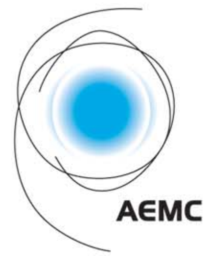

RULE CHANGE

Australian Energy Market Commission

DRAFT RULE DETERMINATIONS

Draft National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012

Draft National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012

Rule Proponents

Australian Energy Regulator
Energy Users Rule Change Committee - Amcor, Australian Paper, Rio Tinto, Simplot, Wesfarmers, Westfield and Woolworths

23 August 2012

For and on behalf of the Australian Energy Market Commission

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About the AEMC

The Council of Australian Governments (COAG), through its then Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. In June 2011 COAG announced it would establish the new Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two principle functions. We make and amend the national electricity, gas and energy retail rules, and we conduct independent reviews of the energy markets for the SCER.

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Executive Summary

Overview of draft rule determination

The Australian Energy Market Commission (AEMC or Commission) proposes to make a series of amendments to the National Electricity Rules (NER) and the National Gas Rules (NGR) on the economic regulation of network services.

These amendments provide the Australian Energy Regulator (AER), and for the NGR in Western Australia, the Economic Regulator Authority (ERA) with additional strength and flexibility in setting revenues and prices for electricity and gas network service providers (service providers). The most significant changes proposed are in the way the regulator determines the rate of return that service providers can earn on their assets. Other changes are proposed on how the size of the regulatory asset base (RAB) is determined and the process for making determinations.

The amendments proposed by the Commission are in response to rule change requests submitted by the AER and a group of large energy users (the Energy Users Rule Change Committee (EURCC)). These requests have been made following one full application by the AER of the current NER to each service provider. The areas covered by the rule change requests are:

- rate of return (under the NER and NGR);[1]
- capital expenditure incentives (under the NER);
- capital and operating expenditure allowances (under the NER); and
- regulatory determination process (under the NER).

In general, the Commission has found that the NER and NGR can be improved and strengthened. The Commission proposes a series of changes that will or are likely to contribute to the national electricity objective (NEO) and the national gas objective (NGO) (as relevant) taking into account the revenue and pricing principles.[2]

The proposed amendments comprise a package that, at a general level:

- promote flexibility and adaptability, to allow the regulator to make decisions in changing circumstances, and for service providers with different characteristics, such as network size and geography;

1 The AER's gas rule change request covers only how the rate of return is set under the NGR. The NGR also apply to the economic regulation of pipeline services in Western Australia. The Economic Regulation Authority of Western Australia applies the rules in that State.

2 The rule making tests are set out in section 88 of the National Electricity Law (NEL) and section 291 of the National Gas Law (NGL). The revenue and pricing principles are set out in section 7A of the NEL and section 24 of the NGL. They set out a number of principles that concern matters such as the recovery of efficient costs, incentives to promote efficiencies and that prices should reflect returns commensurate with the risks involved in providing services.

- improve the regulatory determination process to allow the regulator adequate time for decision making, to improve consumer engagement, and to improve transparency and accountability; and
- address ambiguities and clarify provisions, to put beyond doubt the interpretation of provisions, particularly in the NER.

Changes proposed to address problems identified

The Commission proposes a number of amendments in response to the rule change requests from the AER and the EURCC. These proposals have been informed by numerous submissions from stakeholders, various reports and other material, including the Commission's own analysis. Extensive consultation has been carried out as part of the consideration of these rule change requests.

The Commission's conclusions on the major issues covered are summarised below.

Rate of return

Overall approach

The most significant changes being proposed as part of these rule change requests are how the rate of return for service providers is determined under the NER and the NGR.

The Commission proposes to amend the rate of return provisions in the NER and NGR to provide for a common framework that enables the regulator to make the best possible estimate of the rate of return at the time a regulatory determination is made. When making the estimate the regulator must take into account the market circumstances, estimation methods, financial models and other relevant information.

Given the capital intensity of energy networks, the rate of return is one of the key determinants of the network prices that consumers pay. The nature of the energy network sector requires service providers to make significant investments in assets over time to maintain and improve their networks. The rate of return allows service providers to attract the necessary funds from capital markets for these investments and service the debt they incur in borrowing the funds.

Common framework

Currently, there are three different frameworks that have varying degrees of flexibility and prescription in how the rate of return should be determined. The Commission has concluded that there are disadvantages with each approach. The rate of return frameworks for electricity transmission and distribution are too prescriptive. The implementation of the rate of return framework under the NGR has resulted in a similar approach to that taken for electricity.

The AER has sought to have one rate of return framework in place, based on the electricity transmission model.

The Commission agrees that there is a strong case for a common framework under the NER, including as between transmission and distribution, and NGR for setting the rate of return. A common framework can minimise risks of distortions in capital allocation or investment decisions between the electricity and gas sectors. Yet, the framework must allow consideration of the different characteristics of service providers in each sector when estimating a rate of return.

The proposed common framework will require the regulator to make an estimate of the rate of return that is consistent with an overall objective. The objective is focussed on the rate of return required by a benchmark efficient service provider, with similar risk characteristics as the service provider subject to the decision. Under this approach the regulator will have the flexibility to adopt the approach it considers appropriate to estimate the rate of return, provided it considers relevant estimation methods, financial models, market data and other information. This is so that the best estimate of the rate of return can be obtained that reflects efficient financing costs of the service provider at the time of the regulatory determination.

In this way, the regulator can better respond to changing financial market conditions, particularly where volatile market conditions impact on a service provider's ability to attract sufficient capital to finance the expenditure necessary to provide a reliable energy supply to consumers.

Guidelines

While providing for flexibility, the Commission recognises that it is important for investor, service provider and consumer confidence in the framework that the regulator is transparent about its approach to determining the allowed rate of return.

To supplement the considerations at each regulatory determination, the proposed framework requires the regulator to develop rate of return guidelines setting out the approach it intends to take in estimating the allowed rate of return for service providers. This must be undertaken no less than every three years and involves consultation with stakeholders. Consultation on the guidelines will give all stakeholders an opportunity to contribute to discussions about how the regulator should approach the overall rate of return estimate.

As part of the framework the Commission has not included any preferred methods for estimating a rate of return consistent with the overall objective. Instead the Commission has provided some high-level principles to guide the estimation and left the judgement as to the best approach to the regulator to make, consistent with achieving the overall allowed rate of return objective. This involves the regulator making judgements about analytical techniques and evidence to use to make the estimate of the rate of return.

Return on debt

As part of its assessment of the rate of return framework, the Commission has found that the estimation of the return on debt component can be dramatically improved to

allow consideration of alternative ways of determining the efficient debt servicing costs of electricity network service providers (NSPs).

Both the AER and the EURCC have claimed that the current regulatory approach in the NER is not delivering a satisfactory estimate of the cost of debt for NSPs. In its rule change request the EURCC proposed changing the rules from estimating a forward-looking return on debt to using a trailing average of observed historical debt costs of benchmark NSPs.

The Commission agrees with the AER and the EURCC that the current approach in the NER is problematic for some NSPs, depending on their characteristics and debt management strategies. A number of other approaches to estimating the return on debt were suggested to the Commission by stakeholders.

A number of different approaches to estimating the return on debt may meet the overall rate of return objective. Consistent with the proposed framework, the Commission is of the view that the regulator is in the best position to determine the best approach to estimating a return on debt. The proposed common framework provides that the regulator can use a range of different approaches to undertake this task.

As part of its rule change request, the EURCC proposed that the return on debt for state-owned NSPs to be determined differently from privately-owned NSPs.[3] The Commission has considered this and does not support this aspect of the EURCC's rule change request for a number of reasons, including competitive neutrality considerations.

Capital expenditure incentives (electricity)

The Commission proposes to include in the NER a number of "tools" the AER can apply to provide adequate incentives for NSPs to spend capital expenditure efficiently, having regard to an overall capital expenditure objective. The objective describes what the capital expenditure incentive regime, as a whole, should aim to achieve. That is, only capital expenditure that is efficient should enter the RAB to be recovered from consumers in future periods.[4]

The tools are:

- applying capital expenditure sharing schemes to provide incentives to incur efficient capital expenditure. These are to be designed by the AER;
- undertaking reviews of efficiency of past capital expenditure, including the ability to preclude inefficiently incurred expenditure from being rolled into the

3 Note that 'state-owned' encompasses a variety of terms such as Government owned, and publicly owned. 'privately-owned' encompasses a variety of terms such as privately owned and non-state owned. It is considered that these two terms are the most appropriate and accurate to use and are, therefore, adopted throughout this document.

4 In this context, references to the RAB are to the RAB that is rolled forward from one regulatory period to another.

RAB. The amount that may be precluded is limited to the amount of any expenditure above the capital expenditure allowance; and[5]

- deciding whether to depreciate the RAB using actual or forecast expenditure.

In designing and applying these tools, the AER will be required to take into account a number of principles and factors.

The proposed amendments include a requirement on the AER to make guidelines setting out its approach to incentives. These guidelines must be made in consultation with stakeholders.

The amendments to the NER have been proposed after considering the AER's concerns, and undertaking further analysis. The AER was concerned that there are incentives for NSPs to spend more than the capital expenditure allowances set by the AER as part of their regulatory determinations for a regulatory period. The Commission identified two key issues with capital expenditure incentives in the NER:

- the power of the incentive to incur capital expenditure efficiently declines during a regulatory period; and

- capital expenditure above the allowance is not subject to any regulatory scrutiny which means that there is a risk that expenditure above the allowance may be inefficient.

Also there are factors outside of the NER that may provide for additional expenditure to be incurred.

The Commission has identified a range of theoretical drivers for spending above a capital expenditure allowance. NSPs exhibit different expenditure practices. There are clearly legitimate circumstances in which expenditure above capital expenditure allowances could occur, but often mitigation action such as reprioritising projects could be taken by the NSP to ensure that, overall, capital expenditure is within the allowance set by the regulator. Amongst some NSPs there is a tendency to defer capital expenditure to the end of the regulatory period. For some this practice is not so obvious. A range of tools (see above) that the AER can apply as appropriate is the best way to address such differences.

As highlighted above, one of the tools proposed is a review of the efficiency of past capital expenditure. In the Commission's view this is the most appropriate way to address the lack of supervision of capital expenditure that has been incurred. The benefits of a review of the efficiency of past capital expenditure include:

- providing information to other stakeholders regarding the efficiency of the NSP;

[5] Unless it relates to within period capitalisation policy changes or inefficient related party margins, which may also be precluded from being rolled into the RAB.

- contributing to the AER’s analysis in setting capital expenditure allowances for the NSP’s next regulatory period; and
- providing a necessary companion to any capital expenditure sharing schemes in place. While effective, capital expenditure sharing schemes will not definitely ensure that NSPs never undertake capital expenditure inefficiently. The review provides a further and final check on the efficiency of capital expenditure forming part of the RAB.

When considered alongside the amendments proposed for capital expenditure and operating expenditure allowances outlined below, this package of tools can be used by the AER to provide incentives as required so that only investment that is necessary is incurred and rolled into the RAB. If this occurs consumers will pay as part of their network charges only for investment that was necessary to provide reliable network services.

Capital expenditure and operating expenditure allowances (electricity)

The Commission proposes to make amendments to the NER to clarify and remove ambiguities regarding the powers of the AER to interrogate, review and amend capital expenditure and operating expenditure proposals submitted by NSPs. The AER should also be required to publish annual benchmarking reports, setting out the relative efficiencies of NSPs based on the information available to it.

These amendments are proposed after having considered the AER’s concerns that restrictions in the NER have resulted in capital expenditure and operating expenditure allowances of NSPs that are not efficient. It should be noted here that what the AER approves in this context is expenditure, not projects.

Increases in the rate of return and expenditure allowances have both been significant factors contributing to higher network charges for consumers; and some increases in expenditure have been necessary.

In clarifying the AER's powers the Commission has confirmed its overall approach to capital expenditure and operating expenditure allowances. The NSP’s proposal is necessarily the starting point for the AER to determine a capital expenditure or operating expenditure allowance, as the NSP has the most experience in how its network should be run. Under the NER the AER is not "at large" in being able to reject the NSP’s proposal and replace it with its own since it must accept a reasonable proposal. But the AER should determine what is reasonable based on all of the material and submissions before it.

This reflects the obligation that all public decision makers have to justify their decisions. In addition, the NER do not place any restrictions on the analytical techniques that the AER can use to scrutinise and, if necessary, amend or substitute the NSP’s capital expenditure or operating expenditure forecasts. From a practical perspective the NER reflect the approaches of other regulators.

The Commission views benchmarking as a critical exercise in assessing the efficiency of a NSP, and approving capital expenditure and operating expenditure allowances. Benchmarking should take into account differences in the environments of the different NSPs, being those factors that are outside the control of the NSP. The Commission proposes to remove any potential constraints in the NER on the way the AER may use benchmarking.

Consideration of these rule change requests has highlighted the difficulties consumers and their representatives experience in participating in the regulatory determination process. Whilst benchmarking is a critical tool for the regulator, it can also be of assistance to consumers, providing them with relative information about network performance on NSPs. Benchmarking information would be useful to consumers when participating in the regulatory determination process and merits reviews, and also in their informal interactions with NSPs.

Regulatory determination process

The Commission proposes a number of detailed changes to the regulatory determination processes in Chapters 6 and 6A of the NER.

These proposed amendments follow the consideration of a series of process related issues raised by the AER. Those issues relate largely to the ability of stakeholders to engage effectively in the regulatory determination process.

The Commission considers that the process needs to be transparent and timely. This is so that all parties have a clear understanding of their rights and obligations at the outset, as well as ample opportunity to participate. This is a key contributor to confidence in the overall outcomes from the perspective of both the NSP and consumers.

The proposed changes include:

- lengthening the regulatory determination process by commencing six months earlier, for both electricity distribution and transmission. This provides time for the regulator to prepare and publish a mandatory issues paper and hold a public forum. It also provides time for a cross submissions stage later in the process if required;

- the application of an optional framework and approach paper for electricity transmission as well as distribution. Also that document can be used, where necessary, to settle a number of issues prior to regulatory proposals being submitted. Examples here include information that needs to be provided by the NSP, and the capital expenditure incentive package that the AER proposes to apply to the NSP; and

- improving transparency and accountability by requiring the NSP to nominate to the AER the reasons why it classifies material as confidential. The AER would be required to publish a report of the NSP making confidentiality claims as well as indicating the proportion of material that the NSP claims to be confidential.

The Commission considers the consultation process in the regulatory determination process set out in the NER as a minimum. The Commission encourages engagement and interaction between the NSP and consumer representative groups, and the NSP and the AER outside of the formal regulatory determination process.

Consumer engagement and participation

A number of the proposed amendments also attempt to address a lack of focus on consumer engagement and participation. The proposed changes in this regard are broad and varied.

They include requiring:

- the NSP to indicate in its proposal the extent to which it has engaged with consumer representatives. The NSP must also provide an overview paper for consumers;
- the AER to publish an issues paper after receiving the regulatory proposal. The purpose is to assist consumer representatives to focus on the key preliminary issues on which they should engage and comment;
- the AER to publish a benchmarking report that informs consumers on the relative efficiencies of NSPs; and
- the AER, when setting capital expenditure and operating expenditure allowances, to take into account the extent to which a NSP has engaged with consumers in preparing its forecasts.

Drivers for effective regulation

The Commission is of the view that the package of amendments to the NER and NGR included in this draft rule determination provides the regulator with additional tools to carry out its functions. The effectiveness of the NER and the NGR in terms of the overall price and service outcomes experienced by consumers is dependent on two drivers:

- the effective application of the NER and NGR by the regulator; and
- the effective corporate governance of the NSPs providing services which are subject to economic regulation.[6]

The efficiency with which network services are provided depends on the way in which the drivers work together. Only when these aspects are operating as intended will the best outcomes for consumers be achieved.

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6 Corporate governance here refers to governance at both the management and shareholder level.

The interpretation and application of the rules by the regulator is crucial. This draft rule determination provides examples and illustrations of how the rules could be interpreted and applied to address problems that exist currently, but also how their application could adapt when the circumstances change.

Management and shareholders of service providers also play a critical role in the efficient provision of network services. They do this through a variety of means, such as approving proposals to be submitted to the regulator, given the significance of AER decisions for these businesses. They also create incentives within the business to encourage efficient outcomes.

Merits review

In April 2012, the Standing Council on Energy and Resources (SCER) appointed a panel to undertake a review of the Limited Merits Review (LMR) regime in the National Electricity Law (NEL) and the National Gas Law (NGL).

The LMR Panel has observed that a narrower, and more formalistic approach to merits review, has developed than what was originally intended. In its view this approach has been relatively detached from the focus on the overall objectives set out in the NEL and NGL and encouraging outcomes that are in the long term interests of consumers. The LMR Panel has suggested that the NER and the NGR could be amended to provide for more holistic, broader decision making, focussing on overall outcomes.

Where possible, the draft rule seeks to address this concern by allowing the regulator to approach decision making more holistically. The main examples are requiring the regulator to focus on meeting overall objectives in relation to capital expenditure incentives and the rate of return that are linked to the NEO/NGO and the revenue and pricing principles.

The LMR Panel is still in consultation phase and has not made any recommendations for change at this stage. It is possible that further rule changes will be required to complement any changes to the merits review process that the SCER decides should be made.

Next steps

The Commission invites comments from stakeholders on this package of amendments, prior to making its final rule determinations and final rule in November 2012.

The Commission also invites submissions on whether the draft rule provided reflects the intentions set out and approaches taken in these draft rule determinations.

Submissions close on 4 October 2012. Any requests for a public hearing under the NEL or the NGL must be made by 30 August 2012.

Implementation

Arrangements will be required to transition a number of NSPs to the new rules. The AEMC's implementation proposal will be published for comment mid September 2012.

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1 Network regulation rule change requests

1.1 Rule change requests

In September 2011 the Australian Energy Regulator (AER) submitted two rule change requests seeking to amend the rules for the economic regulation of network services. The areas identified by the AER as deficient and requiring improvement are:

- For electricity: the capital and operating expenditure framework, capital expenditure incentives, rate of return provisions and the efficiency of the regulatory process, as set out in the National Electricity Rules (NER); and
- For natural gas: the rate of return provisions in the National Gas Rules (NGR).

In October 2011, the Energy Users Rule Change Committee (EURCC), a committee of large energy consumers, comprising Amcor, Australian Paper, Rio Tinto, Simplot, Wesfarmers, Westfield and Woolworths, also submitted a rule change request. The EURCC's rule change request relates to one area of the rate of return on capital under the NER, being the cost of debt. The EURCC seeks changes to the NER relating to the methodology for the calculation of the return on debt component and a differential cost of debt for state-owned and privately-owned network service providers (NSPs).[7]

1.2 Rationale for the rule change requests

This section sets out, at a high level, the major problems with the current NER and NGR, as reflected in the AER's and the EURCC's rule change requests.

In the AER's view, the rules, in particular the NER, have hindered its ability to appropriately regulate the electricity networks, to ensure that the regulated electricity networks invest efficiently and earn appropriate commercial returns, and to respond to changing circumstances[8]. These conclusions have followed at least one application of the chapter 6 and chapter 6A NER frameworks for each of the electricity NSPs, and the equivalent provisions of the NGR for gas service providers. The main problems identified by the AER are as follows:

- capital expenditure and operating expenditure allowances (electricity) – the AER refers to restrictions under the NER on its ability to interrogate and amend the capital expenditure (capex) and operating expenditure (opex) forecasts of NSPs and the requirement that the regulator must accept a forecast if it reasonably reflects certain criteria listed in the NER. The AER considers that the NER invite upwardly biased forecasts and limit its ability to interrogate and amend forecasts provided by NSPs;

7 In this draft rule determination a reference to "service providers" includes both gas and electricity service providers, while a reference to "NSP" refers only to an electricity network service provider.

8 AER Executive Briefing, p1, 29 September 2011

- capex incentives (electricity) – the AER considers that there are problems with the current NER in respect of capex incentives. This is because they provide for all actual capex incurred within a regulatory control period to be rolled into the regulatory asset base (RAB) regardless of whether or not the capex allowed for in the determination was efficient. This roll forward model, in the AER's view, creates incentives for NSPs to incur more than efficient levels of capex;

- rate of return (electricity and gas) – the AER's electricity and gas rule change requests refer to the problems associated with having different rate of return frameworks for electricity distribution, electricity transmission and gas. In the AER's view these frameworks have required repeated assessments of similar arrangements and evidence for each determination or access arrangement process, creating an administrative burden. For gas, the AER states that the NGR create uncertainty in that they do not specify a particular framework for determining the rate of return;

- cost of debt (electricity and gas) – the AER states that the current approach to assessing the cost of debt has become difficult to apply under changing financial market conditions. The EURCC also considers this approach is problematic in the case of electricity, along with the lack of a differential cost of debt for state-owned and privately-owned NSPs; and

- regulatory determination process (electricity) – the AER has raised a number of process issues that largely concern the ability of stakeholders to engage effectively in the regulatory determination process. For example, NSPs provide submissions on their own regulatory proposals. In the AER's view this may result in stakeholders having insufficient time to consider additional material from the NSP.

1.3 Solutions proposed in the rule change requests

The rule proponents propose a number of amendments to the NER and the NGR to address the problems they have identified. In short, the solutions may be described as follows:

- capex and opex allowances – the AER proposes amendments to the NER to set its own estimate of capex and opex, using a range of inputs;

- capex incentives – the AER proposes for inclusion in the NER a sharing mechanism that would apply to any expenditure above the regulatory allowance. 60 per cent of this expenditure above the allowance would be rolled into the RAB for the next regulatory control period, with the remainder excluded from that asset base and funded by shareholders. It also proposes being given the discretion in transmission to determine whether to adopt forecast or actual depreciation; and to disallow capex for related party margins and as a consequence of capitalisation policy changes;

- rate of return – the AER proposes a single framework for electricity and gas which most closely aligns with the current framework for electricity transmission set out in chapter 6A of the NER; that is, the outcomes of periodic rate of return reviews must apply and cannot be departed from in subsequent determinations and access arrangements made before the next rate of return review. The AER would also amend the NER and the NGR to provide it with increased discretion in how to determine certain individual parameters forming part of the rate of return and would remove the need for persuasive evidence before amending them. For gas in particular, the AER proposes that the NGR would prescribe that the rate of return would be calculated as a nominal post-tax vanilla weighted average cost of capital, using the capital asset pricing model to determine the return on equity. This means the rate of return provisions for electricity and gas would be in line;

- cost of debt - the AER proposes that the methodology for setting the debt risk premium should be included in the periodic rate of return reviews undertaken by the AER, rather than being prescribed in the NER. The EURCC proposes a new rules-prescribed methodology for calculating the cost of debt, having regard to the "actual debt costs" of electricity NSPs. The return on debt for state-owned electricity NSPs would be determined differently to non-state owned NSPs; and

- regulatory determination process - the AER considers that aspects of the current regulatory determination process under the NER could be improved to enable more timely submission and consideration of material by all relevant stakeholders prior to the AER making its decisions.

1.4 Consultants

The Australian Energy Market Commission (AEMC)[9] has engaged a number of consultants to assist it with the analysis of issues raised in the rule change requests from the AER and the EURCC. Initially, the AEMC engaged Professor Stephen Littlechild, Professor George Yarrow and Strategic Finance Group Consulting (SFG). Professors Littlechild and Yarrow have provided assistance in the area of capex and opex allowance, capex incentive and regulatory process. SFG has provided assistance on the rate of return (including cost of debt) issues. These consultants have provided reports to the AEMC which are available on the AEMC's website.

Following the publication of the directions paper in March 2012 the AEMC engaged the following consultants to undertake analysis and provide reports:

- The Brattle Group (Brattle) – on approaches to assessing capex and opex forecasts;

- Covec - on related party margins;

9 In general in this document the term "AEMC" is used in respect of administrative actions or former decisions of the Australian Energy Market Commission, whereas the term "Commission" is used when referring to the considerations and decisions leading up to the draft rule determination.

- Economic Insights – on the use of actual and forecast depreciation;
- Parsons Brinckerhoff – on capital expenditure practices of NSPs; and
- SFG - an additional report on cost of debt issues.

These additional reports are published with this draft rule determination.[10]

In making its draft rule determination the Commission has been informed by the material prepared by these consultants.

1.5 Commencement of rule making process and extensions of time

On 20 October 2011, the Commission published a notice under section 95 of the National Electricity Law (NEL) and section 303 of the National Gas Law (NGL) advising of its intention to commence the rule making processes and first round of consultation on the AER's rule change requests. A consultation paper prepared by AEMC staff identifying specific issues and questions for consultation was also published with the rule change requests.

Given that the proposals raised issues in the rules on similar subject matter, on 3 November 2011, the AEMC gave notice under section 93(1)(a) of the NEL to consolidate the EURCC's rule change request with the AER's electricity rule change request. The result of this consolidation was the creation of a new consolidated rule change request which would run to the same process and timetable as the original AER rule change request.

Due to the complex nature of these rule change requests, the AEMC issued notices under section 107 of the NEL and section 317 of the NGL to extend the length of the rule change process in this case. Accordingly, on 20 October 2011 and 3 November 2011, the AEMC issued notices to extend the period of time for the making of the draft rule determinations on these rule change requests to 26 July 2012. On 21 June 2012, the AEMC issued further notices under section 107 of the NEL and section 317 of the NGL to extend the period of time for the making of the draft rule determinations to 23 August 2012.

1.6 Consultation on rule change requests

On 20 October 2011 the AEMC issued a consultation paper on the AER rule change request and on 3 November 2011 it issued a consultation paper on the EURCC rule change request. The AEMC held a public forum in Brisbane on 23 November 2011 to facilitate discussion on the - rule change requests. Submissions on the two consultation papers closed on 8 December 2011.

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10 This document reflects draft rule determinations made by the Commission for electricity and gas. For ease of reference, the singular term "draft rule determination" has been used to refer to these throughout this document.

On 2 March 2012, the AEMC published a directions paper on the consolidated rule change request and the AER's gas rule change request.[11] The directions paper explained the AEMC's initial positions on, and set out its next steps to progress these rule changes requests. A series of workshops were also held on 2 April 2012 in Melbourne to discuss some of the key issues raised in the directions paper. Submissions on the directions paper closed on 16 April 2012. A summary of these submissions is published with this draft rule determination.

The AEMC held a public forum in Sydney on 9 May 2012 with Professors Littlechild and Yarrow. Professors Littlechild and Yarrow presented on the papers they provided for the AEMC's directions paper, which provided stakeholders with the opportunity to raise questions with them.

The AEMC held workshops in Sydney on 18 May 2012 and 13 July 2012 on cost of debt issues. The AEMC also invited written submissions on cost of debt issues which closed on 5 July 2012.

1.7 Consultation on draft rule determination

In accordance with the notices published under section 99 of the NEL and section 308 of the NGL, the Commission invites submissions on these draft rule determinations by 4 October 2012. In order for the AEMC to meet the statutory deadline for publication of the final determination in November 2012 it is important that submissions are not provided after this date, and any submissions that are received late may not be given full weight.

In accordance with section 101(1a) of the NEL and section 310(2) of the NGL, any person or body may request that the Commission hold a hearing in relation to the draft rule determinations. Any request for a hearing must be made in writing and must be received by the Commission no later than 30 August 2012.

Submissions and requests for a hearing should quote project number "ERC0134/ERC0135/GRC0011" and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission

PO Box A2449

SYDNEY SOUTH NSW 1235

1.8 Next steps

Transitional arrangements will be published in September 2012.

11 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012.

The Commission invites comments from stakeholders on this package of amendments, prior to making its final rule determinations and final rule in November 2012.

The Commission also invites submissions on whether the draft rule provided reflects the intentions set out and approaches taken in these draft rule determinations.

2 Draft Rule determination - electricity

2.1 Commission's draft determination

In accordance with section 99 of the NEL the Commission has made this draft rule determination in relation to the rules proposed by the AER and the EURCC as part of the consolidated rule change request.

The Commission has determined that it should not make the rule proposed by the AER and the EURCC but rather to make a more preferable rule.[12]

The Commission's reasons for making this draft rule determination are set out in chapters 6 to 12.

A draft of the more preferable rule that the Commission proposes to make (draft rule) is attached to and published with this draft rule determination. Its key features are described in chapters 6-12 of this draft rule determination. The draft rule that has been published does not include the transitional provisions, which will be published in September 2012.

2.2 Commission's considerations

In assessing the consolidated rule change request the Commission considered:

- its powers under the NEL to make the draft rule determination;
- the consolidated rule change request;
- submissions received during initial consultation on the consolidated rule change request and following publication of the directions paper;
- comments made by stakeholders as part of workshops and forums held as part of the consultation undertaken for the consolidated rule change request;
- consultants reports;[13]
- the ways in which the proposed rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO);
- discussion papers and reports published by the Limited Merits Review Panel;

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12 Under section 91A of the NEL the AEMC may make a rule that is different (including materially different) from a market initiated proposed Rule (a more preferable rule) if the AEMC is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates) the more preferable rule will or is likely to better contribute to the achievement of the national electricity objective.

13 Referred to in chapter 1.

- previous decisions of the Commission, including the 2006 chapter 6A rule determination;[14]
- relevant documents published by the Ministerial Council on Energy (MCE) regarding the development of chapter 6 of the NER; and
- relevant merits review decisions of the Australian Competition Tribunal (ACT).

There is no relevant MCE Statement of Policy Principles relating to the consolidated rule change request.

2.3 Commission's power to make the rule

The Commission is satisfied that the draft rule falls within the subject matter about which the Commission may make rules as set out in section 34 of the NEL and in schedule 1 of the NEL. The draft rule is, among other things, within:

- section 34(1)(a)(iii), as it relates to the activities of persons participating in the National Electricity Market (NEM) or involved in the operation of the national electricity system; and
- the matters set out in items 15-24 and 25-26I of schedule 1, as they relate to transmission and distribution system revenue and pricing.

2.4 Rule making test

2.4.1 NEO

Under section 88(1) of the NEL the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NEO. This is the decision making framework that the Commission must apply.

The NEO is set out in section 7 of the NEL as follows:

> "The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system."

For the consolidated rule change request the Commission considers that the relevant aspects of the NEO is the promotion of efficient investment in electricity services for

14 AEMC, Economic Regulation of Transmission Services, Rule Determination, 16 November 2006, Sydney

the long term interests of consumers with respect to price. More particularly, efficient investment requires:

- there being a level of investment in network infrastructure so that safety and reliability standards are met in circumstances where consumers pay no more than is necessary for the network services they receive;
- the costs NSPs incur in providing network services to their customers reflecting efficient financing costs. This is to allow NSPs to attract sufficient funds for investment while minimising the resultant costs that are borne by consumers; and
- the establishment of certain, robust and transparent regulatory environment. Investors will have more confidence and may be more likely to invest in monopoly infrastructure where the regulatory process is certain and robust, with appropriate checks and balances in place. Consumers will also have more confidence that the outcomes are better in such an environment.

2.4.2 Assessment of the draft rule against the NEO

The Commission is satisfied that the draft rule will, or is likely to, contribute to the achievement of the NEO for the reasons set out below.

Approach to capex and opex

The draft rule confirms the discretion the regulator has to review and scrutinise NSPs' capex and opex proposals to better achieve the objective that allowances set are efficient. The regulator can adopt a range of analytical techniques to determine the ultimate capex and opex allowances for a NSP. The draft rule also provides for a suite of ex ante incentive mechanisms that could be used to encourage NSPs to incur only capex which is efficient. As NSPs are different the draft rule provides the regulator with discretion to determine an appropriate capex incentive package for each NSP. As a final check the draft rule also provides for the regulator to undertake a review of past capex for efficiency.

This establishes a package of tools to allow the regulator to set efficient allowances in the first place, to establish an appropriate ex ante incentive regime to encourage efficient capex and finally, to undertake a review of past expenditure and to preclude inefficient expenditure being rolled into the regulatory asset base. This package should mean that only investment that is necessary is incurred and rolled into the asset base. This means that consumers will pay as part of their network charges only for investment that was necessary to provide network services to them.

Rate of return

The draft rule adopts a new framework for determining the rate of return. It provides that the allowed rate of return for a NSP must meet an objective related to the efficient financing costs of a benchmark efficient NSP with a similar nature and degree of risk as the NSP subject to the decision. The draft rule provides the regulator with sufficient

discretion in estimating return on equity and debt but also requires the consideration of a range of estimation methods, financial models, market data and other information so that the best estimate of the rate of return can be obtained overall.

The draft rule also provides for the allowed rate of return to reflect changing circumstances so that the application of the framework should result in the best overall estimate of the rate of return in any case, reflecting efficient financing costs. This should ensure sufficient funds are attracted for network investment, while minimising costs for consumers.

Regulatory determination process

The draft rule makes a number of changes to the process for making determinations. It provides more time for consumers and other stakeholders to participate meaningfully in the regulatory determination process, as well as giving the regulator more time towards the end of the process to consider material presented to it. The draft rule also provides for increased transparency and accountability regarding confidentiality claims over material submitted as part of the process.

The regulatory determination process changes increase the likelihood of better overall outcomes, as there should be more time to consider information, and resolve issues at an earlier stage where possible. This will help increase confidence in the regulatory determination process.

2.4.3 Implementation costs

The draft rule provides for a range of significant changes to chapters 6 and 6A of the NER. There will be implementation costs for NSPs and other stakeholders, including consumers, in adjusting to these changes. For the regulator there will be implementation costs as it develops the guidelines and schemes necessary for the successful application of this package of rules.

Having said this, the Commission is of the view that these costs are minor when compared with the potential benefits associated with the draft rule. The costs will be outweighed by the outcomes of the determination process.

2.4.4 AEMO's declared network functions

Under s. 91(8) of the NEL the Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of Australian Energy Market Operator's (AEMO) declared network functions. The draft rule is compatible with AEMO's declared network functions because it is not related to and does not affect these functions.

2.5 More preferable rule

Under s. 91A of the NEL, the AEMC may make a rule that is different (including materially different) from a market initiated proposed rule (a more preferable rule) if the AEMC is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates), the more preferable rule will, or is likely to, better contribute to the achievement of the NEO.

Having regard to the issues raised by the proposed rule, the Commission is satisfied that the draft rule will, or is likely to, better contribute to the achievement of the NEO than the proposed rule for the following reasons:

- the draft rule encourages more holistic, overall decision-making by the regulator. In particular, the rate of return provisions and the capex incentive provisions of the draft rule allow the AER to adopt an approach that is consistent with the achievement of a specified objective without prescribing the precise approach which the AER must adopt;
- the draft rule provides the regulator with discretion to consider the changing circumstances of each NSP, and make decisions on a case by case basis so that the best outcomes can be achieved - at the same time, the regulator must do so in an accountable and transparent manner. For the rate of return provisions, the draft rule also enables the regulator to have regard to any changes in financial market conditions that could have a positive or negative impact on a NSP's rate of return at the time of its decision; and
- the draft rule amends the regulatory process so that it commences earlier and includes additional steps. This gives the regulator more time to make better decisions and other stakeholders more time to participate in the process more effectively.

Chapters 6 to 12 explain in greater detail the respects in which the Commission considers that the draft rule is likely to better contribute to the achievement of the NEO than the proposed rule.

2.6 Other requirements under the NEL

In applying the rule making test in section 88 of the NEL, the Commission has taken into account the revenue and pricing principles as required under section 88B of the NEL as the draft rule relates to matters specified in items 15 to 24 and 25 to 26I of Schedule 1 to the NEL.

The revenue and pricing principles have been taken into account below.

2.6.1 Recovery of efficient costs

Section 7A(2) of the NEL – a NSP should be provided with a reasonable opportunity to recover at least the efficient costs it incurs in providing network services and in

complying with a regulatory obligation or requirement or making a regulatory payment.

Capex/opex allowances and capex incentives

A NSP's proposal must set out the NSP's capex and opex requirements for the regulatory period. While this draft determination clarifies the discretion the regulator has to interrogate and amend a NSP's forecasts, it also confirms the significance of the NSP's proposal for the regulator's determination. In terms of capex incentives, any scheme implemented by the regulator is likely to allow an increase above a NSP's capex allowance (or at least be neutral) for an efficient NSP. In addition, any efficient costs of a NSP should be rolled into the RAB following a review of the efficiency of past capex by the regulator.

Rate of return

This principle requires that the rate of return reflects efficient financing costs necessary to attract sufficient investment capital to maintain a reliable electricity supply while minimising the cost to consumers. The rate of return must therefore only reflect efficient financing costs of a benchmark efficient NSP to ensure that the service provider can retain the benefits from adopting more efficient financing arrangements than assumed by the regulator, and consumers are protected if a service provider is inefficient in their financing practices.

Regulatory determination process

The regulatory determination process changes increase the likelihood of better overall outcomes, as there should be more time to consider information, and resolve issues at an earlier stage where possible.

2.6.2 Effective incentives

Section 7A(3) of the NEL – a NSP should be provided with effective incentives to promote economic efficiency with respect to the services the NSP provides. The economic efficiency that should be promoted includes efficient investment in the systems used to provide network services, efficient provision of those services, and efficient use of the systems that provide those services.

Capex/opex allowances and capex incentives

The combination of an appropriately set ex ante allowance for capex and a range of capex incentives (including a review of the efficiency of past capex) will create effective incentives to promote economic efficiency. In addition, the draft rule gives the regulator the power to establish small scale incentive schemes to test innovative approaches to incentives.

Rate of return

Efficient outcomes in terms of investment, operation and use of network services are most likely to be obtained when the best estimate of the rate of return is obtained.

2.6.3 Charges for network services

Section 7A(5) of the NEL – the price or charge for the provision of a network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the network service.

Capex/opex allowances and capex incentives

As described above, the regulator should take into account the NSP's proposal as part of the process of setting expenditure allowances. In addition, the draft rule clarifies the discretion the AER has in interrogating and amending the NSP's proposal. Appropriately set capex and opex allowances should allow for a return commensurate with regulatory and commercial risks.

Rate of return

Having regard to this principle involves the estimated rate of return being commensurate with the risks involved in providing the service, which is what is sought from the rate of return estimation process. This principle can best be met by obtaining the best possible rate of return estimate.

2.6.4 Economic costs and risks of potential for under and over investment

Section 7A(6) of the NEL – regard should be had to the economic costs and risks of the potential for under- and over-investment by a NSP in the systems used to provide network services.

Capex/opex allowances and capex incentives

Capex and opex allowances that are set too high or too low can create the risk of under- or over- investment. By clarifying the discretions the regulator has, the draft rule and draft determination contribute to expenditure allowances that better reflect efficient costs. More effective capex incentive arrangements, including reviews of the efficiency of past capex, may also mitigate the risk of over-investment.

Rate of return

If the rate of return estimate is set to the efficient required return, there will be no incentive for under- or over- investment. Such incentives for inefficient investment become more pronounced when the rate of return estimate differs from the efficient required return.

Regulatory determination process

The draft rule provides more time for consumers and other stakeholders to participate meaningfully in the regulatory determination process, as well as giving the regulator more time towards the end of the process to consider material presented to it. This should better allow economic costs and investment risks to be brought to the attention of the regulator and considered.

2.6.5 Economic costs and risks of potential for under and over utilisation

Section 7A(7) – regard should be had to the economic costs and risks of the potential for under- and over-use of the networks used to provide network services.

Capex/opex allowances and capex incentives

Capex allowances set to an efficient level allow an appropriate level of capex to be undertaken. This should also then allow networks to sustain the use that is made of them.

Rate of return

If the rate of return estimate is set to the efficient required return, then prices are (by definition) set at the efficient level and there is no distortive effect on usage due to mis-pricing.

Chapters 6 to 12 explain in greater detail the way in which the Commission has taken the above revenue and pricing principles into account in formulating the draft rule.

The draft rule also includes a number of provisions that are necessary or consequential (as permitted by section 91B of the NEL).

3 Draft Rule determination - gas

3.1 Commission’s draft determination

In accordance with section 308 of the NGL the Commission has made this draft rule determination in relation to the rule proposed by the AER.

The Commission has determined that it should not make the rule proposed by the AER but rather to make a more preferable rule.[15]

The Commission's reasons for making this draft rule determination are set out in chapters 6 and 7.

A draft of the more preferable rule that the Commission proposes to make (draft rule) is attached to and published with this draft rule determination. Key features are described in chapters 6 and 7 of the draft rule determination.

3.2 Commission’s considerations

In assessing the rule change request the Commission considered:

- its powers under the NGL to make the draft rule determination;
- the rule change request;
- submissions received during initial consultation on the rule change request and following publication of the directions paper;
- comments made by stakeholders as part of workshops and forums held as part of the consultation undertaken for the rule change request;
- consultants reports;[16]
- the ways in which the proposed rule will, or is likely to, contribute to the achievement of the national gas objective (NGO);
- discussion papers and reports published by the Limited Merits Review Panel;
- previous decisions of the Commission, including the 2006 Chapter 6A determinations;

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15 Under section 296 of the NGL the AEMC may make a rule that is different (including materially different) from a market initiated proposed Rule (a more preferable rule) if the AEMC is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates), the more preferable rule will or is likely to better contribute to the achievement of the national gas objective.

16 Referred to in chapter 1.

- relevant documents published by the MCE regarding the development of Chapter 6 of the NER; and
- relevant merits review decisions of the ACT.

There is no relevant MCE Statement of Policy Principles relating to this rule change request.

3.3 Commission's power to make the rule

The Commission is satisfied that the draft rule falls within the subject matter about which the Commission may make rules as set out in section 74 of the NGL; in particular section 74(1)(a)(i) and (ii) relating to access to, and the provision of, pipeline services and items 41, 49 and 50 of schedule 1 of the NGL relating to the building block approval and the AER's economic regulatory functions and powers.

3.4 Rule making test

3.4.1 NGO

Under section 291(1) of the NGL the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NGO. This is the decision making framework that the Commission must apply.

The NGO is set out in section 23 of the NGL as follows:

> "The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."

For the rule change request the Commission considers that the relevant aspects of the NGO are the efficient investment in natural gas services for the long term interests of consumers with respect to price. Efficient investment requires that the costs gas service providers incur in providing services to their customers should reflect efficient financing costs. This is to allow gas service providers to attract sufficient funds for investment while minimising the resultant costs that are borne by consumers.

3.4.2 Assessment of the draft rule against the NGO

The Commission is satisfied that the draft rule will, or is likely to, contribute to the achievement of the NGO because the draft rule provides that the allowed rate of return for a benchmark efficient gas service provider must meet an objective related to the efficient financing costs of a gas service provider with a similar nature and degree of risk as the gas service provider subject to the decision. The draft rule also provides the regulator with sufficient discretion in estimating return on equity and debt, while requiring the consideration of a range of estimation methods, financial models, market

data and other information so that the best estimate of the rate of return can be obtained overall.

Finally, the draft rule provides for the allowed rate of return to reflect changing circumstances so that the application of the provisions of the rule should result in the best overall estimate of the rate of return in any case, reflecting efficient financing costs.

All of these factors should allow sufficient funds to be attracted for network investment, while minimising costs for consumers, thereby promoting efficient investment which is also in the long term interests of consumers.

3.4.3 Implementation costs

The draft rule provides for a range of significant changes to the rate of return provisions of the NGR. There will be implementation costs for gas service providers and other stakeholders, including consumers, in adjusting to these changes. For the regulator, there will be implementation costs as it develops the rate of return guideline necessary for the successful application of the draft rule.

Having said this, the Commission is of the view that these costs are minor when compared with the potential benefits associated with improving the process for determining the allowed rate of return. The costs will be outweighed by the outcomes of this improved determination process.

3.5 More preferable rule

Under section 296 of the NGL, the AEMC may make a rule that is different, including materially different, from a market initiated proposed rule (a more preferable rule) if the AEMC is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule, to which the more preferable rule relates, the more preferable rule will, or is likely to, better contribute to the achievement of the NGO.

Having regard to the issues raised by the proposed rule, the Commission is satisfied that the draft rule will, or is likely to, better contribute to the achievement of the NGO than the proposed rule for the following reasons:

- the draft rule gives primacy to an overall rate of return objective. This objective is directly linked to the NGO by focussing on estimating a rate of return required by a benchmark efficient entity;
- the draft rule requires the regulator to take a more holistic approach in estimating the return on equity and debt and the overall allowed rate of return;
- the draft rule provides the regulator with discretion to use the best approach to estimating return on equity and return on debt to meet the overall rate of return objective on a case by case basis, but at the same time it must do so in an accountable and transparent manner;

- the draft rule allows the regulator to have regard to any changes in financial market conditions that could have a positive or negative impact on a gas service provider's rate of return at the time of its decision; and
- the draft rule includes a requirement for the development and periodic review of rate of return guidelines to provide an interactive process between regulator, gas service provider, consumers and other stakeholders about the best approaches to estimating the rate of return.

Chapters 6 and 7 explain in greater detail the respects in which the Commission considers that the draft rule is likely to better contribute to the achievement of the NGO than the proposed rule.

3.6 Other requirements under the NGL

As required under section 293 of the NGL, the Commission has also taken into account the revenue and pricing principles as the draft rule relates to item 41 of schedule 1 of the NGL.

The revenue and pricing principles have been taken into account as follows:

- Section 24(2) – a gas service provider should be provided with a reasonable opportunity to recover at least the efficient costs it incurs in providing reference services and in complying with a regulatory obligation or requirement or making a regulatory payment. This principle requires that the rate of return reflects efficient financing costs necessary to attract sufficient investment capital to maintain a reliable natural gas supply while minimising the cost to consumers. The rate of return must therefore only reflect efficient financing costs of a benchmark efficient gas service provider to allow the service provider to retain the benefits from adopting more efficient financing arrangements than assumed by the regulator, and consumers are protected if a service provider is inefficient in their financing practices.
- Section 24(3) – a gas service provider should be provided with effective incentives to promote economic efficiency in investment in, and the operation and use of, the pipeline for the provision of pipeline services. Efficient outcomes in terms of investment in, and the operation and use of, pipeline services are most likely to result when the best estimate of the rate of return is obtained.
- Section 24(5) – the reference tariff charged for a reference service should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service. Having regard to this principle involves the estimated rate of return being commensurate with the risks involved in providing the service, which is what is sought from the rate of return estimation process. This principle can best be met by obtaining the best possible rate of return estimate.

- Section 24(6) – regard should be had to the economic costs and risks of the potential for under- and over-investment by a gas service provider in a pipeline that is used to provide pipeline services. If the rate of return estimate is set to the efficient required return, there will be no incentive for under- or over-investment. Such incentives for inefficient investment become more pronounced when the rate of return estimate differs from the efficient required return.

- Section 24(7) – regard should be had to the economic costs and risks of the potential for under- and over-utilisation of a pipeline that is used to provide pipeline services. If the rate of return estimate is set to the efficient required return, then prices are by definition set at the efficient level and there is no distortive effect due to mis-pricing.

Chapters 6 and 7 explain in greater detail the way in which the Commission has taken the above revenue and pricing principles into account in formulating the draft rule.

4 Commission's reasons

4.1 Introduction

A number of problems have been raised in the rule change requests. They have been considered against submissions, various reports and other material, and the Commission's own analysis. The Commission has concluded that there are problems in the NER and in the case of rate of return, the NGR, and rule changes are required to address those problems.

The solutions set out in this draft rule determination and included in the draft rules are a positive contribution to the overall effectiveness of the economic regulation of network services generally under chapters 6 and 6A of the NER, and the application of the rate of return under the NGR. They comprise a package of changes that, at a general level:

- promote flexibility and adaptability, enabling the regulator to make decisions in changing circumstances, and for service providers with different characteristics;
- improve the regulatory process to allow the regulator adequate time for decision-making, to improve consumer engagement, and to improve transparency and accountability; and
- address ambiguities and clarify provisions, to put beyond doubt the interpretation of provisions, particularly in the NER.

Chapters 2 and 3 set out how the draft rules meet their respective rule making tests under the NEL and NGL. The Commission's detailed analysis and consideration of issues is contained in the subsequent chapters. This chapter sets out the Commission's analysis and articulation of the problems and proposed amendments to the NER and NGR at a high level. This chapter also includes a discussion on other issues that are relevant to the consideration of the problems raised in this rule change request, being other factors relevant to effective regulation, and the merits review process.

4.2 Summary of assessment of issues

The rule change requests raised four broad areas of problems with the rules, as set out in section 1.2 above. Taking each in turn, the Commission draws the conclusions below.

4.2.1 Rate of return

Overall framework

The AER has referred to problems associated with having different rate of return frameworks for electricity distribution, electricity transmission and gas. It has sought

to have one rate of return framework put in place, based on the electricity transmission model. The Commission's initial views were that the current rate of return rules for electricity transmission are not satisfactory as they do not provide sufficient flexibility to deal with changing circumstances. Having undertaken considerable analysis in this area, the Commission has concluded that none of the existing rate of return frameworks under the NER and NGR have the characteristics necessary to best meet the NEO and NGO, taking account of the Revenue and Pricing Principles (RPP).

There is a strong case for a common framework under the NER, including as between transmission and distribution, and NGR for setting the rate of return. A common framework can minimise any risks of distortions in capital allocation or investment decisions between the electricity and gas sectors, although the framework contemplated here would provide scope for the regulator to consider the different characteristics of NSPs in each sector when determining a rate of return for each NSP.[17]

Under the proposed approach the regulator must determine a rate of return (the allowed rate of return) that is consistent with that required by a benchmark efficient firm with similar risk characteristics to the service provider in question. A key feature of the new framework is that the allowed rate of return is effectively determined on a "determination by determination basis".[18] This will ensure that the regulator can better respond to changing financial market conditions, particularly where volatile market conditions impact on a NSP's ability to attract sufficient capital to finance its expenditure requirements.

While providing for flexibility, the Commission recognises that it is important for investor, NSP and consumer confidence in the framework that the regulator is transparent about its approach to determining the allowed rate of return. Further, all stakeholders should have an opportunity to contribute to discussions about how the regulator will determine the overall rate of return, including how it will estimate the return on equity and debt components of the overall allowed rate of return.

To supplement the considerations at each determination, the proposed framework requires the regulator to develop rate of return guidelines that set out the approach it intends to take to estimating the allowed rate of return for NSPs. These guidelines must be reviewed at least every three years. This will allow all stakeholders to periodically consider and comment on new evidence or analytical techniques that may allow better estimates of the rate of return to be made. This process should provide a smooth evolutionary process for estimation techniques to develop as new evidence and thinking emerges.

The effectiveness of the Commission's proposed framework for the determination of the allowed rate of return depends, to a significant degree, on how the regulators and

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17 In this chapter of the draft determination, the term "NSP (network service provider)" is used to refer generally to electricity network service providers under the NER and gas service providers under the NGR, unless the context requires otherwise.

18 In this draft rule determination generally, in the context of the rate of return, the term "determination" refers both to regulatory determinations under the NER and access arrangement determinations under the NGR.

the appeal body interpret the new rules. The Commission has taken the opportunity in this draft determination to explain how the draft rules are to be interpreted. Most importantly, the draft rules are intended to ensure that the regulator (and the appeal body) focuses on whether the overall rate of return meets the allowed rate of return objective, which is intended to be consistent with the NEO/NGO and revenue and pricing principles.

The Commission has not included in the draft rules any preferred methods for determining a rate of return consistent with this objective, but instead has left the judgement as to the best approach to the regulator to make consistent with achieving that objective.

Return on debt

As part of its assessment of the rate of return framework, the Commission has found that the estimation of the return on debt component can be dramatically improved to allow consideration of alternative ways of determining the efficient debt servicing costs of electricity NSPs.

Both the AER and the EURCC have claimed that the current regulatory approach in the NER is not delivering a satisfactory estimate of the cost of debt for NSPs. In its rule change request the EURCC proposed changing the rules from estimating a forward-looking return on debt to using a trailing average of observed historical debt costs of benchmark NSPs.

The Commission agrees with the AER and the EURCC that the current approach in the NER is problematic for some NSPs, depending on their characteristics and debt management strategies. A number of other approaches to estimating the return on debt were suggested to the Commission by stakeholders.

A number of different approaches to estimating the return on debt may meet the overall rate of return objective. Consistent with the proposed framework, the Commission is of the view that the regulator is in the best position to determine the best approach to estimating a return on debt. The draft rule provides that the regulator can use a range of different approaches to undertake this task.

As part of its rule change request, the EURCC would also provide for the return on debt for state-owned NSPs to be determined differently from privately-owned NSPs. The Commission has considered this and does not support this aspect of the EURCC's rule change request for a number of reasons.

