue Model

Roll-Forward of Regulatory Asset Base Model

Appendix 4: Opening RAB Value for Each TNSP

Transmission Network Service Provider	Regulatory Asset Base (\$m)	Start of Revenue Cap	End of Revenue Cap
EnergyAustralia	635.6 (as at 1 July 2004)	1 July 2004	30 June 2009
TransGrid	3,012.76 (as at 1 July 2004)	1 July 2004	30 June 2009
Powerlink	2,276.87 (as at 1 July 2001)	1 January 2002	30 June 2007
ElectraNet	823.75 (as at 1 January 2003)	1 January 2003	30 June 2008
Transend	603.6 (as at 31 December 2003)	1 January 2004	30 June 2009
SP AusNet	1,835.60 (as at 1 January 2003)	1 January 2003	31 March 2008
Murraylink Transmission Company	102.96 (as at 1 October 2003)	1 October 2003	30 June 2013
Directlink Joint Venture ¹⁵⁶	116.68 (as at 1 July 2005)	1 July 2005	30 June 2015

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Draft AER Decision on Application for Conversion and Revenue Cap, 8 November 2005. The Draft Rules do not include a value on the basis that it is a draft decision. Final Rules will include the RAB as determined in any final decision.