4.2.2 Capital expenditure and operating expenditure allowances and related issues

Capex and opex allowances

This first issue concerns the ability of the AER to interrogate and amend capex and opex proposals. The AER has stated that restrictions in the rules have resulted in capex and opex allowances forming part of determinations for NSPs that are higher than they should be. Since publication of the directions paper the Commission has undertaken further work to assess this issue from two perspectives – analysing any further evidence provided to it of the drivers of prices, as well as engaging consultants to reconsider the original approach to expenditure allowances in chapter 6A of the NER, dealing with the economic regulation of electricity transmission services. From this the Commission has concluded:

- increases in the rate of return and expenditure allowances have both been significant factors contributing to higher network charges; and some increases in expenditure have been necessary. On the basis of information provided to the Commission it is not possible to tell if constraints on the AER's ability to amend NSPs' expenditure forecasts have caused inefficient increases in expenditure allowances; and
- from a practical perspective the approach in respect of expenditure allowances in chapter 6A of the NER reflects the approach of regulators in other jurisdictions in Australia and overseas. There are, however, some areas for improvement in the NER, largely to clarify that approach, and to remove any ambiguities.

The Commission remains of the view that the essential features of the capex and opex allowances provisions in the NER are appropriate. The NSP's proposal is necessarily the starting point for the AER to determine a capex or opex allowance, as the NSP has the most experience in how its network should be run. Under the NER the AER is not "at large" in being able to reject the NSP's proposal and replace it with its own since it must accept a reasonable proposal. But the AER should determine what is reasonable based on all of the material and submissions before it. This reflects the obligation that all public decision makers have to justify their decisions. In addition, the NER do not place any restrictions on the analytical techniques that the AER can use to scrutinise and, if necessary, amend or substitute the NSP's capex or opex forecasts.

Having confirmed that base, the Commission has identified some provisions that may be causing constraints in an unintended way, particularly clause 6.12.3(f).

The Commission views benchmarking as a critical exercise in assessing the efficiency of a NSP and in approving capex and opex allowances. Benchmarking should take into account differences in the environments of the different NSPs, being those factors that are outside the control of the NSP. The Commission proposes to remove any potential constraints in the NER on the way the AER may use benchmarking.

Annual benchmarking report

One of the problems associated with the current regulatory determination process is the difficulties consumers and their representatives experience in participating effectively. The draft rule includes a number of provisions designed to improve the ability of consumers to participate in the regulatory process, a number of which are considered below. Whilst benchmarking is of critical importance to the regulator, it can also be of assistance to consumers, providing them with relative information about network performance. This would be useful to consumers when participating in the regulatory process and merits reviews, but also in their informal interactions with NSPs. On this basis the AER should publish annual benchmarking reports, setting out the relative efficiencies of distribution network service providers (DNSPs) and transmission network service providers (TNSPs), taking into account the exogenous factors that distinguish them.

Other issues

The rule change requests and further submissions have raised other issues relating to:

- increased consultation on expenditure models – the methodology or methodologies for preparing expenditure forecasts will be included in the framework and approach paper stage, which will also apply to TNSPs, see below and section 10.9. This will encourage stakeholders to discuss the model at an earlier stage and before proposals are submitted; and

- capex and opex factors – the AER must have regard to the capex and opex factors when assessing capex and opex proposals. The process-related aspects of these factors are more appropriately located elsewhere as they are of a different character to the other factors in that they deal with the materials presented to or obtained by the AER in the course of the regulatory process. Further changes to the capex and opex factors are necessary to address a variety of incidental issues such as to take into account the various incentive schemes provided for in the NER. Finally a factor has been included to require the AER to have regard to the extent to which NSPs have considered what consumers seek. The more confident the AER can be that consumers' concerns have been taken into account, the more likely the AER can be satisfied that a proposal reflects efficient costs.

4.2.3 Capex incentives

Sharing schemes, reviews, depreciation

The AER raised concerns about what it considers to be incentives for NSPs to spend more than efficient levels of capex, that is, above the capex allowances made as part of their determinations, for a regulatory period. To address this problem in its rule change request the AER recommended the introduction of a requirement in the NER that only 60 per cent of any expenditure incurred by a NSP above its capex allowance would be rolled into the RAB and, therefore, recoverable. Related to this the AER also

requested that it be given the discretion to roll forward the RAB using depreciation based on actual or forecast expenditure.

After undertaking initial analysis, the Commission concluded that the NER does not provide incentives for NSPs to spend more than their allowance, although factors outside the NER may provide for such additional expenditure. The Commission did identify two key issues with capex incentives in the NER:

- the powers of the incentive not to incur expenditure above capex allowance declines during a regulatory period, which has implications for efficiency incentives, timing of capex and substitution between capex and opex; and
- capex above the allowance is not subject to any regulatory scrutiny which means that there is a risk that expenditure above the allowance may be inefficient.

Since publication of the directions paper the Commission has undertaken further analysis of actual capex by NSPs; engaging consultants to assist. The work of the consultants and the Commission's own analysis has identified a range of theoretical drivers as to why a NSP might spend more than its capex allowance. It also identified different expenditure practices of NSPs. There are clearly legitimate circumstances in which expenditure above capex allowances could occur, but often mitigation action could be taken so that, overall, capex is within the allowance. Amongst some NSPs there is a tendency to defer capex to the end of the regulatory period. For some this practice is not so obvious. Given the problems identified and the results of the further analysis, the Commission's approach is to provide the AER with a number of "tools" which it can apply as it considers necessary to provide adequate incentives on NSPs to spend capex efficiently, having regard to an overall capex objective and consistent with the NEO and RPP. The tools are capex sharing schemes to be designed by the AER, efficiency reviews of past capex and deciding whether to depreciate the RAB using actual or forecast expenditure to establish a NSP's opening RAB. This package should also be viewed alongside the ability of the AER, on an ex ante basis, to scrutinise effectively, and if necessary amend, proposed capex allowances as part of the determination process so that allowances set in the first place are efficient.

An overall capex incentive objective will describe what the capex incentive regime, as a whole, should aim to achieve – both in respect of the guideline that the AER must make setting out its proposed approach to application of the capex incentive "tools" provided in the NER and how it applies a capex incentive regime to an individual NSP. The AER will also be required to take into account a number of principles and factors when designing and applying the capex tools.

Regarding the reviews of the efficiency of past capex, the Commission is of the view that this is the most appropriate way to address the lack of supervision of capex that has been incurred. Such a review is also a necessary companion to any capex sharing schemes in place. While effective, capex sharing schemes will not necessarily mean that NSPs never undertake capex inefficiently. A further and final check on the efficiency of expenditure that is rolled into the RAB is in the long term interests of consumers.

The AER may use the analytical techniques it considers appropriate to undertake such reviews, in much the same way as it can when assessing capex proposals. The AER will be required to undertake a review of the efficiency of past capex for all NSPs as part of the determination process and include a statement on the efficiency of expenditure going into the RAB. The AER will also have the discretion to preclude inefficient past capex being rolled into the RAB to the extent of any over expenditure above the capex allowance for the previous regulatory period.

Related party margins and capitalisation policy changes

In addition to the broader capex incentive issue discussed above, the AER considers that there are two additional capex incentive issues in the NER relating to related party margins and changes to capitalisation policies during a regulatory period.

Further work undertaken (including modelling undertaken by consultants) appears to confirm that there is a potential incentive for NSPs to incur inefficient related party margins, even with capex sharing schemes in place. This incentive could encourage NSPs to enter into commercial arrangements that are not the most efficient. The Commission considers that the issue should be dealt with by reviewing the capex after it is undertaken. It therefore proposes to give the AER discretion to preclude inefficient related party margins being rolled into the RAB as during the previous regulatory control period, regardless of whether the NSP spent more than its allowance overall or not. In assessing this type of expenditure, the AER should take a flexible approach, recognising the differing incentive power in different circumstances.

The Commission accepts that there is a potential incentive for a NSP to change its capitalisation policy so that it can classify opex as capex and recover the same expenditure twice: once in forecast opex; and again through depreciation and return on capital once the expenditure is rolled into the RAB. The strength of such an incentive would be affected by other factors, such as the requirements of statutory accounting and capex sharing schemes. Ex ante incentives will not necessarily deal with the issue, however, so the AER should be able to review the relevant capex after it is incurred.

Similar to related party margins, the Commission proposes to give the AER discretion to preclude expenditure being rolled into the RAB to the extent that expenditure reflects operating expenditure that was capitalised as a result of changes to the NSP's capitalisation policy during the regulatory period. The AER should have this discretion regardless of whether the NSP has spent more than its allowance overall or not.

4.2.4 Regulatory determination process

Steps in the process

The AER raised a series of process-related issues, largely relating to the submission of material by NSPs late in the regulatory determination process. The AER's concern in this regard is that there is inadequate time to review and comment on this material, both from the AER's and other stakeholders' perspectives. The Commission has

reconsidered the regulatory determination process as set out in the NER, under both chapters 6 and 6A. This has been undertaken taking into account other aspects of the consolidated rule change request. Also relevant is, on the one hand, the need for the regulator and other stakeholders to have adequate time to consider and respond to material and, on the other hand, the need in some circumstances for material to be submitted later in the process.

A number of detailed changes have been proposed to address these issues, with a view that the regulatory determination process needs to be transparent and timely to ensure that all parties have a clear understanding of their rights and obligations at the outset, as well as ample opportunity to participate. This is a key contributor to confidence in the overall outcomes from both the perspective of the NSP and consumers. The changes proposed include:

- lengthening the regulatory determination process by six months, for both electricity distribution and transmission. This provides for time for the regulator to prepare and publish an issues paper as well as time for a cross submissions stage later in the process if required;
- the application of an optional framework and approach paper for electricity transmission as well as distribution. Also that document can be used, where necessary, to settle a number of issues prior to regulatory proposals being submitted. Examples here include information that needs to be provided by the NSP, and the capex incentive package that the AER proposes to apply to the NSP; and
- improving transparency and accountability by requiring NSPs to nominate the reasons why they classify material as confidential.

Some of these changes should also improve the ability of consumers to participate in the regulatory determination process.

It is important to note that the Commission considers the regulatory determination process set out in the NER as a minimum. The Commission encourages engagement and interaction between NSPs and consumers, and the AER and NSPs outside of the formal processes.

Diverse issues

The AER raised a number of diverse issues. Firstly, the AER proposed a broader uncertainty regime in distribution to balance its proposals for stronger capex incentives and more discretion in respect of capex and opex allowances, including defining the materiality threshold for cost pass through events. Secondly, the AER proposed to align and extend the timeframes for it to make decisions on applications under the uncertainty regime for distribution and transmission. Thirdly, the AER proposed to broaden the type of material errors or deficiencies by which the AER could revoke and substitute a regulatory determination and also be able to amend the regulatory determination. Fourthly, the AER proposed to introduce a shared assets mechanism to

allow it to decide on whether to apply a revenue adjustment or control mechanism adjustment for assets which are shared for services related to standard control and other services. Finally, the AER proposed for it to be given the ability to create incentive schemes outside of those prescribed in the NER.

The general approach the Commission took with these particular proposals was, where they were adopted, to seek to achieve consistency between chapters 6 and 6A unless there are substantive reasons for a difference. In respect of the AER's proposals, the Commission has decided as follows:

- for increased accountability on the NSP and to allow the NSP to recover efficient costs for unexpected events, the capex reopener and contingent project regimes that apply in transmission will now also apply in distribution;
- to build in flexibility, the decision-making timeframe for applications under the uncertainty regime will be extended for complex or difficult issues;
- the AER's power to revoke and substitute a decision for a material error or deficiency under Chapter 6A will be limited as currently provided under Chapter 6;
- to promote innovation whilst also providing for cost reflectivity to consumers, a shared assets cost adjustment mechanism may apply to assets that share distribution or transmission services with any unregulated service; and
- to promote innovation and flexibility, the AER will be able to develop small scale pilot or test schemes to ensure that the potential impact of such a scheme is understood before full implementation.

4.3 Drivers for effective network regulation

The Commission is of the view that the package of amendments to the NER and NGR included in this draft rule determination provides the regulator with additional tools to carry out its functions. The effectiveness of the NER and the NGR in terms of the overall price and service outcomes experienced by consumers are dependent on two drivers:

- the effective application of the rules by the regulator; and
- the effective corporate governance of the NSPs providing services which are subject to economic regulation.

The efficiency with which network services are provided depends on the way in which the drivers work together. Only when these aspects are operating as intended will the best outcomes for consumers be achieved.

Regarding the first driver, the interpretation and application of the rules by the regulator is crucial. This draft rule determination provides examples and illustrations

of how the rules could be interpreted and applied to address problems that exist currently, but also how their application could adapt when the circumstances change.

Management and shareholders of service providers also play a critical role in the efficient provision of network services. They do this through a variety of means, such as approving proposals to be submitted to the regulator, given the significance of AER decisions for these businesses. They also create incentives within the business to encourage efficient outcomes.

4.4 Merits review

While the Commission has been considering these rule change requests the Standing Council on Energy and Resources (SCER) decided to bring forward the review of the Limited Merits Review (LMR) regime in the NEL and the NGL. In April 2012 a panel was appointed to undertake the review.

The LMR Panel has observed that a narrower, and more formalistic approach to merits review has developed than what was originally intended. In its view this approach has been relatively detached from the focus on the overall objectives set out in the NEL and NGL and encouraging outcomes that are in the long term interests of consumers. The LMR Panel has suggested that the NER and the NGR could be amended to provide for more holistic, broader decision making, focussing on overall outcomes.

Where possible, the draft rule seeks to address this concern by allowing the regulator to approach decision making more holistically. The main examples are requiring the regulator to focus on meeting overall objectives in relation to capex incentives and the rate of return that are linked to the NEO or NGO and the RPP.

The LMR Panel is still in consultation phase and has not made any recommendations for change at this stage. It is possible that further rule changes will be required to complement any changes to the merits review process that the SCER decides should be made.

5 Overall approach to the draft rule determination

In the directions paper, the Commission stated that it would consider, on a case by case basis, the level of detail and clarity that it would provide in the NER or the NGR, as relevant. This approach is consistent with the current energy market governance structure, as well as the approach taken by the AEMC and the MCE as rule maker in the past.

The issues established in the consideration of the rule change requests are many and varied. At a general level, they relate to:

- a lack of flexibility and ability to adapt to changing external environments and different circumstances of NSPs;
- a limited ability to review or scrutinise, on the part of the regulator, the efficiency of capital expenditure before it becomes part of the regulatory asset base;
- a lack of opportunity for meaningful consumer engagement in the determination process; and
- ambiguity and a lack of clarity in some areas of the NER which has been impacting on the regulator's ability to scrutinise, review and, if necessary, revise capex and opex forecasts.

Taking these problems into account, the Commission's general approach in the context of the rule change requests can be described as follows:

- providing the regulator with the discretion to make decisions appropriate to the circumstances of each NSP in a changing environment. This also recognises, though, that certain elements should be prescribed into the rules, such as the overall regulatory process to be followed;
- improving transparency and accountability in discretionary decision-making by requiring the regulator to address relevant factors and considerations;
- raising the level of decisions to encourage a focus on the overall outcome - this is particularly evident in the area of capex incentives and the rate of return;
- requiring transparency and accountability on the part of NSPs by requiring them to provide more explanations to consumers and to report to the regulator on the reasons for taking or not taking certain actions;
- encouraging more timely and meaningful consumer engagement where appropriate;
- facilitating more productive and earlier engagement between the NSPs and the regulator;

- removing any identified ambiguities or lack of clarification or precision in the NER and NGR; and
- harmonising the approach in chapters 6 and 6A of the NER, unless there are substantive reasons for a different approach.

Where the solutions proposed involve providing increased discretion to the regulator, generally additional provisions have been included to require the regulator to take into account certain factors and considerations. These additional requirements have been included for a number of reasons including:

- they are reflective of good regulatory practice as they improve transparency and accountability;
- they are consistent with the broader governance framework established by the NEL and the NGL which contemplate distinct roles for the rule maker and regulator; and
- together with the discretionary elements they reflect the appropriate balance for the current electricity regulatory environment (in place since 2006), bearing in mind that there has been only one full application by the AER of the current NER to each NSP. Chapters 6 and 6A can be regarded as a prescriptive and detailed articulation of the approach to incentive based regulation for electricity. The changes contemplated by this rule determination involve a departure from that approach only in so far as is warranted by recent developments and the current circumstances.

That is not to say, however, that the approach taken here could not evolve over time, as confidence in the application of the rules increases. As stated previously, including in the directions paper, these matters need to be considered on a case by case basis.

Amendments to the rules are proposed in this draft rule determination where it has been demonstrated that a clear problem exists – whether on a theoretical or practical basis. Where evidence of a problem has not been provided or is not conclusive then the Commission does not propose to make any changes. A good example here is the area of capex and opex allowances. In this area, the evidence provided of the problem was not conclusive and, on that basis, the Commission's changes are limited to addressing ambiguities and a lack of clarity.

The directions paper included a summary of responses to the AEMC's first consultation in this rule change process.[19] Unless indicated, in this draft rule determination, where submissions are discussed, the discussion builds on the previous summary and focuses on new points made by stakeholders.

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19 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, pp. 73-75. See also AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Summary of issues raised in submissions, pp. 39-92.

6 Rate of return framework

Summary

The Commission considers that there is a strong case for a common framework under the NER (including as between transmission and distribution) and NGR for setting the rate of return. A common framework can minimise any risks of distortions in capital allocation or investment decisions between the electricity and gas sectors. The proposed common framework provides scope for the regulator to consider the different risk characteristics of benchmark efficient service providers in each sector when determining a rate of return at each regulatory determination under the NER or access arrangement decision under the NGR.[20]

The Commission does not consider that any of the existing rate of return frameworks under the NER or NGR have the characteristics necessary to best meet the NEO and the NGO, taking account of the RPP.

The Commission is proposing a framework that requires the regulator to determine a rate of return (the allowed rate of return) that meets an overall objective focussed on the rate of return required by a benchmark efficient service provider. Unlike the current NER frameworks, a key feature of the Commission's new framework is that the allowed rate of return is determined on a determination by determination basis. This approach will allow the regulators determination to better respond to changing financial market conditions, particularly where volatile market conditions impact positively or negatively on a service provider's ability to attract the necessary capital to finance its expenditure requirements.

The Commission recognises that it is important for confidence in the framework and the rate of return outcomes amongst consumers, service providers and investors, that the regulator is transparent about its approach to determining the allowed rate of return. It is also important that all stakeholders have an opportunity to contribute to discussions about how the regulator will approach determining the overall rate of return, including how it will estimate the return on equity and debt components of the overall allowed rate of return.

To supplement the considerations at each determination/access arrangement, the proposed framework requires the regulator to develop after consultation, rate of return guidelines that set out the approach it intends to take to determining the allowed rate of return. The rate of return guidelines must be reviewed at least every three years. These arrangements provide a process for all stakeholders to periodically consider and comment on new evidence or analytical techniques

20 In this chapter of the draft determination, the term "service provider" is used to refer generally to electricity network service providers under the NER and gas service providers under the NGR, unless the context requires otherwise.

that may allow better estimates of the rate of return to be made. This process should provide an evolutionary process for estimation techniques to develop as new evidence and thinking emerges.

The effectiveness of the Commission's proposed framework for determining the allowed rate of return depends, to a significant degree, on how the regulator and the appeal body interpret the new rules. As with the draft rules in other areas of this draft rule determination, the Commission has explained how it intends the rate of return provisions of the draft rule to be interpreted. Most importantly, the draft rule is intended to allow the regulator and the appeal body to focus on whether the overall estimate of the rate of return meets the overall objective for the allowed rate of return, which is closely linked to the NEO, the NGO and the RPP. While the regulator may choose to determine the rate of return by estimating other values to contribute to the allowed rate of return, the Commission considers that assurance that the overall objective is met can only be gained by considering whether the overall rate of return arrived at meets the stated objective.

The Commission has not included in the draft rule any preferred methods for determining a rate of return consistent with the overall objective, but instead has left the judgement as to the best approach to the regulator. The Commission considers that determining the rate of return requires a regulator to exercise judgement about the analytical techniques and evidence to use to make the estimate. The Commission does not consider that the determination of the rate of return can be safely reduced to a formulaic exercise.

6.1 Introduction

The return on capital often represents the largest component of the revenue/pricing determinations of service providers. Therefore, the rules on how the rate of return is determined are a key element of the network charges that consumers are asked to pay. Under the building block approach to regulating revenues/prices, the return on capital is determined by applying a rate of return to the RAB (electricity) or projected capital base (gas) to determine the return on capital allowance to be included in the revenue requirement in each year of a service provider's regulatory determination or access arrangement.[21]

The current frameworks for estimating the rate of return for electricity transmission, electricity distribution and gas service providers differ in a number of respects, including the extent of the discretion available to the regulator in estimating the rate of return and whether the estimate of the rate of return is made at each determination or in a periodic review with the outcome applying to determinations over a number of future years. The current frameworks are set out in Chapter 6A of the NER for electricity transmission, Chapter 6 of the NER for electricity distribution, and rule 87 of the NGR for gas service providers.

21 See NER clauses 6A.6.2(a) and 6.5.2(a). See also NGR rule 76(a).

A summary of the current frameworks, including the policy rationale for the frameworks when they were put in place, was provided in the AEMC's directions paper.[22] The directions paper also explained the AER's rule change request for the rate of return frameworks for electricity and gas transmission and distribution.[23]

This chapter does not discuss issues relating to the estimation of return on debt although it is an integral part of determining the overall rate of return. Return on debt is covered in chapter 9 of this draft rule determination. This chapter discusses the overall rate of return framework, including estimating the return on equity.

This chapter is structured as follows:

- section 6.2 summarises the submissions received in response to the AEMC's directions paper;
- section 6.3 outlines the Commission's analysis in terms of the attributes of a good rate of return framework that achieves the NEO, the NGO and the RPP. It then considers the rate of return framework that best meets those attributes and describes some of the draft rule provisions that are intended to implement that framework; and
- section 6.4 sets out further detail on the draft rule provisions, together with the Commission's guidance on the interpretation of the draft rule provisions.

6.2 Submissions

6.2.1 Rule proponent's suggested changes to its original proposal

In response to suggestions that its rule change request did not provide for enough flexibility to adjust parameter estimates and the allowed rate of return for changes in market conditions or in response to new information, the AER proposed the following amendments to its proposed rule:

- allow the outcomes of the Weighted Average Cost of Capital (WACC) review to be applied to revenue/pricing determinations where the draft decision is released after the WACC review is finalised; and
- reduce the maximum interval between WACC reviews to two or three years.[24]

In response to concerns that its original rule change request did not allow for merits review of the WACC review, the AER states that it does not object to the expansion of the merits review framework to cover the WACC review. The AER also states that the rate of return framework should provide a regulatory regime that delivers a "frequent,

22 See: AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 67-71.

23 Id., pp. 71-73.

24 AER, Directions Paper submission, 2 May 2012, p. 37.

industry–wide, holistic consideration of cost of capital issues (including merits review)".[25]

The AER submitted that each of the current rate of return frameworks have flaws and that none of them should be adopted without amendment, and has urged the AEMC to determine the best approach to contribute to the achievement of the NEO and the NGO.

6.2.2 Views on the effectiveness of existing frameworks

In their submissions to the directions paper, the service providers generally maintained their position against the AER's proposed changes to the rules.

Service providers generally support the Commission's initial position in the directions paper that the Chapter 6A framework of the NER is too inflexible to deal with changing market conditions.[26] This view was also supported by the Western Australian (WA) Public Utilities Office and the Major Energy Users (MEU).[27]

However, the Chapter 6A rate of return framework has received some support from some consumer representative groups.[28] The Energy Users Association of Australia (EUAA) submit that the Commission has dismissed the AER's concerns regarding such a framework too lightly and suggests that more work needs to be done to limit the "perpetual review" that, as they see it, advantages service providers and disadvantages consumers.[29]

The Energy Networks Association (ENA), Grid Australia and a number of other DNSPs such as ETSA, CitiPower and Powercor, and United Energy and MultiNet Gas (UE and MG) generally favour a common framework for electricity service providers based on the existing Chapter 6 framework with some modifications that they consider would enhance investment certainty, although they recognise that there is a trade-off between certainty and flexibility.[30] Service providers submit that investment certainty could be improved in practice by setting out the overall objective for the rate of return

25 Id., p. 38.

26 See for example: APA Group, Directions Paper submission, 16 April 2012, p. 1; Ausgrid, Directions Paper submission, 16 April 2012, p. 8; APIA, Directions Paper submission, 16 April 2012, p. 23; ENA, Directions Paper submission, 16 April 2012, p. 2; ESAA, Directions Paper submission, 26 April 2012, p. 16; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p.11; Grid Australia, Directions Paper submission, 16 April 2012, p. 2; UE and MG, Directions Paper submission, 16 April 2012, p. 9.

27 WA Public Utilities Office, Directions Paper submission, 19 April 2012 , p. 2; MEU, Directions Paper submission, 17 April 2012, p. 28.

28 EUAA, Directions Paper submission, 17 April 2012, pp.28-29.

29 Id., pp. 28-29.

30 See for example: ENA, Directions Paper submission, 16 April 2012, pp. 1-2; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 11; Grid Australia, Directions Paper submission, 16 April 2012, pp.2-3,9; UE and MG, Directions Paper submission, 16 April 2012, p. 9.

estimate and testing any estimate against some high-level principles on a consistent basis.[31]

The NGR framework is viewed by gas service providers (and others) as having important desirable qualities such as flexibility to deal with changing market conditions and being forward-looking such that service providers are able to attract new investment to the sector.[32] Gas service providers such as APA Group and Dampier Bunbury Pipeline (DBP) submit that, in effect, the NER rate of return framework is already applied under the NGR by the AER. They submit that the desire of the AER for consistency means that the more prescriptive NER rate of return framework invariably overrides the more flexible NGR rate of return framework.[33]

Gas service providers submit that the NGR better allows consideration of the efficient overall rate of return, whereas the NER can lead to individual parameters being considered independently.[34]

6.2.3 Views on methodological issues in rate of return estimation

There is strong support from service providers for retaining a framework based on the concept of an efficient benchmark firm.[35] However, some consumer groups are of the view that the current framework is not delivering an efficient rate of return commensurate with what would be expected in a competitive environment.[36] Gas service providers stress the importance of considering the prevailing conditions in the market for funds when determining the allowed rate of return.[37]

Some service providers submit that a determination by determination consideration of the rate of return does not necessarily have to involve a full review of all the elements of the rate of return.[38] For example, Ausgrid suggests that guidance from the regulator

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31 See for example: ENA, Directions Paper submission, 16 April 2012, p. 2.

32 APA Group, Directions Paper submission, 16 April 2012, pp. 2-4; APIA, Directions Paper submission, 16 April 2012, pp. 9-15 ; DBP, Directions Paper submission,16 April 2012, pp. 3-5.

33 APA Group, Directions Paper submission, 16 April 2012, p. 3; DBP, Directions Paper submission, 16 April 2012, p. 5.

34 APA Group, Directions Paper submission, 16 April 2012, pp. 2-3; APIA, Directions Paper submission, 16 April 2012, pp. 11-12 ; DBP, Directions Paper submission, 16 April 2012, pp. 1-2.

35 See for example: APA Group, Directions Paper submission, 16 April 2012, p.1; Grid Australia, Directions Paper submission, 16 April 2012, p. 10.

36 See for example: MEU, Directions Paper submission, 17 April 2012, p. 5; EURCC, Directions Paper submission, 16 April 2012, pp. 5-7.

37 APA Group, Directions Paper submission, 16 April 2012, pp. 16-17; The Financial Investor Group, Directions Paper submission,16 April 2012, pp. 1, 4, 7; UE and MG, Directions Paper submission, 16 April 2012, p. 10; WA Public Utilities Office, Directions Paper submission, 19 April 2012, p. 4.

38 See for example: Ausgrid, Directions Paper submission, 16 April 2012, pp. 8-9; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 2. 9-12; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp.12-13; Jemena, Directions Paper submission, 16 April 2012, p. 36; SA DMITRE, Directions Paper submission, 9 May 2012, p. 4.

from periodic WACC reviews could be readily applied to all non-contentious issues where there was no material change in circumstances.[39]

There are some diverging views among stakeholders as to whether the rules need to be changed to reflect the interdependency and inter-relationship of parameters in estimating the rate of return.[40] Some service providers submit that it is already open under Chapter 6 of the NER for the AER to take into account the inter-relationships between parameter values but that the AER had (in some circumstances) failed to do so, and hence the rules needed to explicitly require the AER to do so.[41]

The Queensland Treasury Corporation (QTC) suggests that the inter-relationships should be recognised through guiding principles, but not prescribed mechanically in the rules.[42] The Independent Pricing and Regulatory Tribunal (IPART) submit that the rules should recognise the inter-relationships to allow changes in individual parameters to be fully reflected in the final overall rate of return estimate.[43]

A small number of stakeholders, mainly consumer and energy user groups, support the view that a specific approach for estimating the required return on equity (the Capital Asset Pricing Model or CAPM) should be mandated in the rules.[44] However, the majority of stakeholders oppose such an approach.[45] There is widespread support for the rules allowing the use of more than one model to estimate the return on equity capital, at least as a cross-check for reasonableness.[46]

Other than IPART, most stakeholders are of the view that the use of ranges in estimating the rate of return parameters is not desirable. Jemena in particular, notes the approach of the New Zealand Commerce Commission that uses the 75th percentile of

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39 Ausgrid, Directions Paper submission, 16 April 2012, pp. 8-9.

40 See for example: Grid Australia, Directions Paper submission, 16 April 2012, pp. 10-11; Ausgrid, Directions Paper submission, 16 April 2012, pp. 10-11.

41 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp.13-14.

42 QTC, Directions Paper submission, 16 April 2012, pp. 4-5.

43 IPART, Directions Paper submission, 16 April 2012, p. 12.

44 See for example: EUAA, Directions Paper submission, 17 April 2012, p. 31; Ethnic Communities Council of New South Wales, Directions Paper submission, 16 April 2012, p. 3; TEC, Directions Paper submission, 17 April 2012, p. 3.

45 See for example: APA Group, Directions Paper submission, 16 April 2012, pp. 1-2; APIA, Directions Paper submission, 16 April 2012, p. 4 ; Consumer Action Law Centre, Directions Paper submission, 16 April 2012, pp. 1-2, 6; DBP, Directions Paper submission, 16 April 2012, pp. 1-5; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp.11-19; IPART, Directions Paper submission, 16 April 2012, pp. 12-13; MEU, Directions Paper submission, 17 April 2012, p. 5; UE and MG, Directions Paper submission, 16 April 2012, p. 8; WA Public Utilities Office, Directions Paper submission, 19 April 2012, pp. 3-4.

46 See for example: WA Public Utilities Office, Directions Paper submission, 19 April 2012, p. 4; UE and MG, Directions Paper submission, 16 April 2012, p. 9; Jemena, Directions Paper submission, p. 40; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 17; APIA, Directions Paper submission, 16 April 2012, pp. 12-14; APA Group, Directions Paper submission, 16 April 2012, p. 3; DBP, Directions Paper submission, 16 April 2012, p.1.

its estimate of the WACC range (rather than the mid-point) to explicitly recognise the relatively higher costs of underinvestment if the allowed return is set too low.[47]

6.2.4 Views on persuasive evidence test

Many stakeholders commented on the interpretation and application of the persuasive evidence test. The AER maintains its view that the persuasive evidence test should be removed to end any ambiguity as to its interpretation and application.[48] The AER also states that it has concerns with the Tribunal's recent interpretation in the Victorian DNSPs' 2011–15 distribution determinations appeals that clause 6.12.3(f) of the NER also applies to WACC decisions.[49] The AER submits that the restriction from the application of clause 6.12.3(f) creates further complication on the application of the persuasive evidence test and gives undue weight to a service provider's regulatory proposal at the expense of setting parameters that are appropriate or otherwise in accordance with the interests of all stakeholders.[50]

There is opposition to the removal of the persuasive evidence test from service providers, who argue that the persuasive evidence test is an important component of achieving regulatory certainty, efficient outcomes, accountability and rigour.[51] User groups such as the MEU are also of the view that there is some value in having a persuasive evidence test.[52] However, the MEU is concerned that such a test should not allow service providers to have a "second bite" on every issue.[53] On the other hand, the EUAA supports the AER's view that the persuasive evidence test is problematic to interpret.[54]

6.2.5 Views on merits review

The necessity for access to merits review is something that is overwhelmingly endorsed by all service providers and many other stakeholders.[55] The AER also

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47 Jemena, Directions Paper submission, 16 April 2012, p. 38.

48 AER, Directions Paper submission, 2 May 2012, pp. 52-54.

49 Clause 6.12.3(f) states that if the AER refuses to approve a service provider's proposal, the substitute amount or value on which the distribution determination is based must be (i) determined on the basis of the current regulatory proposal; and (ii) amended from that basis only to the extent necessary to enable it to be approved in accordance with the rules.

50 AER, Directions Paper submission, 2 May 2012, p. 53.

51 ENERGEX, Directions Paper submission, 16 April 2012, p.3; ENA, Directions Paper submission, 16 April 2012, pp. 43-46; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 9-11; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 11.

52 MEU, Directions Paper submission, 17 April 2012, p. 64.

53 Id., p. 30.

54 EUAA, Directions Paper submission, 17 April 2012, p. 27.

55 See for example: APA Group, Directions Paper submission, 16 April 2012, p. 1; APIA, Directions Paper submission, 16 April 2012, p. 21; DBP, Directions Paper submission,16 April 2012, p. 1; Ergon Energy, Directions Paper submission, 16 April 2012, p. 2; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp.12, 18; Grid Australia, Directions Paper submission, 16 April 2012, p. 10; Jemena, Directions Paper submission, p. 36; SA DMITRE, Directions Paper

acknowledge that under its rule change request proposal, the determination of the allowed rate of return would be precluded from merits review. However, the AER states that in principle it does not object to the expansion of the merits review framework to cover its proposed periodic WACC review.[56]

More generally, some service providers argue that the AER already has the ability under the rules to achieve the things it claims it is constrained from doing and that such restrictions, in some cases, related to implementation issues and do not necessitate rule changes.[57] One example in this context is the suggestion that it is already open to AER to raise at the Tribunal any consequential effect of a parameter value change on another parameter (ie take into account inter-relationships between parameter values).[58]

6.3 Analysis

The following section presents the Commission's analysis of the issues to be considered in deciding on the best framework for determining the allowed rate of return. This section and the next section also describe how the proposed draft rule implements such a framework.

6.3.1 Assessment of existing frameworks

Chapter 6A of the NER

The Commission outlined its initial position on the effectiveness of the Chapter 6A rate of return framework in the directions paper.[59] The Commission noted that there is a trade-off between certainty and stability on one hand, and flexibility and the ability to reflect changing market conditions on the other. The Chapter 6A rules were designed with an emphasis on certainty and stability.

In the directions paper, the Commission took the view that the Chapter 6A framework did not provide the level of flexibility required to allow the estimate of the rate of return to evolve as market conditions change. Fixing WACC parameters for long periods produces results that may not reflect current market conditions or the availability of information to estimate parameter values. The global financial crisis and its continuing impact through the European sovereign debt crisis, highlight the

submission, 9 May 2012, p. 5; The Financial Investor Group, Directions Paper submission,16 April 2012, p. 12; UE and MG, Directions Paper submission, 16 April 2012, p, 8; WA Public Utilities Office, Directions Paper submission, 19 April 2012, p. 2.

56 AER, Directions Paper submission, 2 May 2012, p. 45.

57 APA Group, Directions Paper submission, 16 April 2012, pp. 7-8; ENA, Directions Paper submission, 16 April 2012, p.2; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 9-12; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 14.

58 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 14; ENA, Directions Paper submission, 16 April 2012, p. 49.

59 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 78-80.

dangers inherent in an overly rigid approach. The framework in Chapter 6A does not allow for a WACC review outside of the periodic schedule. In addition, the Chapter 6A framework does not permit any decisions made at a WACC review to be subject to merits review.

Furthermore, the Commission is concerned that the current provisions of Chapter 6A of the NER create the potential for the regulator and/or appeal body to interpret that the best way to estimate the allowed rate of return is by using a relatively formulaic approach that may not consider the relevance of a broad range of evidence, and may lead to an undue focus on individual parameter values. For example, the current Chapter 6A framework does not allow the regulator, other than at a WACC review, to consider whether and how the recent substantial changes in the Government bond market have affected the required return on equity estimate.

The Commission retains its view that Chapter 6A is insufficiently flexible to be the best framework for achieving the NEO and RPP in the future. Therefore, the Commission does not share the AER's view in proposing a new common rate of return framework under the NER and the NGR predominantly based on the features of the current Chapter 6A framework will best achieve the NEO, the NGO and the RPP in the future.

Chapter 6 of the NER

The Commission's initial view in the directions paper on the effectiveness of the Chapter 6 rate of return framework reflected two important assessments. First, that the Chapter 6 rate of return framework allows more flexibility than the Chapter 6A rate of return framework for incorporating changing evidence on parameter values into the WACC estimate. Second, that there are still some problematic features in the Chapter 6 rate of return framework that require further consideration.

Estimating a WACC involves the joint estimation of parameters/values and, as such, it is important to consider inter-relationships between parameters/values to be confident that the overall rate of return estimate is appropriate. Many stakeholders agreed with this proposition and a number of them identified the parameters that were inter-related. However, there was some disagreement about the extent to which the recognition of such inter-relationships is already permissible under the Chapter 6 rate of return framework and about the merits or otherwise of including a provision in the rules requiring the consideration of such inter-relationships.[60]

The Commission considers that it is important the rules allow the inter-relationships between parameters to be appropriately considered and for the regulator to focus on whether its overall estimate of the rate of return is appropriate, and not consider specific parameters or components of the return on equity and debt estimate in isolation. The Commission is concerned that the rules and interpretation of those rules

60 Grid Australia, Directions Paper submission, 16 April 2012, pp. 10-11; Ausgrid, Directions Paper submission, 16 April 2012, pp. 10-11; QTC, Directions Paper submission, 16 April 2012, pp. 4-5; IPART, Directions Paper submission, 16 April 2012, p. 12; AER, Directions Paper submission, 2 May 2012, pp. 46-47.

in the current Chapter 6 rate of return framework has led to an undue focus on individual WACC parameter values within the overall estimate of the rate of return.

The AER's position is that the persuasive evidence test is problematic, not least because of ambiguity as to its interpretation and application, and that it provides unnecessary restrictions on the AER's ability to determine an appropriate rate of return.[61] The ENA and a number of service providers submit that regulatory certainty is a critical aspect of a rate of return framework and that the persuasive evidence test serves a useful role in achieving this.[62]

The Commission agrees with the AER that the existing persuasive evidence test is problematic. Regulatory certainty, though desirable, should not be attained at the expense of limiting the regulator's ability to make the highest-quality rate of return estimate at any particular time.

The Commission considers that the Chapter 6 rate of return framework, while more flexible than the Chapter 6A rate of return framework, is not the best framework for achieving the NEO, the NGO and the RPP in the future.

Part 9 of the NGR

Gas service providers have strongly argued that the NGR provides a clear and simple rate of return framework with considerable discretion and flexibility in contrast to the electricity frameworks. In general, the gas sector submits that the NGR framework is more likely to achieve an allowed rate of return outcome that is consistent with the NGO and the RPP. This is because the NGR specifies an overall objective – that the allowed rate of return must be commensurate with the prevailing conditions in the market for funds and that it must reflect the risk that a benchmark service provider would face in providing the regulated services. Gas service providers also submit that the NGR rate of return framework is simple and unconstrained by prescription, and that the overall objective directly aligns the estimation process towards achieving the NGO and the RPP.

Whereas the current NGR rate of return framework has the potential to provide sufficient flexibility for estimating a rate of return that reflects market conditions and the best available information, the full flexibility that is available under the NGR does not appear to have been used in practice due to approaches from the more prescriptive electricity regimes being applied to the gas regime. This assessment was also made by a number of gas service providers in their submissions.[63] Consequently, it is difficult to fully assess, on the basis of its current implementation, whether the NGR rate of return framework provides the flexibility to have proper regard to the overall objective in rule 87(1).

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61 AER, Directions Paper submission, 2 May 2012, pp. 52-54.

62 ENA, Directions Paper submission, 16 April 2012, pp. 43-46; ENERGEX, Directions Paper submission, 16 April 2012, p.3; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 9,11; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 11.

63 See for example: APA Group, Directions Paper submission, 16 April 2012, p. 3; DBP, Directions Paper submission, 16 April 2012, p. 5.

The recent decisions of the Tribunal in the ATCO Gas (formerly WA Gas Networks) and Dampier to Bunbury Natural Gas Pipeline (DBNGP) merits review appeals on the access arrangement decisions of the Economic Regulation Authority of Western Australia (ERA) have provided additional information about the interpretation of the NGR rate of return framework.[64] In both decisions, the Tribunal noted that:

> "Rule 87(1) describes the objective when the ERA is determining the rate of return on capital. It is an objective which is of course consistent with the national gas objective and with the revenue and pricing principles. It contains no guidance as to how the objective is to be achieved. In the interests of regulatory consistency, it is desirable that such guidance be provided. Rule 87(2) provides that guidance. In particular, rule 87(2)(b) describes how the rate of return on capital is to be determined. It does so by prescribing the use of a 'well accepted approach' and a 'well accepted financial model'.[65]"

In both cases, the Tribunal reached identical conclusions on the application of rule 87(1) and rule 87(2). The Tribunal considered that since the CAPM is a "well accepted financial model" under the provisions of rule 87(2), provided that the inputs to this model are appropriate, the output from this model will necessarily lead to an outcome in accordance with the objective specified in rule 87(1). Therefore, under the Tribunal's interpretation of the NGR, using only the CAPM to estimate the return on equity was sufficient to satisfy the objective in rule 87(1).

The Commission considers that the broad policy intent behind the NGR rate of return framework and the use of an overall objective to guide the regulator's estimate are consistent with better meeting the NGO. However, as discussed further below in section 6.3.6, rules 87(1) and (2) as interpreted by the Tribunal, could be applied in such a way as to reduce the range of information that can be used in estimating the rate of return. Such application could lead to the adoption of relatively formulaic approaches to determining the rate of return rather than focussing on whether the overall estimate of the rate of return meets the overall objective.

Finally, the current rate of return framework under the NGR means that all the substantive debate about the methodology to be used by the regulator formally occurs within the process for each access arrangement decision unless the regulator decides to have a separate consultation, as the ERA did when it developed its bond yield approach for estimating the return on debt that it proposed in the access arrangements for ATCO Gas and DBNGP.[66] This raises a concern that stakeholders have to

64 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12 and *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14. The Tribunal's decisions in both cases concerned a number of issues with direct relevance to the rate of return provisions in the NGR. Among those issues, the Tribunal considered what it termed the "rule 87 construction issue", which pertained to the proper interpretation of the operation NGR rules 87(1) and 87(2).

65 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12 [62]-[63] and *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14, [83]-[84].

66 ERA, *Measuring the Debt Risk Premium – A bond yield approach*, Discussion Paper, 1 December 2010; ERA, *Final decision on WA Gas Networks Pty Ltd proposed revised access arrangement for the Mid-West*

participate in every access arrangement decision to influence the regulator's methodology, which may involve very high costs. For some stakeholders, such as consumer representative groups, this could impose such significant costs that it acts as a barrier to contributing their views on the development of appropriate estimation methodologies. On the other hand, developments in the regulator's methodology through gradual learning in each access arrangement process can be good regulatory practice.

The Commission considers that the policy objective of the rate of return framework in the NGR is consistent with frameworks that could best achieve the NEO, the NGO and the RPP. However, the interpretation of rules 87(1) and 87(2) by the Tribunal means that the Commission cannot be confident that without amendment the current NGR framework is likely to deliver outcomes that best meet the NEO, the NGO and the RPP.

6.3.2 A common rate of return framework under the NER and NGR

The Commission is of the view that none of the existing rate of return frameworks is capable of best fulfilling the requirements of the NEO, the NGO and the RPP. The Commission considers that a new rate of return framework is therefore needed.

The new framework should be a common framework across the NER and the NGR that minimises any risks of distortions in capital allocation or investment decisions between the electricity and gas sectors. While a number of stakeholders have explained differences in the risks potentially faced by service providers operating in the electricity and gas sectors, the Commission has not seen any convincing evidence to support the view that there are features of the electricity and gas sectors that would justify different frameworks for estimating the rate of return for each sector.

The Commission recognises that each sector has a different framework at the moment, and there can be benefits from stability of frameworks over time. However, given the Commission's concerns about each of the existing frameworks as discussed above, the benefits of a common framework appear to significantly outweigh any potential benefits from preserving the stability of any of the existing frameworks.

6.3.3 Attributes of a rate of return framework that would meet the NEO and the NGO

In the directions paper, the Commission proposed that a good rate of return framework would be one that:

- is based around estimating a rate of return for a benchmark efficient service provider;

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and South-West Gas Distribution Systems, 28 February 2011; and ERA, *Final decision on proposed revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 31 October 2011 (as amended on 22 December 2011). The Commission notes that both the access arrangement decisions have amended in accordance with the Tribunal's recent decisions.

- allows methodologies for parameters to be driven by principles and to reflect current best practice;
- allows flexibility to deal with changing market conditions and the availability of new evidence;
- recognises the inter-relationships between parameter values; and
- creates a framework of accountability for both the regulator and the service provider in determining an appropriate rate of return.[67]

There was broad agreement amongst stakeholders about the appropriateness of these five attributes.

Two other key attributes were suggested that the Commission considers should be added to the list set out above, which are:

- certainty for service providers and their investors as to how the regulator will react to changes in market circumstances and make decisions on an appropriate rate of return; and
- a rate of return framework that allows for more effective consumer participation.

While achieving the best possible estimate of the rate of return is the primary requirement of the framework for achieving the NEO and the NGO, achieving a degree of regulatory certainty is an important secondary objective. A degree of certainty in a framework will promote efficient investment in, and use of, the relevant services. That is not to suggest that the rate of return itself must be stable - this would be contradictory to the intention that they correspond to market conditions. Rather, there should be predictability and transparency about the way the allowed rate of return is determined.

The Commission also recognises that consumer engagement (and broader stakeholder interaction) in the rate of return determination process must be as effective as reasonably possible. As the NEO and the NGO are concerned with achieving outcomes that are in the long-term interests of consumers, it is only appropriate that consumers, user groups and other stakeholders be given an opportunity to effectively engage in the process and put forward their views.

The Australian Pipeline Industry Association (APIA) also made a number of other suggestions on the criteria. It suggested recognising the following attributes:

- the rate of return framework must be guided by a clear overarching criterion to be met by a rate of return; and
- a rate of return framework that takes into account the specific risks of service providers operating in a regulatory environment.

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67 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 91-92.

While the Commission agrees with APIA that a clear overall objective for the rate of return estimate is important, this is a means to achieve some of the attributes listed above rather than an attribute in itself. The Commission considers that the rate of return framework should provide a rate of return for a benchmark efficient service provider, and that, in developing the characteristics of a benchmark efficient service provider, the regulator considers the risk profile of the service provider to determine whether the benchmark chosen is appropriate. Therefore, the attribute of focussing on a benchmark efficient service provider can incorporate the consideration of the specific risks of a service provider operating in a regulated environment.

6.3.4 Features of a new common rate of return framework

Having regard to the attributes of a good rate of return framework set out above, the Commission has considered the best framework for the rate of return. Recognising that the existing NGR rate of return framework and the existing framework under the Chapter 6 of the NER have some features that are consistent with the attributes of a good rate of return framework that would meet the NEO, the NGO and the RPP, the Commission considered whether these two frameworks could be amended in a way that allowed them to better meet the NEO, the NGO as well as the RPP. For instance, the relatively flexible approach to the estimation of the return on debt and equity are attractive features of the NGR rate of return framework. In addition, the ability of the regulator to take into account prevailing market conditions at the time of an access arrangement decision provides a certain level of flexibility in ensuring that the allowed rate of return can be adjusted to reflect efficient financing costs of a benchmark efficient gas service provider.

Equally, the role of the Statement of Regulatory Intent (SORI) under the Chapter 6 rate of return framework has some benefits in terms of providing certainty, transparency and predictability about how the regulator would estimate the rate of return. It also provides for a regular focussed debate and consideration of methodological issues in estimating the return on equity and debt components of the overall rate of return.

Having considered the two starting points of the existing Chapter 6 approach under the NER and the approach under the NGR, the Commission has developed a proposed framework in this draft rule determination that it considers can result in outcomes that best meet the NEO, the NGO and the RPP. In the following sections, the Commission has set out its considerations of the features of its proposed framework against the attributes of a good rate of return framework discussed above.

Estimating a rate of return for benchmark efficient service provider

The primary objective of the allowed rate of return is to provide service providers with a return on capital that reflects efficient financing costs. A rate of return that corresponds to efficient financing costs will allow service provider to attract the necessary investment capital to maintain a reliable energy supply while minimising the cost to consumers.

The application of the NEO, the NGO and the RPP do not necessarily mean that service providers should recover their actual financing costs as this would create no incentive for them to minimise their financing costs. It is for this reason that the concept of a "benchmark efficient firm" and "benchmark efficient financing costs" are often used in the rate of return discussion. De-coupling a service provider's allowed financing costs from its actual costs means that service providers can retain the benefits from adopting more efficient financing arrangements than assumed by the regulator, and consumers are protected if a service provider is inefficient in their financing practices.

It is essential for the rate of return framework to be based around the concept of efficiency and to allow the recovery of only benchmark efficient financing costs. While both the NGR and the Chapter 6 rate of return frameworks include references to the rate of return being based on the efficient benchmark financing costs, the Commission is not confident that the current rules link the determination of the allowed rate of return to this overall objective.

In the Commission's view, there is a need to bring the focus of the rate of return in the rules back to the NEO, the NGO and the RPP. The Commission's proposed rate of return framework therefore has an overall objective for the allowed rate of return. In order to meet the NEO and the NGO, this objective reflects the need for the rate of return to correspond to the efficient financing costs of a benchmark efficient entity with similar circumstances and degree of risk as that which applies to the service provider whose rate of return is being determined.

Methodologies driven by principles and reflecting current best practice

In the Commission's view, achieving the NEO, the NGO, and the RPP requires the best possible estimate of the benchmark efficient financing costs. This can only be achieved by ensuring that the estimation process is of the highest possible quality. It means that a range of estimation methods, financial models, market data and other evidence should be considered, with the regulator having discretion to give appropriate weight to all the evidence and analytical techniques considered.

The Chapter 6 rate of return framework takes a relatively prescriptive approach to the rate of return estimation process and, once particular methodologies and parameter values are adopted in a review, there is a material hurdle in the persuasive evidence test before a different approach or value can be adopted. For example, the Chapter 6 rate of return framework provides no scope for the estimation of the return on equity using an estimation method other than the CAPM. In addition, it does not provide any scope to test the outcomes against other information or developments in current best practice.

By contrast, in not prescribing a particular methodology, the NGR rate of return framework should allow methodologies for parameters to be driven by principles and to reflect current best practice. Further, it can recognise the inter-relationships between parameter values and thereby enable the allowed rate of return to be determined in an internally consistent manner.

The rate of return estimation should not be formulaic and be driven by a single financial model or estimation method. The estimation approach to equity and debt components should include consideration of available estimation methods, financial models, market data and other evidence to produce a robust estimate that meets the overall rate of return objective. This means giving the regulator discretion on how it should estimate these components, rather than limiting the estimation process to a particular financial model or a particular data source. In the context of estimating the return on equity, the estimation should not be limited to the standard CAPM, but should consider other relevant evidence. The Commission's view on the return on debt estimation is discussed in chapter 7.

An example of an estimation process that has become formulaic is the mandatory use of the CAPM under the NER and the view that appears to be adopted in practice that CAPM is the only "well accepted" model under the NGR, despite the flexibility to consider other models.

The AER has strongly rejected any approach other than the CAPM in its submission. The AER's view is that it is unlikely that there would be a justifiable departure from the CAPM over the medium to long term.[68] Specifically, the AER noted that:

> "[T]o the extent that other models are considered, other parameters may need to be considered. Assessing all parameters and alternative models concurrently, however, is practically difficult, and would be particularly so if undertaken during a tight reset timeframe.[69]"

Most of the financial models that exist in the finance field are based on academic work. All of the models appear to have some weaknesses. All the models that have been advanced have been criticised for either the underlying assumptions required or lack of correlation of modelling results with empirical tests. Even the CAPM has been criticised in academic literature.[70] For example, some of the identified limitations of the CAPM are:

- it is based on unrealistic assumptions;
- it is difficult to test the validity of the CAPM; and
- the Beta estimate does not remain stable over time.[71]

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68 AER, submission to the Directions Paper, 2 May 2012, p. 43.

69 Ibid.

70 See for example: E Fama, and K French, 'The Cross-Section of Expected Stock Returns', *Journal of Finance*, vol 47, no.2, 1992, pp. 427-465; E Fama, and K French, 'The Capital Asset Pricing Model: Theory and Evidence', *Journal of Finance*, vol 48, no.3, 2004, pp. 25-46; T Copeland, J Weston, and K Shastri, *Financial Theory and Corporate Policy* 4th edition, Pearson Education, 2005, chapter 6.

71 See M Grinblatt, and S Titman, *Financial Markets and Corporate Strategy*, 2nd edition, McGraw-Hill, New York, 2002; and for surveys of the empirical evidence on the CAPM see: JY Campbell, AW Lo, and AC MacKinlay, *The Econometrics of Financial Markets*, Princeton, New Jersey, 1997, pp. 211-217; R Jagannathan, I Meier, 'Do We Need CAPM for Capital Budgeting?', *Financial Management*, vol 31, no.4, 2002, pp. 55–77.

Two of the most prominent academics in this field, Eugene Fama and Kenneth French, make the following statement on the CAPM:

> "The attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor - poor enough to invalidate the way it is used in applications. The CAPM's empirical problems may reflect theoretical failings, the result of many simplifying assumptions. But they may also be caused by difficulties in implementing valid tests of the model.[72]"

An illustration of the issues associated with just relying on the CAPM to estimating return on equity has also been highlighted by the LMR Panel. In its stage one report, the LMR Panel noted that "binding regulatory decisions hand and foot to a financial model with known defects does not immediately commend itself as an approach that will advance the NEO and NGO".[73]

There are a number of other financial models that have varying degrees of weaknesses.[74] Some of the financial models that have gained some prominence include the Fama-French three-factor model[75], the Black CAPM[76], and the dividend growth model.[77] Weaknesses in a model do not necessarily invalidate the usefulness of the model. Ultimately, it is important to keep in mind that all these financial models are based on certain theoretical assumptions and no one model can be said to provide the *right* answer.

Given that there are other financial models and methods for estimating the cost of equity capital that vary in their acceptance academically and consequent usage by market practitioners, restricting consideration to the CAPM alone would preclude consideration of other relevant estimation methods.

The Commission is of the view that estimates are more robust and reliable if they are based on a range of estimation methods, financial models, market data and other evidence. A framework that eliminates any relevant evidence from consideration is unlikely to produce robust and reliable estimates, and consequently is unlikely to best meet the NEO, the NGO and the RPP.

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72 E Fama, and K French, 'The Capital Asset Pricing Model: Theory and Evidence', *Journal of Finance*, vol 48, no.3, 2004, p. 25.

73 LMR Panel, *Review of the Limited Merits Review Regime*, Stage One Report, Report for the SCER, 29 June 2012, p. 42.

74 A summary of a number of return on equity financial models was provided by SFG in their report to the Commission on preliminary analysis of rule change proposals. See: SFG Consulting, *Preliminary analysis of rule change proposals*, Report for the AEMC, 27 February 2012, pp. 57-66.

75 E Fama, and K French, 'Common Risk Factors in the Returns on Stocks and Bonds', *Journal of Financial Economics*, vol 33, no.1, 1993, pp. 3–56

76 F Black, 'Capital market equilibrium with restricted borrowing', *Journal of Business* vol 45, no.3, 1972, pp. 444-455.

77 MJ Gordon, *The Investment, Financing, and Valuation of the Corporation*, Irwin, Homewood Illinois,1962.

The Commission also notes that a framework that allows the regulator to properly consider a range of estimation methods, financial models, market data and other e evidence is in line with the Commission's general philosophy of giving the regulator capacity to exercise regulatory judgment.

The Commission considers that the approach in the NGR rate of return framework provides a sound basis on which to build a new rate of return framework. The less prescriptive nature provides sufficient flexibility to consider alternative methodologies. It can also allow the regulator to consider new evidence as it emerges and adjust or adapt its methodologies if justified.

As further discussed below, the Commission considers that while the broad architecture of rule 87 is appropriate for the new rate of return framework in respect of this attribute, given the Tribunal's recent interpretation of rules 87(1) and (2), the rules need to be changed to allow the overall objective for the allowed rate of return to remain a key focus, while also allowing the estimation to be driven by principles.

Flexibility to deal with changing market conditions and new evidence

A robust and effective rate of return framework must be capable of responding to changes in market conditions. If the allowed rate of return is not determined with regard to the prevailing market conditions, it will either be above or below the return that is required by capital market investors at the time of the determination. Neither of these outcomes are efficient and neither is it in the long term interest of energy consumers.

The Commission does not consider that the Chapter 6 rate of return framework approach is capable of responding sufficiently to changing market conditions. The fact that some parameters and methodologies are locked in through the WACC review SORI, means that the regulator is unable to reconsider whether adjustments should be made to the rate of return at the time of a service provider's determination to reflect circumstances in the financial markets. While the Chapter 6 rate of return framework provides for departure through the persuasive evidence test, this test places a threshold both for the regulator and the service providers to justify. Instead of focussing on whether the overall allowed rate of return reflects efficient financing costs, the persuasive evidence test drives debates on specific parameter values and methodologies.

On the other hand, the NGR rate of return framework potentially provides the flexibility needed to take account of changing market conditions and the availability of new evidence. The NGR rate of return framework achieves this by allowing the rate of return to be determined during each access arrangement decision, unconstrained by any WACC review outcomes. However, this approach does raise some concerns about the ability of all stakeholders, including consumers and their representative groups, to participate in rate of return determinations on an ongoing basis.

In order to provide the flexibility to determine the rate of return that can take into account changes in market conditions, the Commission's proposed rate of return framework requires the rate of return to be determined at the time of each regulatory

determination of a TNSP or DNSP under the NER and each access arrangement decision of a gas service provider under the NGR. As discussed further below, the Commission considers that a requirement for guidelines on rate of return methodologies to be developed by a regulator provides the mechanism to achieve both effective consumer engagement and regulatory predictability.

Inter-relationships between parameter values

For an estimate from a financial model to be reliable, it must properly reflect any interactions between the parameters within the model. In some models, two or more parameters are mathematically linked (ie the relationship between them can be expressed in the form of a mathematical formula). Proper implementation of a model requires that any mathematical relationship between parameters be recognised when estimating those parameters.

There are also some well-established empirical relationships between parameters (eg it may be an empirical fact that two parameters are significantly negatively correlated). Proper implementation of a model would require any empirical relationship between parameters to be recognised when estimating those parameters.

The Commission considers that the rate of return framework should allow such inter-relationships of parameter values to be appropriately recognised. While stakeholders have suggested that the current Chapter 6 rate of return framework allows for such inter-relationships to be taken into account, the Commission has seen limited evidence of how this occurs in practice.

The Commission's proposed framework explicitly recognises such parameter inter-relationships by requiring the regulator and the service provider to have regard to them.

Accountability for both the regulator and the service providers

It is important that the rate of return framework places accountability on the regulator and the service provider in estimating an appropriate allowed rate of return. The Commission's proposed rate of return framework achieves this accountability in a number of ways.

First, the return on equity estimate can be derived from a range of different estimation methods, financial models and market evidence, ensuring that it is informed by and tested against the range of relevant evidence.

Second, the framework requires the regulator and the service providers to be continually measuring their choice and application of methods, models and other relevant evidence against the overall objective of a rate of return that corresponds to the efficient financing costs of a benchmark efficient service provider.

Third, the regulator is required to develop and publish guidelines as part of a transparent consultative process.

Lastly, given the existing NEL provisions, the Commission's proposed rate of return framework does not alter the service providers' ability to seek merits reviews of the regulator's decision on its allowed rate of return after a regulatory determination or access arrangement decision.

Regulatory certainty

The Commission recognises that the Chapter 6 rate of return framework provides a certain level of regulatory certainty in the determination of the rate of return for service providers that is desirable. However, it is important to also recognise that there is some tension between having flexibility and certainty in the framework. On the one hand, investors require certainty in the regulatory regime on how the rate of return would be determined in the future. On the other, investors also require certainty that where market conditions change, the regulatory regime will provide enough flexibility to the regulator to make the necessary adjustments.

The Commission considers that the NGR rate of return framework represents a stronger attempt at ensuring that the determination of the rate of return meets the NEO, the NGO and the RPP. It places primary importance on determining an overall rate of return that promotes efficient use and investment, ensuring that a desire for certainty and predictability does not inhibit this being achieved. The Chapter 6 rate of return framework seeks to strike a balance between the two somewhat competing objectives. While the Commission agrees that regulatory predictability is a relevant consideration under the NEO, the NGO and the RPP, it considers that achieving an estimate of the rate of return that best reflects the benchmark efficient financing costs is the overriding consideration for a rate of return framework in terms of achieving the NEO, the NGO and the RPP.

During the Commission's discussions with some service providers, it was suggested that if a rate of return framework based on the NGR approach was to be adopted, then there should be an "inertia principle". This would require the parameter values of previous regulatory determinations to be binding for future regulatory determinations until variation is sought that passes some form of persuasive evidence test. It was suggested that some parameters by their nature are subject to significant ongoing discussion and that two experts could look at the same material and come up with multiple answers. It was suggested that use of this type of "evidence" would reduce certainty, stability and transparency in the regulatory framework.

The Commission notes that the concept of an inertia principle was raised during the AER's last WACC review in 2008 on the interpretation of the persuasive evidence test in Chapters 6 and 6A of the NER. Legal opinion obtained by the ENA at the time of the AER's WACC review suggested that the persuasive evidence requirement in rules put in place an inertia principle which gives precedence to the parameters previously adopted.[78] That legal opinion also stated that such evidence may comprise empirical

78 See *Request for advice – AER review of the WACC parameters*, Letter to ENA members dated 22 September 2008 (Appendix A of joint submission from Grid Australia, ENA and APIA to the AER's 2008 WACC review), p. 3.

observation and expert opinion which logically tends to establish the value, and that the AER must adopt an approach to the WACC review that properly gives effect to the inertia principle.[79] The legal opinion also stated that an approach that requires, before departing from an existing parameter, evidence that the previous value was incorrect or likely to be incorrect would be appropriate because it would be consistent with the language of the rules and give substantive and real effect to the requirement for persuasive evidence.[80]

The Commission's view is that inclusion of an inertia principle would undermine the strength of its proposed rate of return framework. Having said this, it is conceivable that an inertia principle will manifest itself under the Commission's proposed framework through the development of regulatory precedent from previous regulatory determinations and access arrangement decisions until new evidence emerges or market conditions change. Therefore, it is not obvious why the framework should explicitly lock in any evidence threshold based on an inertia principle.

The Commission is proposing to have non-binding guidelines on rate of return methodologies. This is to safeguard the framework against the problems of an overly-rigid prescriptive approach that cannot accommodate changes in market conditions. Instead, sufficient flexibility would be preserved by having the allowed rate of return always reflecting the current benchmark efficient financing costs.

The non-binding nature of the guidelines would not work against regulatory predictability (or the inertia principle) since the regulator would, in practice, be expected to follow the guidelines unless there had been some genuine change in the evidence. The regulator would also need to explain why it was deviating from the guidelines. Similarly, service providers would need to explain in their regulatory proposals why they are proposing a different approach to the regulator’s guidelines if they wished to advocate a different approach. This would not, of course, limit a service provider’s ability to submit that there was a change in evidence or circumstances that required a variation. Additionally, each regulatory determination would remain subject to merits review, allowing the appeal body to maintain appropriate oversight over the regulator's decision.

More effective consumer participation

One of the key drawbacks of the existing NGR rate of return framework is that it may not allow for more effective consumer participation (particularly where there are a lot of relatively small consumers) on rate of return issues as it operates on a determination by determination basis. Consumer representative groups and energy user groups have submitted that resource constraints limit their ability to effectively engage on a determination by determination basis. The Commission is mindful of this and would prefer to have a rate of return framework that provides both periodic consultation and a mechanism for allowing consumer consultation to be given proper effect.

79 Id., p. 4.

80 Ibid.

The Commission is also mindful of ensuring that the rate of return framework can facilitate regulatory predictability. Providing a degree of certainty to service providers and their investors as to how the regulator will react to changes in market circumstances and make decisions on an appropriate rate of return allowance is an important consideration.

A useful way to achieve both effective consumer engagement and regulatory predictability is through the use of guidelines. Such guidelines can play the role of outlining the methodologies that the regulator proposes to use in determining the allowed rate of return at the time of a regulatory determination. The guidelines could be developed and thereafter reviewed periodically, using an extensive consultation process. This would allow consumers to effectively engage in the creation and review of such guidelines.

6.3.5 Nominal post-tax rate of return

Whereas the NER currently mandates a nominal post-tax framework for determining the rate of return, the NGR does not specify a particular framework. In its gas access arrangement decisions to date, the AER has consistently applied a nominal post-tax framework. However, the ERA has used a real pre-tax approach.

The AER’s rule change request has sought to prescribe the nominal post-tax approach in the NGR. The ERA has supported the AER’s proposal, noting that it has found the real pre-tax approach to be problematic and is considering moving to the nominal post-tax framework in any event.[81] Given the AER's rule change request, the Commission has had to consider the approach a common rate of return framework should take.

In prescribing a nominal post-tax approach in Chapter 6A, the AEMC in its 2006 Chapter 6A determination noted that this largely reflected existing practice under the Australian Competition and Consumer Commission’s (ACCC) Statement of Regulatory Principles. The AEMC also commented that:

- the post-tax approach addresses concerns regarding overcompensation for tax in the early years of an asset’s life, due to accelerated depreciation provisions for tax purposes which continue to apply to some TNSP assets; and
- convergence in modelling approaches across different energy businesses would improve the ability to compare returns across different regimes, whereas allowing differences in the frameworks applying to TNSPs and DNSPs would not aid in such a convergence.[82]

The pre-tax and post-tax approaches produce equivalent outcomes provided that the effective company tax rate is properly calculated under the pre-tax framework. Generally, where a pre-tax approach has been adopted, regulators have adopted either

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81 ERA, Consultation Paper submission, 6 December 2011, p. 4.

82 AEMC, *Draft national electricity amendment (Economic regulation of transmission services) rule 2006 - Transmission revenue: rule proposal report*, February 2006, pp. 63–64.

the statutory tax rate or a simple and conservatively high assumption for the effective tax rate. For example, the ERA has applied the real pre-tax framework in relation to gas pipelines regulated under the NGR in WA, using an effective tax rate of 30 per cent (the equivalent of the company tax rate of 30 per cent as used under the post-tax framework).[83]

The AER and ERA both submit that the use of the company tax rate and a conservatively high assumption of the effective tax rate lead to systematic overcompensation for company tax. The AER also submit that eliminating the potential for overcompensation requires the precise calculation of an effective tax rate, which is administratively burdensome. Moreover, the calculation of an effective tax rate requires cash flows to be modelled in post-tax terms and then converted into pre-tax equivalents. That is, the regulator would perform a post-tax calculation in either case.

The Commission is of the view that a common framework should apply the nominal post-tax approach. While the nominal post-tax approach is already applied consistently to TNSPs and DNSPs under the NER, prescribing a nominal post-tax approach in the NGR would streamline the access arrangement review process and provide certainty for gas service providers as to the basis on which the regulator will determine the allowed rate of return. Furthermore, there are unlikely to be any changes in circumstances of the gas service providers or in regulatory practice that would justify having the flexibility in the NGR to reconsider these issues in each access arrangement.

A consistent approach by the AER and the ERA across the NER and the NGR will also allow convergence in modelling approaches across different sectors and would improve the ability to compare returns across the different regimes. As observed by the AEMC in its Chapter 6A determination, allowing differences in the frameworks applying to different types of service providers would not aid in such a convergence.

6.3.6 Implications of the Tribunal decision in the ATCO Gas and DBNGP cases

Given that the Commission is proposing to introduce a common rate of return framework that has similar broad architecture to the existing NGR rate of return provisions, the Commission considers it is helpful to outline further its reasons for altering the existing NGR to better reflect its policy objective, particularly in the context of the recent decision of the Tribunal in the ATCO Gas and DBNGP merits reviews.

In both the ATCO Gas and DBNGP cases, the Tribunal rejected the contention of the applicants that giving primary emphasis to rule 87(1) would reflect the NGO and the RPP.[84] Such a conclusion does not reflect the policy intention of the Commission. The

83 ERA, *Final decision on WA Gas Networks Pty Ltd proposed revised access arrangement for the Mid-West and South-West Gas Distribution Systems*, 28 February 2011, pp. 50-56; and ERA, *Final decision on proposed revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 31 October 2011 (as amended on 22 December 2011), pp. 119-126. Cf. AER's post-tax approach under the NGR: AER, *Envestra Ltd Access arrangement proposal for the SA gas network 1 July 2011 – 30 June 2016*, Final Decision, June 2011, pp. 43-46 and Appendix A pp.164-175.

84 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14.

Commission's policy intention is for the primary consideration to be whether or not the overall allowed rate of return reflects benchmark efficient financing costs. A focus on the overall estimate of the rate of return is a key policy objective for the new framework.

The Tribunal has suggested in both these cases that rule 87(1) lacks guidance as to how the objective is to be achieved and that in the interests of regulatory consistency, it is desirable that such guidance be provided, and that rule 87(2) serves that function in describing how the rate of return is to be achieved.[85]

The Tribunal also held that "implicit (or explicit) criticisms of modelling... must be minimised, if not negated, by the requirement that the approach and the model used must be well accepted by those who undertake and use such approaches and models for that purpose"[86], and that "it is almost inherently contradictory then to say that the approach or the model is not likely to produce a reliable output - assuming that the inputs are appropriate – if that approach and that model are well accepted".[87]

The Commission considers that this conclusion presupposes the ability of a single model, by itself, to achieve all that is required by the objective. The Commission is of the view that any relevant evidence on estimation methods, including that from a range of financial models, should be considered to determine whether the overall rate of return objective is satisfied.

The Tribunal also highlighted its concerns regarding insufficient prescription:

> "The measure of prevailing conditions in the market for funds, and of the risks involved in providing reference services - without prescribing finally how that is done - would be fraught and vulnerable to an evolutionary and possibly idiosyncratic series of regulatory decisions. It would provide less certainty. It would expose the process of selection of rate of return on capital to the risk of prolonged debate about the relevant factor, their empirical measurement and their weightings.[88]"

The Commission is mindful of the potential consequences of removing prescription and allowing the regulator increased discretion. However, the potential consequences must be balanced against potential benefits. Regulatory discretion is an important feature of every regulatory regime and guidance that is too prescriptive runs the risk of unnecessarily limiting the achievement of the NEO and the NGO. The focus should be on the outcome of the process rather than on individual steps of the process itself. The Commission believes no one method can be relied upon in isolation to estimate an allowed return on capital that best reflects benchmark efficient financing costs.

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85 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12, [61] – [63]; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14, [81]-[83].

86 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12,at [63]; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14, [84].

87 Ibid.

A focus on the overall estimate of the rate of return is a key objective of the new rate of return framework. It is the Commission's belief that requiring the regulator to have regard to more relevant information on estimation methods, financial models and other market data and allowing the regulator more capacity to achieve the overall objective, combined with a strengthened emphasis on achieving this objective, is more likely to achieve the NEO and the NGO than the current approaches.

The Commission believes that a mechanism for addressing, or at least mitigating, the Tribunal's concerns regarding "idiosyncratic series of regulatory decisions", "less certainty" and "prolonged debate" is the use of guidelines on rate of return methodologies under the new framework. The next section provides a detailed discussion on these guidelines, including their construction, operation, and role in meeting the NEO, the NGO and the RPP.

6.4 Draft rule

This section covers aspects of the draft rule on the rate of return framework other than the return on debt, which is discussed in chapter 7.

In addition to comments on whether the Commission's proposed draft rule for determining the rate of return is the best way to meet the NEO, the NGO and the RPP, the Commission would also welcome comments on whether the draft rule achieves the Commission's intended objectives. While all future circumstances cannot be anticipated, the Commission would prefer the rules to be as clear as possible in giving effect to its intended objectives, and would welcome comments on whether it has achieved this with the proposed draft rule.

6.4.1 Guidance on draft rule

The draft rule provides a common rate of return framework for determining the return on capital for service providers. In determining the return on capital, the allowed rate of return would be estimated at the time of each regulatory determination of a TNSP or DNSP and each access arrangement decision of a gas service provider.

The draft rule is structured to require the regulator to determine a rate of return consistent with an overall objective (the allowed rate of return objective). The allowed rate of return objective requires the rate of return to correspond to the efficient financing costs of a benchmark efficient service provider with similar degree of risk to the service provider whose rate of return is being determined.

The Commission considers that the allowed rate of return objective is consistent with the NEO and the RPP under the NER, and is also consistent with the NGO and RPP under the NGR. The concept of a benchmark efficient service provider means that the regulator can conclude that the risk characteristics of the benchmark efficient service provider are not the same for all service providers, and the Commission would expect

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88 *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12, [68]; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14, [89].

a regulator in developing its guideline (discussed below) to explicitly consider this issue. Having said this, the Commission recognises that if a regulator concluded that the risk characteristics of a benchmark efficient service provider are different between, for instance, electricity and gas service providers, there may be challenges in all cases in identifying sufficiently precise measurements of the quantum of the difference for determining the rate of return.

In determining the allowed rate of return, the regulator would be required to consider the return on equity and the return on debt as the allowed rate of return comprises a weighted average these two components. Although for practical purposes, the regulator may turn its mind to separately estimating the return on equity and return on debt, the Commission considers that in order to satisfy the overall objective the regulator must consider whether the overall estimate of the rate of return is consistent with the overall objective, and have regard to inter-relationships between approaches and values used for estimating the return on equity and return on debt.

In order to determine the rate of return, the regulator must use relevant estimation methods, financial models, market data and other information. The intention of this clause of the proposed rule is that the regulator must consider a range of sources of evidence and analysis to estimate the rate of return, and make a judgement in the context of the overall objective as to the best method(s) and information sources to use, including what weight to give to the different methods and information in making the estimate.

The draft rule requires the allowed rate of return to be determined on a nominal post-tax basis with proper regard to dividend imputation (gamma). This is also consistent with the current WACC approach in the NER rate of return frameworks in that it requires a consistent treatment of cash flows and the discount rate to properly incorporate the gamma factor. The current prescription of the gamma value of 0.5 in clause 6A.6.4 has also been removed to allow the regulator the ability to estimate an appropriate value that would result in a rate of return that meets the overall objective.

In addition, since the nominal-post tax rate of return framework will apply to gas service providers under the NGR, the Commission's draft rule includes new provisions for the estimation of the cost of corporate income tax. This provision is similar to the provisions in Chapters 6 and 6A of the NER to allow for a common rate of return framework to be established.

The draft rule distinguishes between the allowed rate of return objective (ie the rate of return must correspond to the efficient financing costs of a benchmark efficient entity with similar degree of risk to the service provider whose rate of return is being determined) and certain secondary requirements that the regulator must have regard to. These secondary requirements relate to the use of internally consistent approaches and considering any inter-dependencies between parameters used in estimating the rate of return. For these and other provisions that the regulator is required to have regard to when estimating the rate of return, the Commission intends only that the regulator has considered these issues and explained how it has considered the issues.

The Commission does not intend that the regulator's estimate of the rate of return must be done in a way that meets these provisions.

Further, the Commission notes the Tribunal's comments in the recent Victorian DNSPs merits review case, where it the Tribunal said that:

> "[I]t is important for the AER to estimate the DRP [debt risk premium] and other WACC components with rigour and transparency, using comprehensive market-accepted data and offering some degree of certainty about the way in which it will apply the various estimating formulae (including the DRP formula) to a regulated company. Its estimating practices, data sources and reference periods must be well articulated, consistent and communicated to the parties...[89]"

While the draft rule gives the regulator discretion in the factors it must have regard to, the Commission agrees with the Tribunal's view that the regulator must undertake the rate of return estimation process with rigour and transparency. In this regard, the Commission expects the regulator to use estimating practices that are robust and rely on transparent data sources. It is also expected that the regulator will clearly articulate how it has considered the factors it must have regard to in making its decision on the allowed rate of return that meets the overall objective.

Estimating return on equity

The draft rule sets out two requirements for the return on equity estimation. The first is that the estimation must be consistent with the allowed rate of return objective. The second is that the estimation must take into account prevailing conditions in the market for equity funds.

The requirement that the return on equity is to be estimated in a manner consistent with the overall objective means that the overall approach is reflected in the return on equity component. In turn, the overall approach requires the regulator to have regard to relevant estimation methods, financial models, market data and other evidence as part of its assessment process.

The Commission has taken the view that it is preferable not to prescribe in the rules a list of particular models that should be considered or indeed prescribe characteristics that must be met by such a model. The Commission instead is proposing rules that require the regulator to have regard to relevant estimation methods, financial models, market data and other evidence and leave to the judgement of the regulator the relative weights given to methods, models and such information. Implicit in this requirement to consider a range of methods, models and information is that checks of reasonableness will be undertaken.

The second principal requirement is that the return on equity must take into account the prevailing conditions in the market for equity funds. It reflects the importance of estimating a return on equity that is sufficient to allow efficient investment in, and

89 *Application by United Energy Distribution Pty Limited* [2012] ACompT 1 at [461].

efficient use of the relevant services. However, this requirement does not mean that the regulator must estimate the return on equity at the latest possible moment before the regulatory determination. Instead, it means that the regulator must make its estimate in a way that meets the overall objective, while taking into account the prevailing conditions in the market for equity funds.

Rate of return guidelines

The purpose of having guidelines on rate of return is two-fold. First, it will allow a more focussed discussion on wider issues around estimating the rate of return, including the choice of estimation methods, financial models, types of information that may be used, and how the regulator intends to apply them. This includes guidance from the regulator on how it proposes to deal with any new information or evidence at the time of the regulatory determination. Secondly, it will allow all stakeholders, including consumers and consumer representative groups to have an opportunity to participate in debates on return on equity and return on debt methodologies rather than always having to find resources to engage on technical matters at each and every electricity determination or gas access arrangement decision.

These guidelines must be reviewed at least every three years in accordance with the defined consultation procedures. The draft rule requires the AER to develop separate guidelines for service providers in the electricity transmission, distribution and gas sector, though the intention of the Commission is to allow the AER to undertake a common process to the extent possible (and appropriate) for developing the guidelines.

In developing and reviewing the guidelines, the draft rule requires the AER to follow the consultation procedures under Chapters 6 and 6A of the NER. The Commission's preference is for the distribution consultation procedures to apply both for TNSPs under Chapter 6A and DNSPs under Chapter 6 of the NER. Since the transmission consultation procedures are different to the distribution consultation procedures, the Commission's draft rule amends the transmission consultation procedures to align it with the distribution consultation procedures to allow the AER to undertake the review of the guidelines for TNSPs and DNSPs jointly and concurrently.

In addition, the draft rule introduces a new rate of return consultative procedure in Part 3 of the NGR for the development and review of the rate of return guidelines. This provision mirrors the distribution consultation provisions of the NER. The NGR rate of return consultative procedure provisions will allow the AER to develop and review the guidelines under the NGR at the same time as under the NER. The ERA would also be required to produce separate guidelines for the gas service providers it regulates under the NGR through the new rate of return consultative procedure provisions.

In keeping with the Commission’s objective of limiting unnecessary prescription, these guidelines would be non-binding. Though the guidelines will not be binding in the same way the current SORI is under the Chapter 6 and 6A rate of return frameworks, the Commission would expect service providers, consumers, the AER, the ERA, and the appeal body to have significant regard to them as a starting point for each regulatory determination or access arrangement. The Commission is of the view that

the regulator should be allowed a fair degree of discretion on the precise contents of these guidelines, but intends the guidelines to provide a meaningful signal as to the regulator's intended methodologies for estimating return on equity and return on debt components of the allowed rate of return.

The Commission expects that the creation and periodic review of the rate of return guidelines will involve a wide and thorough consultation with stakeholders. The Commission expects the guidelines to provide a detailed outline of the methodologies to which the regulator proposes to have regard in determining the rate of return. That is, within the guidelines the regulator would be expected to:

- detail the financial models that it would take into account in its decision, and why it has chosen those models rather than other models. This would extend to outlining its methodologies, estimation techniques and current estimates (where appropriate) of relevant parameters;
- detail any other information that it would expect to have regard to, and why it has chosen to have regard to that information and not other information;
- provide guidance on how it would use such models and information in reaching its decision, including matters such as:
  - the relative weight (although not necessarily in a quantitative way) it would expect to place on various model estimates; and
  - what market data (or similar) it would use to ascertain lower bounds and/or reasonableness checks on the estimates;
- incorporate best practice in the application of financial models and market data; and
- be as transparent and open as possible.

The Commission anticipates that the guidelines would allow a service provider or other stakeholder to make a reasonably good estimate of the rate of return that would be determined by the regulator if the guidelines were applied. In other words, the methodologies to be adopted and the information sources to be used should be sufficiently well explained such that they could be applied with a reasonable degree of certainty and accuracy.

The application of the rate of return guidelines at the time of a regulatory determination or an access arrangement decision is not mandatory. However, if the regulator makes a decision on any methodology for estimating the allowed rate of return that is not in accordance with the guideline, the regulator must state, in its reasons for the regulatory determination or access arrangement decision, the reasons for departing from the guidelines.

The draft rule places a similar obligation on the service providers. That is, a service provider must have regard to the most recent rate of return guidelines when proposing

a rate of return as part of its regulatory proposal. However, where the service provider seeks to depart from the methodologies in the guidelines, it must state in its regulatory proposal the reasons for departing from the guidelines.

Clarification on discretion in constituent decisions under the NER

The AER has expressed some concern with the manner in which the Tribunal has interpreted clause 6.12.3(f) of the NER as imposing a constraint on rate of return decisions. In the merits appeal by the Victorian DNSPs, the Tribunal noted that:

> "[I]t was unreasonable for the AER to adopt its novel approach to estimating the DRP. In the circumstances, its departure from JEN's proposal in relation to the DRP [debt risk premium] was contrary to cl 6.12.3(f) of the NER, which provides that the AER may only amend a value or input used in a regulatory proposal to the extent necessary to enable it to be approved in accordance with the NER. Since the value for the DRP in the JEN revised regulatory proposal was derived in a way that was compliant with cl 6.5.2 of the NER, no amendment by the AER was permitted under cl 6.12.3.[90]"

The Commission has clearly specified that the allowed rate of return must meet the overall rate of return objective. In order for its draft rule on the rate of return framework to work as intended under the NER, the AER should not be limited to assessing a rate of return proposal on the basis of what the service provider proposes, with any departure from that proposal being the minimum necessary for the rate of return to comply with the requirements set out in the NER.

The Commission has therefore determined to amend clause 6.12.3(f) in Chapter 6 of the NER so that it no longer applies to the AER's decision on the allowed rate of return under the new framework. A similar amendment has been made to Chapter 6A in clause 6A.14.3(b) of the NER.

90 *Application by United Energy Distribution Pty Limited* [2012] ACompT 1 at [441].

7 Return on debt

Summary

The Commission's approach to the issues raised by the AER and the EURCC's rule change requests in relation to the return on debt are consistent with the approach to the overall rate of return framework discussed in chapter 6. In particular, the Commission is giving the regulators the scope to consider the most appropriate approach to estimating the return on debt having regard to the overall allowed rate of return objective for estimating the rate of return for service providers.[91]

Regulatory practice in Australia for estimating the return on debt has primarily involved taking an average of the risk free rate and the DRP over a 20 to 40 day period close to the start of the regulatory determination or access arrangement. Therefore, the estimate is an attempt to reflect the prevailing conditions in the market for debt funds.

The EURCC's rule change request proposed that the return on debt element of the rate of return should be estimated using a trailing average of observed historical debt costs for a benchmark efficient service provider. The rule change request also proposed to distinguish the return on debt estimate for service providers based on whether the service provider was state-owned or privately-owned to account for government debt guarantees provided to state-owned service providers. Stakeholder feedback has indicated substantial support for consideration of historical trailing average approaches.

Extensive stakeholder engagement on the EURCC's proposed historical trailing average approach indicated that there is substantial support for consideration of approaches other than the current prevailing market conditions approach.

The Commission engaged SFG to assess the various historical trailing average approaches to estimating the return on debt that have been put forward by stakeholders in this rule change process.[92] Informed by this analysis from SFG, the Commission has concluded that there are a number of equally reasonable approaches to estimating the return on debt that may, in some circumstances, help to estimate a rate of return that better meets the overall allowed rate of return objective. In particular, some approaches to estimating the return on debt may better align the regulatory approach with the financing practices of efficiently managed service providers. In these situations, the re-financing risks faced by service providers are reduced, thereby potentially reducing the required

91 As in chapter 6, the term "service provider" is used to refer generally to electricity network service providers under the NER and gas service providers under the NGR, unless the context requires otherwise.

92 SFG Consulting, *Rule change proposals relating to the debt component of the regulated rate of return*, Report for the AEMC, 21 August 2012.

return on equity and providing better investment incentives, to the benefit of consumers.

However, the Commission is also very conscious that the best methodology for estimating return on debt may not be the same for all service providers. As SFG's report shows, specifying any particular method in the rules creates the risk that the rules embed approaches that differ from the financing practices of efficient benchmark service providers and/ or create significant distortions to the incentives for undertaking capex. Therefore, consistent with the Commission's approach to how return on equity should be estimated, the Commission considers that the rules should not prescribe a particular methodology for estimating the return on debt component. The regulator will be better placed than the Commission to decide the best approach in particular circumstances and over time to meet the overall allowed rate of return objective.

The Commission's proposed draft rule provides the regulators with the scope to use a range of different approaches to estimate the return on debt depending on the methodologies they consider to best meet the overall allowed rate of return objective. The draft rule includes some factors that the regulators must have regard to when considering the best approach to estimate return on debt, including implications for the broader estimate of the allowed rate of return. Given the difficulties in designing one unambiguously superior approach, the Commission considers that providing regulators with this flexibility is the best way to ensure that the rate of return outcomes better achieve the NEO, the NGO and the RPP.

The rate of return guidelines to be developed by the regulators will provide a forum to discuss and analyse the best approaches to estimating the return on debt. Service providers would also have the opportunity as part of their regulatory determination or access arrangement process to argue for a different approach to that proposed in the guidelines. Service providers would need to explain why their proposed approach better met the overall rate of return objective than the approach in the guidelines.

The Commission is not proposing to make a rule that would put in place a different approach to estimating the return on debt for privately-owned and state-owned service providers, as proposed by the EURCC. The governments in Australia are signatories to the Competition Principles Agreement that puts in place various provisions that attempt to preserve competitive neutrality where service providers are stated-owed. In particular, the NSW, Queensland and Tasmanian governments have arrangements in place to meet the Competition Principles Agreement for their service providers. It is for governments to decide how to implement the Competition Principles Agreement, and the Commission considers that assessment of potential rule changes under the NEO needs to take account of how governments have implemented the agreement. The Commission considers that rate of return should be determined by reference to benchmark efficient service providers.

7.1 Introduction

The current Chapter 6 and 6A rate of return frameworks under the NER require weights to be applied to the return on equity and the return on debt to estimate the average expected return on capital. The weights are applied according to the gearing ratio – the relative proportions of equity and debt finance. The return on debt estimate represents the return that investors of debt capital would require from a benchmark efficient service provider. Aligning the return on debt estimate with the efficient expected cost of debt of a service provider is therefore an important element in determining the rate of return.

As the return on debt is part of the overall allowed rate of return, the Commission considers that the best way to meet the NEO, the NGO and the RPP for estimating the return on debt is the same as that discussed in the rate of return framework chapter. That is, the return on debt estimate should reflect the efficient financing costs of a benchmark efficient service provider. It should try to create an incentive for service providers to adopt efficient financing practices and minimise the risk of creating distortions in the service provider's investment decisions. If a service provider is run inefficiently then its shareholders, and not its customers, should bear the financial consequences of inefficient financing practices.

Under the current Chapter 6 and 6A of the NER, the return on debt is defined to be the nominal risk free rate plus the debt risk premium (DRP).[93] No such definition exists in the NGR. While the NGR does not mention the DRP, it states that the rate of return for gas service providers is to be commensurate with prevailing conditions in the market for funds and the risk involved in providing reference services.[94]

A more detailed discussion on the application of the current rules on return on debt, including the risk free rate and the DRP, was provided in the AEMC's directions paper.[95] The directions paper also explained the rule change requests from the AER and the EURCC on return on debt that have been consolidated by the Commission. [96]

This chapter is structured as follows:

- Section 7.2 summarises the comments of stakeholders to the AEMC's directions paper and additional consultation. It explains the Commission’s assessment of the proposal for a historical trailing average approach to estimating the return on debt;

- Section 7.3 explains the Commission’s consideration of the current definition of the benchmark for estimating the return on debt and whether the allowance for

93 NER clauses 6.5.2(b) and 6A.6.2(b).

94 See NGR rule 87(1).

95 See AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 97-98.

96 Id., pp. 98-101.

the return on debt that service providers are currently receiving is too high given their debt service costs;

- Section 7.4 explains the Commission's assessment of the EURCC's proposal for a different approach to estimating the return on debt for state-owned and privately-owned service providers; and
- Section 7.5 sets out further detail on the draft rule provisions, together with the Commission's guidance on the interpretation of the draft rule provisions.

7.2 A trailing average approach to estimating the return on debt

7.2.1 Stakeholder views

Most service providers are supportive of exploring historical averaging approaches, though not generally endorsing the specific EURCC proposal.[97] APIA suggests that the EURCC proposal is a departure from the forward looking approach and would adversely affect incentives for efficient investment. APIA argues that a historical trailing average approach should only be considered if it is likely to be a better forecast of return on debt at the time of the regulatory determination as required by the RPP, and considered that the EURCC proposal had a low likelihood of being so.[98]

The ENA is of the view that the EURCC proposal was just one form of a trailing average that could be implemented, and has proposed its own approach.[99] The principal difference between the two proposals is that the ENA method entails calculating a trailing average of the DRP only, with the risk free rate continuing to be fixed at the beginning of the regulatory period. The ENA argues that this approach would reflect the current financing strategies of most privately-owned service providers.[100] This proposal is similar to that advocated jointly by ETSA, CitiPower and Powercor.[101]

Some service providers submit that the NER requirement for the rate of return to be forward looking does not necessarily limit the consideration of historical evidence and point to reliance on historical evidence for calculating other parameters that make up the WACC as proof of this.[102] The New South Wales Treasury Corporation (NSW T-Corp) and some service providers argue that the evidence is that long-term averaging does a better job at predicting future rates that will apply over the course of the

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97 ENA, Directions Paper submission, 16 April 2012, p. 56; ENERGEX, Directions Paper submission, 16 April 2012, p.3; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 13-14; Grid Australia, Directions Paper submission, 16 April 2012, p. 2; Ausgrid, Directions Paper submission, 16 April 2012, p. 13; UE and MG, Directions Paper submission, 16 April 2012, p. 11.

98 APIA, Directions Paper submission, 16 April 2012, pp. 20-21.

99 ENA, Directions Paper submission, 16 April 2012, p. 56.

100 Ibid.

101 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 23.

102 Ausgrid, Directions Paper submission, 16 April 2012, p. 13.

regulatory period than short-term averaging.[103] Ausgrid argues that the current Chapter 6 rate of return framework already allows for the historical averaging approach to be implemented.[104]

However, the ENA and some of its members argue that substantial changes would be required in the rules to implement a trailing average approach, including:

- the separation of the risk-free rate used to estimate the return on debt from that used to estimate the return on equity;
- the development of a revised over-arching principle for the estimation of the debt element of the WACC;
- the potential creation of an annual pass-through mechanism to allow the trailing average DRP to be updated; and
- the need to establish empirical estimates of DRP over the period of the trailing average that includes significant market disruptions.[105]

In their joint submission, ETSA, CitiPower and Powercor reiterates its arguments from its submission to the directions paper that a trailing average on DRP is more consistent with the NEO and the RPP than both the EURCC proposal (for a trailing average of the return on debt) and the existing approach.[106] They argue that allowing the trailing average as an option would lead to opportunism.[107] These service providers also expressed concern about an annual adjustment mechanism removing the rights to merits review of the AER decisions on the DRP.[108] They suggest a compromise might be a reviewable determination decision on a composite historical and forward looking DRP (with no annual adjustment).[109]

Ausgrid argues that the short-term (20 day) averaging approach, currently applied, involves too much risk for investors and service providers and prevents prudent hedging of risk for those utilities with large debt portfolios and large refinancing needs.[110] Ausgrid endorses an approach utilising long-term historical data.[111]

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103 NSW T-Corp, Directions Paper submission, 16 April, pp. 2-3; Ausgrid, Directions Paper submission, 16 April 2012, p. 13.

104 Ausgrid, Directions Paper submission, 16 April 2012, pp. 13-14.

105 ENA, Directions Paper submission, 16 April 2012, p. 57; Ergon Energy, Directions Paper submission, 16 April 2012, p. 14.

106 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 23-24.

107 Id., pp. 23-24.

108 Id., p. 24.

109 Ibid.

110 Ausgrid, Directions Paper submission, 16 April 2012, p. 13.

111 Ibid.

Ausgrid also agrees with the ENA that substantial changes would be required to adopt the EURCC's proposal.[112] Ausgrid suggests that an annual updating of the DRP would mean an effective annual updating of the risk-free rate (as part of the DRP), which would be inconsistent with the fixed risk-free rate in both the return on debt and return on equity calculations. Ausgrid argues that such an inconsistency would create variances that would be very difficult to hedge.[113] Ausgrid also questions the compatibility of this approach with the building blocks framework, suggesting that, the annual updating could lead to an increase in price/revenue volatility for consumers and NSPs during the regulatory period.[114]

Ergon Energy considers that the EURCC approach is not consistent with the forward looking framework, but that there is merit in a moving average approach, such as proposed by QTC.[115] Potential benefits identified by Ergon Energy include that service providers would not be exposed to risk-free interest rate and DRP volatility at the time of regulatory resets it would avoid the drawback of the current method which creates significant market signalling and re-pricing risks for service providers with large debt portfolios, and customers would not be exposed to prices being set during periods of elevated risk-free interest rates and/or DRPs.[116]

The AER considers that the trailing average of actual costs is still likely to represent a forward looking rate of return, in so far as the actual debt costs of the service provider would comprise debt that will mature in the future, but acknowledged that it would be unlikely to reflect the prevailing conditions in the market for funds.[117] Nonetheless the AER recognises the substantial support the EURCC proposal had received and submits that it should be allowed to consider the method when determining the best method for setting the DRP.[118] The AER recommends that any ambiguity in the rules as to whether this approach could be adopted be removed.[119]

Some consumer representative groups argue that the AEMC's approach to the issue is too narrowly focussed and that it should broaden its approach to a wider consideration of regulatory economics.[120]While there is some agreement from consumer representative groups that the rate of return should be benchmarked against an efficient service provider, they suggest that this benchmark had to be tested against a wider market, including taking account of the special position of state-owned

112 Id., p. 14.

113 Id., pp. 14-15.

114 Id., p. 15.

115 Ergon Energy, Directions Paper submission, 16 April 2012, pp. 13-14

116 Id., p. 14.

117 AER, Directions Paper submission, 2 May 2012, p. 61.

118 Ibid.

119 Ibid.

120 EURCC, Directions Paper submission, 16 April 2012, p. 3;

businesses.[121] Overall, consumer representative groups are strongly of the view that benchmarks needed to more closely resemble actual debt funding costs.[122]

7.2.2 Further consultation on historical trailing average approach

During the course of consulting on the AEMC's directions paper, in addition to the EURCC rule change request, two other detailed proposed methodologies for some form of historical trailing average approach to return on debt were proposed by ETSA, CitiPower and Powercor and the QTC.[123] In response to these proposals, the AEMC held a further short round of consultation on the trailing average approach proposals seeking specific comments.[124] The joint ETSA, CitiPower and Powercor proposal and the QTC proposal are briefly summarised below, together with the submission responses received during the additional round of consultation.

Historical trailing averaging approach proposed by ESTA, CitiPower and Powercor

ETSA, CitiPower and Powercor have proposed a variation of the historical trailing averaging approach with the following features:

- the return on debt would be the sum of a base rate of interest and an estimate of the DRP;
- the base rate of interest would be the five-year swap rate (that matches the length of the regulatory period), estimated as the average over a 20-40 day rate-setting period at the time of the determination;
- the DRP would be estimated as the average, over the ten-year period prior to the determination, of the difference between the estimated yield on benchmark debt and the ten-year swap rate (the term would be set to match the term selected for benchmark debt); and
- the resulting estimate of the return on debt could either:
  - — be updated annually during the regulatory period; or
  - — be set as some combination of the historical average and a forward-looking estimate.[125]

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121 See for example: MEU, Directions Paper submission, 17 April 2012, pp. 4-5

122 See for example: EURCC, Directions Paper submission, 16 April 2012, pp. 5-7; MEU, Directions Paper submission, 17 April 2012, pp. 31-32; EUAA, Directions Paper submission, 17 April 2012, pp. 31-32.

123 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 23-24.

124 AEMC, *Additional round of consultation on cost of debt issues for the Economic Regulation of Network Service Providers Rule Change Requests*, Consultation Notice, 21 June 2012.

125 See: ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 15.155; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 23-24; ETSA, CitiPower and Powercor, Additional consultation on cost of debt submission, 5 July 2012, pp. 9-10.

Historical trailing averaging approach proposed by QTC

The QTC proposed methodology, like the EURCC's approach, is based on an historical average of the yield on benchmark debt.[126] However, under QTC's proposal, the benchmark return on debt would equal a ten-year weighted moving average of the ten-year total corporate cost of debt. The moving average would be re-calculated quarterly based on the prevailing ten-year corporate cost of debt and updated annually.

The key features of the QTC proposal are:

- the historical averaging period would match the assumed tenor of benchmark ten year debt;
- the cost of benchmark debt would be estimated at the end of each quarter (ie for a ten-year tenor, the average would be taken over 40 observations); and
- the regulatory allowance for the return on debt would be updated annually based on the most recent ten-year period.

To reflect the fact that some service providers may have already locked in debt funding costs at the time of their most recent determinations, having been incentivised to do this under the current rules, QTC proposes a set of transitional arrangements. These transitional arrangements are designed to ensure that service providers do not receive a windfall gain or loss stemming from the differential between current and historical yields. The QTC's proposed transition arrangements can be summarised as follows:

- in Year 1 of the first regulatory period, the debt allowance would be based on the estimate of the current yield on benchmark debt, as under the current rules;
- in Year 2, the debt allowance would be based on 90 per cent weighting on the current yield and 10 per cent weighting on the average yield over the previous year;
- in Year 3, the debt allowance would be based on 80 per cent weighting on the current yield, 10 per cent weighting on the average yield over the previous year, and 10 per cent weighting on the average yield over the year prior to that; and
- this procedure continues for ten years, at which time the return on debt allowance each year is the average over the previous ten years.

The QTC stated that its proposed approach is consistent with an efficient diversified debt funding strategy that would be used by a benchmark service provider in the absence of regulatory distortions. Under its approach, all increases in the benchmark debt balance would be weight-averaged into the benchmark return on debt allowance using the prevailing ten-year corporate cost of debt. The size and timing of the debt increases would be based on the benchmark debt profile in the service provider's post-tax revenue model.

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126 QTC, Directions Paper supplementary submission, 8 June 2012.

Summary of submission responses to further consultation

In response to the further consultation, the AER submits that there is merit in further exploring trailing average approaches, although the QTC's proposal requires further refinement.[127] The AER's view is that the AEMC should amend the rules to enable, but not prescribe, trailing average approaches. The AER states that the specification of methodology would be best considered as part of a WACC review process.[128] The AER also suggests that a number of practical considerations remain to be resolved.[129]

Responses from service providers generally welcomed a trailing average approach as an option, but stressed the need to keep it only as an option under the rules as it would not necessarily be suitable for all service providers.[130] A common view is that there should be appropriate transitional provisions to allow service providers to unwind any hedging arrangements put in place in response to the existing approach to estimating the return on debt should any trailing average approach be adopted.[131]

UnitingCare Australia in its submission notes that consideration of the trailing average approaches risks too much focus on the borrowing practices of service providers at the expense of achieving the long term interests of end-users.[132]

7.2.3 SFG's analysis of historical trailing average approaches

The AEMC engaged SFG to advise on the potential impacts of adopting a historical trailing average approach to estimating the return on debt. SFG were particularly asked to consider the impact on the risks faced by the shareholders of the service providers and the impact on the incentives for service providers to undertake efficient capex. It is in these two ways that the introduction of a trailing average approach to estimating the return on debt could lead to more efficient outcomes to the benefit of consumers.

SFG's report has been released along with this draft determination.[133]

In its report, SFG highlighted that for a given definition of the return on debt for an efficient benchmark service provider (in particular, the assumed credit rating and term to maturity), whether the return on debt estimate is based on the prevailing debt cost

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127 AER, Additional consultation on cost of debt submission, 10 July 2012, p. 1.

128 ibid.

129 Ibid.

130 See for example; APIA, Additional consultation on cost of debt submission, 5 July 2012, p. 2; ETSA, CitiPower and Powercor, Additional consultation on cost of debt submission, 5 July 2012, p. 2; Grid Australia, Additional consultation on cost of debt submission, 6 July 2012, p. 1; ENA, Additional consultation on cost of debt submission, p. 1.

131 ENA, Additional consultation on cost of debt submission, pp. 8-9; Grid Australia, Additional consultation on cost of debt submission, 6 July 2012, pp. 10-11.

132 UnitingCare Australia, Additional consultation on cost of debt submission, 6 July 2012, pp. 1-2.

133 SFG Consulting, *Rule change proposals relating to the debt component of the regulated rate of return*, Report for the AEMC, 21 August 2012.

spot rate or an average of that spot rate over time, the average cost of debt will be the same over the long run.[134] That is, changing to an averaging approach will not, in itself, systematically reduce or increase the allowed return on debt in the long run. SFG observed that averaging approaches will, by definition, result in smoother estimates of the return on debt over time.[135]

The AEMC asked SFG to analyse a number of different approaches to implementing a trailing average approach to estimating the return on debt that covered the range of approaches proposed during the rule change process. The options analysed by SFG took account of the EURCC's, the QTC's and ETSA, CitiPower and Powercor's proposed approaches. SFG compared these approaches to the current approach, which was defined as an estimate of the return on debt for a service provider estimated at the time of each regulatory determination or access arrangement over a 20 to 40 day rate setting period. SFG's analysis isolated the impact of introducing different forms of a historical trailing average approach from the impact of different benchmark specifications for estimating the return on debt.

SFG also noted that the approach to setting the return on debt by the regulators cannot occur without regard to the service providers financing practices. In particular, SFG considered that the regulatory framework should aim to provide incentives for NSPs to engage in efficient financing practices, and should seek to minimise distortions to the financing practices as well as to the incentives to undertake efficient capex.

Summarily, SFG has concluded that:

- The introduction of historical trailing average approaches for estimating the return on debt has the potential to reduce the risks faced by equity holders of some service providers. This is because a historical trailing average approach can allow a service provider to more closely match its debt servicing costs to the regulatory allowance for the return on debt.

- Currently service providers have varying abilities to match their debt servicing costs to the regulatory allowance for the return on debt. Some of the smaller privately-owned service providers appear able to hedge their interest rate very well, but larger state-owned service providers such as those in NSW and Queensland appear unable to enter into these hedges because the relevant financial markets are not sufficiently deep to meet their requirements. The reduction in risks for equity holders of moving to an historical trailing average approach is greater for those least able to currently match their debt servicing costs to the regulatory allowance. For those able to achieve a good match currently the introduction of a trailing average approach may slightly increase the risks for equity holders.

- A historical trailing average approach to estimating the return on debt can lead to significant differences between the regulatory allowance for return on debt and

134 Id., p. 4.

135 Id., p. 5.

the cost of debt in the market for funds at any point in time. Such a difference could impact the incentives for service providers to invest efficiently in capex. For example, if the cost of debt in the market for funds is higher than the regulatory allowance then the service provider may not invest as much as would be efficient. SFG noted that the QTC's proposal for a historical trailing average return on debt provided one way to address this risk.

- Service providers are likely to have entered into financial arrangements to mitigate their risk given the current approach to estimating the return on debt. Therefore, any change in approach could lead to some service providers gaining extra revenue or losing revenue as a result of unwinding those financial arrangements. Gains or losses of revenue of this type from changes in regulatory arrangements could be perceived by investors as increasing regulatory risk, and thereby lead investors to seek a higher rate of return. SFG therefore recommend that consideration be given to transitional arrangements when changing the approach to estimating the return on debt.

7.2.4 Analysis

The Commission notes the widespread, though not unanimous, support for consideration of a historical averaging approach to the return on debt allowance across service providers and consumer representative groups.[136] A case was made, for example by the QTC, NSW T-Corp, and Ausgrid, that the current regulatory position of calculating interest rates on debt over a 20 to 40 day period encourages risk management behaviour in service providers that, in general, would not likely occur in the absence of such regulation. They argue that it also comparatively disadvantages large service providers whose ability to hedge large volumes of interest rate risk over such a short period is severely limited by the size and liquidity of the relevant markets.[137] The Commission also notes that submissions against the introduction of an averaging approach were based on arguments that such an approach would not properly reflect service providers' efficient financing and risk management strategies.[138]

This diversity of views is consistent with modelling analysis from SFG that suggests that, for service providers with significant refinancing risks, the cash flow volatility of equity returns can be substantially reduced by moving to a trailing average approach,

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136 see for example: ENA, Directions Paper submission, 16 April 2012, p. 56; ENERGEX, Directions Paper submission, 16 April 2012, p.3; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 13-14; Grid Australia, Directions Paper submission, 16 April 2012, p. 2; Ausgrid, Directions Paper submission, 16 April 2012, p. 13; UE and MG, Directions Paper submission, 16 April 2012, p. 11; MEU, Directions Paper submission, 17 April 2012 , p. 32; EUAA, Directions Paper submission, 17 April 2012, pp. 31-32.

137 QTC, Directions Paper Submission, 16 April 2012, p. 7; NSW T-Corp, Directions Paper submission, 16 April 2012, p. 3; Ausgrid, Directions Paper submission, 16 April 2012, p. 13.

138 See for example: APIA, Directions Paper submission, 16 April 2012, pp. 20-21; APA Group, Directions Paper submission, 16 April 2012, p. 6.

but that for others the current prevailing rate approach is slightly better at minimising the volatility of returns.[139]

The Commission considers that the long-term interests of consumers are best served by ensuring that the methodology used to estimate the return on debt reflects, to the extent possible, the efficient financing and risk management practices that might be expected in the absence of regulation. The Commission therefore proposes that the rules be amended to make it unambiguous that the regulator can consider a range of approaches to estimating the return on debt to meet the overall rate of return objective. This would include a range of different approaches that involve averaging estimates of the return on debt over historical periods.

The draft rule does not set the return on debt by reference to any particular base rate and DRP. This will allow the regulator sufficient flexibility to determine historical averages of either the entire return on debt or just the DRP component. Furthermore, there is the flexibility to set a DRP against a base rate other than the Commonwealth government-bond rates. For example, a bank bill swap rate could be used. This flexibility is important to allow the methodology used to estimate the return on debt to reflect the borrowing and risk management practices of an efficiently run service provider.

Regulators in other jurisdictions have adopted similar approaches to the type of historical trailing average approaches discussed during this rule change process. For example, the Civil Aviation Authority, the Office of Gas and Electricity Markets (Ofgem), the Office of Water Services Regulation Authority (Ofwat) and the Office of Rail Regulator in Great Britain have been considering and applying some form of annually adjusting cost of capital, primarily driven by concerns about predicting future market movements in the risk-free rate and the cost of debt measure.

Most recently, Ofgem as part of its transmission and gas distribution price controls to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model have applied an index to the return on debt allowance. Ofgem has noted that indexation, in and of itself, does not preclude regulated businesses from entering into any particular hedging strategy, and that indexation ensures that efficiently financed debt is funded, even if the market cost of debt is above the return on debt allowance at the time of debt issuance.[140]

Consistent with its approach to other aspects of this draft rule proposal, the Commission is concerned that there should be transparency and accountability in the regulators' consideration of the approach to estimating the return on debt, and that there should be similar accountability for the service provider. Therefore, the Commission is proposing some factors that the regulator must have regard to when considering the approach to estimating the return on debt.

139 SFG Consulting, *Rule change proposals relating to the debt component of the regulated rate of return*, Report for the AEMC, 21 August 2012. pp. 52-68.

140 Ofgem, *Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues*, 31 March 2011.

Amongst the issues that the Commission intends the regulator to have regard to is the extent to which a particular approach to estimating the return on debt may influence the required return on equity for a service provider. If a particular approach to estimating the return on debt can reduce the refinancing risk of an efficiently financed service provider, then there may be scope to conclude that the return on equity should be lower than it otherwise would have been, which would be to the benefit of consumers.

The impact on the incentives for efficient capital expenditure is also an important consideration. To the extent that the difference between the return on debt and the debt servicing costs of the service provider is minimised at any point in time then it might be expected that the incentives for efficient capital expenditure are stronger.

Section 7.5 provides an explanation of issues the Commission expects the regulator to have regard to when considering these factors.

7.3 Benchmark for estimating the return on debt and whether the allowed cost of debt is higher than service providers' actual debt costs

In the directions paper the Commission sought views on the appropriate benchmark to use for estimating the return on debt, and whether the return on debt estimate made in recent regulatory decisions had been higher than the service providers' actual debt costs. The next section below summarises the comments of stakeholders on these related issues. As the Commission’s draft rule does not prescribe the detailed characteristics of the benchmark to be used for estimating the return on debt, it has not been necessary for the Commission to reach a view on the appropriate definition of the benchmark. Under the Commission’s proposed draft rule this will be a decision for the regulator as part of determining which approach meets the overall allowed rate of return objective for the relevant service provider.

7.3.1 Stakeholder views

The appropriate benchmark

In general, service providers maintain the view that the use of a ten-year benchmark DRP remains an appropriate way of estimating the return on debt for an efficient benchmark service provider. Service providers submit that the apparent disparities between the return on debt estimates in recent regulatory determinations and the market-observed service provider debt servicing payments were a reflection of current financial market conditions driven by a temporary necessity to borrow funds at shorter maturities.[141] Service providers argue that this cost did not account for higher

141 See for example: Ausgrid, Directions Paper submission, 16 April 2012, p. 12; APIA, Directions Paper submission, 16 April 2012, pp. 17-18; ENA, Directions Paper submission, 16 April 2012, pp. 50-52; Ergon Energy, Directions Paper submission, 16 April 2012, p. 12; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 21-22; Grid Australia, Directions Paper submission, 16 April 2012, p. 11.

refinancing risks that are inherent in borrowing at shorter terms. They also note that the Tribunal has consistently concluded that the AER has erred in approaches that produced an artificially depressed DRP benchmark.[142]

The SA DMITRE is of the view that the approach should be specified by the AER, but the AEMC should provide sufficient detail in the rules for service providers to be able to propose DRP values from a consistent source of indicators, as determined by the AER.[143]

Jemena suggests limiting the discretion of the AER by detailing the return on debt methodology in a binding document with the AER decision being subject to merits review.[144] Ergon Energy suggests the rules should provide some guidance as to how the DRP is to be estimated, rather than give the AER complete discretion.[145] It also states that it would be appropriate for the AER to specify its benchmark in periodic reviews to provide sufficient certainty and predictability for service providers and investors.[146]

The ENA argues that the AER is allowed under the existing Chapter 6 rate of return framework to adopt a new benchmark for DRP if its 2009 SORI values are no longer appropriate and yet has not sought to do so.[147] The ENA argues for a stable benchmark that provides certainty and is consistent with long term evidence of debt financing practices.[148] TNSPs and DNSPs generally supported the ENA's view that it was not the current rules that is the problem, but rather the way the AER has applied the existing rules. It was also suggested that the AER should commence a process in consultation with stakeholders on these matters, consistent with the Tribunal's recent recommendations in the APT Allgas merits review appeal.[149]

Consumer representative groups argue that the return on debt allowances were not designed to be a source of profit and the current benchmarks were too generous.[150] Consumer representative groups were split on the question of prescription versus discretion. Some submit that the approach to estimating the return on debt should be specified in the rules.[151] Others agreed with the AEMC’s initial view, and that of the

142 UE and MG, Directions Paper submission, 16 April 2012, p. 10.

143 SA DMITRE, Directions Paper submission, 9 May 2012, p. 5.

144 Jemena, Directions Paper submission, 16 April 2012, p. 43.

145 Ergon Energy, Directions Paper submission, 16 April 2012, p. 13.

146 Ibid.

147 ENA, Directions Paper submission, 16 April 2012, p. 55.

148 Id., pp. 55-56.

149 Id., p. 2.

150 EUAA, Directions Paper submission, 17 April 2012, pp. 5, 31-32; MEU, Directions Paper Submission, 17 April 2012, pp. 31-32; EURCC, Directions Paper submission, 16 April 2012, pp. 5-6.

151 EUAA, Directions Paper submission, 17 April 2012, p. 31; EURCC, Directions Paper submission, 16 April 2012, p. 5.

AER, that the approach to estimating the return on debt should not be specified in the rules and that the AER should be allowed discretion.[152]

Regulatory allowance for return on debt estimate compared to observed debt servicing costs

The NSW T-Corp supports the view that the apparent disparity is temporary, driven by the effects of the global financial crisis, and that longer-term debt remains the appropriate benchmark. It also submits that higher refinancing risks and costs would offset any short term benefit.[153]

The QTC's view is similar to the NSW T-Corp's and it provided an empirical analysis to show that the ten-year DRP awarded by the AER has been consistent with the shorter-term costs of borrowing for service providers. Based on this analysis, the QTC concludes that equity holders have not been over-compensated for their increased refinancing risks and costs.[154]

The AER, in its submission, acknowledges that some, but not all, of the difference between the DRP and the observed debt cost market data may be due to refinancing risks. However, it argues that it has been effectively limited to using the Bloomberg Fair Value curve as a benchmark and that this benchmark reflects higher DRPs than that of service providers, even after adjusting for different maturities.[155] The AER argues for the methodology to determine the DRP, including the definition of the benchmark, to be determined during its proposed WACC review.[156]

Those service providers that addressed the question, generally, submit that limited, little, or no weight should be afforded the views of market analysts on whether the cost of debt allowed by the regulator was more or less than the cost of debt available to service providers in the market.[157] Market analysts were seen to be limited in their understanding of the regulatory process and, further, the focus of their reports was very different from that required for regulatory purposes. This meant that mistakes may follow in trying to utilise them in this context.[158]

The QTC is of the view that, while the independence of market analysts was desirable, there are numerous significant risks in relying on information in analysts' reports.[159] The QTC suggests that the best way to incorporate information from market analysts

152 MEU, Directions Paper submission, 17 April 2012, p. 5; CUAC, Directions Paper submission,17 April 2012, p. 3.

153 NSW T-Corp, Directions Paper submission, 16 April 2012, pp. 1-2.

154 QTC, Directions Paper submission, 16 April 2012, pp. 11-18.

155 AER, Directions Paper submission, 2 May 2012, p. 56.

156 Id., p. iv.

157 APIA, Directions Paper submission, 16 April 2012, p. 36; Ergon Energy, Directions Paper submission, 16 April 2012, p. 12; Jemena, Directions Paper submission, 16 April, 2012, p. 44; UE and MG, Directions Paper submission, 16 April 2012, p. 10.

158 See for example: APIA, Directions Paper submission, 16 April 2012, p. 36.

159 QTC, Directions Paper submission, 16 April 2012, pp. 20-22.

into the process would be by way of a formal survey, and that debt capital market specialists are more likely to provide valuable information than analyst reports.[160]

Consumer representative groups, directly or indirectly, seemed to favour consideration of analyst reports in assessing whether service providers could outperform their allowances.

7.3.2 Analysis

The appropriate benchmark

The Commission considers that the regulator is best placed to assess the characteristics of a benchmark efficient entity consistent with the overall rate of return objective. Therefore, the Commission has not reached a view on whether the characteristics the regulators have used to define the benchmark are appropriate. Under the Commission's proposed rules for the rate of return framework, the regulator will need to consider this issue as part of developing its rate of return guidelines, and that process will provide an opportunity for all stakeholders to submit their views and discuss any differences of view.

There is a separate issue about how easy it is to measure the return on debt for particular characteristics of a benchmark efficient service provider. In this respect, the proposed draft rule does not mandate the use of any particular measurement approach. This flexibility gives the regulator the ability to consider the best information and evidence to inform such a measurement.

Regulatory allowance for return on debt estimate compared to observed debt servicing costs

In its report, SFG suggests that since the DRP has been somewhat elevated post-global financial crisis (GFC), and since there has been an upwardly-sloping yield curve and it is easier to obtain shorter-term debt finance, it is unsurprising that observed DRPs are higher than those on previously issued debt and are higher than DRPs on shorter-term debt.[161] SFG considers that such facts do not, in themselves, imply that regulatory estimates are overstated - refinancing risks could very well explain the premium - the fact that interest rates have risen does not mean that abnormal returns are being earned.[162]

When the regulatory estimate for return on debt is set on the basis of prevailing rates of debt at a particular point in time, it is almost inevitable that there will be periods of time when the debt servicing costs of a service provider are higher than, and periods when they are lower than, that estimated by the regulator at the time of the determination or access arrangement. This mismatch would only potentially be

160 Ibid.

161 SFG Consulting, *Preliminary Analysis of Rule Change Proposals: Report for AEMC*, 27 February 2012, p. 4.

162 Ibid.

avoided if a service provider was able to, and chose to, refinance all its debt at exactly the same time as the regulatory estimate was made. If this mismatch is broadly likely to occur equally often in both directions then the outcome is not systematically favouring one set of stakeholders over another.

The Commission's rate of return framework draft rule proposal provides the flexibility for the regulator to consider alternative approaches to estimating the return on debt, including historical trailing average approaches that may better align the debt servicing costs of an efficiently run service provider with the regulatory estimate of the return on debt. Over a long enough period of time such approaches will not lead to service providers facing higher or lower debt servicing costs than an unbiased assessment of prevailing debt costs at the time of regulatory determinations or access arrangement decisions. However, as discussed above, there may be some circumstances in which such historical trailing average approaches could reduce the required return on equity and reduce distortions to capex, which could benefit consumers. Under the proposed draft rule, it is for the regulator to determine the best approach to estimating the return on debt to meet the overall rate of return objective.

7.4 Whether the return on debt should be estimated differently based on the service provider's ownership

In the directions paper the Commission explained its preliminary view that it was not minded to adopt the EURCC's proposal that the return on debt for state-owned service providers be set differently than for investor-owned service providers. The Commission provided a number of reasons why it was not minded to support the state-owned return on debt aspect of the EURCC's rule change request.

7.4.1 Stakeholder views

Consumer representative groups did not accept the views of the Commission as to why the EURCC's proposal to treat state-owned service providers on a different basis to privately-owned service providers for return on debt was not likely to be accepted.[163]

The QTC outlined some of the various complicated ownership structures that existed and argued that the correct approach is to treat each service provider as a stand-alone entity.[164]

ENERGEX strongly supported the AEMC's preliminary view that it would be inappropriate to have different return on debt allowances for state-owned and privately-owned service providers. ENERGEX suggests that no commercial advantage accrues to state-owned service providers since competitive neutrality fees are applied,

163 EURCC, Directions Paper submission, 16 April 2012, pp. 8-15; MEU, Directions Paper submission, 17 April 2012 , p. 33-34; EUAA, Directions Paper submission, 17 April 2012, pp. 31-32; TEC, Directions Paper submission, 17 April 2012, p. 3.

164 QTC, Directions Paper submission, 16 April 2012, pp. 18-19.

and that distortions would be created by treating service providers differently based on ownership.[165]

The EURCC's submission provides a number of arguments against the Commission's preliminary reasoning in the directions paper.

The primary contention by the EURCC is that the Competition Principles Agreement (CPA) that imposes competitive neutrality principles to businesses owned by state governments does not apply to state-owned service providers as they operate in a market that has no actual or potential competition. That is, as natural monopolies, they neither face actual competition for the network services they provide, nor any potential competition from the private sector. Consequently, it believes that despite the fact that state governments levy debt neutrality fees under the CPA on service providers due to competitive neutrality concerns, this cost should not be considered for the purposes of regulating the revenue of these businesses.

Other key objections made by the EURCC are that:

- the Commission's view that competitive neutrality principles also apply to potential resource allocation distortions that can result in input as well as output markets of state-owned monopoly businesses cannot be sustained (the resource allocation distortion argument);[166]
- while the state governments have a right to charge service providers that it owns whatever it chooses to, this does not confer an obligation on users to pay those fees. The charges to users should reflect the NEO and the Commission has failed to take account of that (the governments’ right to levy debt guarantee fees versus the consumer interest argument);[167]
- the Commission's claims of geographical distortions that would arise with different allowances for the return on debt are without foundation (the geographical market distortions argument);[168]
- the Commission's claim that the EURCC’s proposal would dissuade jurisdictions from divestiture of their service providers is not correct. The design and implementation of the regulatory framework should not be influenced by policy considerations either for or against divestiture (the sale or divestiture of state-owned service providers argument);[169] and
- taxes on the profits of the service providers owned by governments are effectively a return on the government investment in their service providers and

165 ENERGEX, Directions Paper submission, 16 April 2012, p. 3.

166 EURCC, Directions Paper submission, 16 July 2012, pp. 8-10.

167 Id., pp. 10-12.

168 Id., p. 13.

169 Id., p. 14.

should be counted as such in consideration of the appropriate return on debt (the taxes versus equity ownership argument).[170]

Other than EURCC, the other only other stakeholders that have made submissions against the Commission's preliminary position in its direction paper were from the EUAA,[171] the MEU,[172] and the Total Environment Centre (TEC).[173]

The EURCC's views and arguments on these issues are discussed below.

7.4.2 Analysis

Application of competitive neutrality principles to state-owned service providers

There is a significant difference of view between the Commission and the EURCC on the application of the CPA and the competitive neutrality principles to state-owned service providers and the ability of the NER to legally affect the ability of jurisdictional governments to levy debt neutrality fees in accordance with the CPA.

The CPA defines the aim of competitive neutrality policy as:

> "the elimination of resource allocation distortions arising out of the public ownership of entities engaged in significant business activities: Government businesses should not enjoy any net competitive advantage simply as a result of their public ownership. These principles only apply to the business activities of publicly owned entities, not to the non-business, non-profit activities of these entities.[174]"

Under the CPA, competitive neutrality principles must be applied by governments where appropriate, to all significant state-owned businesses, including at the local government level. The CPA also imposes a set of obligations on all governments in relation to taxation, debt and regulatory neutrality, full cost attribution and setting prices to earn a commercial rate of return.

The Commission does not accept the EURCC's view that the application of the CPA to state-owned service providers should not be a relevant consideration under the NEO. The Commission is mindful that the interpretation and application of the CPA is a matter for the state and territory governments who are signatories to it, and not the Commission. All jurisdictional governments that own service providers in the NEM apply the competitive neutrality principles to them as part of discharging their obligations under the CPA. Accordingly, each jurisdiction that has retained ownership of its service provider has corporatised the business and imposed on the business

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170 Id., pp. 14-15.

171 EUAA, Directions Paper submission, 16 April 2012, pp. 31-32;

172 MEU, Directions Paper submission, 17 April 2012, p. 34.

173 TEC, Directions Paper submission, 17 April 2012, p. 4.

174 Competition Principles Agreement subclause 3.(1).

similar commercial and regulatory obligations to those faced by the private sector, including:

- full Commonwealth, State and Territory taxes or tax equivalent payments;[175]
- commercial rate of return requirements and an obligation to pay dividends;
- requirements that prices reflect the full cost of providing network services;
- debt guarantee charges to offset cost advantages of implied government borrowing guarantees; and
- regulations applying to private sector competitors.

In the Commission's view, the most important factor to recognise is that state-owned service providers that are subject to the NER are required to pay debt neutrality or government guarantee fees to the jurisdictional government (via state treasuries) as part of the application of the competitive neutrality principles. These fees are mandated in various state legislation and code of practice instruments. The various legislative and codes of practice instruments are described in Box 7.1.

Box 7.1: Jurisdictional legislative instruments and codes applying debt guarantee fees to state-owned service providers

Commonwealth Government

The Commonwealth Government's approach for implementing competitive neutrality principles with respect to debt neutrality is set out in its Competitive Neutrality Policy Statement of June 1996 and Competitive Neutrality Guidelines for Managers. In essence, the Commonwealth Government requires its businesses to pay a debt neutrality charge where they borrow money at a rate that reflects the credit risk of the Commonwealth Government as a whole rather than a rate reflecting the credit risk of that type of business activity.[176]

Commonwealth Government businesses that are subject to competitive neutrality are required to determine the difference between their actual cost of borrowing and the benchmark cost they would incur if they were borrowing as a non-government entity and remit the difference as debt neutrality payments to the Official Public Account.[177]

New South Wales

In NSW, the *Public Authorities (Financial Arrangements) Act 1987* (NSW) (PAFA

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175 For example see sections 128 and 129 of the *Government Owned Corporations Act 1993* (Qld); section 15 of *State Owned Corporations Act 1989* (NSW); section 6 of the *Electricity Companies Act 1997* (Tas).

176 Commonwealth Government Treasury and Department of Finance and Administration, *Australian Government Competitive Neutrality Guidelines for Managers*, Financial Management Guidance No.9, February 2004, p. 21.

177 Id., pp. 22-27.

Act) provides the legislative basis for administering government guarantee fees for state-owned corporations such as Ausgrid, Endeavour Energy, Essential Energy and TransGrid.

Under section 10 of the PAFA Act, all declared state-owned corporations are required to obtain all financial accommodation (generally defined to include debt instruments such as loans, promissory notes, debentures, bonds and discounted securities) from the NSW T-Corp. In accordance with section 22D of the PAFA Act, the NSW Treasurer can charge a state-owned corporation a fee in respect of debt guaranteed by the NSW Government. The Treasurer determines the amount and the timing of the fee.

In addition to the PAFA Act, the NSW Treasury also has a policy statement on the application of competitive neutrality.[178] According to this policy, state-owned businesses in NSW with government guaranteed borrowings have been required to pay a credit-rating-based fee to the Consolidated Fund since 1990.[179] The policy statement states that the debt guarantee fees scheme is intended to:

"• make up the difference between the interest paid by government businesses and what they would have paid based on their stand-alone credit ratings;

- correct any distortions in Government business investment and pricing decisions;

- encourage better debt management practices by Government businesses by making them aware of the full cost of borrowing; and

- compensate the Government for the financial risk of guaranteeing debt repayment by Government businesses.[180]"

Tasmania

In Tasmania, electricity service providers such as Aurora Energy and Transend, are deemed to be state-owned companies and as such must comply with section 13 of the *Electricity Companies Act 1997* (Tas). This Act states that government guarantee fees are to apply as if the business was a Government Business Enterprise under the *Government Business Enterprises Act 1995* (Tas). Section 78 of the Government Business Enterprises Act states that:

> "(1) A Government Business Enterprise must pay guarantee fees into the Consolidated Fund if it has financial accommodation.

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178 NSW Treasury, *Policy Statement on the Application of Competitive Neutrality - Policy and Guidelines Paper*, January 2002.

179 Id., p. 11,

180 Ibid.

(2) The guarantee fees in respect of a financial year that are payable by a Government Business Enterprise are to be calculated as specified in the Treasurer's Instructions.

(3) The Treasurer must determine one or more guarantee fee rates for each Government Business Enterprise and must notify each Government Business Enterprise of the guarantee fee rates applicable to it.

(4) A Government Business Enterprise must -

(a) provide to the Treasurer guarantee fee returns in the form, and at the times, specified in the Treasurer's Instructions; and

(b) pay its guarantee fees at the times, and in the manner, specified in the Treasurer's Instructions."

The Tasmanian government also has a number of policy instruments that provide guidance on the application of competitive neutrality principles to state-owned businesses. The following policy documents are applicable:

- National Competition Policy: Tasmania's Reform Obligations and the New Financial Arrangements, August 1995;
- Application of the Competitive Neutrality Principles under National Competition Policy, June 1996;
- National Competition Policy: Guidelines for considering the Public Benefit under the National Competition Policy, March 1997;
- Guidelines for Implementing Full Cost Attribution Principles in Government Agencies, September 1997;
- Significant Business Activities and Local Government in Tasmania, April 2004; and
- Costing Fees and Charges - Guidelines for Use by Agencies, December 2006.[181]

Queensland

In Queensland, the debt guarantee fee is levied on government-owned corporations (GOC) such as ENERGEX, Ergon Energy and Powerlink via a number of instruments. These include:

- the *Government Owned Corporations Act 1993* (Qld) (GOC Act);

181 These documents are available from the office of the Tasmanian Economic Regulator at www.economicregulator.tas.gov.au/domino/otter.nsf/price-v/002.

- the *Queensland Competition Authority Act 1995* (Qld) (QCA Act);
- Queensland Government policy statement: Competitive Neutrality and Queensland Government Business Activities, July 1996; and
- Queensland Government Code of Practice for Government Owned Corporations' Financial Arrangements, August 2009.

Under section 16(d) of the GOC Act, the competitive neutrality principles apply to state-owned corporations such that "… each GOC competes on equal terms with other entities carrying on business, any special advantages or disadvantages of the GOC because of its public ownership or its market power will be removed, minimised or made apparent."

Section 38 of the QCA Act contains principles of competitive neutrality, which states that:

> "The principle of competitive neutrality is that a government agency carrying on a significant business activity should not enjoy a competitive advantage over competitors or potential competitors in a particular market solely because the agency's activities are not subject to 1 or more of the following:
>
> (a) full Commonwealth or State taxes or tax equivalent systems;
>
> (b) debt guarantee fees are to be directed towards offsetting the competitive advantages of government guarantees;
>
> (c) procedural or regulatory requirements of the Commonwealth, the State or a local government on conditions equivalent to the conditions to which a competitor or potential competitor may be subject, including, for example, requirements about the protection of the environment and about planning and approval processes."

The Queensland Government Code of Practice for Government Owned Corporations' Financial Arrangements states, inter alia, that:

- The Code of Practice applies to all government owned corporations declared under the GOC Act.
- The Code of Practice is to be applied through a statement of compliance in the parent GOC's Statement of Corporate Intent, which each GOC must have for each financial year in accordance with sections 97, 102 and 107 of the GOC Act.
- Each GOC is required to engage an independent credit rating agency to undertake a comprehensive stand-alone credit rating at least once every three years. This rating will be used to determine the competitive neutrality

fee payable by the GOC.[182]

Difference between benchmark return on debt and actual cost of debt

In its submission, the EURCC states that the Commission has an incorrect understanding of the relationship between the regulatory return of debt allowance that sets the charges that energy users pay, and, the service providers' calculation of their actual cost of debt.

Since state-owned service providers are able to borrow funds at interest rates based on the credit rating of their respective state or territory government, a debt guarantee fee/competitive neutrality fee aims to ensure that the service providers are subject to a rate of interest or cost of debt based on their own credit rating. The fee represents an extra charge to make up the difference between the interest paid by the service provider and the amount they would have paid in the absence of a government guarantee. Therefore, under the current rules, the return on debt estimate does not need to account for any charges associated with these fees as the return on debt is estimated on the basis of a benchmark service provider with a standalone credit rating.

Resource allocation distortions

The EURCC states that it disagrees with the Commission's view that competitive neutrality considerations include resource allocation distortions in input as well as output markets. The EURCC states that resource allocation distortions can only occur if the state governments charge fees to some government departments (or corporatised businesses that it owns) but not to others.

The EURCC notes the example where the Queensland and NSW governments charge government debt guarantee fees for the debt that they provide to their service providers, but they do not charge the same fee for the debt that they provide to their health, education or housing departments. It claims that this type of distortion would lead the governments to prefer lending to their service providers rather than to, for example, their health, education or housing departments, since they get a fee from the loans it makes to the former but not the latter. It concludes that any debt government guarantee fees may therefore encourage misallocation of resources – more lending for networks at the expense of hospitals, schools and roads, etc. On this reasoning, the EURCC states that the Commission's conclusion that service providers should be subjected to debt neutrality fees is therefore in contradiction.

Debt raised by service providers to fund capex is an input into the network services they produce as the output for users. The current application of government debt guarantee fees ensures that service providers apply a commercial discipline to their borrowing to fund any capex requirements. Absent the government debt guarantee fees, the service providers would now be facing an artificially lower rate of return than

182 Queensland Treasury, *Queensland Government, Code of Practice for Government Owned Corporations' Financial Arrangements*, August 2009, available at: http://www.ogoc.qld.gov.au/goc-policies/code-of-practice-gocs-fin-arr.pdf.

other private sector service providers seeking to raise funds in the same capital markets.

Faced with an artificially lower rate of return, the service provider may view capex solutions as comparatively lower cost to non-network solutions. This is because a lower rate of return implies that non-network solutions involving operating expenditure costs such as labour costs and non-asset solutions are now comparatively less attractive. Clearly, artificial distortion on the efficiency of capex means that resources in the input markets are no longer being used at least cost, thus causing allocative inefficiency.

Lack of competitive neutrality on debt costs would not only result in resource allocation distortions between different types of inputs for network solutions and non-network solutions, it would also have an impact on other businesses. State-owned electricity service providers can be considered to be in competition with:

- the gas sector which is a fuel of choice; and
- other electricity networks when large consumers are considering where to locate new factories, offices etc.

This point was also made by the NSW Treasury in their submission to the rule change requests.[183]

Any network over-investment by service providers caused by an artificially lower rate of return allowance would have flow on effects for gas networks since they compete with electricity as a fuel of choice in states such as Queensland and, to a lesser extent, in NSW. If service providers are required to charge comparatively lower prices to their consumers due to lower rate of return, it could lead consumers to switch any discretionary consumption of gas to electricity. Over the longer term, not only would this cause inefficient consumption of electricity, it would also impact on the competitiveness of the gas networks.

Having an artificially lower rate of return allowance can also impact on the competitiveness of other investor-owned service providers or third party suppliers of alternative control services that compete with state-owned service providers. If the state-owned service provider's rate of return did not reflect market based rates and they did not face any commercial discipline, then they could effectively outbid their competitors for projects.

In the Commission's view, it is arguably more likely that reducing the rate of return for state-owned service providers in the way proposed by the EURCC could lead to under-investment by the relevant service providers because the state governments may choose to restrict their access to debt capital. Whatever the reaction of the state government, it appears likely to lead to some distortions in behaviour.

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183 NSW Treasury, Consultation Paper submission, 23 December 2011, p. 7.

Contrary to the EURCC's view, applying competitive neutrality to the cost of borrowing of state-owned service providers ensures that the businesses recognise the efficient cost of debt and therefore minimise any resource allocation distortions.

On the second issue raised by the EURCC with respect to government guarantee fees encouraging misallocation of resources between service providers and other public goods providers such as hospitals, education and housing departments, etc, it is important to recognise that government debt has an opportunity cost.

The government has a finite borrowing capacity at particular prices for debt, and it must make allocation decisions on the debt it can raise in the capital markets. If the government did not apply debt management discipline to the service providers, the debt it would raise for them must compete with other government services such as hospitals, roads and public housing that do not operate to the same degree on a commercial basis.

The debt guarantee fee represents the opportunity cost of the government borrowing on behalf of the service providers. Borrowing will impact on investment in other public goods such as roads, hospitals and schools. As service providers pass on their costs to their consumers, the government guarantee fees act to allow compensation for the opportunity cost to taxpayers for providing the cheaper lending.

If governments were to provide debt to service providers at AAA credit rating without charging a neutrality fee, it would mean an effective subsidy from taxpayers. The guarantee fees aim to allow the best deployment of funds for the governments and value to taxpayers.

In any event, the Commission considers that how the jurisdictional governments choose to prioritise their funding is a public policy matter that is beyond the scope of the NER to address.

Geographical market distortions

The EURCC put forward two reasons for its disagreement with the Commission's view about potential geographical market distortions that could arise through their proposal on different cost of debt for state-owned service providers. The EURCC claims that:

(i) with regard to generators, since they do not pay for the use of the transmission (or distribution) systems they will not be impacted by any difference between the charges levied by privately-owned or state-owned service provider; and

(ii) with regard to end users, the Commission has shown that privately-owned service providers already have lower network charges than state-owned networks. If there is a prospect of inefficient end-user relocation due to price differences between networks then, if anything, reducing the charges of state-owned service providers will help to address this problem, not exacerbate it, as the Commission has concluded.

The Commission remains concerned that circumstances where service providers operating in different geographic regions would be required to set prices that are differentiated by ownership rather than by reference to the underlying economic costs of providing those services could create distortions. There could over time potentially be an artificial incentive for overinvestment in generation and network capacity in the lower price regions, along with under-investment in demand-side initiatives.

Sale or divestiture of state-owned service providers

The EURCC disagrees with the Commission's view that its proposal would effectively preclude any state government from selling or divesting its service provider. It rejects that view on the basis that:

- privately-owned service providers already charge considerably less than state-owned service providers. If state-owned service providers are privatised, their owners will deliver higher levels of investment and operating efficiency than has occurred under state ownership; and
- if state governments were not able to derive such high profits and fees from their service providers, they are more likely to want to sell them.

More generally, the EURCC states that it is inappropriate for the Commission to be mindful of the impact of rule change proposals in terms of the propensity for state governments to privatise service providers. According to their view, such a consideration is not contemplated in the NEO.

The rule proposed by the EURCC attempts to differentiate efficient cost recovery depending on who the shareholder is. If such a rule was made, it risks distorting the incentives of efficient capital financing structures of state-owned service providers compared to privately-owned service providers. In such circumstances, there is likely to be a material impact on consumers as ownership changes are considered.

In the Commission's interpretation of the NEO, the efficiency of a service provider should be based on how well they can respond to the incentives provided by the regulatory framework.

Taxes versus equity ownership

The EURCC suggests that the dividends paid to the state governments as the shareholder and the taxation payments paid to the state governments as the taxing authority should be added together when considering the effective returns (or profits) that state governments are receiving from their service providers.

This issue was considered in the directions paper, and the Commission does not agree with the EURCC's contention. As SFG noted, when taxation revenues are included in this calculation, the resulting estimate of the return on equity would be disproportionate to the risk that is borne by the state governments as the

shareholder.[184] SFG has already advised the Commission that the return received by governments as a shareholder (as dividends) should be compared with the risk borne as a shareholder and taxation revenues received as the taxing authority should have no part in this comparison.[185] The Commission remains satisfied that SFG's view is appropriate.

Use of the Commonwealth Government's approach for the guarantee scheme for ADIs

The EURCC suggests that a potential way forward for estimating return on debt for state-owned service providers could be based on the approach adopted by the Commonwealth Government in relation the benchmark for the Guarantee Scheme for Large Deposits and Wholesale Funding Australian Deposit-taking Institutions (ADIs).

While the details of how this might precisely work in the context of its rule change proposal have not been provided in its submission, the EURCC appears to be suggesting that the rules could be made to require establishing a benchmark basis points spread based on some defined credit rating and debt tenor that would be explicitly added to the state-owned service providers' return on debt allowance, as observed through the yields on their respective state treasury bonds.

It is unclear how this approach would materially differ to the current approach where the government debt guarantee fees are levied on each service provider by their state treasuries based on cost of debt estimates of a service provider with a stand-alone credit rating (which is different to the state's credit rating). State treasuries generally obtain independent market cost of debt estimates based on stand-alone credit ratings for each of the service providers they finance, and determine the guarantee fee based on the difference between the actual cost of debt incurred for the service provider and notional market-based cost of debt derived from market surveys. For example, in its submission the QTC has stated that it obtains DRP estimates from market surveys for BBB+ rated companies with varying debt maturities to calculate the competitive neutrality fee to apply to the service providers it finances.[186] The BBB+ credit rating is what the AER has used for the benchmark market-based return on debt estimate to date.

It might be the case that stakeholders such as the EURCC do not fully understand how jurisdictional governments determine the debt guarantee fees for their service providers. It may be useful if there was a more transparent process through which the fees were levied.

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184 SFG Consulting, *Preliminary analysis of rule change proposals*, Report for the AEMC, 27 February 2012, p. 36.

185 Id., p. 37.

186 QTC, Directions Paper submission, 16 April 2012, Appendix B.

7.5 Draft rule

This section covers return on debt aspects of the new rate of return framework that the Commission proposes to adopt, which was discussed in the previous chapter of this draft determination.

This section should be read in conjunction with the section in the previous chapter that discussed the draft rule for the overall rate of return framework, including how the Commission intends the proposed draft rule to be interpreted. It is particularly important to note that the proposed draft rule places a requirement on the regulator to determine a rate of return that meets the overall allowed rate of return objective. It is the Commission's view that this requirement can only be fully satisfied if the regulator considers its overall estimate against that objective. The Commission does not consider that the regulator could be satisfied it had met that overall objective if it made estimates about components or parameters that form part of the rate of return estimate in isolation and without considering the overall estimate against the overall objective. Therefore, those aspects of the proposed draft rule that relate to the return on debt estimate should be seen as part of the analysis to inform the estimate of an overall rate of return.

The Commission would also welcome comments on whether the draft rule on return on debt achieves the Commission's intended objective.

7.5.1 Estimating return on debt

The Commission has not mandated any particular approach to estimating the return on debt in the draft rule. Instead, the draft rule sets out at a very broad level the characteristics of three approaches to estimating the return on debt that could reasonably be contemplated by a regulator. The three options are designed to reflect an approach to return on debt based on:

- the prevailing cost of funds approach;
- an historical trailing average approach; or
- some combination of these two approaches.

The draft rule describes these three options to make it clear that all of them are available to the regulator if it considers they best meet the overall allowed rate of return objective. The Commission accepts that it could also have chosen not to describe any approaches, but it considers that there is a benefit of certainty in stating clearly the range of available options.

The Commission intends that the regulator (and the service provider in its regulatory proposal or access arrangement proposal) have the discretion to propose an approach that it considers best meets the overall allowed rate of return objective. This discretion for the regulator includes the detail of any approach, such as the period over which a prevailing cost of debt is observed, the length of any historical averaging period, and

the form of measurement of the observed financing costs. In all cases the regulator's judgement is to be exercised in such a way as to be consistent with the overall allowed rate of return objective.

While the Commission considers that allowing the regulator to estimate the return on debt component of the rate of return using a broad range of methods represents an improvement to the current approach, it is a separate issue from that of benchmark specification and measurement. A historical trailing average approach still requires the regulator to define a benchmark and use appropriate data sources to measure it. Arguably, it is even more important that the benchmark is defined very clearly and can be measured, because it needs to be estimated periodically in the future. The measurability of the approach would be a factor that the regulator would have to consider as part of its assessment of different approaches.

The regulator will need to set out its approach(es) to estimating the return on debt in its rate of return guidelines. The Commission expects that the development of the guidelines will provide a forum for service providers, consumers and other stakeholders to propose different approaches to the estimation of return on debt, and for the regulator to discuss the merits of different approaches before setting out its proposed approach in the guidelines. The Commission intends that the regulator could adopt more than one approach to estimating the return on debt having regard to different risk characteristics of benchmark efficient service providers. The service providers will have an opportunity at the time of their determination or access arrangement to propose an alternative approach to that proposed by the regulator in the guidelines, but the service provider will need to explain why their proposed approach is better than the approach proposed by the regulator in the guidelines.

The proposed draft rule includes a provision to allow an annual adjustment to the allowed revenue for the service provider in circumstances where the regulator decides to estimate the return on debt using an approach that requires the return on debt to be updated periodically during the regulatory period. The formula for calculating the updated return on debt must be specified in the regulatory determination or access arrangement and must be capable of applying automatically. Additional consequential amendments have been made in Chapters 6 and 6A of the NER to remove any impediments to allow the regulator to adjust its revenue/pricing determination during the regulatory period from the application of an annually updating return on debt estimate.

While the proposed draft rule provides the regulator with substantial discretion as to the approach to adopt to estimate the return on debt, consistent with meeting the overall rate of return objective, the Commission considers that regulatory accountability and transparency is very important. Therefore, the draft rule includes factors that the regulator must have regard to when considering the approach to estimating the return on debt. It is not intended that these are the only factors the regulator can have regard to. The specific factors identified in the draft rule are:

- the likelihood of any significant differences between the costs of servicing debt of a benchmark efficient service provider and the estimated return on debt;

- the impact on consumers, including due to any impact on the return on equity of a benchmark efficient service provider;
- the incentive effects of inefficiently delaying or bringing forward capex; and
- the impact of changing the methodology for determining the return on debt across regulatory periods.

The Commission explains below the types of issues that the regulator is be expected to consider when having regard to each of these factors.

Likelihood of differences between the cost of servicing debt of a benchmark efficient service provider and the estimated return on debt

The Commission intends that there is consideration of the extent to which the methodology used is commensurate with the financing and hedging strategy of the benchmark efficient service provider. This means that there should be consideration of the extent to which the methodology matches the funding costs expected to be incurred by a benchmark efficient service provider over the regulatory period, having regard to the debt arrangements the benchmark efficient service provider is likely to already have in place. This matching is based on the benchmark efficient service provider but, this benchmark could vary with the nature of regulated entities and their efficient funding and hedging strategies. Further, the length of any proposed averaging period would need to be considered alongside the benchmark service provider's borrowing profile.

Impact on consumers, including the impact on the return on equity

The Commission considers it essential that the effect on consumers is considered. Perhaps the most direct way in which consumers could benefit from the use of a historical trailing averaging period would be if this reduced the required return on equity because a benchmark efficient service provider's refinancing risks had been reduced through the particular method that was adopted for estimating the return on debt. To the extent that a methodology allows the overall risk to equity holders to be reduced in a measurable way by reducing the cash flow volatility of equity returns the regulator might be expected, all other things being equal, to be positively disposed towards it.

Quantifying the impact may be difficult in many cases, but the Commission would expect that the position of different types of service providers could be considered. For example, large single asset service providers might argue they face high refinancing risks from a prevailing rate approach, such that moving to a historical averaging approach would provide a net decrease in risk to equity holders, and consequentially a net benefit to consumers. Similarly, the Commission would expect that some service providers would argue that their equity investors would be worse off under any historical trailing average approach and therefore consumers would be better off with retention of the prevailing rate approach in their case.

Incentive effects of inefficiently delaying or bringing forward capex

This factor requires the regulator to consider the impact of its proposed approach on incentives to accelerate or delay capex in ways that are inefficient and hence run counter to the NEO, the NGO and the RPP. A distortion to investment incentives can arise where there is a significant mismatch between the cost of debt under the regulatory determination and the actual costs of debt in the market. For example, if the return on debt under the regulatory determination is lower than the cost of debt in the market then service providers may under invest relative to an efficient amount of investment.

Impact from changing the methodology across regulatory periods

The Commission considers that when there is a proposed change in methodology for estimating the return on debt, consideration should be given to the consequences for investment incentives arising from a change in methodology. In particular, consideration should be given to the potential for consumers and service providers to face a significant and unexpected change in costs or prices that may have negative effects on confidence in the predictability of the regulatory arrangements. It may be possible in many circumstances for the method to estimate the return on debt to take such concerns into account in the design of the method. Therefore, this factor is intended to promote consideration of whether these issues would arise and how best to address them.

8 Capex and opex allowances and factors

Summary

- Since publication of the directions paper the Commission has done further work to address the problems raised by the AER, being inappropriate constraints in the NER on its powers to interrogate and amend capex and opex proposals.
- The Commission has analysed further evidence provided to it of the drivers of prices, which indicate that both the rate of return and expenditure allowances have been significant factors contributing to higher network charges. However it is not possible to tell from this if any expenditure allowances to date have been inefficient, or if there is a problem with the NER.
- The approach to expenditure allowances was set by the AEMC in Chapter 6A in 2006. It includes that the NSP's forecast should be the starting point for the AER's analysis, but the AER is free to use a range of analytical techniques to assess this forecast and should consider all material and submissions before it. Further work confirms that the practices of the AER pursuant to Chapter 6A conform to good regulatory practice when compared with other regulators in Australia and overseas, and the Commission's view is that Chapter 6A reflects these practices.
- In general, the existing provisions of the NER provide the AER with appropriate discretion to set capex and opex allowances at an efficient level, assuming it has adequate information and uses appropriate analytical techniques.
- There are however some areas for improvement in the NER to clarify the approach and remove ambiguities.
- Benchmarking is a critical exercise in assessing the efficiency of a NSP's capex and opex forecasts. It should take into account differences in the environments of the different NSPs.
- The AER should be required to undertake annual benchmarking of NSPs. Among other things, this will improve the ability of consumers to participate in the regulatory process.
- It is appropriate that the methodology or methodologies for determining expenditure forecasts be set in advance of the NSP preparing its regulatory proposal. It should be included as part of the framework and approach paper.

This chapter sets out the Commission's considerations in respect of capex and opex allowances, and capex and opex factors. Section 8.1 sets out further thinking on

whether the problem raised by the AER exists, that is, whether the NER inappropriately constrain the AER in respect of the way it can interrogate and amend NSP's capex and opex forecasts. Having dealt with the problem, section 8.2 describes the original intent of Chapters 6 and 6A of the NER and sets out some changes to the NER to clarify ambiguities and increase clarity. Section 8.3 addresses other issues relating to capex and opex allowances, and section 8.4 deals with capex and opex factors.

8.1 Do the NER inappropriately constrain the AER regarding capex and opex allowances?

8.1.1 Introduction

The AER claims that the NER have constrained its ability to interrogate and amend expenditure proposals, resulting in capex and opex allowances which are higher than they should be.[187] While there are legitimate reasons for increases in network charges, it states these constraints are also driving up network charges.[188]

The AEMC commenced its analysis in the directions paper by examining evidence for these problems in AER regulatory determinations and comments of the Australian Competition Tribunal. It considered submissions provided by stakeholders, and engaged two consultants, Professors Littlechild and Yarrow, to undertake further analysis. Following this analysis, the Commission did not come to a conclusion as to whether constraints in the NER were driving up network charges. In order to consider the matter in greater depth, the Commission called for further evidence from stakeholders of a problem and engaged consultants to reconsider the original intent behind Chapter 6A of the NER.

8.1.2 Submissions

The AER and the ENA have both provided lengthy submissions in response to the AEMC's request for further information about the drivers for rising network costs. Both assess how much lower revenues would have been had key variables not been allowed to increase from the previous regulatory period. These include capex, opex and the rate of return.[189] The relative significance of rate of return and capex differs between the two submissions but both found they were significant. The ENA submission also includes a critique of a 2011 Bruce Mountain paper referred to in the directions paper.[190] The AER's submission includes examples of how it claimed it had been constrained in setting capex and opex allowances.[191]

187 AER, Rule change request, Part A, 29 September 2011, p. 8.

188 Id., p. 6.

189 ENA, Directions Paper submission, 16 April 2012, p. 10; and AER, Directions Paper submission, 2 May 2012, Appendix 1, p. 9.

190 ENA, Directions Paper submission, Attachment B, 16 April 2012.

191 AER, Directions Paper submission, 2 May 2012, Appendix 2.

In terms of other stakeholders, Ausgrid provides a detailed submission explaining its recent increases in investment.[192] Other NSPs and representative groups provide additional detail of drivers for price increases.[193] Consumers groups highlight declining affordability and also the fact that the growth in the RAB has been outstripping growth in demand, new connections or length of network in recent times.[194] Perceived inefficiency of state-owned NSPs is also a focus of consumer group submissions.[195]

8.1.3 Analysis

This section sets out the Commission's further consideration of whether there is a problem with the NER in respect of capex and opex allowances in the way claimed by the AER.

Rising network charges

At the start of the rule change process, a number of assertions were made by stakeholders about rising network charges. For example, the AER claimed that a significant proportion of recent rises in electricity prices can be attributed to increases in network charges, and that one factor driving up network charges has been the need for capex and opex.[196] In order to understand the context of the problems, the Commission sought more detail on the drivers for increases in network charges and any link between these increases and the NER.

As described above, in response to this request some stakeholders have provided detailed research and analysis. Submissions from these stakeholders demonstrate that a number of factors have been causing increasing network charges. There is no doubt that capex and opex allowances have increased from previous periods, but the significance of the capex and opex increases in comparison to increases in other factors - and in particular the rate of return - is not clear. According to the ENA, rate of return increases are at least as significant a driver of network costs as increases in capex and opex.[197] On the other hand, according to the AER, which conducted a similar type of analysis to the ENA though excluding adjustments as a result of Tribunal decisions, the increase in the forecast capex from the previous period is a more significant factor than rate of return increases.[198] Had the AER included the effect of the Tribunal decisions

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192 Ausgrid, Directions Paper submission, 16 April 2012, p. 4.

193 See for example ENERGEX, Directions Paper submission, 16 April 2012, p. 2; ESAA, Directions Paper submission, 24 April 2012, p. 4.

194 Consumer Action Law Centre, Directions Paper submission, 16 April 2012, pp. 2-3; EUAA, Directions Paper submission, 16 April 2012, pp. 2-11; Ethnic Communities Council of NSW , Directions Paper submission, 16 April 2012, p. 2; and UnitingCare Australia, Directions Paper submission, 9 May 2012, pp. 23-31.

195 EUAA, Directions Paper submission, 16 April 2012, p. 8.

196 AER, Rule change request, Part A, 29 September 2011, pp. 5-6.

197 Compare ENA, Directions Paper submission, Attachment C, 16 April 2012, p. 9 (Figure 3.1) and p. 11 (Figure 3.2).

198 AER, Directions Paper submission, 2 May 2012, Appendix 1, p. 4 (Figure 1.3).

its results may not have been too dissimilar to those of the ENA. Either way, the submissions provide important clarity to the problem. Increases in capex and opex are driving up network charges, but rate of return increases are also contributing to this.

However, the mere fact of increases, or even significant increases, in capex and opex allowances for a NSP from one period to the next does not of itself demonstrate a deficiency in the NER. The increased capex and opex may be required to meet the objectives in the NER. To demonstrate a deficiency, it is necessary to show that these increases were more than what was needed to satisfy the requirements of the NER, including the requirement that capex and opex allowances should reasonably reflect efficient costs. Little evidence has been provided relating to the efficiency of the expenditure allowances determined by the AER. The ENA's analysis of this efficiency identifies the main drivers of capex and opex increases, such as replacement capex, for key NSPs. The ENA then shows that the AER or its consultant came to the view at the most recent reset for the NSP that the expenditure proposed for that category was efficient.[199] Ausgrid has provided a higher level of detail on the need for increased investment.[200]

The directions paper referred to a report by Bruce Mountain in 2011 which offered a way of assessing the efficiency of DNSPs' expenditure.[201] This sort of analysis could have been used by stakeholders in responding to the directions paper to show whether capex or opex allowances were efficient. The ENA has, however, provided a critique of the Mountain report in Attachment B to its submission. This critique appears to take the view that the Mountain report is too simplistic in its analysis to be robust. For example, Mountain should have used energy distributed and peak demand as part of his composite scale variable, in addition to customer numbers.[202] The Commission accepts that it may be possible to undertake a more sophisticated analysis, taking into account more of the "exogenous" reasons for differences between the levels of capex and opex required by each NSP. This does not invalidate the overall approach taken in Mountain's report, though. While there may be some shortcomings in Mountain's report, no analysis has been provided which would challenge Mountain's conclusion that the average privately-owned DNSP is more efficient than the average state-owned DNSP. With a greater use of benchmarking, perhaps using the approach suggested in Bruce Mountain's report, it may have been easier for the AER to identify inefficiencies in previous expenditure forecasts or allowances.

In conclusion, the analysis presented in submissions by stakeholders provides important context about rising network charges but does not confirm that expenditure allowances to date have been inefficient, or that there are in fact problems with the NER in this area. The AER analysis of specific constraints and the report commissioned by the AEMC comparing the original intent with other jurisdictions is more useful in this regard. These are discussed further below.

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199 ENA, Directions Paper submission, 16 April 2012, pp. 12-13.

200 Ausgrid, Directions Paper submission, 16 April 2012, Attachment A, section 3.

201 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 25.

202 ENA, Directions Paper submission, Attachment B, 16 April 2012, p. 7.

AER evidence of constraints applying

Appendix 2 of the AER's submission provides evidence that the AER claims shows that the capex and opex allowed by the AER in its previous decisions may have been higher than efficient on the basis that the AER was constrained in its ability to replace a NSP's forecast with a lower amount. The AER refers to two of its regulatory determinations for Ergon Energy as examples. The first relates to corporation initiated augmentation (CIA) capex. The AER claims that it could not establish the CIA capex proposed by the NSP was inefficient but its substituted CIA capex was limited by the NSP's proposal, such as by having to use an 18 month deferral assumption.[203] In the other example, relating to customer initiated capital works (CICW), there was disagreement between the AER and Ergon Energy over the methodology for forecasting CICW. The AER claims that it was constrained by the NER to focus on the methodology rather than being free to establish its own efficient estimate.[204]

In each example the AER states it was limited to the approach Ergon Energy took to capex. It appears that each time the constraint was based on clause 6.12.3(f), which is discussed further below. Leaving aside any ambiguity associated with that clause, the AER appears to have taken a somewhat conservative approach to interpreting it. If the AER is correct that in the two examples described above the capex allowance may have been higher than was efficient, it is not clear this was due to a deficiency in the NER. Had the AER been able to provide benchmarking analysis that the Ergon Energy capex allowance was high relative to other NSPs this would have provided clarity on whether the allowance was, in fact, efficient.

The Brattle report

The Brattle report considers whether the overall approach to expenditure allowances in chapter 6A of the NER, and the AER's practices in applying Chapter 6A, conform to good regulatory practice. Here regulatory practice refers to the approach regulators use to determine expenditure allowances, such as the analytical techniques employed. In order to understand what good regulatory practice may be, Brattle looked at regulatory practices in seven jurisdictions in Australia and overseas which adopt incentive-based economic regulation. In considering these other jurisdictions the AEMC asked Brattle also to consider whether there are any "background factors" which might explain any differences observed in these other jurisdictions.

In addition to the AER, Brattle considered the regulatory approaches in Great Britain, New Zealand, New South Wales, Western Australia, Ontario and Rhode Island.[205] Brattle considered how the relevant regulators review capex and opex forecasts, and described the extent to which the practice in each jurisdiction is driven by rules or guidelines. Using the analysis of these different regimes, Brattle formed a conclusion

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203 AER, Directions Paper submission, 2 May 2012, Appendix 2, p. 3.

204 Id., p. 5.

205 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 74. This paragraph also explains why each of the four overseas jurisdictions was chosen.

on best practice regarding approaches to setting allowances as part of incentive-based regulation. Following on from this, it sets out some observations and recommendations, including how the NER could be improved. Many of these observations and recommendations are used as support for the approach the Commission has taken in sections 8.2 and 8.3 below.

It is important to note that there are some clear differences between the jurisdictions chosen in terms of regulatory structures and institutional arrangements. For example, in NSW NSPs are state-owned, whereas in Great Britain they are privately-owned.[206] The AER does not have to assess the prudence of past capex, while the ERA, for example, does do this. Many North American regulators take a backward-looking approach to setting prices however Brattle chose Ontario and Rhode Island due to their use of forecasting.[207] There is much less prescription in Great Britain around how Ofgem must exercise discretion in respect of capex and opex allowances by comparison to the NER.[208]

In terms of the actual practices that regulators adopt when assessing capex and opex forecasts under incentive-based regulation, Brattle does not identify any fundamental differences between the approach of the AER and the practices of regulators in the other jurisdictions. It notes that in respect of assessments of capex and opex forecasts, while the level of prescription in the rules differs among jurisdictions, the regulators operating under such rules do not undertake less analysis nor do they seem to be restricted in the choice of tools for the purposes of such analysis.[209] Rules may affect the weight put on the results of different analysis, but Brattle is not able to determine this conclusively.[210] On the basis of Brattle's conclusion, the Commission's view is that the approach to expenditure allowances in Chapter 6A, which generally reflects the AER's practices, remains fairly consistent with good practice as reflected in the practices of the other regulators examined by Brattle.

Brattle also makes some observations about improvements to the NER. In some areas the approach could be clarified and the differences between Chapters 6 and 6A should only reflect fundamental differences in characteristics between transmission and distribution. For example, in respect of clause 6.12.3(f) of the NER, Brattle cannot see how such a clause could constrain the AER, since a regulator will always use the NSP's proposal as a starting point, and will always explain its decision. However, the clause does not operate in a helpful way and could be clarified. In addition, Brattle cannot see any reason to justify clause 6.12.3(f) in distribution given that there is no equivalent clause in Chapter 6A.

In general, Brattle states that the regulator should always be free to develop its own analytical method, though the rules might provide guidance in the form of principles. There are some additional tools which could be used to improve how capex/opex

206 Id, paragraph 26.

207 Id., paragraph 75.

208 Id., paragraph 12.

209 Id., paragraphs 13, 30 and 31.

210 Id., paragraph 33.

allowances are set, such as the use of output measures and a "menu" approach to forecasts.[211]

Other matters considered by Brattle include the following:

- rejecting or adjusting the NSP's proposal - in some jurisdictions the rules require the regulator first to test whether the NSP's forecast is reasonable before making an adjustment, whereas in others the regulator's goal is simply to set a forecast, though Brattle considers that this apparent distinction is not a helpful way of characterising what regulators actually do in practice;[212]

- importance of good information - as discussed further below, it is critical that the regulator has good information;[213]

- analytical tools - each regulator develops its own tools to address issues that arise;[214]

- interaction between NSP and regulator - these interactions tend to be similar in all jurisdictions considered, though in some there is additional "senior-level" interaction;[215] and

- consumer engagement - there does not appear to be a common approach to consumer engagement, but it would appear that other regulators engage with consumers or consumer representatives more than the AER does, both on a formal and informal basis.

Finally, Brattle highlights the importance of good data for setting expenditure allowances at the right level. Some regulators in other jurisdictions have put considerable effort into improving the data they collect. This includes annual data collection outside the determination process, and regular interaction with NSPs to ensure that the data collection process is operating effectively.[216]

Conclusion

On the basis of the analysis in the directions paper and this draft rule determination, the Commission forms the following views:

- increases in the rate of return and expenditure allowances are both significant factors contributing to rises in network charges;

- some increases in expenditure allowances have been necessary;

211 Id., paragraphs 41-45.

212 Id., paragraph 15.

213 Id., paragraph 16.

214 Id., paragraphs 17 and 43.

215 Id., paragraph 23.

216 Id., paragraph 44.

- on the basis of the material considered, it is not possible to conclude that the NER have constrained the AER's ability to consider and substitute NSPs' expenditure forecasts and have caused inefficient increases in expenditure allowances; and
- while the Chapter 6A approach to capex and opex allowances remains generally consistent with good regulatory practice, it could be enhanced in some ways, and some changes for clarification reasons should be made so that Chapters 6 and 6A of the NER better reflect this approach.

8.2 Clarifying the rules regarding capex and opex allowances

8.2.1 Introduction

In the directions paper the Commission indicated an initial view that the overall approach to setting expenditure allowances in the NER remains valid but that changes so that this approach is better reflected in the rules, and to improve clarity generally, may be warranted.

8.2.2 Submissions

The AER's submission maintains its position that it is constrained in the way it can substitute its own estimate for NSP expenditure forecasts, though it states fewer constraints apply in respect of the AER's ability to reject a proposal for being too high.[217] For example, it states when it seeks to substitute its own estimate it is limited to addressing only those elements of a proposal which do not meet the expenditure criteria. The AER has provided more material on the incentives on NSPs to over-forecast and exacerbate information asymmetries.[218] The AER states that a better approach than the current NER would be for it to be free to replace a NSP's forecast with its better estimate, though it would need to justify this on the basis of the information before it, as well as principles in the NEL.[219]

NSPs maintain their position that the AER is not constrained by the NER and no changes are necessary in respect of the setting of expenditure allowances.[220] The ENA states that the way the NER has been applied has not been inconsistent with the approach set out in the AEMC's Chapter 6A rule determination. Consumer groups support the AER's proposal and believe that its experience is sufficient reason for concern; it should be given the benefit of the doubt in these matters. The onus of proof should be shifted away from the AER to the NSPs, who must be required to justify

217 AER, Directions Paper submission, 2 May 2012, p. 2.

218 Id., p. 5.

219 Id., p. 11.

220 ENA, Directions Paper submission, 16 April 2012, p. 23.

their forecasts. In general if there is no detriment to consumers in clarifying the NER in the way required by the AER then this should occur.[221]

The Victorian Department of Primary Industries (Vic DPI) also supports changing the NER to clarify the AER's powers, and states that it does not think the AER's proposed changes would give it unconstrained powers.[222] The SA DMITRE suggests changing the propose-respond approach, with its claimed presumption in favour of investment, to receive-determine which gives the AER more discretion.[223] IPART expresses concern about unnecessary price increases and supports the AER's proposal to allow it to adopt its best estimate of efficient costs.[224]

In respect of benchmarking, NSPs continue to seek the retention of the reference to the "circumstances of the NSP" in the NER so that the AER takes these circumstances into account.[225]

8.2.3 Analysis

Confirming the approach to capex and opex allowances

In section 8.1 above, the conclusion was that while the Chapter 6A approach remains broadly consistent with good regulatory practice, it could be enhanced in some areas, and there could also be changes to Chapters 6 and 6A of the NER so that they better reflect that approach. The changes to the NER are discussed further below.

The original intent behind Chapter 6A was initially described by the AEMC in 2006.[226] Set out below is a further clarification of what that intent is regarding capex and opex allowances.

The NSP's proposal is necessarily the procedural starting point for the AER to determine a capex or opex allowance.[227] The NSP has the most experience in how a network should be run, as well as holding all of the data on past performance of its network, and is therefore in the best position to make judgments about what expenditure will be required in the future. Indeed, the NSP's proposal will in most cases be the most significant input into the AER's decision. Importantly, though, it should be only one of a number of inputs. Other stakeholders may also be able to provide relevant information, as will any consultants engaged by the AER. In addition,

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221 CUAC, Directions Paper submission, 16 April 2012, pp. 3-4; Consumer Action Law Centre, Directions Paper submission, 16 April 2012, pp. 3-4; EUAA, Directions Paper submission, 16 April 2012, pp. 18-19; TEC, Directions Paper submission, 17 April 2012, p. 4.

222 Vic DPI, Directions Paper submission, 16 April 2012, pp. 2-4.

223 SA DMITRE, Directions Paper submission, 5 May 2012, p. 3.

224 IPART, Directions Paper submission, 16 April 2012, pp. 5-6.

225 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 44; Grid Australia, Directions Paper submission, 16 April 2012, p. 6.

226 AEMC, Economic Regulation of Transmission Services, Rule Determination, 16 November 2006.

227 See also comments made in The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraphs 14 and 71.

the AER can conduct its own analysis, including using objective evidence drawn from history, and the performance and experience of comparable NSPs. The techniques the AER may use to conduct this analysis are not limited, and in particular are not confined to the approach taken by the NSP in its proposal.

While the AER must form a view as to whether a NSP's proposal is reasonable, this is not a separate exercise from determining an appropriate substitute in the event the AER decides the proposal is not reasonable. For example, benchmarking the NSP against others will provide an indication of both whether the proposal is reasonable and what a substitute should be. Both the consideration of "reasonable" and the determination of the substitute must be in respect of the total for each of capex or opex.

The criteria for determining capex and opex contain a requirement that the AER must accept a proposal that is reasonable. It seems almost to go without saying that the AER must accept such a proposal. Why the AER would ever need to reject a proposal that it has determined is reasonable is unclear. The idea of reasonableness was used at times in consultation in 2006 to refer to a "reasonable range".[228] This is a concept that can be misleading in the context of the exercise the AER must conduct in determining a capex or opex allowance. The AER has confirmed that it does not generally approach capex and opex allowances by determining a maximum and minimum possible allowance, and indeed the lack of precision inherent in this exercise would mean this has little benefit.[229] The use of the term "reasonable" merely reflects this lack of precision. Thus, the AER could be expected to approach the assessment of a NSP's expenditure (capex or opex) forecast by determining its own forecast of expenditure based on the material before it. Presumably this will never match exactly the amount proposed by the NSP. However there will be a certain margin of difference between the AER's forecast and that of the NSP within which the AER could say that the NSP's forecast is reasonable. What the margin is in a particular case, and therefore what the AER will accept as reasonable, is a matter for the AER exercising its regulatory judgment.

The Commission remains of the view that the AER is not "at large" in being able to reject the NSP's proposal and replace it with its own.[230] The obligation to accept a reasonable proposal, discussed above, reflects the obligation that all public decision-makers have to base their decisions on sound reasoning and all relevant information required to be taken into account. Some submissions have referred to the concept of an evidentiary burden, or onus of proof, as some submissions have termed it, that the AER has.[231] To the extent the AER places probative value on the NSP's proposal, which is likely given the NSP's knowledge of its own network, then the AER should justify its conclusions by reference to it, in the same way it should regarding any other submission of probative value. In circumstances where the NSP is required to provide information in support of its proposal, and the AER is required to explain its decision, an evidentiary burden does not appear to reside with one party more than another.

228 Id., p. 52.

229 AER, Response to AEMC questions, 2 February 2012, p. 10.

230 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 53.

231 EUAA, Directions Paper submission, 16 April 2012, p. 17.

Changes to clarify and remove ambiguity in the NER

The description of the approach above confirms that the NER is drafted appropriately in many areas. With the exception of benchmarking, discussed further below, the capex and opex criteria remain valid. For example, the obligation to accept a reasonable proposal should reflect the AER's current practice. There is no reference to a reasonable range, which is appropriate.[232] The AER, whenever it determines a substitute for a NSP's proposal, is not constrained by the capex and opex criteria from choosing the best substitute it can determine. As described above, the criteria also do not impose an inappropriate evidentiary burden.

In terms of whether it is appropriate for the process to start with the NSP submitting a proposal to the AER, Brattle has shown that this is accepted practice in most of the jurisdictions it surveyed.[233] In jurisdictions where this did not occur, the regulator tended to be reviewing a large number of smaller businesses, such as in New Zealand. Of much more import is whether the AER has the necessary tools to scrutinise the NSP's proposal.

The analytical techniques the AER may use are not limited by the capex/opex criteria. This is appropriate, as Brattle has indicated.[234] On the other hand, the extent of the constraint imposed on the AER by clause 6.12.3(f) is unclear. This could be read as merely requiring the AER to treat the NSP's proposal as an input into its determination of a capex or opex allowance, or as preventing an AER substitute from moving away from an NSP's proposal beyond what is necessary to result in a reasonable allowance. NSPs state that clause 6.12.3(f) is clear, but there have been few strong arguments about the benefits of this clause - and why it should be retained - in respect of capex and opex.[235] On the other hand, the AER has interpreted these provisions as imposing a much greater constraint on it.[236] The Brattle Group has also observed problems with this provision:

> "... it may be that neither 'adjusted only to the extent necessary' nor 'based on the NSP proposal' are helpful guides to the exercise of the regulator's judgment, in particular, if this were interpreted to rule out 'top down' adjustments.[237]"

The Commission has determined it should be clear clause 6.12.3(f) does not apply to capex and opex allowances. The guidance provided by this clause, as described above, such as requiring the AER to take into account the NSP's proposal, would be achieved

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232 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 42.

233 Id., paragraph 14.

234 Id., paragraph 17.

235 ENA, Consultation Paper submission, Attachment C, 8 December 2011, p. 11; though note Ausgrid, Consultation Paper submission, 8 December 2011, p. 17.

236 AER, Directions Paper submission, 2 May 2012, p. 11 and Appendix 2 generally.

237 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 38.

by other provisions anyway, and this clause represents a difference between Chapters 6 and 6A for which there in no substantive explanation. The AER should not be limited to assessing a proposal on the basis of a "bottom up", engineering-based approach, and the AER should be free to determine a substitute amount on the basis of the information it has.

The AER has proposed that the criterion relating to demand forecasts and cost inputs[238] is less important than the first two criteria and should be moved to the capex and opex factors. In the directions paper the Commission took the initial view that the significance of demand forecasts and cost inputs is such that they should remain in the capex and opex criteria.[239] The AER has since proposed that these could be moved to the capex and opex objectives.[240] This would, however, position demand forecasts and cost inputs as objectives rather than key elements of expenditure allowances that are relevant in a range of ways. The Commission remains of the view that this criterion should remain where it is.

The Commission shares the view expressed by The Brattle Group that there could be greater harmony between Chapters 6 and 6A.[241]While recognising that these Chapters were developed by different organisations at different times, there should be no reason for any differences unless these are based on a fundamental difference between the characteristics of transmission and distribution networks or their owners. Differences in the NER not based on this may lead to ambiguity and a loss of clarity. In time, it may be possible for Chapters 6 and 6A to be merged into one. At present, changes are limited to those within the scope of the rule change process. Certain issues raised by the AER, both in terms of expenditure allowances and the overall regulatory process,[242] relate to the quality of the information available to the AER and the manner in which it is collected. For example, good quality information should make it easier for the AER to determine the reasonableness of capex or opex forecasts. There are notable differences in the provisions in Chapters 6 and 6A relating to information provision. Among other things, submission guidelines are part of Chapter 6A but may have been thought unnecessary in Chapter 6 with the advent of regulatory information orders and notices. The Commission has therefore determined to adjust Chapter 6A to remove the rule requirement for the AER to prepare submission guidelines; any information the AER would have required to be provided through submission guidelines can be required to be provided through a regulatory information instrument.

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238 See for example, clause 6.5.7(c)(3).

239 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 33.

240 AER, Directions Paper submission, 2 May 2012, p. 16.

241 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraphs 21, 35 and 41.

242 See chapter 10.

Benchmarking

The Commission views benchmarking as a critical exercise in assessing the efficiency of a NSP and determining the appropriate capex or opex allowance. Any benchmarking exercise must take into account differences in the environments of the different NSPs. The directions paper sought to explore further with stakeholders the circumstances that benchmarking should take into account with a view to determining whether these circumstances should be clarified in the NER. Submissions from stakeholders in response indicate consistency in terms of the circumstances that are considered relevant to benchmarking.[243] Broadly, the factors that would be taken into account are exogenous - being factors outside the control of the NSP - such as the age of the network, and topography. Endogenous factors, such as the nature of ownership or previous managerial decisions, should not generally be taken into account. Having considered the possible circumstances raised in submissions, the Commission shares the view expressed in the joint submission of ETSA, CitiPower and Powercor that the variety of circumstances are such that it would be difficult for the AEMC to set these out in the NER in a comprehensive way.[244]

Instead, the reference to "circumstances of the relevant NSP" should be removed from the capex and opex criteria. There appears to be little doubt about how the AER should undertake a benchmarking exercise, including the circumstances that should be taken into account, and the reference to individual circumstances is likely to constrain the AER in an inappropriate way. Given the importance of benchmarking in determining the capex or opex allowance, any inappropriate constraints on the AER under the NER in undertaking a benchmarking exercise should be removed.

In response to the concerns Grid Australia raised about other consequences of the removal of the reference to "circumstances of the relevant NSP", these appear to be unfounded.[245] Outside of benchmarking, it is hard to see how the manner in which a NSP accounts for its costs could be affected by this clause. The clause only relates to the total costs a prudent operator would require to achieve the objectives and the way a NSP accounts for its costs is irrelevant. The AER should not be able to control such processes through this clause.

8.2.4 Guidance on draft rule

Changes to clarify and remove ambiguity in the NER

Section 8.2.3 has recommended some changes to clarify and remove ambiguity in respect of the AER's powers to consider and, if necessary, amend, expenditure forecasts. As described above, however, the existing rules in this area remain appropriate. Importantly, the existing rules operate at a high level and, with the

243 AER, Directions Paper submission, 2 May 2012, p. 9; ENA, Directions Paper submission, 16 April 2012, p. 23; Jemena, Directions Paper submission, 16 April 2012, p. 13; and ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 43.

244 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 45.

245 Grid Australia, Directions Paper submission, 16 April 2012, p. 6

possible exception of clause 6.12.3(f), which is discussed further below, do not prescribe in detail how the AER must go about assessing expenditure forecasts. The Commission is of the view that the best outcomes will be achieved if the NER do not attempt to describe too closely what the AER must do in this area, and instead leave it with the discretion to determine, based on its own experience and judgment, the right level of capex and opex allowance.

Under the existing rules, when the AER assesses an expenditure forecast it has certain criteria to assess the forecast against, and certain factors it must bear in mind. These criteria broadly reflect the NEO, and include the efficient costs of a prudent operator and a realistic expectation of demand. The AER assesses the total of the capex or opex forecast and is not required to consider individual projects. The Commission considers that the existing rules give the AER sufficient freedom to set capex and opex allowances that are efficient, assuming it applies appropriate analytical techniques and has access to an appropriate level of information.

In respect of clause 6.12.3(f), the Commission has determined to amend this so it is made clear that it does not apply to the AER's decisions in respect of substituted capex or opex allowances under Chapter 6 of the NER. This means that, when the AER replaces a NSP's forecast with the AER's substitute amount or value, the NER do not require that the substitute is determined on the basis of the NSP's proposal and amended from that basis only to the extent necessary to be approved. The way that the AER exercises its judgment in respect of the proposal and the rest of the evidence may achieve the same result as clause 6.12.3(f), but the NER themselves no longer prescribe it.

Benchmarking

The draft rule gives the AER discretion as to how and when it undertakes benchmarking. However, when undertaking a benchmarking exercise, circumstances exogenous to a NSP should generally be taken into account, and endogenous circumstances should generally not be considered. In respect of each NSP, the AER must exercise its judgement as to the circumstances which should or should not be included. However exogenous factors to be taken into account are likely to include:

- geographic factors: topography and climate;
- customer factors: density of the customer base (urban v rural), load profile, mix of customers between industrial and domestic;
- network factors: age, mix of underground and overground lines, though this will depend on the extent to which this is at the election of the NSP; and
- jurisdictional factors: reliability and service standards.

Endogenous factors not to be taken into account may include:

- the nature of ownership of the NSP;

- quality of management; and
- financial decisions.

8.3 Other issues

8.3.1 Introduction

In the course of consulting on the rule change requests, other options for dealing with the original problems raised by the AER have been identified. Some of these are described in this section.

8.3.2 Submissions

The AER proposes in its submission on the directions paper a new solution for dealing with the problem raised in its rule change proposal of determining whether a NSP's capex or opex proposal is efficient.[246] At present, the AER has had difficulty in requiring a NSP to use a particular model to prepare its expenditure forecasts. Even if the AER has a preferred approach, the NSP need not use it. This means that the AER must spend time after the NSP's regulatory proposal is submitted to understand the NSP's model and engage with the NSP in respect of it. There are practical problems in using a regulatory information instrument to specify the AER's model.

Instead, the AER seeks to consult on expenditure models as part of the framework and approach paper. Once a model is set in the framework and approach paper, the NSP would be required to justify its expenditure forecasts based on the model in the framework and approach paper, including any departures it has made from the model.

Another issue that has been identified is that the opex/capex objective to maintain the quality, reliability, safety and security of the distribution/transmission system and the regulated services provided by it may perpetuate a higher standard than is necessary based on past service and reliability standards. In general, stakeholders are supportive of clarifying the word "maintains" in the capex and opex objectives so that forecasts are better aligned with applicable service and reliability standards.[247] The Vic DPI states that since Victoria does not have jurisdictional reliability standards the capex and opex objectives should not be stated in these terms.[248]

246 AER, Consultation Paper submission, 12 December 2011, p. 12.

247 AER, Directions Paper submission, 2 May 2012, p. 17; ENA, Directions Paper submission, 16 April 2012, p. 24.

248 Vic DPI, Directions Paper submission, 16 April 2012, p. 4.

8.3.3 Analysis

Annual benchmarking reports

Benchmarking has been discussed in section 8.2.3 above. As well as informing the AER's consideration of capex and opex allowances, benchmarking analysis undertaken by the AER can be of benefit to consumers.

A key issue that has arisen in the context of this rule change process is the ability of stakeholders, and in particular consumers, to participate actively in regulatory determinations. A number of changes have been made to the NER to improve consumer participation, and if consumer groups were better resourced it would likely lead to significantly improved consumer engagement. Other changes have been made to encourage NSPs to engage more with consumers prior to submitting their regulatory proposals.

In addition to this, changes need to be made to improve the information available to consumers, including adequate and relative - in the sense of comparing NSPs- information about network performance. Having access to this would assist consumers both in informal interaction with NSPs as well as engaging in the formal regulatory process and merits reviews. The Commission considers many of these aims would be achieved if the AER was required to undertake annual benchmarking of NSPs, with its results published in a report that could be easily understood by consumers. This would set out the relative efficiencies of distribution and transmission NSPs, taking into account the exogenous factors that distinguish them.

These reports would also assist the AER in assessing capex and opex forecasts as part of a regulatory determination. Having undertaken the benchmarking on an annual basis, it should be much quicker for the AER to benchmark as part of its determination. This requirement would not impact the AER's ability to utilise other analytical techniques.

In addition, the capex and opex factors have been amended to allow the AER to consider any relevant annual benchmarking report when assessing a capex or opex forecast.

Under section 28V of the NEL, the AER has the power to prepare network service provider performance reports. The annual benchmarking reports proposed in the draft rule are a subset of the reports the AER may publish under section 28V.

In order to undertake an annual benchmarking exercise, the AER should use the best information available to it. This may involve using the information gathering powers it has under the NEL, such as regulatory information instruments. Alternatively, the AER may collect information on a voluntary basis or else use information it has collected in other processes, such as regulatory determinations. Brattle has underlined the importance of annual data collection outside of the regulatory determination process,

and notes the effort other regulators have put into doing this.[249] It appears the AER does not undertake information gathering and benchmarking to the same extent as many other regulators.

One reason for the AER's lack of information gathering could relate to the powers it has. Among other things, there are limitations on using regulatory information instruments solely for the purposes of preparing network service provider performance reports: section 28F(3)(d) of the NEL. Changes to the NEL are outside the AEMC's power, however the SCER may wish to address this further. Changes to the NER may also provide the AER with greater powers in this respect; the AEMC has proposed to the SCER as part of its work on total factor productivity possible rule changes which would require NSPs to provide benchmarking information to the AER.

Engagement on the expenditure model

In this rule change process, the Commission encourages NSPs, the AER and other stakeholders to engage more often, on a more informal basis, and outside of the regulatory determination process. In most cases, it is not possible to mandate this engagement through new rules, and instead it should occur through a change in approach of the bodies mentioned. Some provisions of the draft rule have been designed to facilitate this. They include a new capex/opex factor which requires the AER to take it into account the extent to which expenditure forecasts include expenditure to address the concerns of consumers that have been identified in the course of consumer engagement, and certain changes proposed in chapter 10 such as an extension to the time frame for the regulatory determination process.

Nevertheless, it may be appropriate to mandate consultation between the AER and the NSP on some specific matters. One such area is expenditure models. The expenditure models to be used to prepare capex and opex forecasts are a critical part of a NSP's proposal. The AER has stated that NSPs are not restricted in the methodologies they may use to prepare their expenditure forecasts, and that the AER remains unaware of the methodology or methodologies a NSP decides to use until the regulatory proposal is submitted.[250] The AER has proposed that the methodologies for preparing expenditure could be included as part of the framework and approach paper stage.

It is hard to see any disadvantages in an approach which encourages stakeholders to engage on the expenditure methodologies at an earlier stage. If the AER and stakeholders do not engage on the expenditure methodologies until after the regulatory proposal is submitted it will take up time generally and, more critically, if the AER prefers a different methodology it may take the NSP some time to re-run its calculations, putting pressure on the rest of the process. Instead, any expenditure methodology or methodologies preferred by the AER for a particular NSP should be included in the framework and approach paper. This includes Chapter 6A (transmission), in which a framework and approach paper step should be added to the

249 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 44.

250 AER, Directions Paper submission, 2 May 2012, p. 12.

regulatory process. Importantly, for flexibility, there should be no restriction on a NSP also including in its regulatory proposal expenditure forecasts generated using methodologies other than those specified in the framework and approach paper, as long as the framework and approach paper methodology or methodologies are also used.

Capex and opex objectives

In the directions paper, the Commission noted the concern raised by the AER that use of the word "maintain" in the capex and opex objectives may mean the AER is constrained in its ability to adjust expenditure allowances in the event that jurisdictional standards, for example, were to decrease or be relaxed.[251] In general, submissions were not opposed to the capex and opex objectives being clarified to recognise greater flexibility for the AER in this regard.[252]

On further consideration, a change to these objectives would be outside the scope of this rule change. While the AER raised the issue, it indicated that it had chosen not to proceed with the issue in its rule change proposal, and did not propose a rule change as a result.[253] This issue was also considered by the Commission as part of the NSW workstream of the Review of Distribution Reliability Standards and Outcomes, where it was suggested that this issue should be resolved through a separate rule change proposal.[254]

Menu regulation

The directions paper raised the concept of incentive schemes that would encourage more accurate forecasting by rewarding companies for making forecasts that turn out to be correct.[255] In Great Britain, an example of this type of scheme is menu regulation. On further consideration, a scheme such as menu regulation is likely to require a wide range of changes to the way expenditure forecasts are provided which are not warranted at this stage based on the evidence provided. Menu regulation is discussed further at section 9.5.1 below.

8.3.4 Guidance on draft rule

Engagement on the expenditure model

The draft rule requires the AER to develop a standard methodology for preparing expenditure forecasts. This overall methodology may be comprised a number of

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251 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 30.

252 See for example, ENA, Directions Paper submission, 16 April 2012, p. 24.

253 AER, Rule change request, Part B, 29 September 2011, p. 33.

254 AEMC, *Review of Distribution Reliability Outcomes and Standards*, Draft Report - NSW workstream, 8 June 2012, p. 101.

255 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 29.

approaches. For example, it may include the "repex" model that the AER used in the recent Victorian distribution regulatory determinations for replacement capex, and a different approach for augmentation capex. NSPs would have the chance to make submissions on this model when the AER consults on it. There is no obligation that the same standard methodology be used for transmission and distribution, but given the similarities between TNSPs and DNSPs it seems likely this would be the same. There may, however, be specific NSPs for whom the standard model is not appropriate, perhaps due to size or location. The AER would have the ability in its framework and approach paper, which is also consulted on, to identify if the NSP is required to use the standard methodology, or if not, what alternative methodology should be used. In preparing its proposal, the NSP could use different methodologies but at least one of these would have to be the methodology specified in the framework and approach paper.

Annual benchmarking reports

The Commission notes above that the AER may need additional information gathering powers under the NEL to produce robust annual benchmarking reports. To the extent that a lack of information gathering powers has affected the ability of the AER to undertake annual benchmarking, the AER could raise this in the reports.

8.4 Capex and opex factors

8.4.1 Introduction

The AER must have regard to the capex and opex factors when considering proposals from NSPs for capex and opex. The AER has proposed a number of discrete changes to these factors, though some of these factors relate to other changes considered, including benchmarking and incentive schemes.

8.4.2 Submissions

The AER maintains its position from its rule change request. In particular, while seeking that the "procedural" factors should be moved to the procedural provisions of Chapters 6 and 6A, it sees no need for a rule that replicates the procedural fairness requirement to publish analysis relied on in a decision.[256] It continues to press removing from the capex and opex criteria the reference to demand forecasts and cost inputs.

The ENA is very concerned that there must be an obligation on the AER to make available to a NSP in advance all material on which the AER intends to rely in its final decision.[257] It does however accept that the capex and opex factors should not be exhaustive.[258] In terms of moving the procedural factors, the ENA is concerned that

256 AER, Directions Paper submission, 2 May 2012, p. 15.

257 ENA, Directions Paper submission, 16 April 2012, p. 41.

258 Id., p. 39.

this would affect the weight that would be placed on them.[259] The joint submission of ETSA, CitiPower and Powercor, on the other hand, does not object to moving the procedural factors.[260]

8.4.3 Analysis

Process-related changes

The Commission maintains its position from the directions paper to move the process-related changes from the capex/opex factors to the "procedural" provisions further back in chapters 6 and 6A.[261] These provisions have a different character from the other factors in that they deal with the materials presented to, or obtained by, the AER in the course of the regulatory process, as opposed to certain facts or data. As such, they sit better with the other procedural provisions, such as clause 6.11.1. It is noted that ETSA, CitiPower and Powercor, in their joint submission, support this approach.[262]

The ENA does not support moving these factors.[263] This is partly because they are fundamental elements of the AER's decision and partly for legal reasons. The Commission shares the view that these should be fundamental components of the AER's decision, but does not see the shift to the procedural provisions as altering this approach. The ENA raises a concern at law that the AER's proposed shift from "have regard to" wording to "consider" wording in respect of two of these factors will affect the overall decision-making process.[264] To accommodate this, the draft rule adopts the "have regard to" wording for all three factors.

The Commission has considered further the views it presented in the directions paper regarding the requirement on the AER to consider analysis it has published.[265] It acknowledges the challenges in using merits review to test analysis published with a final regulatory determination, and notes that the NEL requires that the AER inform NSPs of material issues under consideration.[266] However, the Commission maintains the position that because the length of time the AER has to reach a final regulatory determination is fixed there could be times when it is too difficult for the AER to consult on analysis prior to the final regulatory determination. To balance the time constraints against the need for scrutiny of new material, the draft rule requires the

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259 Id., p. 39.

260 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 46.

261 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 33.

262 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 46.

263 ENA, Directions Paper submission, Attachment F, 16 April 2012, p. 24.

264 Id., p. 68.

265 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 32.

266 ENA, Directions Paper submission, 16 April 2012, p. 41; and ENA, Directions Paper submission, Attachment F, 16 April 2012, p. 69.

AER to use its best endeavours to publish analysis on which it proposes to rely, or which it proposes to refer to, prior to the making of the final regulatory determination. The obligation on the AER under section 16(1)(b) of the NEL is also relevant; as with any provision of the NEL, this has priority over related provisions of the NER to the extent of any inconsistency.

Non process-related changes

In respect of the other proposed changes to the capex and opex factors, the Commission maintains its view from the directions paper that the capex and opex factors should remain mandatory considerations. In respect of whether these factors are exhaustive, the Commission also maintains its position from the directions paper that the AER is not at present limited to the factors set out in the NER. At the same time, however, different clauses in the NER take an inconsistent approach to whether additional wording needs to be added to confirm that factors are exhaustive, and this could lead to ambiguity. To clarify this, an additional factor has been added to the capex and opex factors allowing the AER to consider other factors. Since a NSP should be given the opportunity to address factors against which its forecast will be assessed, there is also included in the draft rule a requirement that the AER notify the NSP in advance of any such additional factor or factors. This reflects the AER's obligations in section 16(1)(b)(i) of the NEL.

Various other changes have been made to the capex and opex factors. One factor relates to the service target performance incentive scheme (STPIS) (see for example clause 6.5.6(e)(8)). The original intent behind this factor is that expenditure allowances with respect to labour costs should be sufficient to allow the NSP to respond to the incentives as part of the STPIS. The AER has suggested this factor could be broadened.[267] The Commission agrees with this and has removed the reference to labour costs and broadened the scope of the incentive schemes covered. In addition, consequential amendments have been made to the capex and opex factors in Chapter 6 to recognise the addition of the contingent projects regime.

As discussed above, the factor relating to benchmarking[268] has been expanded to refer to the annual benchmarking reports.

Finally, a factor has been added that requires the AER to have regard to the extent to which NSPs have considered what consumers seek. NSPs should be engaging with consumers in preparing their regulatory proposals and should factor in the needs and concerns of consumers in determining, for example, their capex programs. What consumers want and are prepared to pay for, whether in terms of reliability or some other factor, will assist in showing what is efficient. The more confident the AER can be that consumers' concerns have been taken into account, the more likely the AER could

267 AER, Rule change request, Part B, 29 September 2011, p. 34.

268 See for example clause 6.5.7(e)(4).

be satisfied that a proposal reflects efficient costs. A similar approach is taken in Great Britain by Ofwat in respect of water regulation.[269]

8.4.4 Guidance on draft rule

Process-related changes

The "best endeavours" clause in the draft rule for the AER to publish in advance analysis on which it proposes to rely, or to which it proposes to refer, for the purposes of the final regulatory determination means that the AER should publish such analysis unless there are time constraints or other reasons why it would be practically impossible for the AER to do so. The way this clause interacts with section 16(1)(b) of the NEL is critical. To the extent there is an inconsistency between those two provisions, the draft rule is not intended to override the NEL, and indeed could not. The AER still has an obligation under the NEL provision to inform the relevant NSP of material issues under consideration and to give the NSP a reasonable opportunity to make submissions in respect of them.

Non process-related changes

As mandatory considerations, the AER has an obligation to take the capex and opex factors into account, but this does not mean that every factor will be relevant to every aspect of every regulatory determination the AER makes. The AER may decide that certain factors are not relevant in certain cases once it has considered them.

In respect of the new capex and opex factor that clarifies that the AER may consider additional factors, any additional factor must be notified to the relevant NSP prior to the NSP submitting its proposal.

In respect of the new factor for the AER to have regard to the extent to which NSPs have considered what consumers seek, there are various ways this could be relevant. For example, it may be the case that a majority of consumers are unhappy with the visual impact of a proposed new line. If the NSP engages with consumers, it may decide that the best way to address the concerns of consumers would be to build the line underground, even if this is a more expensive option. When the AER considers the NSP's overall capex proposal, it should take into account that the proposed option will provide a higher quality of service in line with consumers' preferences and willingness to pay, above less expensive options which fall below the level of service demanded by consumers. In general, a NSP that has engaged with consumers and taken into account what they seek could reasonably expect the AER to take a more favourable view of its proposal.

269 See for example Ofwat, *Involving customers in price setting - Ofwat's customer engagement policy statement*, April 2011, p. 21.

9 Capex incentives

Summary

- The AER raised concerns about what it considers to be incentives for NSPs to spend more than their capex allowances and recommended the introduction of a requirement in the NER that only 60 per cent of any expenditure incurred by a NSP above its capex allowance would be rolled into the RAB.
- The Commission does not agree that capex incentives in the NER provide incentives for NSPs to spend more than their allowance. However, it has identified issues in relation to incentives to seek efficiencies and a lack of supervision of capex above the allowance. Further analysis of actual capex by NSPs has also identified that there are legitimate circumstances in which expenditure above capex allowances could occur.
- The Commission's approach to addressing these problems is to provide the AER with a number of "tools" which it can apply as it considers necessary to provide adequate incentives for NSPs to spend capex efficiently, having regard to an overall capex objective which is consistent with the NEO and RPP. These tools are:
  - capex sharing schemes to be designed by the AER;
  - efficiency reviews of past capex, including the ability to preclude inefficient expenditure from being rolled into the RAB. However, any exclusion will be limited to an amount that is equal to the amount of expenditure above the allowance; and
  - deciding whether to depreciate the RAB using actual or forecast expenditure to establish a NSP's opening RAB.
- These tools should be viewed alongside the ability of the AER, on an ex ante basis, to scrutinise effectively, and if necessary amend, proposed capex as part of the determination process to set efficient allowances in the first place.
- An overall capex incentive objective will describe what the capex incentive regime, as a whole, should aim to achieve. The AER will also be required to take into account a number of principles and factors when designing and applying the capex incentive tools.
- In addition, regardless of whether the NSP spent more than its allowance, the AER will have the discretion to preclude expenditure from being rolled into the RAB to the extent that expenditure comprises:
  - inefficient related party margins; or

— opex which was capitalised as a result of within period changes to the NSP's capitalisation policies.

9.1 Introduction

The role of capex incentives is to encourage NSPs to incur efficient levels of capex - that is, to spend no more than necessary for a given level of reliability and broader service quality. Currently, a NSP is required under the NER to forecast its requirements for capex for the forthcoming regulatory period. In the regulatory determination, the AER determines to either approve this forecast or not approve it and replace it with its own forecast[270] which then becomes the allowance. This allowance is the basis of an incentive for a NSP. If a NSP spends more than its allowance it is required to bear the costs[271] of this expenditure above the allowance for the remainder of the period. Conversely, if it spends less than its allowance it retains the benefit for the rest of the period.

The AER claims that the NER provide an incentive for NSPs to spend more than efficient levels of capex for a regulatory period.[272] This is claimed to be the case particularly where the NSP's allowed rate of return was higher than its actual cost of capital and where the NSP was responding to non-financial incentives it may face. The AER proposes to prescribe in the rules an adjustment to the RAB roll forward[273]such that a NSP could only recover 60 per cent of the cost of any over expenditure (the 60/40 sharing mechanism).[274] It also requests that it be given the discretion to roll forward the RAB using depreciation based on actual or forecast capex as a means of providing an additional incentive. The AER currently has this discretion in Chapter 6 (distribution) but not in Chapter 6A (transmission).

In addition to the broader capex incentive issue, the AER considers that the NER provide an incentive for NSPs to inefficiently incur capitalised related party margins and to replace opex with capex through changes to their capitalisation policies during a regulatory period.[275]

The Commission does not consider that capex incentives in the NER provide an incentive for NSPs to spend more than their allowance. It noted in the directions paper that a NSP could make a judgement on a forward looking basis as to the possible

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270 The AER does not approve augmentation capex for TNSPs in Victoria; this is determined instead by AEMO.

271 The cost the NSP bears is the cost of financing the extra capex, so these costs are for depreciation incurred and foregone return on the capex.

272 AER, Rule change request, Part B, 29 September 2011, p. 38.

273 In this chapter, phrases such as capex 'going into the RAB' or being considered at the 'RAB roll forward' are generally referring to the RAB which is adjusted and locked in for the next regulatory period.

274 Id., p. 40.

275 AER, Rule change request, Part B, 29 September 2011, pp. 53-56; AER response to AEMC queries on AER network regulation rule change proposals, 1 February 2012, pp. 7-10.

difference between its allowed cost of capital and its true cost of capital. This might provide a basis to support an overspend, but capex incentives should not be designed to address cost of capital matters. However, the Commission identified two key issues with capex incentives in the NER. These were that:

- the incentive to make efficiency improvements declines during the regulatory period, which has implications for the timing of capex and substitution between opex and capex; and
- capex above the allowance is not subject to any regulatory scrutiny, which means that there is a risk that any expenditure above this allowance may be inefficient.[276]

The Commission identified a number of options that might address these issues and sought stakeholders' views on these. It also decided to undertake further analysis, engaging consultants to assist.

The directions paper did not present a view on whether the AER should have discretion to use actual or forecast depreciation or whether a specific method should be prescribed in the NER. Nor did it come to a view on whether there was an issue with capitalised related party margins. Instead, the Commission decided to undertake further analysis on these issues, engaging consultants to assist. However, the Commission acknowledged that there is an incentive for NSPs to change their capitalisation policies during a regulatory period in order to recover opex again as a capex.

The remainder of this chapter is structured as follows:

- section 9.2 summarises the submissions received in response to the Commission's directions paper;
- section 9.3 outlines further consideration of the problems raised in respect of capex incentives;
- section 9.4 sets out the Commission's overall approach to addressing the problems identified with capex incentives;
- the following sections provide detailed analysis on each of the tools that comprise capex incentives, the Commission's draft rule and the intended interpretation. These tools are:
  - capex sharing schemes (section 9.5);
  - reviews of efficiency of past capex (section 9.6); and
  - actual or forecast depreciation (section 9.7); and

276 AEMC, Directions Paper, pp. 34, 40, 43.

- section 9.8 discusses related party margins and within-period capitalisation policy changes, and the draft rule provisions that are directed at these problems.

9.2 Submissions

9.2.1 Capex incentive sharing schemes/ex-post reviews

The AER agrees with the problems identified by the Commission in the directions paper. In addition, it also maintains that in certain circumstances the NER fail to create incentives to incur only efficient capex. In respect of a solution, the AER prefers the discretion to develop a capex sharing scheme in a guideline rather than having a mechanism prescribed in the NER such as the 60/40 sharing mechanism. However, the AER considers that it is inappropriate to introduce incentives that generate greater rewards for deferring capex from one regulatory period to another. Should the problem of deferral be addressed, the AER is open to alternative capex incentives including a symmetrical scheme.[277]

NSPs maintain their support for a principles-based, symmetrical capex sharing scheme as the appropriate means for addressing issues with capex incentives. However, they consider that the AER should have discretion not to introduce a capex incentive mechanism if it proves impracticable to address concerns regarding deferral. NSPs are not in support of ex post prudency and efficiency reviews of capex. They consider that a well-designed ex post prudency and efficiency review does not provide any additional incentives compared to a well-designed ex ante regime. In addition, they note that ex post prudency and efficiency reviews create regulatory risk and distort ex ante incentives for efficient investment.[278]

Consumer groups have a range of views on these matters. The EUAA and UnitingCare Australia state that there is an incentive in the NER for NSPs to overspend and support the thrust of the AER's 60/40 proposal.[279] The MEU agrees with the AER on the incentive to overspend and supports ex post scrutiny.[280] The Consumer Action Law Centre supports a range of mechanisms given the different ownership and governance arrangements of NSPs.[281]

Governments and other regulators broadly support further consideration of ex post prudency and efficiency reviews.[282] The SA DMITRE supports a symmetrical efficiency benefit sharing scheme (EBSS) in combination with ex post prudency and

277 AER, Directions Paper submission, 2 May 2012, p. 20.

278 ENA, Directions Paper submission, 16 April 2012, pp. 29-32.

279 EUAA, Directions Paper submission, 16 April 2012, p. 25; UnitingCare Australia, Directions Paper submission, 9 May 2012, p. 48.

280 MEU, Directions Paper submission, 17 April 2012, pp. 23-26.

281 Consumer Action Law Centre, Directions Paper submission, 16 April 2012, p. 5.

282 IPART, Directions Paper submission, 16 April 2012, pp. 7-8; Vic DPI, Directions Paper submission, 16 April 2012, p. 6.

efficiency reviews limited to projects above a certain threshold.[283] On the other hand, the Vic DPI is not convinced that an additional capex incentive scheme will be in the long term interests of consumers.[284]

9.2.2 Actual/forecast depreciation

Some stakeholders agree with the views presented in the directions paper regarding the incentive to incur efficient capex under an actual depreciation approach compared to a forecast approach.[285] However, submissions from NSPs note that the use of actual depreciation creates a disincentive to invest in short-lived assets because a higher proportion of any savings made against the forecast can be retained by the NSP.[286] Therefore, to address capex efficiency incentives, NSPs favour the application of an EBSS over the use of actual depreciation.[287]

In contrast, the AER does not believe that the differing incentives to invest in short versus long lived assets was material given that short-lived assets are a relatively small proportion of the RAB and the scope to substitute was limited. As a result, the AER states that potential distortions are not significant enough to warrant exclusion of actual depreciation from the framework. In addition, the AER states that further guidance should not be provided in the NER, but if principles were included they should be at a high level and direct the AER to consider the interactions with the overall capex incentive framework in the decision to use actual or forecast depreciation.[288] Both Vic DPI and IPART support the AER's proposal that it be given this discretion.[289]

9.2.3 Related party margins/capitalisation policy changes

In respect of related party margins, UE and MG characterises the AER's concerns as largely theoretical.[290] The AER maintains that applying a capex incentive regime does not address incentives to incur inefficient related party margins.[291] The Vic DPI agrees with the AER that there is an incentive for NSPs to incur inefficient related party

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283 SA DMITRE, Directions Paper submission, 5 May 2012, pp. 3-4.

284 Vic DPI, Directions Paper submission, 16 April 2012, pp. 5-6.

285 See for example: ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 28-29; IPART, Directions Paper submission, 16 April 2012, pp. 8-9.

286 See for example: Jemena, Directions Paper submission, 16 April 2012, pp. 22-23; ENA, Directions Paper submission, 16 April 2012, pp. 33-34.

287 See for example: ENA, Directions Paper submission, 16 April 2012, p. 34; Grid Australia, Directions Paper submission, 16 April 2012, p. 8; Jemena, Directions Paper submission, 16 April 2012, p. 23.

288 AER, Directions Paper submission, 2 May 2012, pp. 21-25.

289 Vic DPI, Directions Paper submission, 16 April 2012, p. 10; IPART, Directions Paper submission, 16 April 2012, pp. 8-9.

290 UE and MG, Directions Paper submission, 16 April 2012, p. 6.

291 AER, Directions Paper submission, 2 May 2012, p. 29.

margins and that the issue needs to be addressed.[292] Similarly, the MEU is concerned about the use of related parties that could provide incentives for raising costs.[293]

NSPs have mixed views on how the problem could be dealt with. UE and MG support incentive mechanisms that encourage NSPs to minimise capex.[294] Jemena considers that an ex post review of new or changed margins may be appropriate.[295] UE and MG consider that an approach which excludes related party margins from being included in the RAB may have the unintended consequence of precluding network service providers from negotiating more favourable performance related contracts which would ultimately deliver better outcomes for consumers.[296] The AER has proposed that margins be either included or excluded in the RAB roll forward consistent with how those margins were treated in the determination.[297]

In respect of capitalisation policy changes, the joint submission of ETSA, CitiPower and Powercor suggest that decisions as to the inclusion of overheads in the RAB roll forward should be based on whether they were allocated to capex consistently with the capitalisation policy of the NSP at the time of the determination.[298] Jemena considers that stronger capex incentives through a well-constructed EBSS will deal with the capitalisation issue by removing the incentive to capitalise operating expenditure.[299] Similarly, the ENA considers it appropriate that the AER should retain the ability to calculate operating and capital expenditure efficiency gains under an EBSS in a manner that removes the effect of changes to the classification of expenditure.[300]

9.3 Further consideration of the problems raised in respect of capex incentives

9.3.1 Report on capex overspends

The Commission undertook further work on the circumstances in which a NSP would need to spend more than its capex allowance. This was to further understand the issues the Commission identified regarding capex incentives, and to form a basis on which to develop solutions. It also sought submissions on this issue and engaged Parsons Brinckerhoff to assist with this.

292 Vic DPI, Directions Paper submission, 16 April 2012, pp. 10-13.

293 MEU, Directions Paper submission, 17 April 2012, p. 61.

294 UE and MG, Directions Paper submission, 16 April 2012, p. 7.

295 Jemena, Directions Paper submission, 16 April 2012, p. 25.

296 UE and MG, Directions Paper submission, 16 April 2012, pp. 6-7.

297 AER, Directions Paper submission, 2 May 2012, p. 29.

298 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 33.

299 Jemena, Directions Paper submission, 16 April 2012, p. 25

300 ENA, Directions Paper submission, 16 April 2012, p. 35.

Parsons Brinckerhoff identified a range of theoretical drivers as to why a NSP might spend more than its capex allowance. These include:

- corporate governance including asset management capability and forecasting, estimating and planning ability of the NSP;
- unpredictable events/uncontrollable costs such as natural disasters, eg Victorian bush fires, macro-economic factors such as Gross Domestic Product (GDP) growth and inflation;
- delivery risks such as changes in input prices, eg for labour and equipment, and unforseen conditions at construction sites; and
- the regulatory framework such as the capex incentives in the NER and whether a service target performance incentive scheme is in place.[301]

However, from a practical point of view, case studies of NSPs suggest that many of the drivers of capex overspends are in fact able to be mitigated or at least controlled. Harder to control though are capex overspends to meet unexpected growth in demand for new connections because these are primarily a function of macro-economic conditions. Also compliance with unanticipated regulatory obligations or requirements for the provision of regulated services is hard to control.[302]

Parsons Brinckerhoff considers that the ability to defer expenditure is one of the ways in which some of these uncontrollable factors might be mitigated. A NSP is likely to look more closely at options for deferring capex the closer it gets to exceeding its allowance. For example, ElectraNet commented that if planned capex was likely to exceed the allowance, then it would typically reassess its planned projects and look at available deferral or scope for change options that help reduce capex. Parsons Brinckerhoff also noted that:

> "In practice actual project costs will be both more than and less than original regulatory submission forecasts, so the net effect is an increase in the business's ability to offset overspending in one area against unpredicted savings or efficiencies realised in another in order to stay at or below the regulated allowance levels.
>
> The exception to this is where low probability high impact events such as extreme weather events, or geopolitical economic shocks have a material effect on Capex. Such exceptions would be better handled by dedicated regulatory tools such as Capex re-openers.[303]"

While there may currently be stronger incentives to minimise opex than capex, nothing in the work that Parsons Brinckerhoff has undertaken indicates that the current

301 Parsons Brinckerhoff, *Report on capital expenditure overspends by electricity network service providers,* Report for the AEMC, 16 August 2012, chapter 2.

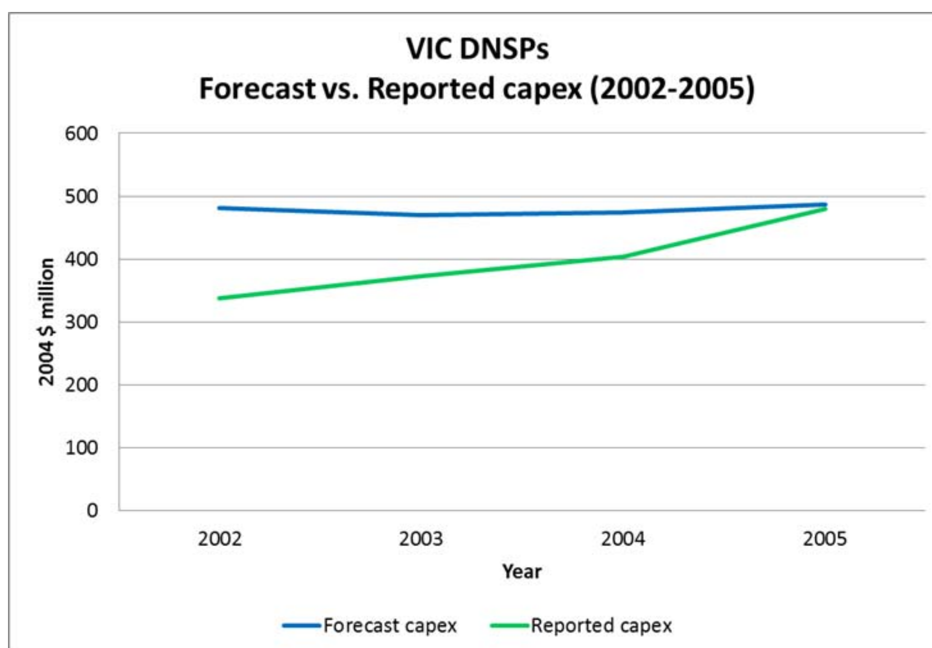
302 Id., pp. 32-33.

regulatory framework provides NSPs with an incentive to overspend their allowances. However, Parsons Brinckerhoff has also noted that insufficient regulatory oversight would strengthen the potential for capex overspends through a lack of consequences.[304]

9.3.2 Further analysis of problems

Further work undertaken provides additional support for the problems with the current capex incentives framework as identified in the directions paper. In respect of the incentive to defer capex, the Victorian DNSP Annual Performance Report from 2010, as published by the AER, indicates that amongst Victorian DNSPs there is a tendency to defer capex towards the end of regulatory periods. Figure 9.1 and Figure 9.2 below track capex allowances and reported capex during two regulatory periods: the first in which there was an EBSS; and the second where there was no EBSS.

Figure 9.1 Victorian DNSPs allowance versus reported capex for the period 2002-2005

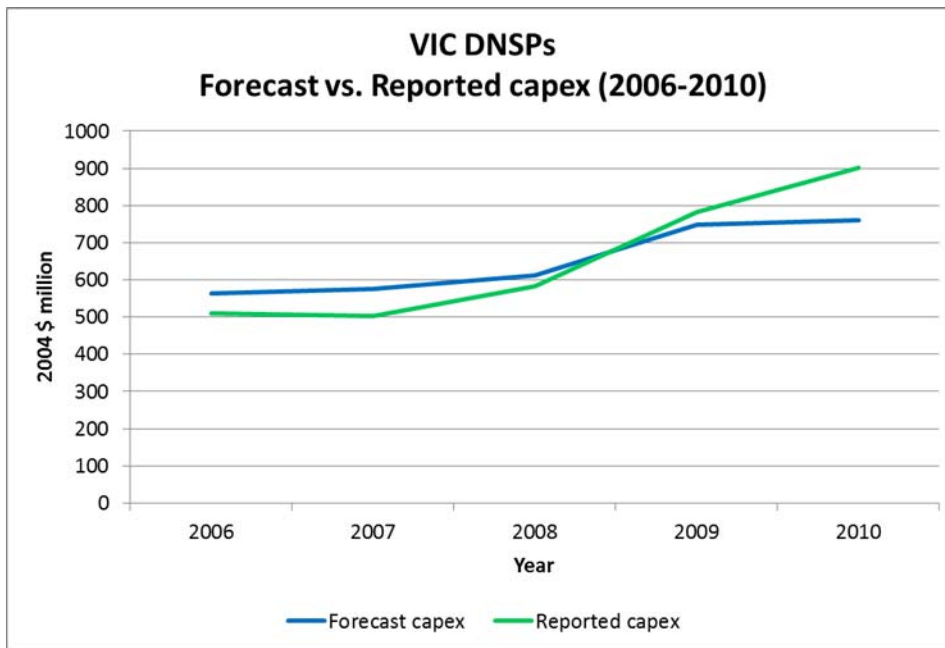


Source: AER, Victorian Electricity Distribution Network Service Providers Annual Performance Report 2010, May 2012, p. 94.

303 Id., p. 33.

304 Ibid.

Figure 9.2 Victorian DNSPs allowance versus reported capex for the regulatory period 2006-2010



Source: AER, Victorian Electricity Distribution Network Service Providers Annual Performance Report 2010, May 2012, p. 94.

Some of the data presented in the Parsons Brinckerhoff report suggests a similar tendency. For example, in Ausgrid's last regulatory period, its actual capex increased significantly compared to the allowance.

Figure 9.3 Example of capex in previous regulatory period

	Capital expenditure in previous regulatory period ($m) $ values expressed in ($m, nominal)					
	2004/05		2005/06		2006/07	
Capital Expenditure Category	Allowance	Actual	Allowance	Actual	Allowance	Actual
Asset renewal/replacement		151.3		214.3		270.1
Augmentation to meet peak demand growth		203.5		248.2		369.5
Quality, reliability and security of supply enhancement		7.5		9.9		10.2
Environmental, safety and statutory obligations (excluding reliability)		47.0		40.9		34.2
Non-network assets		48.8		64.4		72.0
Other		0.0		0.0		0.0
Total	452.9	458.1	497.5	577.7	681.2	755.9

	Capital expenditure in previous regulatory period ($m) $ values expressed in ($m, nominal)					
	2007/08		2008/09		Total	
Capital Expenditure Category	Allowance	Actual	Allowance	Actual	Allowance	Actual
Asset renewal/replacement		273.1		312.6		1,221.4
Augmentation to meet peak demand growth		480.6		642.8		1,944.5
Quality, reliability and security of supply enhancement		13.6		25.3		66.5
Environmental, safety and statutory obligations (excluding reliability)		29.1		34.8		185.9
Non-network assets		113.8		209.8		508.9
Other		0.0		9.6		9.6
Total	689.7	910.3	690.9	1,234.9	3,012.2	3,936.9

Source: Parsons Brinckerhoff, *Report on capital expenditure overspends by electricity network service providers*, Report for the AEMC, 16 August 2012, p. 12.

9.4 Overall approach

9.4.1 Providing the AER with discretion

This section sets out, broadly, how the Commission proposes to address the identified problems.

The AER should have access to a range of "tools" that can be used to create incentives for NSPs to undertake efficient capex. These tools are reviews of capex efficiency, capex sharing mechanisms and the use of actual or forecast depreciation and are described in further detail below. The AER is generally best placed to determine which tools can be

best used to create incentives for individual NSPs rather than specific approaches being included in the NER.

The flexibility inherent in the proposed approach will allow the AER to apply and tailor the incentives. Scope for the AER to use a range of tools and adapt those tools over time recognises that the best incentives for efficient capex may not be the same for all NSPs or the same over time. The experience of other regulators such as Ofgem, who have gradually developed their approach to incentives for capex, illustrates that learning from how incentives work and adapting them can help to improve overall outcomes for customers. Importantly, the use of incentives by the AER to encourage dynamic efficiency – which would include innovation – should deliver benefits to consumers in the longer term, as required by the NEO. This longer term focus is critical.

The Commission's view is that, with greater discretion, there must also be appropriate accountability and transparency to help provide certainty for stakeholders and confidence that the outcomes are in the best interests of consumers.

9.4.2 Objective, guidelines and principles

The draft rule provides for an overall objective for capex incentives that is consistent with the NEO and RPP. This objective describes what the capex incentive regime, as a whole, should aim to achieve. It provides that only capex that is included in an adjustment that increases the value of the RAB is capex that reasonably reflects the capex criteria. This will be particularly relevant when the AER is considering what its overall approach should be to capex incentives. Should it use one tool and none of the others or should it use all of the available tools? As well as guiding the AER on its overall approach to capex incentives, the objective will guide the AER in the development and application of the tools themselves to individual NSPs. It will also be relevant for the appeal body to consider this objective when assessing any merits reviews on elements of the capex incentives regime. Importantly, the objective does not act as a mandatory requirement or a prohibition, but a source of direction for the capex incentives regime.

The capex incentive objective has been formulated to reflect the ex ante test for efficiency of capex that was developed by the Commission in 2006. This means that capex incentives should be designed with the aim that only capex that is efficient should be rolled into the RAB. Efficiency in this context should include trading off investment in new and replacement assets, maintenance of existing assets and other options such as demand side management.[305] It also includes the efficient timing of capex and whether expenditure incurred reflects that which would have been incurred by a prudent NSP. The capex incentive objective is framed in terms of ensuring the capex that is included in the RAB reasonably reflects the capex criteria.

To provide greater certainty around how capex incentives are to be utilised, the AER is required under the draft rule to set out its approach to capex incentives in guidelines.

305 In practice, efficiency can only be measured by comparison to other companies.

This is where the AER must set out the approach to capex sharing schemes and the manner in which it proposes to undertake efficiency reviews of past capex and determine whether to use actual or forecast depreciation. In putting together its guidelines, the AER will need to take a coordinated approach to capex incentives. The AER has the flexibility to develop different tools for different NSPs. The guidelines would set out these different approaches, but the specific regulatory determination for each NSP would develop the specifics to apply. Whatever combination of tools it develops, the guidelines must include an explanation of how that combination achieves the capex incentive objective. The first guidelines will be required to be put in place by 30 August 2013.

Finally, an additional measure of certainty is provided in respect of each of the tools. Included in the draft rule are principles that the AER must consider when it first develops and then applies one of the tools. The Commission intends only that the regulator has considered these principles and explained how it has considered the issues. The Commission does not intend that the regulator's approach to capex incentives must be done in a way that necessarily achieves the principles.

The Commission expects that this combination of an overall objective with a requirement for guidelines and then specific principles will provide for capex incentives to be applied in a transparent and accountable manner.

9.4.3 Capex incentive tools

The capex incentive tools to which the AER will have access are:

- capex sharing schemes;
- efficiency reviews of past capex; and
- whether to depreciate the RAB using actual or forecast capital expenditure to establish a NSP's opening asset base.

These options will be discussed in sections 9.5, 9.6 and 9.7.

The ex ante capex allowance, which is described in chapter 8 also provides capex incentives. For example, an allowance that represents the efficient costs of a NSP will provide incentives for NSPs to incur efficient capex as they have to bear some of the cost of any expenditure above this allowance for the remainder of the regulatory period.

The Commission considered a number of other options that it is not proposing to specify in the NER. These include the AER's 60/40 proposal, not allowing any expenditure above the allowance to be rolled into the RAB, menu regulation and ex post optimisation of the RAB. These are also considered further below.

9.5 Capex sharing schemes

9.5.1 Analysis

Background to capex sharing schemes

Capex sharing schemes allow for the sharing of efficiency gains and losses from capital expenditure between NSPs and consumers. In general regulators have approached such schemes by allowing NSPs to retain a set portion of any efficiency gains they make and bear a set portion of any efficiency losses it incurs against the benchmark. Often the benchmark is the allowance set by the regulator. The ratio of sharing of the efficiency gains and losses between the NSP and consumers is known as the incentive rate.

Importantly, capex sharing schemes can be implemented in a range of ways. Energy regulators in Australia and in Great Britain have provided some examples of what these schemes may look like, and have typically adopted one of three forms: a fixed carry–over period before true–up, a periodic true–up to achieve an incentive rate specified ex–ante or annual true–ups to achieve the ex–ante incentive rate. Examples of these types of schemes are included in Appendix A.

Energy regulators in Australia have tended to use a form of capex sharing scheme that allows the NSP to retain the financial benefits from making efficiency improvements for a fixed period regardless of when the improvements occur in the regulatory period. For example, a saving incurred in year three of one regulatory period would be retained by the NSP until year three of the next regulatory period. The Essential Services Commission of Victoria (ESCV) applied such a capex sharing scheme in the 2001-2005 regulatory period in respect of electricity distribution.[306] Essential Services Commission of South Australia (ESCOSA) has also applied a similar scheme in the past.[307]

The incentive rate is the proportion of benefits retained by the NSP and in these schemes is determined by the length of the carry–over period and the magnitude of the rate of return. A longer (shorter) carry–over period will result in a higher (lower) incentive rate while a higher (lower) rate of return will result in a higher (lower) incentive rate.

In contrast, Ofgem in Great Britain has previously explicitly fixed an incentive rate ex ante and made an adjustment at the start of the following regulatory period such that the NSP receives the specified share of any efficiency gains or losses.[308] The ex–ante incentive rate is usually set as part of a menu of choices contained in Ofgem’s Information Quality Incentive mechanism. Ofgem's approach has developed and will in future involve an annual true up of efficiency gains and losses to achieve the ex–ante

306 ESCV, Electricity Distribution Price Review 2006, Final Decision, October 2006, pp. 419-430.

307 ESCOSA, 2005-2010 Electricity distribution price determination, Part A – Statement of Reasons, April 2005, pp. 67-73.

308 Ofgem, Electricity Distribution Price Control Review, Final proposals, November 2004, p. 98.

incentive rate with a two year lag, which allows for the use of fully audited accounts.[309]

Chapter 6 of the NER currently provides for a form of capex sharing scheme under the efficiency benefit sharing scheme provisions, though this is discretionary.[310] There is no equivalent provision in Chapter 6A. The AER has determined not to develop an efficiency benefit sharing scheme under these provisions due to concerns that it would encourage inefficient deferral of capex into future regulatory periods.[311] The ESCV removed its capex sharing scheme for Victorian DNSPs for the 2006-2010 regulatory period due to similar concerns.[312]

Background to menu regulation

Menu regulation is aimed at addressing similar incentive problems as efficiency sharing schemes, yet has broader aims. It has been adopted by Ofgem and Ofwat in Great Britain.[313] It consists of a set of forecasts from the NSP and the regulator. The regulator uses these to set a menu of expenditure allowances and incentive rates from which the NSP must choose. The incentive rates are set on a sliding scale such that the lower the allowance chosen by the NSP relative to the regulator's forecast, the higher the incentive rate. The incentive rate is then applied to the gap between the actual outcome and the allowance. Additional income is provided to NSPs based on how close their actual expenditure is to their original forecast. Menu regulation is therefore not only designed to encourage efficient capex but also encourage more accurate forecasting. Ofgem also closely monitors service levels as part of its scheme known as the Information Quality Incentive scheme.

The Commission notes that menu regulation in the form such as that adopted by Ofgem would require a different approach to the provision of forecasts and incentives than the current model in the NER. It has therefore decided not to specifically allow for this option in the NER at this stage. However, the Commission notes that the AER could explore the adoption of menu regulation in some form using the new power to develop small scale pilot schemes subject to the limits under that power, as discussed in chapter 11, at section 11.4.

How capex sharing schemes address the identified problems

In general, the AER could use capex sharing schemes to set incentives so that the most efficient NSPs earn the highest rewards and those that are inefficient are penalised. In this way, the AER should be able to use these schemes to encourage appropriate network investment. It will also encourage NSPs to look for efficiencies, such as by innovation. This is in contrast to reviews of efficiency of past capex, for example, which

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309 Ofgem, TPCR4 Rollover: Final proposals, Final decision, November 2011, p. 68.

310 NER clause 6.5.8(b).

311 AER, Directions Paper submission, 2 May 2012, p. 20.

312 ESCV, Electricity Distribution Price Review 2006, Final Decision, October 2006, pp. 10, 431-433.

313 For a more detailed description of the approach see, for example: IPART, *Incentives for cost saving in CPI-X regimes, IPART Working Paper,* July 2011.

would primarily only discourage inefficient overspends (see section 9.6 below). Finally, it should also provide an incentive for NSPs to reveal their efficient costs.

A capex sharing scheme could also, depending on how it is applied by the AER, contribute to addressing the problems the Commission has identified with the existing capex incentives. A scheme could, for example, be designed to provide for a continuous incentive, that is, the incentives would be set so that the incentive power is the same no matter which year of a regulatory period an investment is made. Since the incentive power at the end of a regulatory period would no longer be less than that at the start of the period, the problem of inefficient deferral of capex within a regulatory period should be addressed. Further, any stronger incentives, including towards the end of the regulatory period, should make it likely that there would be less capex above the allowance and therefore less need for scrutiny of actual capex undertaken. A capex sharing scheme is likely to provide the AER with greater confidence that the capex going into the RAB is efficient.

One problem with capex sharing schemes is that it may be difficult to identify whether reductions in capital expenditure are from efficiency gains or inefficient deferral. A capex sharing scheme should not encourage actions that would later lead to degradation of network quality and consequent reductions in service quality. In addition, NSPs are subject to service target performance incentive schemes and regulatory obligations which may affect their ability to respond to capex incentives in that way. The ESCV in respect of gas and Ofgem in Great Britain have both developed ways which attempt to address this problem. A lower powered incentive could also be adopted as a means of reducing the potential size of the problem. While there may be difficulties in applying these schemes, the benefits should outweigh these difficulties. There is room for further innovation in this area.

Capex sharing scheme principles

The draft rule gives the AER the power to implement capex sharing schemes of its own design subject to certain principles.

The first principle concerns rewards and penalties. The scheme should reward the NSP for undertaking efficient capex and penalise the NSP for undertaking inefficient capex. In coming to this principle, the Commission considered whether the scheme should allow for a penalty only regime such as the AER's 60/40 proposal. The purpose of this approach proposed by the AER was to provide an incentive for NSPs not to overspend. In the directions paper, the Commission raised concerns regarding the prescriptive nature of this approach, and also with the lack of a continuous incentive. The Commission was also concerned that the approach would provide penalties for assumed inefficient expenditures but not rewards for efficient expenditure. The 60/40 proposal would therefore not be consistent with the first principle.

The second principle concerns the size of the rewards and penalties. While there is a measure of symmetry in a scheme that provides for both rewards and penalties, a scheme should not have to be "mathematically symmetrical". Mathematical symmetry refers to an improvement or decline in capex relative to a benchmark which is of the

same absolute value accruing the same reward or penalty in absolute value terms. Such an approach would be overly prescriptive and could prevent some schemes that would be beneficial. In a general sense, the level of reward or penalty should be commensurate with the level of efficiency or inefficiency of capex. That is, the financial reward to the NSP should bear some relationship to the efficiency benefit and the financial penalty on the NSP should bear some relationship to the inefficiency penalty, but the size of a reward or penalty for some magnitude of efficient or inefficient capex need not be the same. This is consistent with similar principles in the NER in respect of existing incentive schemes.

The third principle is that penalties should not be imposed on NSPs that undertake capex in an efficient manner. To put it another way, the scheme should encourage NSPs to seek out and achieve efficiency improvements over and above those in the allowance. Those improvements should then be appropriately shared between NSPs and consumers. This means that achieving such efficiency improvements under the scheme should be expected to be net present value (NPV) positive for NSPs while also providing benefits for consumers.

The NER create other incentives for NSPs, and NSPs are required to comply with various legally binding requirements in providing their regulated services. Accordingly the draft rule requires the AER to take into account both of these matters when designing a capex sharing scheme. The principles and matters referred to above, as well as the NSP's circumstances, must also be taken into account by the AER in determining whether, and how, to apply the capex sharing scheme to a particular NSP.

The Commission does not support a principle which provides that a capex sharing scheme should be continuous. A principle of this nature could discourage some schemes which are appropriate. At the same time, the Commission takes the view that in most cases a continuous incentive is preferable to a declining incentive. A constant incentive power is relevant in capex in order to provide an equal incentive to invest in each year of a regulatory period. Anything other than an equal incentive may provide incentives for NSPs to defer expenditure, even where it is not efficient to do so. The Commission agrees with the EUAA and UnitingCare Australia that a declining incentive in capex and a constant incentive in opex may encourage inefficient substitution between opex and capex.[314] Some issues relating to inefficient substitution between opex and capex, particularly in respect of demand side management, are being examined as part of the Commission's Power of Choice Review.

The draft rule permits the AER to apply schemes differently to NSPs or even to apply different schemes. So, for example, the AER could apply stronger incentives where a NSP traditionally spends more than its allowance and weaker incentives where the AER is concerned about inefficient deferral into future regulatory periods.

314 EUAA, Directions Paper submission, 16 April 2012, p. 24; UnitingCare Australia, Directions Paper submission, 9 May 2012, p. 47.

Differences from the current EBSS

As described above, the AER has not used its power in Chapter 6 of the NER to apply an EBSS in respect of capex on the basis that it may lead to inefficient deferral of capex. It is possible that the AER could take the same view in relation to the draft rule provisions for capex sharing schemes. However, there are some important differences between the EBSS and what is proposed here. For a start, an overall capex incentive objective is proposed to be added to the NER, and the AER will need to consider and justify its overall approach to capex incentives in terms of that objective. It is likely that all approaches will have some advantages and disadvantages, but the AER will need to consider whether at an overall level the approach is the best one to meet the overall objective, and the NEO and RPP.

In addition, under the principles described above, the AER will have more flexibility than it currently does under the Chapter 6 EBSS principles. For example, nothing in the principles described above obliges the AER to implement a scheme which has continuous incentives. This may allow the AER to design a scheme which does not create incentives to inefficiently defer capex from one regulatory period to the next.

In respect of the risk of inefficient deferral, the ENA has commented that:

> "Perhaps the most challenging [implementation issue] is the need for measures to avoid creating incentives for NSPs to inefficiently defer capital expenditure from one regulatory period to the next. Similar continuous incentive schemes apply in other jurisdictions, and in these jurisdictions mechanisms exist to address the deferral incentive.[315]"

In the draft rule, the current EBSS has been retained in respect of opex and distribution losses but has been removed for capex.

9.5.2 Guidance on draft rule

Process

The process of developing and applying a capex sharing scheme is as follows:

- the AER may develop a capex sharing scheme or schemes that can be applied to any NSP. This will be set out in the guidelines, which should also explain how the scheme is consistent with the overall capex incentive objective;
- the AER must set out in the framework and approach paper for a NSP its proposed approach to applying any capex sharing scheme to the NSP;
- the NSP proposes how any applicable capex sharing scheme should apply to it in its regulatory proposal. For example, there may be elements that the NSP may propose that are discretionary in the scheme; and

315 ENA, Directions Paper submission, 16 April 2012, p. 29.

- the AER determines how any applicable capex sharing scheme will apply in its draft and final regulatory determinations for the NSP. For example, the AER could use this stage to set any incentive rate that is to be applied for a NSP.

Principles

While the principles provide for rewards and penalties, the principles do not require that there be mathematical symmetry between those rewards and penalties. That is, NSPs are rewarded with a set portion of any efficiency gains and are penalised by a set portion of any efficiency losses. This could be implemented by the AER by reference to a benchmark. For example, a scheme may be designed so that where a NSP is able to undertake its capex program for a regulatory year at $1 million less than the benchmark, 50 per cent of this saving, or $500,000, is reflected in higher revenues. The same scheme may provide that where there is $1 million over the benchmark, the NSP bears the cost of 70 per cent and only $300,000 is recovered in revenues. However, the AER is required to explain in its guidelines how this scheme is consistent with the capex incentive objective.

It should be noted that the use of the terms 'efficiency' and 'inefficiency' are not intended to define any amount above or below the allowance. Specifically, it will be for the AER to define efficient and inefficient expenditure, as well as the relevant benchmark. The purpose of not defining such terms in the draft rule is to give the AER the flexibility to interpret and apply as it sees most appropriate.

The draft rule requires the AER to take into account the interaction of the scheme with other incentives and obligations, such as those relating to service performance, demand management and opex. For example, the AER should consider the impact of the mechanism on substitution of capex for opex. Similarly, it may consider adopting a higher powered scheme where it has access to extensive information on service standards. The AER must also take into account regulatory obligations and requirements on NSPs such as reliability and service standards and the relevant circumstances of the NSP.

The principles can accommodate different types of schemes. Examples of schemes that would be permitted by the draft rule are described in Appendix A. These examples are not meant to limit the way the AER approaches setting capex incentives but to illustrate particular ways that the provisions on capex sharing schemes in the draft rule could be implemented.

9.6 Reviews of efficiency of past capex

9.6.1 Analysis

General approach to reviews of efficiency of past capex

In the directions paper, the Commission observed that reviews of efficiency of past capex would address the lack of supervision problem that it identified. The Commission remains of the view that such reviews are the most direct way of

addressing this problem since they give the regulator the chance to check that the capex to be recovered is efficient.

Reviews of the efficiency of past capex generally encompass the regulator determining whether to allow the future recovery of incurred capex. Reviews of the efficiency of past capex are found in many other jurisdictions, and have been widely adopted in Australia. IPART uses them in the rail and water sectors and has excluded expenditure as a result of a review. For example, it excluded $61 million expenditure in 2003 incurred by Sydney Water Corporation relating to a discontinued customer billing system project.[316] It excluded $0.84 million in the same year from Hunter Water Corporation for purchase of some land for a dam site for a project that it did not consider was required.[317] IPART, in its submissions, is supportive of these reviews.[318] The ESCV also uses them to regulate the water sector.[319]

The ERA in WA also regularly reviews the efficiency of past capex of service providers. For example, it has applied such reviews in respect of Western Power, a NSP. A feature of the regime is that it allows Western Power to obtain pre-approval of expenditure above the allowance to provide the NSP with greater certainty that the regulator will allow the expenditure ex post.[320] The ERA recently excluded $261 million of capital expenditure incurred in one period from the opening capital base for the next period.[321]

These mechanisms are also available to energy regulators in Great Britain and in the United States of America. Professor Yarrow has noted the greater significance of ex post supervision in the United States of America compared to Great Britain.[322]

Analysis of reviews of efficiency of past capex by other regulators indicates that in many cases these reviews are conducted on a project by project, or "bottom up" basis. That is, the regulator considers a particular project that was undertaken and assesses whether that project was undertaken efficiently. The Commission considers that while

316 IPART, Sydney Water Corporation – Prices of water supply, wastewater and stormwater Services – From 1 July 2003 to 30 June 2005, Determination 4, May 2003, p. 19.

317 IPART, Hunter Water Corporation, Prices of water supply, wastewater and stormwater services, From 1 July 2003 to 30 June 2005, Determination 3, May 2003, p. 19.

318 IPART, Directions Paper submission, 16 April 2012, p. 7; IPART, Consultation Paper submission, 8 December 2011, pp. 11-12.

319 See for example: ESCV, 2008 Water price review, Regional and rural businesses' water plans 2008-2013, Melbourne Water's drainage and waterways water plan 2008-2013, June 2008, pp. 21, 26, 58, 64, 84; PwC, Essential Services Commission urban and rural water price review 2008: assessment of demand forecasts, Barwon Water, Final report, Report for ESCV, March 2008, pp. 16-17; Sinclair Knight Merz (SKM), Expenditure forecast review for the Victorian regional urban water businesses, Barwon Water, Final report, Report for ESCV, March 2008, pp. 3-4.

320 Economic Regulation Authority of Western Australia (ERAWA), Proposed revisions to the access arrangement for the South West Interconnected Network submitted by Western Power, Final decision, December 2009, pp. 291-292.

321 ERAWA, Proposed revisions to the access arrangement for the South West Interconnected Network submitted by Western Power, Final decision, December 2009, pp. 200-201.

322 See for example: George Yarrow, Preliminary Views for the AEMC, 12 February 2012, pp. 14-15.

this approach may be appropriate in some cases, any review of past capex by the AER should not be limited to a bottom up consideration. The reviews should consider the totality of the capex undertaken and use a range of techniques to assess whether this capex was, as a whole, efficient. For example, the AER may use benchmarking techniques to compare capex undertaken by one NSP with the capex required by other NSPs. Such reviews might also focus on the processes that NSPs have in place to decide which capex projects to undertake. A regulator may be able to obtain some assurance that a NSP's actual capex is likely to be efficient based on confidence that it has robust processes to determine the need for capex and manage projects within efficiency levels of cost.

The Commission supports the AER using a range of analytical techniques when assessing capex forecasts, as discussed in chapter 8 above. This approach allows the AER to treat capex as a whole, rather than on a project by project basis, when assessing the ex ante capex allowances for a NSP.[323] A similar approach could be taken in respect of reviews of past capex.

Ex post optimisation of the RAB was also raised in the directions paper as a way to address the lack of supervision problem. It is a form of review of past capex. This option is being considered as part of a rule change request from the MEU.[324] As set out in the draft determination on that rule change request, the Commission does not support this option. Among other things, it would require the AER to assess capex from the detail of specific projects and assets. In addition, the Commission considers that the ex post optimisation of the RAB could provide disincentives for future efficient investment due to increased risks to NSPs. It also considers optimisation would increase the complexity and costs of the regulatory process.[325]

In effect, the draft rule requires the AER to undertake a review of the efficiency of past capex for all NSPs as part of the regulatory determination process. This is because the draft rule requires the AER to make a statement on the efficiency of expenditure going into the RAB in its draft and final determination for each NSP. The Commission is concerned about expenditure going into the rolled forward RAB as this is the value used to determine the return on capital and depreciation building block components that will determine the revenue that a NSP can earn on the expenditure incurred. However, the draft rule only allows the AER to preclude expenditure from being rolled into the RAB as a result of a review if a NSP has spent more than its allowance for a specified period. The exception to this provision is expenditure relating to related party margins and as a result of within-period changes to the NSP's capitalisation policy, which is discussed in section 9.8. It is the AER's decision as to whether it considers it appropriate in the specific circumstances to exercise this power. In addition, the draft rule restricts the amount of expenditure that can be excluded from the RAB to the amount of any expenditure above the allowance. The Commission considers that

323 See for example the use of the word "total" in clause 6.5.7(c).

324 MEU, Optimisation of Asset Base and Use of Fully Depreciated Assets Rule change request, October 2011.

325 AEMC, Optimisation of Regulatory Asset Base and the Continued Use of Fully Depreciated Assets, Draft Rule Determination, 21 June 2012.

setting the best possible ex ante allowance for capex is important, and also that the use of ex ante incentive mechanisms for capex have the potential to provide important incentives for efficiency and innovation in capex that may not occur if reliance was placed on reviews of the efficiency of expenditure after it has occurred. Therefore, it is appropriate for NSPs to only be at risk of capex not being included in the RAB if they have overspent the ex ante allowance and the AER's incentive guidelines will be required to set out the manner in which the AER proposes to approach it.

Benefits of a review of the efficiency of past capex

Reviews of the efficiency of past capex would, as described above, provide scrutiny of capex that has been undertaken. This risk of an inability to recover for inefficient expenditure would therefore provide an incentive for NSPs to avoid inefficient capex as this may result in allowances being exceeded. Ex ante incentives, while effective, do not ensure that NSPs never undertake inefficient capex. A further check that what is rolled into the RAB is efficient is therefore in the long term interests of consumers.

The Commission considers there to be additional benefits in undertaking reviews of the efficiency of past capex as a complement to ex ante reviews of capex. The obligation to make a public statement on the efficiency or otherwise of what is going into the RAB may be useful in terms of providing information and analysis to consumers and their representatives. Further, undertaking the review itself could be considered beneficial as a complement to ex ante reviews of capex. For a start, it is common practice that these reviews are carried out at the same time as the ex ante allowances are determined for the next regulatory period. There are good reasons for this. As Brattle has observed in respect of the task of conducting reviews of the efficiency of past capex:

> "in practice, this task is frequently carried out in parallel with reviewing capex forecasts, for example through the use of technical consultants, and perhaps because both tasks require the same data and expertise.[326]"

The review of efficiency of past capex should also assist the AER in determining an appropriate ex ante allowance by better understanding how efficient a NSP has been in the previous period and what projects it has undertaken. It should also improve understanding of the reasons for overspends.

NSPs and the AER have raised a number of concerns in submissions about reviews of efficiency of past capex.[327] The AEMC also determined not to allow for reviews of the efficiency of past capex in 2006.[328] These concerns include that the reviews may add to regulatory risk, and that a NSP may not undertake efficient and required investment and implementation challenges. If a NSP is well run and its management has in place robust processes for deciding which capex projects to undertake and regularly reviews and reassesses its capex program, it should have nothing to fear from a review of its

326 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 54.

327 AER, Rule change request, Part B, 29 September 2011, pp. 43-44.

328 AEMC, Economic Regulation of Transmission Services, Rule Determination, 16 November 2006, pp. 98-99.

efficiency. Indeed such a review should act to give the regulator greater confidence about the efficiency of the NSP's future capex projections.

To mitigate any potential for an increase in regulatory risk, the draft rule is that the amount of capex that may be precluded from being rolled into the RAB will be limited to the extent of any over expenditure of the capex allowance for the relevant period. If the NSP does not overspend, no reduction will be possible. This is discussed further below. Finally, the requirement for the AER to set out its approach to these reviews in a guideline which must be consulted on should create more certainty for the NSP.

Stakeholders have also commented that there may be implementation challenges with reviews of the efficiency of past capex.[329] It is likely that such reviews will require additional work by the AER. However, given that such reviews are expected to be conducted at the same time as the AER considers the ex ante capex allowance for the next regulatory period, there should be synergies that the AER can take advantage of, such as in respect of the information that the AER would need. As for the evidentiary burden, it is unclear why that should be any different from the evidentiary burden that the AER has when it considers ex ante allowances, which are discussed in more detail in chapter 8. The AER should be able to use a variety of approaches to determine the efficiency of capex including top down and bottom-up analysis. The specific approach adopted by the AER could also be tailored to the amount of any overspend. For example, the AER might undertake a more intrusive approach where a NSP has spent significantly more than its allowance and a less intrusive review where the amount of expenditure above the allowance was smaller, and a strong ex ante incentive had been in place.

Finally, examples are provided above of reductions made by other regulators following such reviews. It appears that these regulators have been able to overcome any implementation and evidentiary challenges. Indeed, IPART indicates that it very much supports regulators having the power to undertake reviews of the efficiency of past capex.[330]

In line with the general approach to reviews of the efficiency of past capex set out in the previous section, the Commission has determined to make a draft rule which has the following two elements:

- Reducing the amount of capex to be rolled into the RAB - the AER may preclude expenditure above a NSP's allowance from being rolled into the RAB[331]; and
- Statement on the efficiency of past capex – as part of a regulatory determination for a NSP, the AER must make a statement on the efficiency of capex being rolled into the RAB.

329 See for example: ENA, Directions Paper submission, 16 April 2012, pp. 31-32.

330 IPART, Directions Paper submission, 16 April 2012, p. 7.

331 Unless it relates to within period capitalisation policy changes or inefficient related party margins, which may also be precluded from being rolled into the RAB.

Reduction for inefficient expenditure

This sub-section deals with the AER's power to make a reduction to the amount of capex to be rolled into the RAB. This is discretionary, and is separate to the obligation included in the draft rule for the AER to include in each regulatory determination a statement as to the overall efficiency of the capex rolled into the RAB as part of that regulatory determination. This obligation is discussed in the next sub-section.

The power to reduce the amount of capex to be rolled into the RAB is one of the tools the AER has at its disposal as part of the overall capex incentives regime. As such, the AER must coordinate its approach to this power with the other tools it has. It must do this by setting out in the capex incentive guidelines how it intends to approach imposing such a reduction.

The focus in the draft rule on the overall amount to be rolled into the RAB is intended to encourage the AER to undertake a review of the total capex incurred by the NSP during the specified period rather than just looking at individual projects. In undertaking the review the AER could consider, among other things, whether the NSP could have avoided spending more than its allowance for the period by deferring projects through re-prioritisation. The draft rule is intended to allow the AER to use a range of analytical techniques to assess the efficiency of capex including benchmarking and the assessment of individual projects. The AER could also consider the effectiveness of the NSP's planning and prioritisation processes for capex to try and gain assurance about the robustness of its decision-making.

The AER may only preclude expenditure from being rolled into a NSP's RAB if the NSP has spent more than its allowance for a specified period. In addition, the draft rule only allows the AER to reduce the amount rolled into the RAB by the amount of any expenditure above the allowance. As identified in the directions paper, the Commission considers that if the capex undertaken is the same or very similar to that which the NSP set out in its regulatory proposal then the ex ante assessment of the projects should provide a degree of confidence about the likely efficiency of the expenditure below the allowance. That is, while the nature of the actual capex undertaken need not be identical to what was included in the ex ante allowance, that allowance represents an efficient quantum and expenditure below this amount could be expected to be efficient at an overall level.

Given that the ex ante allowance, as a total, represents a forecast of an efficient level of expenditure for the NSP there should be little need for the NSP to spend above this amount in normal circumstances. As the Parsons Brinckerhoff report indicates, while there are often unexpected additional costs for a NSP during a regulatory period, there will also be unexpected reductions in costs.[332] In addition, the NSP should be able to take mitigating actions, such as re-prioritising capex, to avoid spending over its allowance, or seek a cost pass through if the relevant test is met. Indeed, on this basis, there is an argument that no capex above the level of the ex ante allowance should be

332 Parsons Brinkerhoff, *Report on capital expenditure overspends by electricity network service providers*, Report for the AEMC, 16 August 2012, p. 33.

rolled into the RAB. However, to accommodate unforeseen circumstances where a NSP has legitimately spent more than its allowance, the AER should have the ability to make an assessment of the amount of the overspend that may be rolled into the RAB.

The Commission considered whether a pre-approval process such as that adopted by the ERA in Western Australia could be applied. While the Commission notes that this mechanism can provide for greater certainty for NSPs it does not support adopting a pre-approval mechanism in the NER. This would not be consistent with the general approach which is to encourage the AER to undertake a review of the total capex rather than individual projects. This process could also be administratively burdensome for the AER given the number of NSPs that it regulates.

The operation of the draft rule is explained further in the guidance section below. However, it is relevant to discuss three further elements here.

First, it is significant that the test in the draft rule that the AER must apply in determining whether to preclude expenditure from being rolled into the RAB is essentially the same as it is for assessing forecasts of capex on an ex ante allowance - that is, whether or not the expenditure reasonably reflects the capex criteria. This was the appropriate test for the efficiency of capex determined by the AEMC in 2006 and it continues to remain valid. The AER now has several years of experience in applying this test and a body of regulatory precedent has been developed.

Second, in determining whether to reduce the amount to be rolled into the RAB the AER should only take into account information and analysis that the NSP had or could reasonably be expected to have had access to at the time it undertook the capex.

Finally, whilst an AER decision to preclude capex that would otherwise be rolled into the RAB as a result of an inefficient capex overspend would not itself be a constituent decision, it would form part of the constituent decision as to the opening value of the regulatory asset base. As a result, this reduction would be subject to the same consultation process as the determination process and, more significantly, merits review. It is important for accountability that a NSP be able to seek an appeal body's review of any decision to reduce its capex rolled into the RAB in this way. While the decision would be subject to merits review, the Commission considers it is very important that any review of the AER's decision considers as a minimum the totality of its approach to capex incentives. This is because a decision that focused only on the outcomes of the review of expenditure after it has been incurred, but did not have regard to, for example, any ex ante sharing mechanisms, may reach a conclusion that is not consistent with the overall capex objective and the NEO.

Statement on the overall efficiency of capex rolled into the RAB

In addition to the discretion to make a reduction in the amount of capex rolled into the RAB, the Commission considers it is appropriate that the AER should consider the overall efficiency of capex that is rolled into the RAB. While the reduction described in the previous sub-section only applies where there is an overspend, the requirement to consider the overall efficiency of capex will require the AER to go further and consider the efficiency of capex even where the ex ante allowance has not been exceeded. The

fact that capex in excess of the ex ante allowance can be efficient was discussed above; recognised here is the principle that capex below the allowance can still be inefficient.

This obligation is part of the overall approach towards a greater focus on the efficiency of NSPs in the NER. The annual benchmarking reports, discussed in chapter 6, should mean that the AER develops an overall understanding of the relative efficiency of NSPs on an annual basis. When the AER then comes to considering, for a particular NSP, whether the capex to be rolled into the RAB at a reset is efficient the AER should already have some understanding of the relative efficiency based on its annual analysis. A deeper understanding of whether what is rolled into the RAB is efficient should in turn provide an insight into how the NER are operating to encourage NSPs to achieve efficiency. This would include whether the AER is setting the ex ante allowances at the right level, and whether the capex incentives are operating to deliver efficient outcomes. In addition, conducting this assessment of the overall efficiency of a NSP's capex should assist the AER to better understand whether to make a reduction in respect of any overspends.

In line with the overall approach of giving the AER greater discretion and allowing flexibility, few requirements have been included in the draft rule around how the AER must undertake this task. Some guidance is set out below. For consistency the overall test for efficiency is the same as that to be applied where the AER considers whether to make a reduction to the capex to be rolled into the RAB, and the same as that currently in the rules for the assessment of an ex ante forecast.

The AER should, when it develops its Regulatory Information Notice (RIN), consider the information that it will require to assess the efficiency of capex that has been undertaken during the regulatory period.

9.6.2 Guidance on draft rule

Reduction for inefficient expenditure

The draft rule allows the AER to make a reduction in respect of any overspend in relation to the regulatory allowance for a specified period. The process requires that the AER must set out in its capex incentives guidelines how it will approach an exclusion of incurred capex.

The years that comprise this period will not match any one regulatory period. This is because at the time a regulatory proposal is submitted, data on actual capex will not yet be available for every year of the current regulatory period. This means that the years which comprise the period for analysis should be compared with the relevant regulatory allowance on a like for like basis, for example the same constant dollars and discount factor should be used. Under the current timing for the regulatory process and the extended time frame set out in the draft rule, three years of data from the current regulatory period will be available at the time of the regulatory proposal assuming a five year regulatory period. The draft rule intends that the period in respect of which the overspend will be assessed should comprise:

- the years in the current regulatory period for which the AER has actual capital expenditure data at the time the NSP submits its regulatory proposal. For example, years one to three of a regulatory period where the regulatory period is five years; and

- the last two years of the previous regulatory period which will not previously have been the subject of an ex post review by the AER.

Even though the AER is likely to obtain the data for actual capex of the second last year of the current regulatory period *during* the regulatory process, there may not be sufficient time for the AER to consider this. Therefore, the actual capex during the second last year of the regulatory period will not be considered until the following regulatory determination.

As identified above, the AER will set out the manner in which it will determine to preclude incurred capex from being rolled into the RAB in more detail in the capex incentive guidelines. This could include considerations such as:

- the extent to which projects were evaluated against, and satisfied, the relevant regulatory test;

- the amount of any penalty already imposed on the NSP in respect of the expenditure through a capex sharing scheme, as well as whether the operation of a capex sharing scheme would reduce the likelihood of inefficient overspending; and

- the effect of the use of actual rather than forecast depreciation in the RAB roll forward mechanism.

In determining whether an overspend has occurred, the allowance for each year is determined based on the AER's relevant regulatory determination that includes that particular year. Since this will include years in different regulatory periods different regulatory determinations will be relevant for determining the overall allowance for the years being considered. Any decisions relating to cost pass-throughs, capex re-openers and contingent projects are to be applied to adjust the allowance for the purposes of determining if there has been an overspend. In respect of cost pass throughs, this will mean that the AER will need to know the proportion of any cost pass through amount that represents capex, as opposed to opex. The AER may wish to use its information gathering powers to have this information provided with a cost pass-through application.

As described above, in determining whether expenditure incurred was efficient, the AER must only take into account information and analysis that the NSP could have reasonably been expected to have considered or undertaken at the time that it undertook the relevant capex. The NSP should only be judged on material reasonably available to it at the time, though this would include material available not just at the start of a project but also during it. If for example the NSP chose the most efficient pole design in 2008 but further studies in 2010 indicated a different pole design would have been more efficient, it would depend on when the project was carried out relative to

2010 in the regulatory period whether it may be appropriate for the AER to take into account these further studies. As another example, in coming to a decision on whether work was undertaken efficiently the AER could only use unit costs at the time the expenditure was incurred. The AER could not take into account advancements in technology which may have reduced the unit costs of expenditure. One source of information that the AER could use is published forecasts of demand, for example the transmission annual planning report, and it would be reasonable for the AER to expect that NSPs actively and regularly reviewed capex plans based on the most up to date forecasts of demand.

The AER should set out its reasons in the regulatory determination for reducing the capex that would otherwise be rolled into a NSP's RAB consequent upon a review of the efficiency of past capex. If the AER determines a capex overspend has occurred but determines not to make a reduction, the AER should also explain this in the determination in accordance with the consideration of the overall efficiency of what is rolled into the RAB.

Consideration of the overall efficiency of what is rolled into the RAB

In the draft rule, the statement on the efficiency of capex to be rolled into the RAB is independent of the discretion to reduce the capex that is rolled into the RAB. In practice, the AER is likely to conduct these assessments together and use the review of the efficiency of the totality of the capex as part of its consideration of whether to make a reduction in respect of any overspend.

The draft rule enables the AER to undertake these reviews in the manner it considers appropriate. In particular, these may be tailored to the circumstances of a particular NSP. A review may be different based on the AER's knowledge of how a particular NSP has undertaken capex in the past, for example. Alternatively, if a NSP has overspent in a particular regulatory period the AER might choose to undertake a more extensive review than if it had underspent. The review could be based on a top down or bottom up analysis, or some combination of the two. It is expected that NSPs will include justification that past capex is efficient in their regulatory proposals.

9.7 Actual or forecast depreciation

9.7.1 Analysis

Further work on the incentive effects of actual and forecast depreciation

The changes to the NER that have been proposed by the AER aim to give it flexibility to choose to adopt either a high powered or low powered capex incentive. This would allow it to adopt the approach most appropriate taking into account a range of factors including other incentives and the circumstances of a NSP. The choice of depreciation approach is one part of the overall capex incentive framework, the objective of which is for the AER to ensure that only efficient capex is rolled into the RAB. As discussed above, it is desirable for the AER to have access to a range of options it can apply in

order to achieve this objective. Furthermore, it is appropriate for the AER to be accorded the flexibility to apply those options differently depending on the circumstances of a NSP.

The directions paper did not present a view on whether the AER should have discretion to use actual or forecast depreciation or whether a specific method should be prescribed in the NER. Instead, the Commission undertook to explore in more detail how the choice of depreciation affects a NSP's behaviour.[333]

The Commission engaged Economic Insights to provide advice on the incentive effects of using actual versus forecast depreciation when rolling forward the RAB. Economic Insights designed a model to measure how much benefit is retained by a NSP over the life of the asset if it is able to make a saving against the capex allowance or how much is lost if the NSP overspends. This is the "incentive power" and is the percentage of revenue that a NSP is either up or down for changes in its spending relative to the allowance. The incentive power was calculated for asset lives of 10, 20, 30, 40 and 50 years using both forecast and actual depreciation for comparison.[334]

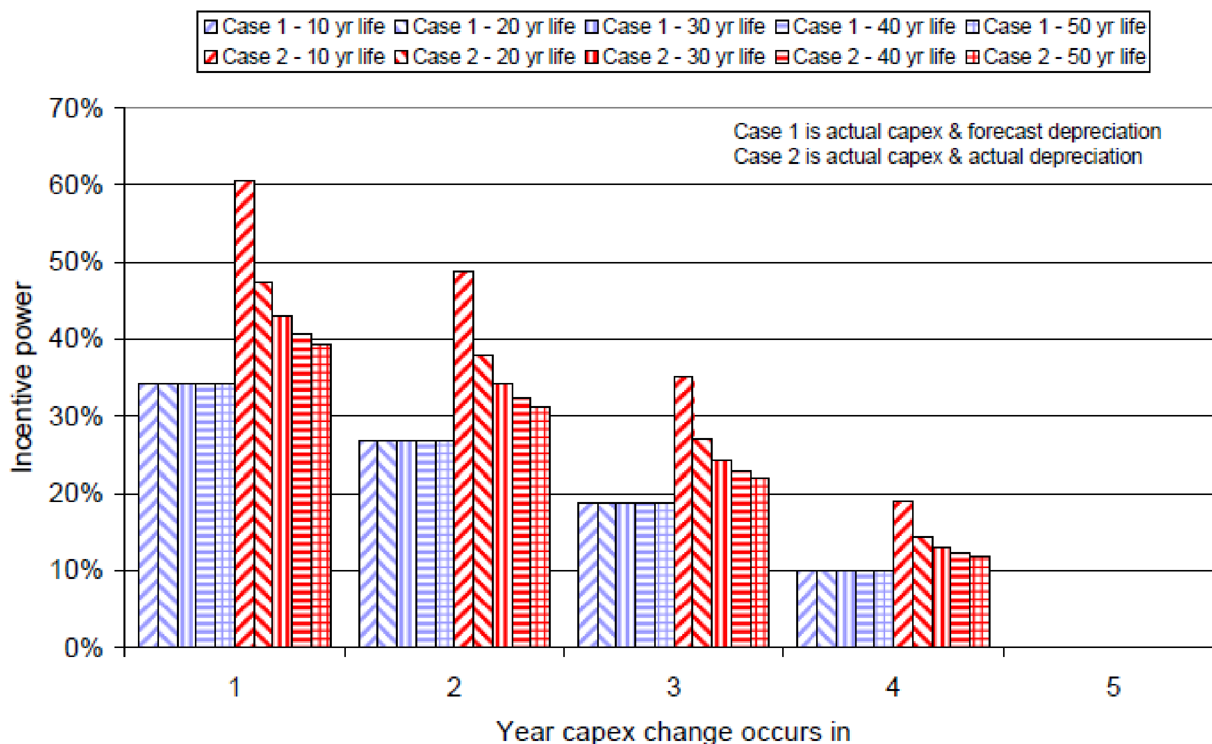
Figure 9.4 below illustrates the results of Economic Insights' modelling. The incentive power for each asset category is shown for each year of a 5 year regulatory period for two cases: Case 1 using actual capex and forecast depreciation (red bars); and Case 2 using actual capex and actual depreciation (blue bars).[335]

333 AEMC, Consolidated Rule Request – Economic Regulation of Network Service Providers, Directions Paper, 2 March 2012, p. 49.

334 Economic Insights, *The use of actual or forecast depreciation in energy network regulation*, Report for the AEMC, 31 May 2012, pp. 14-15.

335 Economic Insights also examined two further cases whereby the capex that is rolled into the RAB is based on the forecast as opposed to the current approach whereby all capex rolled into the RAB is based on the actual amount spent during the period. These additional scenarios were modelled for completeness in order to examine the full range of incentives on NSPs in relation to the roll forward model. The Commission is not currently considering changing the current approach with respect to capex.

Figure 9.4 Capex incentive powers from using actual or forecast depreciation



Source: Economic Insights, *The use of actual or forecast depreciation in energy network regulation*, Report for the AEMC, 31 May 2012, p. 20.

Three conclusions may be drawn from the figure above:

1. The incentive power under an actual depreciation approach is higher than the incentive power under a forecast depreciation approach. That is, a NSP will have a stronger incentive to minimise capex relative to the allowance under an actual depreciation approach. This is illustrated by the red bars being taller than the blue bars;

2. The incentive power under an actual depreciation approach differs depending on asset class whereas it is the same for all asset classes using forecast depreciation. This is shown by the red bars being different heights for the same year and the blue bars being the same height. Since the red bars are highest for the shortest asset lives, a NSP will have a relatively stronger incentive to minimise capex relative to the allowance for those asset types using actual depreciation;

3. The incentive to make any savings relative to the allowance declines through the regulatory period and by year five results in no incentive to make savings.[336] This is shown by all the bars becoming smaller as the years progress and

336 Note these results will differ slightly depending on the time of year it is assumed that capex is undertaken. Economic Insights have assumed that capex is incurred at the end of the year (Economic Insights, *The use of actual or forecast depreciation in energy network regulation*, Report for the AEMC, 31 May 2012, p. 14).

becoming zero by year 5. This is true under both the actual and the forecast depreciation approach.

These modelling results confirm the theoretical assessment of the relative incentive effects of depreciation approaches and analyses put forward in submissions.[337] Consequently, Economic Insights stated that:

> "using forecast depreciation may be a preferable default as the use of actual depreciation is a second best substitute for having a capex EBSS [efficiency benefit sharing scheme], creates an incentive to substitute away from short life assets at a time when they may be becoming increasingly important to achieving efficient energy market outcomes and creates an incentive for NSPs to over-inflate their capex forecasts.[338]"

However, Economic Insights also conducted a review of recent Australian regulatory practice and found that the approach to depreciation varied across and within jurisdictions with regulators citing different reasons for using their chosen approach. In contrast, actual depreciation is the norm in the overseas jurisdictions surveyed. As a result, Economic Insights stated that:

> "It has not been a case of 'one size fits all' and the approach used in each jurisdiction reflects the relative issues and concerns that have evolved in that jurisdiction.[339]"

Economic Insights thus concluded that it would be desirable to accord the AER flexibility in making the choice of depreciation approach in transmission as it currently has in distribution. However, it also stated that given the potential distortionary effects of an actual depreciation approach, it should be used sparingly where additional incentives are warranted and not likely to create significant distortions.

The AER should have the same flexibility in Chapter 6A to adopt actual or forecast depreciation as it does in Chapter 6. This is consistent with the overall approach on capex incentives, that the AER should have access to a range of tools that it can apply depending on the circumstances of the NSP. It is also consistent with harmonising Chapters 6 and 6A to the extent possible. The Commission also notes that nearly all stakeholders supported the AER having the same flexibility in transmission as it currently has in distribution.

Principles for the AER to consider in determining an approach to depreciation

In the rule change process, the Commission has in general supported discretion for the AER coupled with principles the AER must take into account when exercising its discretion. This approach is also appropriate for depreciation. Indeed, Economic

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337 ENA, Directions Paper submission, 16 April 2012, p. 33 and ENA, Directions Paper submission, Attachment C, 16 April 2012, p. 8.

338 Economic Insights, *The use of actual or forecast depreciation in energy network regulation*, Report for the AEMC, 31 May 2012, p. 42.

339 Id., p. 33.

Insights has recommended this approach be taken.[340] Some stakeholders support the use of criteria to evaluate whether a particular approach is appropriate.[341] The importance of criteria was demonstrated by the recent Tribunal decision in which the AER's decision to apply actual depreciation to the Victorian DNSPs was appealed by the Victorian government and was rejected on the basis that the Minister failed to demonstrate that the AER had not followed the required procedures in making its decision.[342] Any principles applied should be the same in Chapter 6 as in Chapter 6A.

The choice of depreciation methodology that is made in a regulatory determination applies at the following reset when the RAB is rolled forward. It affects how much capex that is incurred during the period is rolled into the RAB at the end of the period. As a result, the choice of methodology affects the incentives on the NSP to incur capex efficiently during the period and is one tool that can be utilised to provide incentives to incur capex efficiently. There are also a number of other factors that will affect a NSP's incentives to incur capex efficiently during the period. It is therefore appropriate to consider these factors together when making a decision on the choice of depreciation methodology. The principles set out in the draft rule are intended to facilitate a bespoke analysis of the most appropriate depreciation approach for a NSP.

Therefore, the principles reflect the fact that depreciation is one component of a broader capex incentives arrangement, and that the incentives provided by the choice of depreciation methodology should be coordinated with other incentives for a NSP. For example any capex sharing scheme will be relevant, as this will directly increase the power of the incentive. The power of the incentive for opex is also a relevant consideration to the extent that opex or elements of opex can be substituted with capex. It is undesirable to have incentives to reduce opex without corresponding incentives to reduce capex such that any reductions in opex can be offset by investments in capex. It is also important that incentives to reduce capex do not provide an incentive that could lead to a decline in service standards below the level valued by customers; the incentives provided by the STPIS should also be considered.

Moreover, given the differing incentive rates for assets with economic lives of different lengths under the actual depreciation approach, the extent to which they are substitutable will affect whether it is appropriate to have these differing incentives.[343] This is because, should they be substitutable, it may distort investment decisions on input use which may ultimately impact consumers. For example, it may be more expensive to address demand management by investing in poles and wires (long life) instead of smart technologies (short life). Whether these are substitutable or not, the differing power of the incentive under an actual depreciation approach may independently affect the investment decision. It is therefore relevant to also consider

340 Id., p. iv.

341 Jemena, Directions Paper submission, 16 April 2012, p. 24; ENA, Directions Paper submission, Attachment C, 16 April 2012, p. v.

342 ACompT, *Application by United Energy Distribution Pty Limited [2012] ACompT 1*, 6 January 2012.

343 Economic Insights, *The use of actual or forecast depreciation in energy network regulation*, Report for the AEMC, 31 May 2012.

both the proportional value of short-lived assets in the asset base and their likely current and future strategic importance to gauge the significance of such a risk.

Finally, in considering the appropriate capex incentive it is also relevant to consider the past performance of the NSP. The AER may wish to apply incentives in a different way to a NSP that has historically overspent due to being inefficient compared to one that has underspent.

The objective of the analysis is to arrive at a decision that is consistent with the incentives for efficient capex under the overall regulatory framework whilst minimising any distortionary effects. The AER is required to set out in the capex incentive guidelines the manner in which it proposes to determine whether to use actual or forecast depreciation.

9.7.2 Guidance on draft rule

The draft rule enables the AER to choose the depreciation approach with regard to a number of principles. The principle that refers to the other incentives a NSP has to incur efficient capex is intended to prompt a review of the totality of those incentives, including incentives outside the NER which may be specific to the NSP. This will provide a guide as to whether additional incentives are required to encourage efficient capex. As well, the principle which relates to the efficiency of past capex will also provide a guide as to whether additional incentives are required.

To the extent that additional incentives are deemed appropriate, the principle requiring an examination of the substitution effects of short and long life assets is designed to assess the materiality of the potential distortionary effects of increasing the power of the incentive using depreciation by applying an actual approach. The extent that short-lived assets, such as information technology, can be physically substituted with long-lived assets, such as poles and wires, to achieve similar outcomes in network management should be considered in terms of the ability and the incentive to do so. In turn, a consideration of the benefits of such asset types is intended to address potential strategic importance of such asset types to avoid potential distortions even if the relative size of the asset class is a small proportion of the capex program.

Substitution possibilities between opex and capex should also be considered for potential distortions as they are included in the capex factors. A consideration of capex factors is to encourage consistency with the overall capex incentive objective. Finally, the purpose of the requirement to consider the capex incentive guidelines is to promote internal consistency with the principles and approach included in the guidelines in any decision of the approach to depreciation.

9.8 Related party margins and capitalisation policy changes

9.8.1 Analysis

Further consideration of the problem

In addition to the broader capex incentive issues discussed above, the AER considers that there are two additional relevant capex incentive issues in the NER relating to related party margins and changes to capitalisation policies during a regulatory period.

In the directions paper the Commission stated it would undertake further work to understand the strength of the additional incentive for NSPs to inefficiently incur capitalised related party margins, particularly if the higher related party margins are due to genuine higher costs. The Commission also acknowledged that there is a theoretical incentive for NSPs to reclassify opex as capex by changing their capitalisation policy during a regulatory period, although it considered that stronger capex incentives through an EBSS for capex for example might deal with this issue by removing the incentive to capitalise opex inefficiently.[344]

Following the directions paper the Commission engaged consultants (Covec) to explore the strength of any incentive that a NSP has to incur inefficient related party margins. Covec investigated and reported on a range of related party issues.

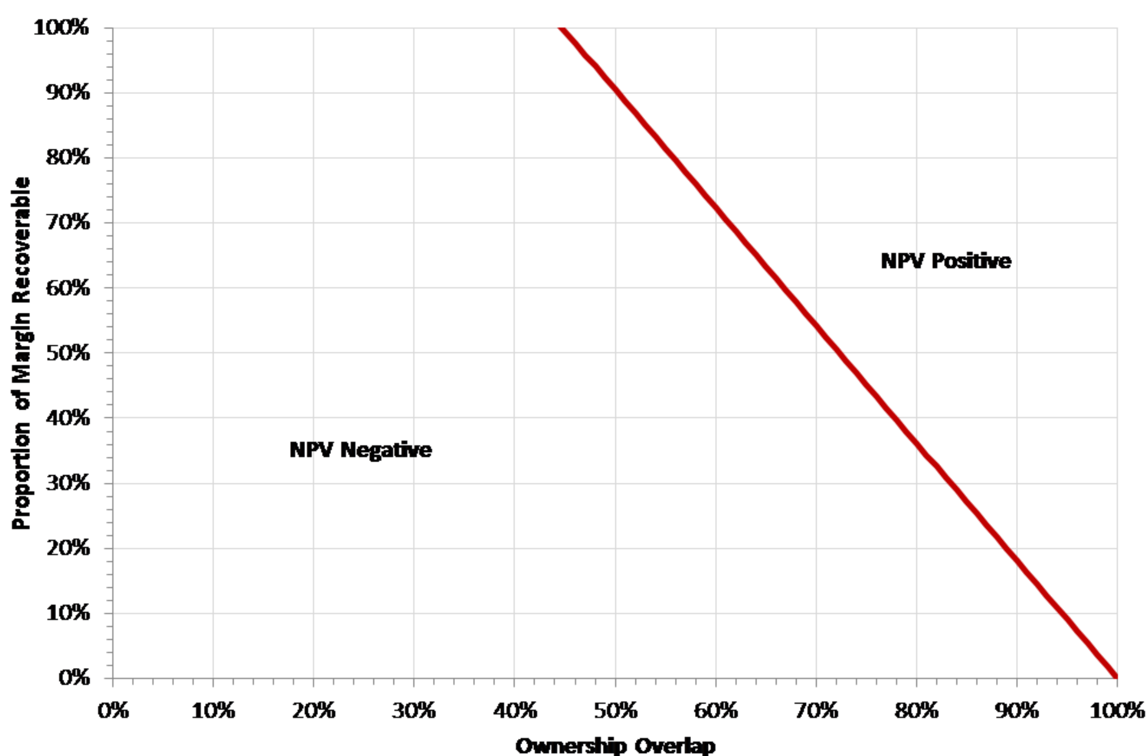
In particular, Covec developed a model to analyse the incentive to pay related party margins. The model allowed for different levels of ownership by the NSP of the related party and different fractions of the margin allowed by the regulator to enter the RAB. The results of the model show that when the NSP owns a large share of a related party it can be financially beneficial for the NSP to pay an inflated margin, even if something less than 100 per cent of that margin is allowed into the RAB.[345] However, Covec identified that at smaller ownership shares it is not financially beneficial to pay an inflated margin, even if there is full pass through of the margin into the RAB.[346] This is illustrated in Figure 9.5 below.

344 AEMC, Consolidated Rule Request – Economic Regulation of Network Service Providers, Directions Paper, 2 March 2012, pp. 57-58.

345 Covec, *Analysis of the Use of Related Parties by Electricity Network Service Providers, Report for the AEMC*, 6 June 2012, p. iii.

346 Ibid.

Figure 9.5 Incentives to pay related party margins



Source: Covec, *Analysis of the Use of Related parties by Electricity Network Service Providers*, Report for the AEMC, 6 June 2012, p. 21.

In addition to the modelling results, Covec identified that a driver for NSPs to engage related parties was economies of scale and scope.[347] Similarly, it noted that there may be tax advantages in engaging related parties but considered that the size of this incentive would be small.[348] It also noted that there is some risk that recent regulatory practice may deter otherwise efficient outsourcing to related parties. Covec considers that an ex post review of prudency and efficiency would provide an opportunity for the AER to mitigate the risk that NSPs may inflate related party margins.[349]

The modelling undertaken by Covec appears to confirm that there is a potential incentive for NSPs to incur inefficient related party margins. It shows that this can occur even where there are strong ex ante capex incentives on a NSP, such as through a capex sharing scheme. Also, as identified by the AER, strong capex incentives will not deal with the issue where a NSP spends less than its allowance overall but incurs inefficient related party margins.[350] The Covec modelling also shows that there is a potential incentive on NSPs to incur inefficient margins where there is less than 100 per cent joint ownership between the NSP and the related party.[351]

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347 Id., p. 18

348 Id., p. 12.

349 Id., p. iii

350 AER, Directions Paper supplementary submission, 30 May 2012, p. 28.

351 Covec, *Analysis of the Use of Related parties by Electricity Network Service Providers*, Report for the AEMC, 6 June 2012, p. 20.

In summary, it appears in theory that there is an issue in the sense that a NSP contracting with a related party in some circumstances could derive a NPV benefit compared to another NSP that does not, although conversely there are other circumstances when such an approach may be NPV negative. This incentive could encourage NSPs to enter into commercial arrangements that are not the most efficient. It is relevant that the AER and ESCV have both felt that there was a need for additional measures to address excessive related party margins. To encourage NSPs to use the most efficient business structure the Commission considers that this issue should be addressed.

Addressing the problem

Given that stronger ex ante incentives through a capex sharing scheme will not fully deal with this issue the Commission considers that the issue should be dealt with by reviewing the capex after it is undertaken. It therefore proposes to give the AER discretion to reduce capex that would otherwise be rolled into the RAB by an amount that represents such part of the margin as would not have been paid if the arrangements to which the margin relates had been on arm's length terms. The AER should have this discretion regardless of whether the NSP spent more than its allowance overall or not. This is because a NSP may also gain from inflating related party margins where it spends less than its allowance overall. This is consistent with the capex factor in the NER that the AER must have regard to in determining the ex ante capex allowance.[352]

The AER should determine whether related party margins meet this test. Overall, a flexible or NSP-specific approach would be optimal, to recognise the differing incentive power in different circumstances. The AER’s current approach, as described in the Covec report,[353] may lack flexibility to take account of NSP specific circumstances. That is, the AER could better tailor incentives to reflect the different circumstances, and so far as is reasonably possible provide an incentive for NSPs to deliver services in whichever way is most efficient, eg in house, related party providers or third party contractors. The Covec model is an example of how this approach might be developed. The Commission proposes to require the AER to set out its approach in the capex incentive guidelines. This will give NSPs and other stakeholders a chance to provide input on the AER's approach outside of the regulatory determination process, promote consistency in the application of the rule between NSPs, and provide greater certainty to NSPs as to how the AER will apply the rule.

The Commission accepts that there is a potential incentive for a NSP to change its capitalisation policy during a regulatory period so that they can classify opex as capex and recover the same expenditure twice: once in forecast opex and again through depreciation and return on capital once the expenditure is rolled into the RAB. At the same time, though, the requirements of statutory accounting may reduce somewhat the incentive or increase the costs of changing capitalisation policies. The incentive to

352 See for example clause 6.5.7(e)(9).

353 Covec, *Analysis of the Use of Related parties by Electricity Network Service Providers*, Report for the AEMC, 6 June 2012, pp. i, 8-9.

change policies should be reduced if a capex sharing scheme brings closer the incentives to undertake efficient opex and capex. In addition there appears to be merit in the ENA's comment that the AER should retain the ability to calculate opex and capex efficiency gains under an EBSS in a manner that removes the effect of changes to the classification of expenditure.[354] However, as set out in section 9.5, although there are likely to be benefits in applying a capex sharing scheme it should be at the AER's discretion as to whether such a scheme is implemented. In addition, even if the AER were to develop and apply a capex sharing scheme this would not necessarily provide for an incentive power that was equal to the opex incentive power, although this is something that the AER would need to consider. Ex ante incentives alone will, therefore, not necessarily deal with this issue. In these circumstances the AER should be able to review the relevant capex after it is incurred.

Similar to related party margins, the Commission proposes to give the AER discretion to reduce the capex that would otherwise be rolled into the RAB by an amount that represents the opex that has been capitalised as a result of within-period changes to the NSPs capitalisation policy. The AER should have this discretion regardless of whether the NSP has spent more than its capex allowance overall or not. This is because a NSP may gain from changing its capitalisation policy where it spends less than its allowance overall. In general a NSP should be able to avoid having to capitalise opex as a result of a change in its capitalisation policy. First, changes to the capitalisation policy in the first two to three years of a forthcoming regulatory period should be less likely on the basis that they could have been included in the earlier regulatory determination. Second, any changes that a NSP wants to make in the final two to three years of a regulatory period could be delayed until the start of the next regulatory period.

9.8.2 Guidance on draft rule

The draft rule allows the AER to reduce the capex that would otherwise be rolled into the RAB to deal with inefficient related party margins. It is up to the AER to determine whether arrangements that were entered into by the NSP and a third party reflect arm's length terms. Similarly, it is up to the AER to determine what the margin would have been if it considers the arrangements do not reflect arm's length terms. However, the AER is required to set out its proposed approach in the capex incentive guidelines. The Commission considers a flexible or NSP specific approach might be adopted to recognise that the incentive power differs in different circumstances and that the Covec model may assist the AER in developing this approach.

Similarly, the draft rule allows the AER to reduce the capex that would otherwise be rolled into the RAB to reflect opex that was capitalised as a result of changes to the NSPs capitalisation policy during the regulatory period.

The AER can reduce the capex that would otherwise be rolled into the RAB for these expenditure types regardless of whether a NSP has spent more than its capex allowance. Similarly, the amount by which the AER may reduce the capex that would

354 ENA, Directions Paper submission, 16 April 2012, p. 35.

otherwise be rolled into the RAB for these expenditure types is not limited to the amount of any expenditure above the allowance.

To assist the AER in exercising this discretion the draft rule requires an NSP to include in its regulatory proposal information on margins paid or expected to be paid in respect of arrangements that are not on arm's length terms and information on opex that has been capitalised by NSPs otherwise than in accordance with the policy submitted to the AER as part of the NSP's regulatory proposal. As a corollary, the draft rule requires NSPs to provide their capitalisation policy with their regulatory proposal. The AER will need this as a reference point in respect of actual expenditure at the time of the next determination. In practice, the AER could take the approach that it will approve capitalised expenditure where a NSP provides audited statements that its policy has not changed. Although not required, it could set this out in the capex incentive guidelines.

10 Regulatory determination process

Summary

- The NER prescribe the process by which the AER is to determine revenues and, in some cases, prices of NSPs. It also sets out the process for market participants in making submissions on each other's material and the AER's draft decision.
- In addition to the NER, the NEL sets out how the AER is to undertake its economic regulatory functions or powers. As a general rule, the NER do not prescribe matters that are already addressed in the NEL. The AER is also subject to various common law requirements that apply to the AER's decision-making processes.
- The process set out in the NER should be considered as the minimum requirement for stakeholder engagement. In the absence of any prescription in the NER on the regulatory determination process, the NSP and AER should be engaging with each other and other stakeholders.
- The Commission has taken a holistic approach to address broad issues with the current process. These issues relate to:
  - giving the AER and other stakeholders, including consumers and consumer representative groups, sufficient time to consider all relevant and significant material;
  - improving consumer engagement, especially earlier in the process; and
  - allowing the NSP sufficient time to prepare its revised regulatory proposal.
- Incremental changes have been made to the current regulatory determination process to clarify existing processes as well as to address the particular issues identified by the Commission. These changes aim to make the process more transparent and make all market participants engaged in the process more accountable.
- The following changes address the issue of improving consumer engagement:
  - the NSP providing a consumer-targeted overview paper with its regulatory proposal;
  - the AER publishing an issues paper outlining its preliminary key issues to assist the consumers to focus their resources; and

- the AER holding a public forum to allow consumers and other stakeholders to engage with the AER and NSP on the regulatory proposal and issues paper.

- The following changes address the issue of making the NSP more accountable:
  - requiring the NSP to identify to the AER specific confidentiality claims in its regulatory proposal;
  - requiring the AER to report such confidentiality claims on its website; and
  - requiring the AER to report on its website where it receives late or out-of-scope material from the NSP.
- The following changes address the issue of improving submissions and the submission consideration process:
  - extending the timeframe for the regulatory determination process by commencing it six months earlier;
  - increasing the time for the NSP to prepare its revised regulatory proposal; and
  - introducing a discretionary cross-submissions stage to target specific issues arising from submissions on the draft regulatory determination or revised regulatory proposal.
- The following changes address the issue of streamlining the framework and approach paper stage:
  - making the paper optional on particular matters that has been addressed in a previous framework and approach paper; and
  - clarifying and aligning the circumstances for changing the service classification and formulaic expression of the control mechanism for unforeseen circumstances.

10.1 Introduction

Regulatory decision-making involves thorough consideration of the regulated business' proposal.[355] It involves providing opportunities for the regulated business and interested stakeholders, including consumers and consumer representative groups, to make submissions to the regulator.[356] It also entails allowing reasonable

355 This point was also made by the Commission in 2006. See AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 108.

356 Ibid.

time for full and thorough analysis of the submissions and the regulator's intermediate decisions.[357] To facilitate this, the NEL sets out the manner in which the AER is to perform its economic regulatory functions or powers.[358] In addition, the NER specify the processes that the AER, NSP and other stakeholders are required to follow as part of the regulatory determination process.[359] A key to effective regulation is the reduction of regulatory risk by providing transparent and timely processes for regulatory determinations.[360] Ensuring clarity around a number of procedural issues provides greater certainty to market participants, makes them more accountable to a clearly prescribed process, and reduces delays in regulatory decision making.[361]

10.1.1 Regulatory determination process

To reduce regulatory error under the current regulatory determination processes, all stakeholders are permitted to provide submissions at various points throughout the process. The AER is concerned that NSPs are undermining the process by providing material that should be part of an initial or a revised regulatory proposal later in the process in the form of submissions.[362] This does not provide other stakeholders and the AER sufficient time to scrutinise this material.

The AER proposes placing limitations on NSP submissions to address this issue. In particular, the AER has proposed rules that would prevent the NSP from making a late initial or revised regulatory proposal in the form of submissions.[363]

10.1.2 Confidentiality claims

The current confidentiality arrangements were designed to balance the need for stakeholders to have access to the information upon which regulatory decisions are made and the need to protect confidential information. Without giving the appropriate protection for certain information, such disclosure could commercially harm the NSP or third parties. The AER is concerned that NSPs have been claiming that more information is confidential than is necessary. This, in turn, denies other stakeholders the opportunity to respond to, make an informed comment upon, and scrutinise, all relevant information.[364]

The AER proposes amendments to the NER which would, amongst other things, provide the AER with the discretion to give such weight as it considers appropriate to

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357 Ibid.

358 Ibid.

359 Ibid.

360 Ibid.

361 Ibid.

362 In this Chapter, unless clearly specified, references to "regulatory proposal" are to regulatory proposals in Chapter 6 and revenue proposals in Chapter 6A. Where references to "revenue proposal" are referred to, these are revenue proposals in Chapter 6A.

363 AER, Rule change request, Part B, 29 September 2011, p. 89.

364 Id., p. 90.

confidential information. This would apply in an initial or revised regulatory proposal, or in any submissions given to the AER.

10.1.3 Framework and approach

The framework and approach paper is specific to the distribution regulatory determination process. It provides the DNSP and other stakeholders with an opportunity to be consulted on the AER's likely approach to certain elements of the distribution regulatory determination.

The AER proposes changes to the content of the framework and approach paper, and when it may be departed from in a final regulatory determination. This would include:

- removing consultation on the application of incentives schemes in the framework and approach paper;
- allowing the AER to change the control mechanism, in addition to service classification, following the framework and approach paper; and
- changing the threshold for departing from the service classification and control mechanism in the framework and approach paper to "unforeseen circumstances".

10.1.4 Chapter structure

The remainder of this chapter is structured as follows:

- section 10.2 summarises the submissions received in response to the Commission's directions paper;
- section 10.3 outlines the general principles adopted by the Commission in addressing the problems identified with the regulatory determination process; and
- the following sections provide detailed analysis on specific matters with respect to:
  - late or out-of-scope submissions (section 10.4);
  - confidentiality claims in the regulatory proposal (section 10.5);
  - the mandatory issues paper and overview paper (section 10.6);
  - the cross-submissions stage (section 10.7);
  - the timing of the regulatory determination process (section 10.8); and
  - the framework and approach paper (section 10.9).

10.2 Submissions

10.2.1 Regulatory determination process

There is general support for commencing the regulatory determination process earlier, including extending the current timeframe.[365] Submissions varied in how much time should be allocated for commencing the regulatory determination process earlier.[366] However, there was also general disagreement on delaying the making of the final regulatory determination, especially due to the impact on subsequent and concurrent regulatory processes.[367] Other options proposed, including a mandatory issues paper and cross-submissions stage, received support from NSPs and other stakeholders.[368] However, the AER was concerned that these would either not provide any value or create administrative burden.[369]

The AER supports its original proposal to restrict submissions from the NSP to require a complete regulatory proposal upfront and to allow the AER and other stakeholders to consider the NSP's regulatory proposal.[370] Nevertheless, the AER is open to modifying its proposal if there are any inconsistencies with the NEL.[371]

Consumer representative groups also support the AER's proposal.[372] They generally do not consider any of the other options proposed in the directions paper would

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365 AER, Directions Paper submission, 2 May 2012, pp. 62, 65-69; ENA, Directions Paper submission, 16 April 2012, pp. 63-65; ENERGEX, Directions Paper submission, 16 April 2012, pp.3-4; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 15-16; Essential Energy, Directions Paper submission, 20 April 2011, pp.9-12; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 47-48; Grid Australia, Directions Paper submission, 16 April 2012, pp. 2-3, 12; Jemena, Directions Paper submission, 16 April 2012, pp. 47, 54; MEU, Directions Paper submission, 17 April 2012, pp.37-38.

366 ENA, Directions Paper submission, 16 April 2012, p. 63; Grid Australia, Directions Paper submission, 16 April 2012, p. 12; Jemena, Directions Paper submission, 16 April 2012, p. 47.

367 AER, Directions Paper submission, 2 May 2012, pp. 68-69; ENA, Directions Paper submission, 16 April 2012, p. 65; ENERGEX, Directions Paper submission, 16 April 2012, pp. 3-4; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 15-16; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 47-48; MEU, Directions Paper submission, 17 April 2012, p.38; SA DMITRE, Directions Paper submission, 5 May 2012, p. 5.

368 ENA, Directions Paper submission, 16 April 2012, pp. 63-66; ENERGEX, Directions Paper submission, 16 April 2012, pp.3-4; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 15-16; Essential Energy, Directions Paper submission, 20 April 2011, pp.9-12; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 47-48; Grid Australia, Directions Paper submission, 16 April 2012, p. 12; Jemena, Directions Paper submission, 16 April 2012, 47, 54; MEU, Directions Paper submission, 17 April 2012, pp.37-38; SP AusNet, Directions submission, 16 April 2012, pp. 6-7; Vic DPI, Directions Paper submission, 16 April 2012, pp.13-14.

369 AER, Directions Paper submission, 2 May 2012, pp. 65-69.

370 Id., pp. 65-66.

371 Ibid.

372 Consumer Action Law Centre, Directions Paper submission, 16 April 2012, p. 7; CUAC, Directions Paper submission, 16 April 2012, p. 4; EUAA, Directions Paper submission, 16 April 2012, pp. 33-34; MEU, Directions Paper submission, 17 April 2012, p. 37; PIAC, Directions Paper submission, 16 April 2012, p. 2; UnitingCare Australia, Directions Paper submission, 9 May 2012, p. 60.

directly address the AER's problem of receiving late submissions.[373] NSPs maintain their previous position from first round submissions that there are legitimate reasons for making late submissions.[374] As an alternative to the AER's approach, NSPs propose a non-rule based solution to address legitimate late submissions.[375]

10.2.2 Confidentiality claims

Most of the stakeholders who provided second round submissions on confidentiality claims maintained their positions from first round submissions. Consumer representative groups maintain their support for the AER proposal, as they agree with the AER's characterisation of the problem.[376] In addition to its original proposal, the AER proposes a "stop the clock" mechanism to allow it more time to consider confidentiality claims.[377]

NSPs continue to disagree with the AER's proposal and consider that the current arrangements are appropriately balanced and the AER should not be given more time.[378] They elaborate further on their previous first round submissions for a non-rule based approach, including proposing a confidentiality information protocol, principles for the protocol, and categorising confidentiality claims.[379]

10.2.3 Framework and approach

Need for a framework and approach paper

The AER supports the NSPs' previous proposal from first round submissions for making the framework and approach paper optional on particular matters, which would be triggered by either the AER or NSP.[380] However, some other NSPs consider that the framework and approach paper must be mandatory to avoid complications such as uncertainties associated with triggering its publication.[381] The MEU considers

373 EUAA, Directions Paper submission, 16 April 2012, pp. 33-34; Public Interest Advocacy Centre (PIAC), Directions Paper submission, 16 April 2012, p. 2; UnitingCare Australia, Directions Paper submission, 9 May 2012, p. 60.

374 ENA, Directions Paper submission, 16 April 2012, pp. 62-63; Ergon Energy, Directions Paper submission, 16 April 2012, pp. 15-16; Essential Energy, Directions Paper submission, 20 April 2011, pp. 10-11; Jemena, Directions Paper submission, 16 April 2012, pp. 51-53.

375 ENA, Directions Paper submission, 16 April 2012, pp. 66-67; Jemena, Directions Paper submission, 16 April 2012, pp. 51, 55; SP AusNet, Directions Paper submission, 16 April 2012, pp. 5-6.

376 Consumer Action Law Centre, Directions Paper submission, 16 April 2012, p. 7; EUAA, Directions Paper submission, 16 April 2012, pp. 33-34; MEU, Directions Paper submission, 17 April 2012, p. 38; PIAC, Directions Paper submission, 16 April 2012, pp.2-3; UnitingCare Australia, Directions Paper submission, 9 May 2012, pp. 59-60.

377 AER, Directions Paper submission, 2 May 2012, p. 71.

378 Ergon Energy, Directions Paper submission, 16 April 2012, p.16; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 49.

379 ENA, Directions Paper submission, 16 April 2012, pp. 67-71.

380 AER, Directions Paper submission, 2 May 2012, pp. 63, 73.

381 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 50-51.

that the framework and approach paper is still necessary to fix in and resolve specific matters earlier in the process.[382]

Control mechanism

The AER states that the control mechanism should be fixed in the framework and approach paper.[383] On the other hand, the AER supports changing the formulaic expression that gives effect to the control mechanism for unforeseen circumstances subsequent to a framework and approach paper.[384] This is a view that has received support from NSPs.[385]

Threshold for changing service classification and formulaic expression of the control mechanism in regulatory determinations

The AER maintains from its original proposal that the threshold for changing service classification in regulatory determinations should be for unforeseen circumstances.[386] This should also now apply to the formulaic expression that gives effect to the control mechanism.[387] Most NSPs consider that the AER's proposal creates uncertainty and that any such change should be based on persuasive evidence.[388] However, the joint submission of ETSA, CitiPower and Powercor consider that the current threshold of "good reasons" should be retained for service classification.[389] They consider that the formulaic expression of the control mechanism can be revisited because the AER currently does this.[390] The MEU, on the other hand, suggests that basing the threshold on unforeseen circumstances suggests the NSP does not understand its business.[391]

10.3 General principles

10.3.1 Background

In 2006, the AEMC considered that the regulatory determination process needs to be transparent and timely to provide all parties with a clearer understanding of their

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382 MEU, Directions Paper submission, 17 April 2012, pp. 56-57, 68-69.

383 AER, Directions Paper submission, 2 May 2012, p. 73.

384 Ibid.

385 ENA, Directions Paper submission, 16 April 2012, pp. 74-75; Ergon Energy, Directions Paper submission, 16 April 2012, p. 17; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 51.

386 AER, Directions Paper submission, 2 May 2012, p. 73.

387 Ibid.

388 ENA, Directions Paper submission, 16 April 2012, pp. 74-75; Ergon Energy, Directions Paper submission, 16 April 2012, p. 17.

389 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 51-52.

390 Ibid.

391 MEU, Directions Paper submission, 17 April 2012, p. 69.

rights and obligations at the outset.[392] This promotes more efficient network investment, operation and service provision in the long term interests of consumers.[393]

Providing the NSP and stakeholders opportunities to make submissions to the regulator and providing for full and thorough decision-making by the regulator promotes transparency.[394] This transparency leads to reduced regulatory risk and error, and decreases the administrative costs of regulation.[395] Applying time constraints to the process also contributes to timely and efficient regulatory decision-making.[396]

The environment for the economic regulation of network services has changed since the AEMC's Chapter 6A rule determination. In 2008, the merits review process was introduced into the NEL. In addition, the MCE Standing Committee of Officials (SCO) made Chapter 6 of the NER for economic regulation of distribution network services. The volume and scope of material being assessed by the AER, and consulted upon with stakeholders, has also increased over time. AER decisions have, as a consequence, increased in length.

As a result of this changed environment, the current timeframe creates challenges for stakeholders to scrutinise the NSP's material, and for the AER to assess all relevant material and make a decision. Consumer representative groups also cannot engage effectively in the regulatory determination process. This changing environment requires adjustment to the regulatory determination process.

10.3.2 Key objectives underpinning the regulatory determination process

In the directions paper, the Commission set out objectives which it considered underpin the regulatory determination process:

- the AER should be given enough time to scrutinise material provided by a NSP in its initial and revised regulatory proposals. This includes providing a clear period of time to consider all relevant and significant material submitted during a regulatory determination process prior to making the final regulatory determination;
- the regulatory determination process should provide a reasonable opportunity for a NSP and other stakeholders to comment on and scrutinise material submitted by each party;
- the NSP should have sufficient time to prepare its revised regulatory proposal and should submit as much relevant information as possible in its revised regulatory proposal;

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392 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. xxi.

393 Ibid.

394 Id., p. 33.

395 Ibid.

396 Ibid.

- in circumstances where a restriction is imposed on the content of the revised regulatory proposal, the NER should not permit this restriction to be circumvented through the use of submissions; and
- the regulatory determination process should encourage dialogue between the AER, the NSP and other stakeholders, particularly consumers, to establish a common understanding of the issues.

These key objectives are consistent with the AEMC's Chapter 6A rule determination. They are also consistent with the NEO as they will likely lead to more transparent and robust decision-making, and therefore increased certainty for investment in significant infrastructure for the provision of services.

The Commission's general approach to this rule change request has been to provide the AER with more discretion. Unlike rate of return or capex incentives, however, in respect of the regulatory determination process there are less risks of additional prescription in the NER. In particular, there should be less need for regular changes to the regulatory determination process to adapt to changing circumstances. To allow stakeholders to properly plan, certainty is also very important for the regulatory determination process.

Nonetheless, the NER, including the draft rule, do not prescribe the regulatory determination process on every aspect, and the AER does have discretion in many respects. This discretion may include further consultation when the AER proposes a shift from its draft position, and placing less weight on, or not considering, information that is submitted too late in the process.[397] The New Zealand Commerce Commission has made use of this type of discretion. Further, the NER only provide a framework towards effective engagement; they it should be seen as a minimum in terms of the level of engagement. The extent of interaction between the regulated business, the regulator and other stakeholders is up to those parties. For instance, the AER and NSP should be engaging with each other regularly on an informal basis, including outside of the regulatory determination process.

As a general rule, the Commission has not prescribed in the NER requirements where a regulatory requirement already exists via the NEL or common law. The Commission considers that prescribing AER discretions which are a general function of regulators, or are already set out in the NEL, should be avoided where possible. This is especially where it is clear that they would still exist in the absence of the NER and including them in the NER would not provide any additional value. This general approach avoids any potential conflict between the NER and the NEL or common law, especially if the NEL or common law position were to change in the future.

397 It is noted that section 16(b)(i) of the NEL requires the AER to inform the NSP of material issues under consideration by the AER.

10.3.3 Options chosen

In addressing the broader issues identified in the directions paper, the Commission has decided to proceed with the following options:

- reporting late or out-of-scope submissions;
- commencing the regulatory determination process earlier, including extending the timeframe for the NSP to prepare its revised regulatory proposal;
- introducing a discretionary cross-submissions stage;
- requiring a mandatory issues paper from the AER and an overview paper from the NSP;
- identifying and reporting confidentiality claims in the regulatory proposal; and
- making the framework and approach paper an optional stage.[398]

These options enhance the transparent and timely processes for regulatory determinations, and increase the robustness of regulatory decision-making. They also address the broader issue of providing all stakeholders with sufficient time and improving stakeholder engagement during the regulatory determination process. They are each discussed in turn below.

10.4 Late or out-of-scope submissions

10.4.1 Analysis

The AER has characterised the problem as being that NSPs are undermining the process by providing late or out-of-scope submissions where they should have included this in their regulatory proposals. To resolve this, the AER proposed placing limitations on NSP submissions, including preventing the NSP from making submissions and limiting it to providing regulatory proposals. However, in the directions paper, the Commission considered the AER's identification of the problem only highlighted a broader issue with the current regulatory determination process. The process is currently not providing all stakeholders with an opportunity to effectively scrutinise material provided by the NSP where the NSP submits further information later in the process. It also does not provide the AER with enough time to assess all relevant material and to make a decision. This late information is greater than was previously envisaged by the AEMC in 2006. There may be legitimate reasons for the provision of information later in the process, such as new information becoming available to the NSP or a material change in the circumstances. However, an increase in

398 It is noted that a framework and approach paper must exist for the prescribed matters, although this may well be the previous framework and approach paper if the approach set out in it remains appropriate.

the quantity of late material has an adverse effect on the ability of interested parties to be engaged with the regulatory determination process.

Inconsistency with the NEL

The Commission has decided not to accept the AER's proposal to restrict the NSP's provision of material during the regulatory determination process. This is because it would create procedural fairness issues by denying the NSP a reasonable opportunity to make submissions, especially where there are legitimate reasons for making submissions. The Commission considers that the AER's proposal to restrict the NSP from making submissions in respect of the regulatory determination before it is made creates an inconsistency with sections 16 and 28ZC of the NEL. On this basis, the Commission notes that the AER has retracted from its original proposal and is open to making modifications to its proposal to avoid any inconsistencies with the NEL.[399]

Other regulators

The AER's problem with receiving information from the NSP which may be late, out-of-scope or voluminous is not unique. Regulators in general are subject to this as part of their regulatory decision-making processes, although there may be differences in the regulatory framework.

One New Zealand Commerce Commission case related to the input methodologies proposed to be used to regulate the price and quality of air services under the *Commerce Act 1986* (New Zealand). The regulated businesses filed a number of late submissions close to the end of the regulatory process, which was several months after submissions had closed.[400] These submissions were provided in another part of the consultation stage addressing a different matter which made them out-of-scope. This was also late with respect to the previous consultation stage. The Commerce Commission decided to reject those submissions.[401]

The regulated business sought judicial review of the Commerce Commission, and the High Court of New Zealand found in favour of the regulator.[402] The court held that there was no legitimate expectation created for the Commerce Commission to consider late submissions.[403] This is because there was no "clear, unambiguous and unqualified" representation from the Commerce Commission that it would have regard to late submissions.[404] It was also held that the Commerce Commission made no error in not considering the late submissions.[405] This is because it made no procedural error in determining the input methodologies under the legislation and there was no material

399 AER, Directions Paper submission, 2 May 2012, p. 66.

400 *Wellington International Airport Limited v Commerce Commission* HC WN CIV-2011-485-1031 [21 December 2011], [278]-[293].

401 Ibid.

402 Ibid.

403 Ibid.

404 Ibid.

405 Ibid.

new element in the late submissions.[406] The Commerce Commission was also deemed to only be required to have regard to views received in the timeframes that the regulator sets.[407] The court's finding has set the precedent for the Commerce Commission if similar situations arise in the future.

The AER currently has the discretion as the regulator to not accept such submissions from the NSP or any other stakeholder.[408] The Commission understands that the Australian Competition Tribunal has previously stated that the AER must draw a line on its engagement with a NSP or it will fail to meet the imposed deadlines.[409] The Commission encourages the AER where appropriate to utilise its existing powers as are available for any administrative decision-maker to not accept late submissions.

Reporting on late and out-of-scope submissions

With this in mind, the Commission has decided a better approach would be for the AER to report on any late or out-of-scope submissions it receives from a NSP. This will not preclude such material from being considered by the AER. However, making public on the AER's website details of late or out-of-scope submissions from the NSP may be an effective tool to discourage such submissions being made. It should allow stakeholders, including consumers, to identify those NSPs that may be taking advantage of the regulatory process. At the same time, it would not prevent the AER taking into account submissions or further material from NSPs where this is justified and the AER has sufficient time to take it into account. The use of such a tool would increase transparency in this area in that the AER previously did not need to report that it had received a late submission. This approach may also be seen as creating a reputational risk for the NSP if it does decide to make a late or out-of-scope submission.

Other options

As noted above, part of the reason for late submissions also relates to a shortage of time in the current regulatory determination process. The Commission's proposed changes to the regulatory determination process, including commencing earlier and extending the current timeframe may assist to alleviate the problem.[410]

The Commission considered some other options proposed to address the limited timeframe, but decided to not accept these. These relate to:

- delaying the making of the final regulatory determination;
- "stopping the clock" for assessing an incomplete regulatory proposal;

406 Ibid.

407 Ibid.

408 ENA, Consultation Paper submission, 8 December 2011, p. 57.

409 *Application by EnergyAustralia* [2009] ACompT 8, [257].

410 Commencing the regulatory determination process earlier and extending the current timeframe are described in section 10.8 of this draft rule determination.

- creating non-binding guidelines to address legitimate late submissions;
- applying a pecuniary penalty against the NSP who submits late submissions; and
- prescribing less weight to be placed on confidentiality claims in the regulatory proposal.

With respect to the option of delaying the making of the final regulatory determination process as a result of receiving a late submission from the NSP, the Commission decided not to proceed with this approach. This is because it would result in a significant administrative burden on other stakeholders. For instance, there would be flow-on effects on the annual pricing process for retailers and jurisdictional regulators. It may also be disproportionate to the problem identified.

The AER proposed a "stop the clock" mechanism to allow the AER to wait for information from a NSP in order to assess an incomplete or a deficient regulatory proposal.[411] However, as previously considered by the AEMC in 2006, there is benefit in maintaining a fixed timeframe for completion of the process.[412] This will also help the NSP to provide its best proposal, and allow for greater certainty and reduce delays. The Commission maintains its 2006 view by continuing the practice of specifying the timeframe for milestones within the regulatory determination process. Balanced with a specified timeframe, some flexibility will continue to be given to the AER to vary the time according to the individual circumstance. For example, not setting a time limit for the making of the draft regulatory determination will allow the AER some flexibility to obtain sufficient information before making the draft regulatory determination.

The ENA proposes non-rule based solutions including earlier engagement between the AER and NSP, and non-binding guidelines for addressing legitimate late submissions based on a set of principles.[413] The Commission commends the NSPs' participation in the rule change process by proposing some solutions towards resolving the identified problems. The Commission encourages NSPs to continue proactively engaging with the AER and other stakeholders, especially consumer representative groups, to improve how they interact with each other. The practices promoted by the NSPs should already be occurring consistent with the obligations on the AER under section 16 of the NEL.

The CUAC proposes the implementation of a pecuniary penalty against the NSP for making late submissions.[414] However, the making of such a rule is prohibited under section 36 of the NEL.

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411 AER, Directions Paper submission, 2 May 2012, p. 67.

412 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 114.

413 ENA, Directions Paper submission, 16 April 2012, pp. 66-67.

414 CUAC, Directions Paper submission, 16 April 2012, p. 4.

10.4.2 Guidance on draft rule

If the AER receives a late or out-of-scope submission from a NSP, the Commission's draft rule requires the AER to make available on its website from a NSP the following information:

- the identity of the NSP who made the late or out-of-scope submission;
- a summary of the particular information it considers to be late or out-of-scope; and[415]
- an indication of the amount or length of that information that it considers to be late or out-of-scope.

The purpose of this draft rule is to publicise the fact that the NSP has made a submission to the AER which the AER considers to be either late or out-of-scope. By making this public, it should discourage the NSP and other NSPs from making such submissions in the future unless the information contained in them is necessary. It also allows the NSP to understand what the AER considers to be late or out-of-scope. Finally, the NSP may wish to informally respond to the AER to explain its reasons for providing such a submission once it is made aware of the AER's position.

10.5 Confidentiality claims in the regulatory proposal

10.5.1 Analysis

Background

In the AEMC's Chapter 6A rule determination, the AEMC considered that efficient and effective regulation requires the provision of accurate, timely and relevant information.[416] In making its decision on the treatment of confidential information, the AEMC balanced the need for:

- timely and accurate information, and stakeholder access to information by which the AER makes its decision; versus
- administrative cost and burden in providing that information, and protection of confidential information that would commercially harm the TNSP or third parties.[417]

The AEMC considered in 2006 that it was essential to provide a degree of transparency with respect to the contents of all submissions considered by the AER in making its decision. It also considered that the NSP should have the opportunity to respond to

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415 For instance, the summary may simply cross refer to that information as contained in the submission.

416 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 113.

417 Ibid.

comments contained in submissions, in particular those critical of a NSP.[418] Therefore, the AEMC specified in the NER for the AER to be given the discretion to give lesser or no weight to confidential submissions.[419]

AER's existing powers

In general, the Commission maintains the view it set out in the directions paper. It is important that the probative value of as much of a NSP's initial or revised regulatory proposal as possible is able to be tested with stakeholders. There will almost always be information included as part of a NSP's initial or revised regulatory proposal which is legitimately claimed to be commercially sensitive and confidential. For example, if detailed cost forecasts for different aspects of a project were made public this may hamper a subsequent competitive procurement process. However, the Commission considers it unlikely that all aspects of an initial or revised regulatory proposal could legitimately be claimed to be confidential. This is partly because the NSP is a monopoly business and does not therefore compete directly with other businesses.

There also appears to be scope for information to be aggregated where concerns about confidentiality for more detailed aspects of information are present. On this basis, it would be expected that only relatively small parts of the initial or revised regulatory proposal should be commercially sensitive, and therefore confidential.

The NER do not explicitly permit the AER to give less weight to confidential information in an initial or revised regulatory proposal. However, there are existing AER powers under the NEL and common law to use discretion in addressing confidentiality claims in a regulatory proposal. These include:

- giving lesser weight to the information when making a decision;
- aggregating confidential information;
- publishing confidential information if the public benefit outweighs the detriment to the NSP arising as a result of the disclosure of the information; and
- seeking alternative arrangements such as limited disclosure.

The Commission considers that the AER has a broad range of tools at the AER's disposal to assist it in addressing confidentiality claims. The AER should take advantage of its existing discretionary powers.

Limited timeframe

In respect of these discretionary powers, the AER indicates that the current timeframe sometimes makes it infeasible to apply the public benefits test under section 28ZB of the NEL.[420] However, the AER also indicates that its internal processes are being

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418 Id., p. 121.

419 Ibid.

420 AER, Response to AEMC questions, 2 February 2012, p. 7.

improved to allow it sufficient time to make use of this discretionary power.[421] The AER notes that extending the regulatory determination timeframe may assist the AER in assessing large confidentiality claims and applying section 28ZB of the NEL.[422] The Commission considers that an additional six months to the current timeframe as discussed in section 10.8 should allow the AER more time to consider confidentiality claims in a regulatory proposal. However, the AER considers that extending the timeframe would not address the problem of a NSP making blanket and unsubstantiated confidentiality claims.[423] Having more information about the reasons for a confidentiality claim may make it easier for the AER to assess the claim. Categories of confidential information, as described below, may assist this.

Categorisation of confidentiality claims and guidelines

NSPs propose a categorisation of confidentiality claims to assist the AER in assessing confidentiality claims.[424] They propose the following categories:

- confidential contractual terms;
- market sensitive cost inputs;
- information provided by a third party on a confidential basis;
- proposed strategic property acquisitions;
- planning for negotiation of industrial agreements;
- proprietary information of a NSP or a third party;
- information which if made public may jeopardise security of the network or NSP's ability to effectively plan and operate its network; and
- information which identifies the personal affairs of individuals.[425]

The Commission considers that these confidentiality categories are clearly legitimate reasons for claiming confidentiality as they relate to commercial sensitivities, protection of security, or privacy. However, they should not be considered an exhaustive list. There may be other categories of confidentiality claims for information not listed which legislation would still require the AER to protect from being disclosed.[426]

To provide clarity on how confidentiality claims in regulatory proposals should be presented to the AER, the Commission proposes to require the AER to develop and

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421 Ibid.

422 AER, Directions Paper submission, 2 May 2012, p. 71.

423 Ibid.

424 ENA, Directions Paper submission, 16 April 2012, p. 71.

425 Ibid.

426 *Competition and Consumer Act 2010* (Cth) s. 44AAF.

consult on guidelines with respect to this. The guidelines would specify the manner in which the NSP is to make confidentiality claims in its regulatory proposal, which may include categories of confidential information. The guidelines may also include how the NSP should identify the confidential information and the type of information that the NSP wishes to have disclosed. However, the guidelines would not prevent the NSP from making confidentiality claims. Its purpose is to assist the AER when it receives confidentiality claims from the NSP.

Further, by establishing guidelines which clarify the manner in which NSPs are to make their confidentiality claims, NSPs will have a better understanding of the AER's requirements. It will also make NSPs become more accountable when they make confidentiality claims in regulatory proposals. In addition, the administrative burden that would have been placed on the AER in addressing confidentiality claims should be reduced. For instance, the AER would be able to sort through the confidentiality claims more quickly and understand what it has to focus on. This would mean the time pressures on the AER would be alleviated and allow the AER to make use of its existing powers more efficiently.

In addition to the guidelines, the draft rule requires the AER to publish on its website information relating to the proportion of the NSP's material that is subject to a claim of confidentiality. This will allow the public to have an understanding as to the proportion of material that has been claimed to be confidential. As a comparison to other NSPs' claims of confidentiality, a comparative proportion of material that the AER has previously received from other NSPs claiming to be confidential will also be published on the AER's website.

Interaction with interested parties

NSPs have proposed a non-rule based solution to the issues raised in respect of confidential information in the form of a confidential information protocol.[427] This may include a limited disclosure agreement between the NSP and an interested party, as has been utilised in the telecommunications industry.[428] The Commission supports any initiative that aims to improve stakeholder engagement, without the need for prescription in the NER.

With the introduction of the NSP overview paper, it would be the appropriate place to require the NSP to explain whether and, if so, how it has engaged with consumers. The AER could use this information to assist it in determining whether it should take a stricter approach in assessing the confidentiality claims from the NSP. For instance, a consumer representative group may be given access by the NSP to a confidential document prior to the submission of the regulatory proposal. On this basis, the AER may be able to test the probative value of the document with that consumer representative group. This could assist the AER in determining how much weight to place on the document.

427 ENA, Directions Paper submission, 16 April 2012, p. 70.

428 Ibid.

The Commission considers setting out the process for addressing confidentiality claims as discussed above will encourage NSPs to become more disciplined in only making genuine confidentiality claims. It will also result in the identification of confidential information to the AER more clearly. This in turn will reduce the administrative burden on the AER to test confidentiality claims. Other stakeholders will also benefit from a more transparent process and have a greater opportunity to access relevant information. Overall, this facilitates as much testing and scrutiny of the initial or revised regulatory proposal as possible, while upholding legitimate claims of confidentiality by NSPs. This will lead to a more well-balanced and robust decision-making process.

10.5.2 Guidance on draft rule

As noted earlier, to promote adherence to a process for addressing confidentiality claims, the draft rule requires the AER to issue guidelines. This will set out the manner in which the NSP makes confidentiality claims in its regulatory proposal, which may include identifying relevant categories of confidential information. The guidelines would be consulted upon in accordance with the standard consultation procedures for guidelines in the NER. The NSP and other stakeholders will then have an opportunity to clarify the requirements for making confidentiality claims in regulatory proposals.

Once the guidelines are in place, the NSP will be required to identify to the AER which information it claims to be confidential. This may include identifying the category of confidentiality claim that the NSP wishes to make or wishes to have disclosed. Based upon this information, the AER would be able to determine the comparative proportion of material that has been claimed as confidential with regard to other NSPs. The AER would then report on its website that a confidentiality claim has been made. Other information on the website would include:

- the identification of the NSP;
- the quantity and proportion of confidential information; and
- a comparison of the NSP's proportion of confidential information to other NSPs.

The AER would not be required to report on other more specific aspects such as categories of confidentiality claims. That type of information is more for the AER's benefit when addressing confidentiality claims.

As an example, the AER provided a table in its submission to demonstrate the proportion of material from NSPs that it has previously received claiming to be confidential.[429] This is reproduced and shown in Table 10.1. The AER could use a similar format on its website to report on confidentiality claims and include the identification of the NSP and proportion of confidential information claimed from each NSP.

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429 AER, Directions Paper submission, 2 May 2012, p. 71.

Table 10.1 Page count - documents submitted by DNSPs in the AER's Victorian electricity distribution determination (2011-15)

	Regulatory proposal		Revised regulatory proposal	
	Public	Confidential	Public	Confidential
Business 1	1,540	4,584	4,157	5,599
Business 2	2,960	5,231	9,337	10,235
Business 3	1,869	22,811	1,704	2,626

Source: AER, Directions Paper submission, 2 May 2012, p. 71.

In addition to the draft rule for confidentiality claims with respect to initial or revised regulatory proposals, the Commission considers that the same rules could also be applied to the pricing methodologies and to submissions in general.[430] However, no consequential amendments will be made to the NER to align confidentiality claims in respect of submissions with the Commission's position on regulatory proposals. This is because NER provisions relating to confidentiality claims in submissions already exist. Conversely, the Commission considers it appropriate to treat confidentiality claims in respect of pricing methodologies for transmission consistently with confidentiality claims in respect of regulatory proposals.

10.6 Mandatory issues paper and overview paper

10.6.1 Analysis

Issues paper

Consumer representative groups seek better opportunities to be engaged in the regulatory determination process. In the directions paper, the Commission identified a need for improvement in engaging with stakeholders during the regulatory determination process, especially with consumer representative groups. The LMR Panel has also taken a similar view that there are weaknesses in the regulatory determination process for consumer and user participation.[431] As a monopoly business, incentives need to be placed on the NSP to continually take into account consumers' current and future interests, preferences and requirements, including improvements to consumer welfare.[432]

The Commission considered in its directions paper the option to establish a mandatory issues paper during the time between the regulatory proposal and close of submissions

430 Pricing methodologies are submitted with the regulatory proposal in transmission.

431 LMR Panel, *Review of the Limited Merits Review Regime*, Stage One Report, Report for the SCER, 29 June 2012, p. 45.

432 Ibid.

on the regulatory proposal. The Commission considered that it would be for the benefit of stakeholders, including consumer representative groups.

Currently, an issues paper is optional under the NER.[433] However, the Commission understands that this process has never been utilised in practice.

A potential explanation for the issues paper not being used by the AER is the current limited timeframe between the regulatory proposal and close of submissions on the regulatory proposal. The AER suggests that this time should be extended to reflect the time and resources if an issues paper is required.[434] The Commission recognises the current time constraints, and considers that additional time should be provided to the AER to prepare this paper.

The AER also considered that the issues paper should continue to be optional, as it may not add value to the regulatory determination process.[435] The Commission notes that the use of an issues paper is not unusual in regulation. Other jurisdictional regulators have used the paper in their regulatory processes.[436] The issues paper allows for preliminary considerations of the AER to be identified upfront. It also allows resource-limited stakeholders, such as consumer representative groups, to focus on specific issues. The Commission shares the view of the Vic DPI that the issues paper may result in a reduction of the volume of NSP material which stakeholders will have to consider.[437] By imposing an obligation on the AER to identify preliminary issues which it considers to be relevant, stakeholders will be guided into focusing on specific areas of interest in the NSP material. It will also reduce the need for stakeholders to unnecessarily become immersed in the other NSP material. In turn, the AER is not limited to considering other issues when making its determination.

The identification of these preliminary issues will assist all stakeholders to make better use of their resources to focus on particular matters when preparing their submissions on the regulatory proposal. It will also encourage further discussion on these issues earlier in the process and before the publication of the draft regulatory determination. The regulator should also benefit from this process because fundamental differences could be identified and resolved earlier in the regulatory determination process and the quality of submissions should improve. This should lead to an overall improvement in stakeholder engagement. For these reasons, the Commission endorses the use of an issues paper.

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433 NER clauses 6.9.3(b) and 6A.11.3(b).

434 AER, Directions Paper submission, 2 May 2012, p. 67.

435 Ibid.

436 For example: ERA, *Western Power's Proposed Revisions to the Access Arrangement for the Western Power Network*, Issues Paper, 7 November 2011, p. 2; ESCOSA, *ETSA Utilities' Capital and Operating Expenditure Submission 2005-2010*, Issues Paper, June 2004, p. 3; ESCV, *Electricity Distribution Price Review 2006*, Issues Paper, December 2004; IPART, *Review of regulated retail tariffs and charges for electricity 2010-2013*, Issues Paper, July 2009; Office of the Tasmanian Economic Regulator (OTTER), *Declaration of Distribution Services and Terms of Reference*, Issues Paper, November 2006; Queensland Competition Authority (QCA), *2005 Electricity Distribution Review*, Issues Paper, September 2003, p. 4.

437 Vic DPI, Directions Paper submission, 16 April 2012, p. 13.

Given its importance, an issues paper should be made mandatory. This will also help to place a discipline for all parties involved to discuss the AER's preliminary views earlier in the process.

In terms of the time requirement, the Vic DPI provided a comparison between the AER regulatory determination process and the ESCV regulatory process which included publication of an issues paper.[438] It took the ESCV approximately two months from the date of receiving the regulatory proposal to publish the issues paper. Using this as a guideline for providing adequate time without creating an administrative burden, the existing regulatory determination process timeframe could be extended to accommodate an additional 40 business days. The issues paper will therefore be required to be published by the AER within 40 business days after the AER receives the NSP's regulatory proposal.

Overview paper

Alongside the issues paper, the Commission considers that there is a need for the NSP's regulatory proposal to be easier for consumers, including consumer representative groups, to understand. To promote this, the Commission has decided that an overview paper should be provided by the NSP. The paper would be subject to preliminary examination together with the regulatory proposal.

A difficulty identified in submissions, especially from consumer representative groups, is the resource intensive nature of the regulatory determination process. Part of this relates to the volume of information provided in the NSP's regulatory proposal. Just on the initial regulatory proposal alone, Table 10.2 illustrates the size that other stakeholders would have to consider for a given regulatory determination process.[439]

438 Id., pp. 13-14.

439 This excludes the confidential information and any other accompanying information.

Table 10.2 Total page count for initial regulatory proposals submitted to the AER

Region	Segment	Regulatory period	Total page count
New South Wales/Australian Capital Territory	Distribution	2009-14	1049
	Transmission	2009-14	128
Queensland	Distribution	2011-15	892
	Transmission	2012-17	131
South Australia	Distribution	2010-15	286
	Transmission	2008-13	138
Tasmania	Distribution	2012-17	323
	Transmission	2009-14	187
Victoria	Distribution	2011-15	1886
	Transmission	2008-14	421

As can be seen in Table 10.2, the total number of pages in initial regulatory proposals varies between regions. This is because of the number of NSPs and type of segment that are being considered as part of the regulatory determination process. With the addition of information that would accompany these regulatory proposals, it creates a further burden on resources for consumer representative groups to digest this information and understand the risks, benefits and impacts.

The overview paper would aim to address this by providing a summary of the NSP's regulatory proposal from the NSP's perspective which is specifically directed at electricity consumers. The scope would be to focus on the risks and benefits of the regulatory proposal for electricity consumers. In addition, the paper would outline how the NSP has engaged with consumers and how it has a right to address any of their concern which have been identified as a result of that engagement. Finally, a comparison between the NSP's proposed and current revenue requirements would be made. This is aimed at promoting NSP engagement with electricity consumers earlier in the process. As the NSP overview paper would be consumer-focused, it would need to be presented in plain language that would be easily understood by electricity consumers. Designing the overview paper this way will help to promote better engagement by the NSP with consumers, including consumer representative groups. It will also mitigate the disadvantage of limited consumer resources and expertise in the area. This approach would also be consistent with the LMR Panel's Stage One Report

findings to encourage earlier consideration of consumers' interests in the regulatory determination process.[440]

Public forum

The Commission considers that the requirement to have an overview paper and issues paper should be complemented by a public forum. The benefit of this is that it provides an additional opportunity for stakeholders to seek clarification from the AER and NSP on the NSP's regulatory proposal and the AER's preliminary thinking in the issues paper. Further, the forum should assist stakeholders when they prepare their submissions.

The Commission understands that the AER currently holds a public forum following the publication of the regulatory proposal, which involves the NSP and AER presenting to interested stakeholders. The Commission also recognises that the AER has a Customer Consultative Group which helps provide the AER with advice on matters affecting consumers. The Commission welcomes any other informal engagement between the NSP and AER with stakeholders.

Taken together, the AER issues paper, NSP overview paper and associated public forum should improve the level of understanding of the issues and quality of input from stakeholders. These processes add value by assisting stakeholders to allocate their resources to focus on key issues in the regulatory proposal and on the AER's preliminary views.

10.6.2 Guidance on draft rule

Issues paper

The Commission has decided to require the AER to publish an issues paper. The purpose of the paper will be to identify the preliminary issues that the AER considers are likely to be relevant to its assessment of the NSP's regulatory proposal. However, the AER would not be precluded from considering other issues when making its regulatory determination. Therefore, the issues paper would not be an exhaustive review of the proposal or contain a complete list of the matters that the regulator would consider in making its final decision.

The issues paper will be published within 40 business days of the AER receiving the NSP's regulatory proposal. It is noted that the publication date for the issues paper is not based on when a resubmitted regulatory proposal, if required to be resubmitted, is received by the AER. This is because the AER should still be able to prepare the issues paper while it waits on further information to be included in the resubmitted regulatory proposal. Therefore, only the period between the resubmitted regulatory proposal and issues paper will be affected. The other milestones in the regulatory

440 LMR Panel, *Review of the Limited Merits Review Regime, Stage One Report*, Report for the SCER, 29 June 2012, p. 46.

determination process will not be contingent on the date that the issues paper is published.

The deadline for submissions on the issues paper and regulatory proposal will be required to be no earlier than 60 business days after the AER publishes its issues paper. This means that the deadline for submissions on the regulatory proposal is essentially no earlier than 100 business days after receipt of the regulatory proposal.[441] The additional time for submissions on the regulatory proposal takes into account the introduction of the issues paper and submissions associated with that paper.

Further, to allow the AER to address a potential increase in submissions as a result of the issues paper, an additional 20 business days will be included as part of the overall regulatory determination process. This also accounts for the additional time that the AER would need to prepare its draft regulatory determination.

Submissions on the issues paper will be due at the same time that submissions on the regulatory proposal are due. This is to reflect the purpose of the issues paper, which is to assist stakeholders, particularly consumers and consumer representative groups, in preparing their submissions on the regulatory proposal.

Overview paper

With a consumer-specific focus in mind, the mandatory overview paper will need to explain how the NSP has engaged with electricity consumers in preparing its regulatory proposal. The paper will also provide a summary of the regulatory proposal for electricity consumers. In this way, the issues paper will as a "map" to the regulatory proposal and help consumers focus on the relevant parts when responding to the regulatory proposal. In addition, the paper will explain how the NSP has sought to address any relevant concerns identified as a result of the engagement with electricity consumers. To further focus the attention of consumers, the paper will describe the key risks and benefits of the regulatory proposal for electricity consumers. Finally, the paper will compare the total revenue approved for the current regulatory period with the NSP's proposed total revenue for the next regulatory period. In this regard, it would be expected that the NSP will provide an explanation for any material differences between these two amounts.

Given that consumers will need to be able to easily access the paper, the issues paper will be a standalone document provided with the regulatory proposal. This means that the language in the paper should be plain language and should not use technical language or industry jargon.

To reflect the overview paper's importance in the process, the AER will be given the ability to accept or reject the overview paper which accompanies the regulatory proposal. If the AER considers that the overview paper does not comply with the NER requirements, the AER may reject the overview paper and require that this paper be resubmitted, addressing any relevant requirements. To provide clarity to the NSP on

441 This time also takes into account the 40 business days for the AER to publish its issues paper after receipt of the regulatory proposal.

the information required in the overview paper, the AER can utilise a regulatory information instrument.

Public forum

The Commission will be making the convening of the public forum on the NSP's regulatory proposal and the AER's issues paper mandatory. It will be required to be held within 20 business days after the AER publishes its issues paper on the NSP's regulatory proposal.

10.7 Cross-submissions stage

10.7.1 Analysis

The AER has expressed a concern that NSPs are providing submissions on the draft regulatory determination to which other stakeholders do not have a reasonable opportunity to respond. Equally, it could be argued that other stakeholders may raise issues in their submissions which do not allow the NSP to have a formal opportunity to respond. Presently, under the NER, there are no formal consultation processes available following close of submissions on the draft regulatory determination. That said, the Commission understands that the AER has used its discretion at times to consult informally with interested parties prior to making a final regulatory determination.

The Commission considers a formal discretionary cross-submissions process may alleviate some of these problems. The New Zealand Commerce Commission uses a cross-submissions stage as part of its regulatory process. It is a discretionary stage in which the Commerce Commission can decide to initiate the process based on a narrow scope of issues raised during the initial round of submissions. For example, the Commerce Commission allowed for a cross-submissions stage on its process and issues paper in one of its regulatory processes.[442] This stage followed immediately after close of submissions on the process and issues paper. Later in that same regulatory process, the Commerce Commission allowed for another cross-submissions stage on its draft input methodology.[443] This second cross-submissions stage occurred immediately after close of submissions on the draft input methodology. NSPs support a cross-submissions stage on the basis that this would provide an opportunity for submissions made by different stakeholders to be tested, and lead to a broader debate between the NSP and other stakeholders.

A criticism of the cross-submissions stage is that it could create an additional administrative burden on the AER to consider an additional volume of material as a

442 The regulatory process was with respect to input methodologies for default price-quality paths with respect to electricity distribution and gas pipeline services. For further information, see New Zealand Commerce Commission, *Additional Input Methodologies for Default Price-Quality Paths*, Process and Issues Paper, 9 December 2011, pp. 5, 7, 9, 12, 16.

443 New Zealand Commerce Commission, *Draft Input Methodologies for Default Price-Quality Paths*, Consultation Paper, 15 June 2012, p. 5.

result of the process.[444] Another criticism is that it may disincentivise the NSP from providing a complete revised regulatory proposal and submissions upfront within the current timeframes.[445] These two concerns could be mitigated by giving the regulator the discretion to initiate the cross-submissions stage. These concerns can be further mitigated by limiting the scope of the cross-submissions stage to specified matters that have been raised during first round submissions.

The Commission is of the view that providing the NSP and other stakeholders with an opportunity to respond to each other's submissions on specified matters will likely increase the opportunity for all to comment. It will also likely potentially reduce the volume of material that may have otherwise been provided later in the regulatory determination process, which would have been outside of the consultation period. The AER may also benefit in the cross-submissions stage if the cross-submissions provide clarity to the AER on specified matters that were raised in submissions on the draft regulatory determination.

Making the cross-submissions stage discretionary and limited in scope will reduce the risk that NSPs treat this stage as an opportunity to submit a late revised regulatory proposal. It also gives the AER the option to dispense with the process if it considers that it would be unnecessary and to better utilise resources in preparing the final regulatory determination.

10.7.2 Guidance on draft rule

The Commission has decided to allow for a cross-submissions stage in the NER. The AER will have the discretion to decide whether or not the cross-submissions stage will be required immediately following the close of submissions on the revised regulatory proposal. If the AER does not invite submissions on the revised regulatory proposal, it implies that the cross-submissions stage would be unnecessary. This is because the AER did not consider it necessary with respect to the revised regulatory proposal. The AER would have the discretion to limit the scope of the cross-submissions stage. The scope would be to specified matters that have been raised during submissions on the draft regulatory determination or submissions on the revised regulatory proposal. If utilised, the cross-submissions stage would allow at least 15 business days for submissions after the invitation for submissions is published.

10.8 Timing of the regulatory determination process

10.8.1 Analysis

In the Chapter 6A rule determination, the timeframe for the regulatory determination process was limited to 11 months. The AEMC's intention was to promote efficient and timely regulatory decision-making. However, as described earlier in this chapter, the

444 AER, Directions Paper submission, 2 May 2012, p. 68.

445 Ibid.

environment for economic regulation of network services has changed since the Chapter 6A rule determination and 11 months appears to be inadequate.

As noted in sections 10.4 to 10.6 in this draft rule determination, new additions to the regulatory determination process will require consequential changes to the existing 11-month regulatory determination process timeframe.

In addition, NSPs have proposed for the time for the NSP to prepare its revised regulatory proposal to be extended. In setting the current 30 business day timeframe in 2006, the AEMC considered that this would be sufficient for the NSP. It was considered that this reflected the limited scope of matters that would be addressed in the revised regulatory proposal. It was also considered that this would provide the discipline to submit in a timely manner. However, the Commission accepts that a lack of resources over the Christmas to New Year period, if applicable, may mean that the 30 business days are insufficient. That said, the NSP must still provide its revised regulatory proposal within a specified timeframe and limit these to matters identified by the AER in the draft regulatory determination. The NSP should not circumvent the existing requirements.

Recognising the burden placed on the NSP, the Commission will allow for an additional 15 business days to the current 30 business day period in which the NSP must submit its revised regulatory proposal.[446] This should provide the NSP with a more reasonable opportunity to prepare and submit a complete revised regulatory proposal. The timeframes have been calibrated to address the Christmas to New Year period problem for the NSP in preparing its revised regulatory proposal under both the financial year and calendar year timeframes. It has also been adjusted for other stakeholders in responding to the revised regulatory proposal.

A total additional 120 business days, or approximately six months, will be required for the overall regulatory determination process timeframe. This is to account for the extension in time for existing stages in the process and the addition of new stages. The Commission does not consider it appropriate to reduce this additional period as proposed in submissions. This is because it would most likely reduce the timeframe for the AER to make its decisions, which would likely reduce the robustness of the AER's decisions. As a result, a NSP will now need to submit its regulatory proposal to the AER at least 19 months, instead of 13 months, before the end of the current regulatory period.

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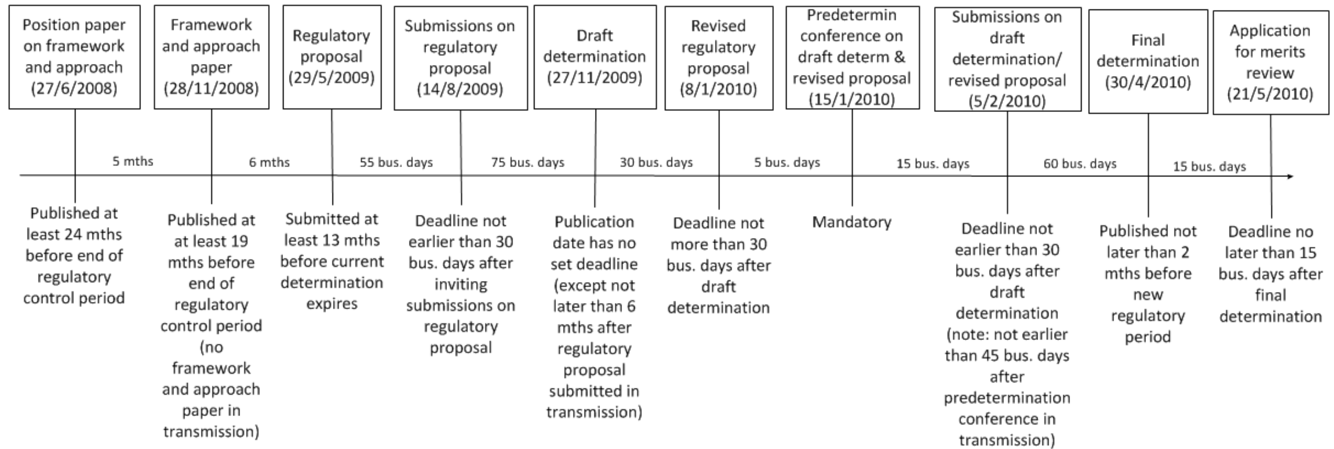
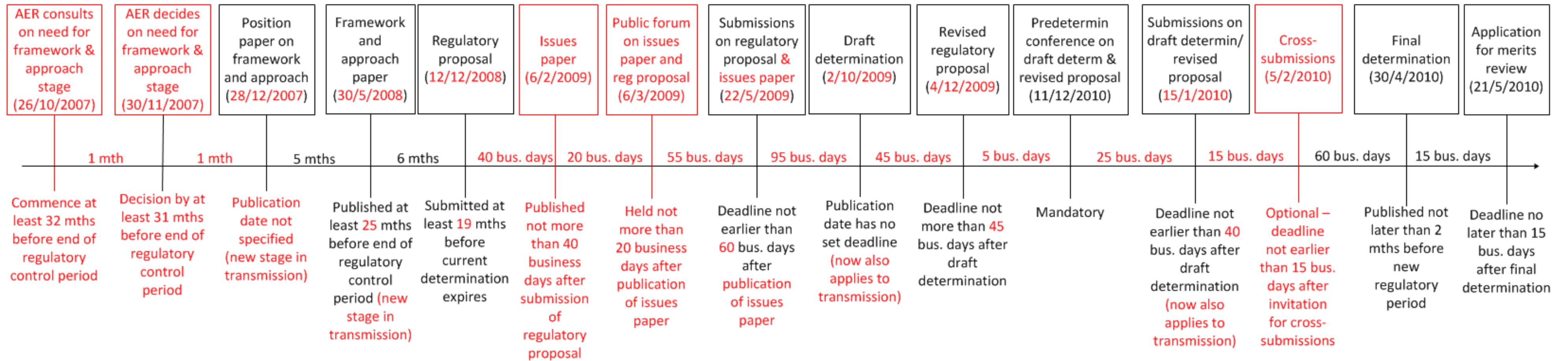
446 The Commission notes that NSPs propose an additional period of between 10 to 15 business days to prepare their revised regulatory proposals.

Figure 10.1 Example of the current regulatory determination process applicable to DNSPs



Note: the dates used in Figure 10.1 are hypothetical and are only used to illustrate the differences between the existing timeframe in this figure and the new timeframe shown in Figure 10.2. The diagram is unique to distribution. Where there are differences with transmission, this has been noted in the diagram.

Figure 10.2 Example of the new regulatory determination process applicable to DNSPs and TNSPs



Note: changes to the current regulatory determination process are highlighted in red text.

A concern with commencing the regulatory determination process earlier is the reduction in accuracy of forecasts for expenditure. This means that the information is more likely to be out-dated when the final regulatory determination is made. However, commencing the regulatory determination process earlier will allow for additional processes to promote further stakeholder engagement and transparency. It will also allow for more time for the existing processes, which should lead to more robust decision-making, more comprehensive and timely submissions, and reduce late material. For these reasons, the Commission considers that the benefit of commencing the regulatory determination process earlier by six months outweighs the risk of less accurate and available information for forecasts.

A comparison with some other jurisdictions and their regulatory processes would suggest that the new AER regulatory determination timeframe is now substantially longer than in those jurisdictions.[447] On the other hand, the AER regulatory determination process is still shorter than the standard 24 month timeframe provided by Ofgem in Great Britain.[448] However, it is somewhat misleading to compare the overall timeframe for the AER regulatory determination process with other jurisdictions, given the differences between the regulatory processes. For example, the degree of prescription is quite extensive with respect to the regulatory determination process for the AER, including statutory deadlines, while Ofgem has almost no prescription on any aspect of the determination process.[449] Another difference includes the scope of the regulatory determination such as determining the cost of capital which is required for the AER regulatory determination, but not required in New Zealand.[450] There are also historical reasons for the differences, noting that the economic regulation of network services was transferred from various jurisdiction-specific regulatory processes into a single NEM-wide regulatory process.[451]

In reviewing the timeframe of the existing regulatory determination process, the Commission considered aligning the regulatory determination process timeframes for transmission and distribution. For consistency, the Commission has decided to make consequential changes where it does not consider there should be any difference and should have a minimal impact on stakeholders. As a result the changes include:

- removing the deadline for the making of the draft regulatory determination for transmission. There is currently no such deadline for distribution. In contrast, the

447 The jurisdictions considered were IPART in New South Wales, ERA in Western Australia, Commerce Commission in New Zealand, Ontario Energy Board (OEB) in Ontario and Rhode Island Public Utilities Commission (RIPUC) in Rhode Island. For further information, see The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, p. 4.

448 Here, the regulatory determination process starts from the date when a regulatory proposal is submitted to the regulator to the date that a final regulatory determination is made by that regulator.

449 The Brattle Group, *Framework for assessing capex and opex forecasts as part of a "building blocks" approach to revenue/price determinations*, June 2012, paragraph 12.

450 Ibid.

451 Id., paragraph 27.

deadline for the publication of the draft regulatory determination in transmission is currently set for no later than six months after the regulatory proposal has been submitted. Removing this deadline allows the AER some flexibility in making the draft regulatory determination, which may be desirable given the different individual circumstances of NSPs; and

- changing the deadline for receipt of submissions on the draft regulatory determination for transmission to be no earlier than 40 business days after the publication of the draft regulatory determination. For transmission, this is currently set at no earlier than 45 business days after the date specified by the AER with respect to the predetermination conference on the draft regulatory determination. For distribution, this is currently set at no earlier than 30 business days after the date specified by the AER with respect to the predetermination conference on the draft regulatory determination.

Given that the above consequential changes are not set to specific dates, the AER will still have some flexibility in adjusting the timeframe for specific milestones as it currently does. However, in continuing to allow for flexibility in changing those timeframes, the AER will still be constrained to meeting the final deadline for publishing the final regulatory determination.

10.8.2 Guidance on draft rule

Commencing the regulatory determination process 120 business days earlier, as can be seen in Figure 10.1 and Figure 10.2, will allow for:

- 40 business days for the AER to prepare the issues paper following receipt of the NSP's regulatory proposal;
- 20 business days for the AER to hold a public forum following the issues paper;
- an additional 20 business days for the AER to prepare its draft regulatory determination;
- an additional 15 business days for the NSP to submit its revised regulatory proposal;
- an additional 10 business days for other stakeholders to consider the NSP's revised regulatory proposal and draft regulatory determination; and
- 15 business days for a cross-submissions consultation stage.

10.9 Framework and approach paper

10.9.1 Analysis

Need for a framework and approach paper

In the directions paper, the Commission considered the NSPs' proposal for a new framework and approach paper to be discretionary if there are no material changes to a particular component of the framework and approach paper.[452] In such a case, there would be no need to revisit such component(s), and the then existing framework and approach paper would be sufficient. This is because the consultation on that component(s) would not provide any additional benefit. As a result, the administrative costs would be reduced by making the process more efficient and flexible. The Commission maintains this position.

Specifying the circumstances when a framework and approach paper is necessary will provide stakeholders with a clear understanding of when the framework and approach would need to be consulted upon. Stakeholders' submissions would also be taken into account prior to the AER making the decision whether or not to proceed with a framework and approach paper.

NSPs also proposed that it should be either the AER or NSP that triggers the framework and approach paper. The MEU, on the other hand, suggested that it should be a tripartite approach and include other stakeholders. Upon further consideration, the Commission considers that, as the administrative decision-maker, the AER should be responsible for deciding whether to trigger the framework and approach paper. It would be at the AER's discretion to determine how much weight should be given to the NSP's input over other stakeholders with respect to initiating a framework and approach paper. However, it would be most likely that the NSP's input would be the most relevant, given that it has the knowledge of its own network and other matters relevant to the forthcoming regulatory period.

For consistency, the framework and approach paper process will also apply to transmission. Moreover, the draft rule omits the provisions in Chapter 6A that relate to submission guidelines. This is because all of the information requirements of submission guidelines as set out in NER clause 6A.10.2 can be met under a regulatory information instrument.

Incentive schemes

The Commission notes the AER's concern that consulting on incentive schemes in the framework and approach paper would be unnecessary and inefficient. However, the Commission maintains its position from the directions paper to retain incentive schemes as part of the framework and approach paper. This is because there has previously been reasonable stakeholder engagement on incentives schemes. Even so, by not requiring a new framework and approach paper with respect to such incentive schemes unless there is to be a change in the way they are applied, the AER's concern should be alleviated. The Commission considers this provides the appropriate balance between flexibility and administrative efficiency on the one hand, and certainty in the framework and approach paper stage on the other.

452 Under the draft rule, the components will include incentive schemes, service classifications, form of the control mechanisms, formulaic expressions of the control mechanisms, dual function assets, and methodology for forecasting expenditure.

Control mechanism - only relevant to distribution

The AER's proposal highlighted the potential mismatch in the thresholds for changing the control mechanism and the service classification following the relevant framework and approach paper for distribution. This could cause a problem where the service classification changes but the control mechanism is not able to be changed as a result. In the directions paper, the Commission took the view that the AER may need some flexibility to adjust the control mechanism following the framework and approach paper when unforeseen circumstances occur. Following further clarification from the AER regarding the differences between the form of control mechanism and the formulaic expression of the control mechanism, the Commission has decided to revisit this issue.

For clarity, clause 6.2.5(b) of the NER lists the available options for the form of control mechanisms, which are:

- a schedule of fixed prices;
- caps on the prices of individual services e.g. a price cap;
- caps on the revenue to be derived from a particular combination of services e.g. a revenue cap;
- a tariff basket price control e.g. a weighted average price cap (WAPC);
- a revenue yield control e.g. an average revenue cap; or
- a combination of any of the above.

The formulaic expression of the control mechanism is the formula associated with that form of control mechanism. An example of the formulaic expression of the control mechanism is provided in Appendix B to illustrate the clear distinction between the "formulaic expression" of the control mechanism and the "control mechanism" itself.

The joint submission of ETSA, CitiPower and Powercor stated in an earlier submission that they support providing some flexibility to revisit the formulaic expression of the control mechanisms.[453] However, they consider that the form of the control mechanisms should be fixed in.[454] Otherwise, this would create an unacceptable degree of regulatory uncertainty for the NSP, place a prohibitive administrative burden on NSPs, and may constrain the NSP's ability to properly assess any new proposed form of control mechanism.[455] The AER and NSPs clarify their support for the joint submission of ETSA, CitiPower and Powercor's in the second round of consultation.

The Commission accepts that the amount of time required for a NSP to accommodate changes to the form of control mechanism would be significant. As a result, the form of

453 ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, p. 37.

454 Ibid.

455 Ibid.

control mechanism should be fixed in the framework and approach paper. However, if the formulaic expression of the control mechanism was able to be amended, a measure of flexibility would be afforded. The joint submission of ETSA, CitiPower and Powercor supports this approach, and notes that the AER has previously observed the benefits of a change to the formulaic expression of the control mechanism.[456] This includes in the South Australian distribution regulatory determination regarding the WAPC, and in the Victorian distribution regulatory determination regarding the S factor true-up correction factor. It would appear that the burden on a NSP to accommodate a change to the formulaic expression is not so great as to be prohibitive of this approach.

The benefit of this approach is that there would be sufficient flexibility in being able to change the formulaic expression of the control mechanism during the regulatory determination process. This flexibility is balanced with certainty in fixing in the form of the control mechanism at the framework and approach paper stage. In addition, the formulaic expression of the control mechanism could be changed when the service classification is changed, addressing the AER's concern.

Threshold for changing service classification and formulaic expression of the control mechanism in regulatory determinations - only relevant to distribution

In respect of changes to service classification, the Commission maintains its position from the directions paper that the threshold to allow the AER to depart from its framework and approach paper will be in the event of unforeseen circumstances.

In contrast to the term "unforeseen circumstances", the Commission considers that the term "good reasons" and "persuasive evidence" are unclear and ambiguous, and are open to differing interpretations. What the AER considers to be "good reasons" or "persuasive evidence" may differ from the NSP. This creates unnecessary uncertainty in the process. On the other hand, the threshold of "unforeseen circumstances" has a more definitive meaning, and has been applied in other parts of the NER.[457] The "unforeseen circumstances" threshold should therefore narrow the scope for protracted debate over interpretation. This provides a degree of certainty compared to the "good reasons" and "persuasive evidence" thresholds, and also allows the AER some flexibility where "unforeseen circumstances" arise. The "unforeseen circumstances" threshold would not allow for changes due to reasons which ought to reasonably have been considered at the time that the decision was made in the framework and approach paper.

In addition, the Commission confirms its view in the directions paper that the threshold for departing from the service classification should be the same as that for departing from the formulaic expression of a control mechanism. Otherwise, a mismatch between the two triggers may mean an appropriate formulaic expression of

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456 Ibid.

457 For example, the term "unforeseen circumstances" appears under NER rule 3.7A(p)(3) and clause 11.30.2(i)(3). In addition to this, the term "unforeseen" appears under clauses 5.6.2A(b)(7), 5.6.5C(a)(1), 5.6.5C(b), 5.6.5C(c), and S8.11.1(b).

the control mechanism would not be able to be set for an altered service classification. Given the approach taken to service classification, this suggests an "unforeseen circumstances" test for the formulaic expression of the control mechanism as well. This provides the necessary consistency to properly change both components.

10.9.2 Guidance on draft rule

Triggering the framework and approach paper

The AER is being given the discretion to trigger the framework and approach paper stage. The circumstances in which the framework and approach stage would be required are if:

- there is no previous framework and approach paper on a particular component; or
- it may be necessary or desirable for a particular component from the previous framework and approach paper to be amended or replaced.

The circumstances above ensure that there must always be in place a framework and approach paper on a particular component, even if that is a previously existing framework and approach paper. A corollary of this is that, where a framework and approach paper on a particular component has previously been put in place, the requirement for a framework and approach paper on that particular component can be bypassed if the existing framework and approach for that component is still appropriate. In other words, the framework and approach paper would only be reopened for the particular components that the AER decides should be consulted upon. In other words, the framework and approach paper would not need to be reopened on all matters.

The AER will be given the responsibility to consider all stakeholder comments, including the relevant NSP's, on whether a revised framework and approach paper is necessary to address a particular component. This will be done prior to the AER making a decision on whether to trigger the framework and approach paper stage. This will give relevant stakeholders, and especially the relevant NSP, an opportunity to make a submission to the AER. It will also promote transparency in the process.

To this end, the draft rule requires the AER to issue an invitation for comment at least 32 months before the end of the current regulatory period. The draft rule also requires that stakeholders, including the relevant NSP, provide their comments on the need for a revised framework and approach. The AER would then be required to consider any stakeholder proposals and must decide whether to trigger the process at least 31 months before the end of the current regulatory period. Alternatively, the AER may not receive any submissions on triggering a framework and approach paper, but could still decide to trigger the framework and approach paper stage.

If there is to be a framework and approach paper stage on a particular component, then the AER must issue a notice to this effect by at least 31 months before the end of the

current regulatory period. The AER must then commence consultation on the framework and approach paper on that particular component. By at least 25 months prior to the end of the current regulatory period, the AER must have completed and published the framework and approach paper.

As there must be a framework and approach paper in respect of dual function assets, it is necessary for the determination on the price regulation of dual function assets to be brought forward to be aligned with the framework and approach paper process. To give the AER enough notice, the value of the relevant dual function assets will need to be advised to the AER before it commences consultation on whether to initiate a framework and approach paper. This means that this value will need to be advised to the AER at least 33 months prior to the end of the current regulatory control period. Given that the value ascribed to the relevant dual function assets must correspond to an opening value for a regulatory year, the time as at which this value must be determined will need to be 36 months prior to the end of the current regulatory period.

Threshold for departing from a component in the framework and approach paper

Except as described above, the AER can depart from the framework and approach paper in respect of the components covered by it during the regulatory determination process. For example, service classifications and the formulaic expression of the control mechanisms can depart from the framework and approach paper for unforeseen circumstances. Another example is the AER can depart from the relevant framework and approach paper for the application of incentive schemes during the regulatory determination stage, although it should give reasons for doing so. However, the form of the control mechanism and dual function assets will continue to be set in the framework and approach paper.

An example of how the "unforeseen circumstance" threshold could be applied may be with respect to a pending judicial decision where a service classification is contingent on that decision. Here, the pending judicial decision is one event and the actual judicial decision is another event. Although it may be argued that the pending judicial decision is foreseeable, the actual judicial decision could probably not be reasonably foreseen until the decision has been made. The service classification would have to be based on what is known at the time the framework and approach paper is made, but could be departed from once the actual judicial decision is made.

11 Diverse issues

Summary

- The capex reopener and contingent project mechanisms will be introduced in Chapter 6 of the NER (distribution) to allow for efficient costs to be recovered for unexpected events. A materiality threshold of one per cent of the annual revenue requirement will apply to cost pass through applications in distribution. These changes bring the uncertainty regime for distribution into line with transmission.

- The AER's decision-making timeframe for applications made under the uncertainty regime will be aligned between distribution and transmission. Some flexibility will be given in the timeframe to account for complex or difficult issues, and waiting on information from certain third parties. This will provide the appropriate balance between certainty and finality with flexibility in the process.

- The AER's power to revoke and substitute a decision for a material error or deficiency under Chapter 6A will be limited to "computational" errors by the AER or false or misleading information provided to the AER by another party. This brings into line the AER's power with Chapter 6, as well as providing for finality and certainty in the process.

- The AER will be given the power to establish shared assets cost adjustment mechanisms. This will apply to existing assets where those assets provide distribution or transmission services as well as other services. The mechanism will be designed in accordance with specific principles and guidelines. This will allow for innovation by NSPs and cost reflectivity for customers of the regulated service.

- Balancing the promotion of innovation and flexibility in regulation with good regulatory practice, the AER will be able to develop small scale pilot or test incentive schemes. This will allow the potential impact of such an incentive scheme to be understood before full implementation.

The AER has raised in its rule change request certain diverse issues. These relate to:

- the appropriateness of applying particular uncertainty regime mechanisms in distribution and aligning decision-making timeframes for the uncertainty regime mechanism (section 11.1);

- when the AER can revoke and substitute regulatory determinations to address material errors (section 11.2);

- how shared assets should be regulated (section 11.3); and

- the development of small scale incentive schemes (section 11.4).

11.1 Uncertainty regime

11.1.1 Introduction

For the purposes of this draft rule determination, the "uncertainty regime" under the NER comprises contingent projects, capex reopeners and pass through events. These mechanisms deal with expenditure that is required to be undertaken during a regulatory period but which is not able to be predicted with reasonable certainty at the time of preparing or submitting a regulatory proposal to the AER for the start of the next regulatory period. A more accessible uncertainty regime will, on the one hand, facilitate certain capex or opex projects being undertaken, though on the other hand it may reduce the incentive to undertake only efficient capex and opex in some circumstances. An appropriate uncertainty regime will contribute to efficiency of investment by allocating risks to the party best able to deal with them, including appropriately sharing the risks of external events.

Capex reopeners and contingent projects

The AER proposes to include capex reopener and contingent project provisions in Chapter 6 of the NER.[458] In general, these would operate in distribution in the same way as they currently operate in transmission in Chapter 6A.

The threshold for a capex reopener would be five per cent of the value of the roll-forward RAB for the first year of the period, as in transmission. The threshold for a contingent project in distribution would be $10 million; however, the AER has also proposed that it have the ability to specify a different threshold for both distribution and transmission contingent projects in guidelines.

In respect of pass through events, the AER's proposal is that a materiality threshold of one per cent of the annual revenue requirement should be applied to distribution.[459]

The AER has also proposed that, where as a result of a pass through application the AER allows capex which is fully recovered during the regulatory period in which the relevant event occurs, the capex should not be rolled forward into the RAB at the next regulatory determination.

The Commission received a related rule change request from Grid Australia on the cost pass through arrangements in Chapter 6A of the NER. The final rule determination was published on 2 August 2012 and is available on the AEMC's website. While that rule change request does not directly relate to the issues proposed by the AER in the current rule change request, there is some overlap in respect of pass through events. The Commission has taken into account that rule determination as part of this rule making process.

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458 AER, Rule change request, Part B, 29 September 2011, pp. 46-52.

459 Id., p. 50.

Timeframes for AER decision-making under the uncertainty regime

When the AER receives an application for cost pass throughs, contingency projects or capex reopeners, it has a set time to make its decision which varies according to the type of application.[460] The AER considers that it does not have enough time for more complex applications, and proposes that it should have the ability to extend these time limits up to a set maximum period, as well as that the current decision-making periods across all types of applications should be aligned. In particular, the AER proposes a common default decision-making period of 40 business days from the date the application is received for positive pass throughs, negative pass throughs, contingent projects and capex reopeners.[461] For complex or difficult applications or where the AER requires further information from the NSP, the AER proposes to extend this decision-making period by an additional maximum period of 60 business days.[462]

11.1.2 Submissions

Capex reopeners and contingent projects

Most submissions maintain their objection from first round submissions to the proposed inclusion of the capex reopener and contingent project mechanisms in distribution.[463] Their reasons were similar to those provided by the MCE SCO in developing Chapter 6 of the NER.[464] That is, distribution projects are significantly different to transmission; being smaller in size, greater in volume, with shorter lead times, and more integrated and therefore difficult to divide.[465] To introduce such mechanisms may increase the administrative burden on the NSP, cause delays in projects, and avoid the merits review process.[466]

In addition to NSPs, consumer representative groups continue to express concern that extending the uncertainty regime would lead to a potential increase in intra-period determinations, an administrative burden placed on them to participate in each application, and a weakening of the expenditure discipline and price or revenue cap regime.[467] As an alternative, some consumer representative groups suggest that the

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460 An exception to this is for negative pass throughs which have no set time limit.

461 AER, Rule change request, Part B, 29 September 2011, p. 100.

462 Id., pp. 99-100.

463 Ausgrid, Directions Paper submission, 16 April 2012, p. 7; ENA, Directions Paper submission, 16 April 2012, pp. 27-28, 34-35; Essential Energy, Directions Paper submission, 20 April 2011, p. 8; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 30-32; IPART, Directions Paper submission, 16 April 2012, pp. 9-10; Jemena, Directions Paper submission, 16 April 2012, p. 24; MEU, Directions Paper submission, 17 April 2012, pp. 47-48, 60; SP AusNet, Directions Paper submission, 16 April 2012, p. 5.

464 Ibid.

465 Ibid.

466 Ibid.

467 Ethnic Communities Council of NSW, Directions Paper submission, 16 April 2012, p. 3; EUAA, Directions Paper submission, 16 April 2012, pp. 24, 26.

NSP should be better at reprioritising or substituting its projects to avoid seeking cost recovery through the uncertainty regime mechanisms.[468]

Notwithstanding the general opposition against contingent projects in distribution, there continue to be mixed responses from NSPs as to whether the threshold is too low or high. Some consider the mechanism would be too resource intensive if the threshold is too low.[469] Others consider the threshold to be so high that the mechanism would be rarely utilised.[470] The Vic DPI has previously proposed in first round submissions that the contingent project threshold and the other thresholds for capex reopeners and cost pass through applications should be indexed by inflation.[471]

With respect to the materiality threshold for cost pass through applications in distribution, some DNSPs suggest various thresholds including $1 million.[472] Other DNSPs have previously suggested in first round submissions that the threshold should remain flexible to capture all non-trivial matters, and reflect less lumpy capex in distribution, failing which they would be exposed to unrecoverable risks.[473]

NSPs maintain the position from first round submissions that the current uncertainty regime for transmission is not effective.[474] They suggest this may be to do with the regime not being: applied in full or at all; practical and efficient; or sufficiently flexible.[475] Further, they consider that uncertainty regime applications are inappropriate for addressing projects based on meeting customer or network demand, which may require a short lead time.[476]

Timeframes for AER decision-making under the uncertainty regime

Most NSPs maintain support for their previous proposal from first round submissions to include a "stop the clock" mechanism with respect to the AER's decision-making timeframe for complex circumstances relating to uncertainty regime applications.[477] This would cater for circumstances which require more time than proposed by the AER e.g. as where the AER is awaiting a decision by a third party or requires further information.[478]

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468 MEU, Directions Paper submission, 17 April 2012, pp. 47-48, 60.

469 Ausgrid, Directions Paper submission, 16 April 2012, p. 7.

470 SP AusNet, Directions Paper submission, 16 April 2012, p. 5.

471 Vic DPI, Consultation Paper submission, 8 December 2011, pp. 5, 8.

472 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, pp. 31-32.

473 Ausgrid, Consultation Paper submission, 8 December 2011, pp. 30-32.

474 ENA, Directions Paper submission, 16 April 2012, pp. 27-28, 34-35.

475 Ibid.

476 Ibid.

477 ENA, Directions Paper submission, 16 April 2012, pp. 80-81; Ergon Energy, Directions Paper submission, 16 April 2012, p. 17; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 53; Grid Australia, Directions Paper submission, 16 April 2012, p. 13; Jemena, Directions Paper submission, 16 April 2012, p. 58.

478 Ibid.

Upon further consultation on the NSPs' proposed "stop the clock" mechanism, the AER also supports this but considers that the mechanism should be limited to uncertain circumstances which cannot be resolved within an extended but limited timeframe.[479] In particular, the "stop the clock" mechanism should only apply to more uncertain circumstances related to waiting on information from third parties, awaiting the outcome of an external event impacting on the assessment, or where the AER has to make a relevant inquiry as part of its assessment and that enquiry requires additional time.[480]

With respect to contingent projects, the AER submits that it has experienced circumstances where contingent projects have required further assessment where there has been a change in scale, scope and schedule which requires it to assess the application afresh e.g. as receiving external advice on a detailed examination of a change in the expenditure profile associated to the expenditure allowance for the project.[481] However, Grid Australia suggests that the "stop the clock" mechanism should not apply to contingent projects.[482]

Some NSPs support the Commission's proposal to introduce a notification step where the NSP would be required to notify the AER if it was aware that there may be external events that could have an impact on an application before the NSP makes its application.[483] However, most NSPs do not support this, suggesting that the AER provide guidelines on its expectations.[484]

11.1.3 Analysis

Background

In the AEMC's Chapter 6A rule determination, the AEMC considered that, like most businesses, a TNSP operates in an uncertain environment.[485] Uncontrollable external events can alter the quantity and nature of services required to be provided.[486] In a normal competitive environment, production and pricing behaviour would adjust to respond to these changes where efficient producers can recover their costs and should generally earn at least a normal return on their investments.[487] The regulatory arrangements, including the uncertainty regime, attempt to mimic the competitive

479 AER, Directions Paper submission, 2 May 2012, pp. 63, 75-77.

480 Ibid.

481 Id., pp. 75-76.

482 Grid Australia, Directions Paper submission, 16 April 2012, p. 13.

483 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 53.

484 ENA, Directions Paper submission, 16 April 2012, pp. 80-81.

485 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 54.

486 Ibid.

487 Ibid.

market by allowing the TNSP to alter its production behaviour to meet market demand and undertake unexpected investment in new network capacity.[488]

For distribution, contingent projects and capex reopeners were excluded from Chapter 6 by the MCE SCO because it was considered that distribution projects were different to transmission with respect to their nature and profile of capex.[489] The MCE SCO considered that uncertainty around capex projects could be dealt with via pass through provisions to the extent the DNSP can demonstrate that the cost is outside of its control.[490] Further, the MCE SCO considered that this would strike a reasonable balance between not penalising the DNSP for events outside its control and ensuring appropriate operation of the incentives regime within the regulatory framework.[491]

Need for capex reopeners and contingent projects in distribution

As described in other parts of this draft determination, the Commission's starting point is that chapters 6 and 6A of the NER should be consistent unless there are substantive reasons for a difference. In respect of the uncertainty regime, the directions paper set out a range of reasons why the TNSP and DNSP face similar levels of uncertainty. Unlike competitive businesses, which are better able to adjust their behaviour in response to uncontrollable factors, the TNSP and DNSP are both generally obliged to continue to supply services even where their equipment is exposed to significant risks. In the absence of an uncertainty regime, the added risk for a regulated business would be factored into the cost of capital, forcing it up. A regulated business might also have more of an incentive to increase the forecast of capex or opex in its regulatory proposal to factor in circumstances which it cannot predict.

The Commission accepts that there are certain disadvantages of an expanded uncertainty regime. It could dampen the incentive effects of an ex ante allowance in certain circumstances. It could also create administrative burden for the AER and stakeholders in responding to "mini-determinations" during the regulatory period. On balance, however, the Commission has decided to maintain its position from the directions paper and include contingent projects and capex reopener mechanisms for distribution. This would better harmonise transmission and distribution, as well as making the NSP more accountable rather than relying on cost pass through applications for uncertain circumstances.

By setting the thresholds for these mechanisms at the correct level, as further discussed below, only the largest projects or events, which could be expected to have longer lead times, would be captured. Accordingly the administrative burden on stakeholders would be limited. In addition, experience with the uncertainty regime in Chapter 6A

488 Ibid.

489 MCE SCO, *Response to stakeholder comments on the Exposure Draft of the National Electricity Rules for distribution revenue and pricing*, 1 August 2007, pp. 29, 48.

490 Id., p. 29.

491 Id., p. 48.

indicates that the incentive effects of the ex ante allowance provided under the regulatory determination process would not be substantially weakened.[492]

In respect of whether pass throughs provide sufficient protection, capex reopeners are intended to fulfil a different function by extending protection to very large events which are more difficult to predict and are more difficult to fully provide for as pass through events. Contingent projects, on the other hand, apply to a matter which is more specific to a particular business and more likely to occur than a pass through.

In addition to NSPs, other stakeholders, including consumer representative groups, are concerned with the potential increase in intra-period determinations, administrative burden placed on them to participate in each application, and weakening the expenditure discipline and price/revenue cap regime.[493] As an alternative, some suggest that a NSP should be using up its existing expenditure allowance, or reprioritising or substituting its projects, to avoid seeking cost recovery through the uncertainty regime mechanisms.[494] In general, the Commission would expect a NSP to act in this way in respect of smaller projects. The threshold for capex reopeners and contingent projects means that these can only be used for larger projects. For such projects, it will be more difficult for the NSP to accommodate these within the existing allowance.

Finally, NSPs also suggest that the current uncertainty regime for transmission is not effective.[495] However, the Commission is of the view that it is outside the scope of this rule making process to review the effectiveness of the uncertainty regime for transmission. Issues specifically associated with the effectiveness of the cost pass through regime have been addressed as part of another rule change process. If there is any reason that the current threshold in transmission should be changed, it should be addressed in another rule change request.

Threshold for capex reopener and contingent project applications in distribution

For contingent projects, the AER proposed a threshold of $10 million which it considered was consistent with the AEMC's original intention in 2006 to align this with the regulatory test threshold.[496] There have been mixed responses from DNSPs; some suggesting the contingent project threshold is too low, while others suggesting it is too high.[497] The Commission maintains its position from 2006 and considers that the threshold should be aligned to the regulatory test threshold i.e. the RIT-T and the

492 It is noted that under Chapter 6A, these mechanisms have not so far created a significant burden, given that contingent project has been used twice while capex reopeners have never been used.

493 Ethnic Communities Council of NSW, Directions Paper submission, 16 April 2012, p. 3; EUAA, Directions Paper submission, 16 April 2012, pp. 24, 26.

494 MEU, Directions Paper submission, 17 April 2012, pp. 47-48, 60.

495 ENA, Directions Paper submission, 16 April 2012, pp. 27-28, 34-35.

496 The regulatory test threshold in transmission has now been superseded by the Regulatory Investment Test for Transmission (RIT-T).

497 Ausgrid, Directions Paper submission, 16 April 2012, p. 7; SP AusNet, Directions Paper submission, 16 April 2012, p. 5.

proposed Regulatory Investment Test for Distribution (RIT-D). For this reason, it is unnecessary for guidelines to be produced to vary the contingent project threshold or for the contingent project threshold to be indexed by inflation.[498] The contingent project threshold will now be directly linked to the estimated capital cost of the most expensive option to address the identified need under the RIT-T, as varied, for transmission and the proposed RIT-D, as varied, for distribution.[499]

By aligning the contingent project threshold with the estimated capital cost of the most expensive option to address the identified need under the RIT-T and the proposed RIT-D, in addition to alternative threshold of five per cent of the maximum allowed revenue (MAR) or annual revenue requirement, whichever is higher, the contingent project threshold will have a practical application as it can be applied to transmission and distribution projects which would be considered significant enough to warrant regulatory scrutiny and administrative resources. Therefore, the concerns raised in submissions with respect to the inappropriateness of applying contingent projects in distribution should be addressed as the threshold will be consistent with the proposed RIT-D.[500] The Commission notes this is consistent with ETSA, CitiPower and Powercor's joint proposal of a $5 million threshold for contingent projects in distribution.[501]

Materiality threshold for cost pass through applications in distribution

The materiality threshold for cost pass through applications in transmission was seen as important to promote stability and predictability of the revenue cap regime for both the regulator and the NSP.[502] Without such a threshold, it was considered that this would lead to greater uncertainty and an increase in administrative costs for the AER to determine a material event.[503] Hence, it was determined that the threshold should be one per cent of the MAR for transmission.

Some DNSPs propose that the materiality threshold for distribution should not be set as a value in the NER.[504] Instead, they consider that it should remain flexible to capture all non-trivial matters and reflect less lumpy capex in distribution.[505] Otherwise, the DNSP would be exposed to unrecoverable risks.[506] However, the Commission is of the view that such an approach introduces an undesirable degree of subjectivity into cost pass through determinations, and gives the DNSPs too much of

498 Vic DPI, Consultation Paper submission, 8 December 2011, pp. 5, 8.

499 In distribution, this value is equivalent to the estimated capital cost to the NSP affected by the RIT-D project of the most expensive potential credible option to address the identified need of $5 million. In transmission, this value is equivalent to the estimated capital cost of the most expensive option to address the identified need which is technically and economically feasible of $5 million.

500 ENA, Directions Paper submission, 16 April 2012, pp. 27-28, 34-35.

501 ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 75-76.

502 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 106.

503 Ibid.

504 Ausgrid, Consultation Paper submission, 8 December 2011, pp. 30-32.

505 Ibid.

506 Ibid.

an avenue to submit applications, which may or may not be trivial in nature. On balance, the Commission considers that a materiality threshold needs to be specified to provide for greater certainty to both the regulator and the DNSP.

The Commission understands that the AER has applied the one per cent threshold in practice for distribution, even though it is prescribed only for transmission. Therefore, there should not be a significant impact on DNSPs in codifying existing AER practices. Further, there does not appear to be a reason for a difference between transmission and distribution. For similar reasons expounded by the AEMC in 2006 for transmission, the Commission considers that there should be a one per cent materiality threshold for distribution. This will provide for consistency, transparency, predictability and certainty on when the AER would be required to consider cost pass through applications.

Double recovery of capex arising from cost pass through applications

The AER has raised the issue that there would be a potential double recovery of capital costs through both cost pass through applications and including that incurred capex again when establishing the roll-forward RAB for the next regulatory period. The Commission maintains its support from the directions paper for the AER's proposal to avoid this potential unintended double counting. This will be done by the draft rule excluding the capital costs recovered through approved cost pass through applications during the current regulatory period from the calculation of the roll-forward RAB for the next regulatory period.

Timeframes for AER decision-making under the uncertainty regime

In the directions paper, the Commission considered extending the timeframe for decision-making on cost pass throughs and capex reopeners, but not in respect of contingent projects. Upon further reflection, it would be appropriate to align the extended timeframes for all three of these mechanisms, including contingent projects. In addition to the benefits that come from consistency in general, the AER's submission provides evidence of the detail and complexity that may be involved in the AER's assessment of contingent project applications.[507] This includes an example of an ElectraNet contingent project application where the expenditure sought after the trigger event had occurred was significantly different from what had been envisaged in the determination. Assessing such applications may require a contractor to be engaged, adding to assessment time. This appears to justify the same changes being made for the assessment time for contingent projects as for cost pass throughs and capex reopeners.

In considering the circumstances in which the AER may extend its decision-making time and the extent of time required, sufficient certainty and finality must be taken into account. To a certain extent, fixing the timeframe will promote certainty and finality; however, it would not necessarily allow the NSP the ability to recover efficient costs for unforeseen events if there is a substantial delay that is outside of the NSP's control. For this reason, the Commission supports the AER's suggested principle that the "stop the

507 AER, Directions Paper submission, 2 May 2012, pp. 75-76.

clock" mechanism should apply in those circumstances which are outside of the AER or NSP's control. Such circumstances would be where the AER is waiting on the provision of information by a governmental authority, or is waiting on a judicial body or royal commission to make relevant information publicly available.

With respect to the time taken for the AER to wait on additional information from the NSP, the default decision-making time of 40 business days will be subject to the later of the date that the AER receives the NSP's information or any additional information associated with the NSP's written application. This requirement for the NSP to provide the AER with additional information the AER requires to make a determination under the uncertainty regime is currently unique for negative cost pass throughs, and has now also been extended to positive cost pass throughs, capex reopeners and contingent projects. This way, it is unnecessary to apply an extended decision-making timeframe to circumstances where the AER is waiting for additional information from the NSP.

Where the issues being considered are complex or difficult, but the AER has all the information that it needs, then the AER should be able to determine the issues within a set timeframe, albeit perhaps an extended timeframe. The Commission considers that the AER's proposal for an extended timeframe in these circumstances would provide the appropriate balance between giving the AER flexibility and offering some degree of finality and certainty in relation to the making of a decision by the AER. For these purposes, the draft rule adopts similar wording to that in section 107 of the NEL, which describes the relevant issues as being of sufficient complexity or difficulty to warrant an extension of time.

The Commission had also proposed an option to introduce a notification step where the NSP would be required to notify the AER if it was aware that there may be external events that could have an impact on the application before it makes its application. However, given the flexibility that has now been built into the timeframe, such a notification appears unnecessary. Nevertheless, the Commission encourages NSPs to notify the AER in advance of its application if it becomes aware of matters that could potentially delay the AER in making its decision. This will assist in allowing the application to be processed more efficiently.

Some NSPs had proposed in first round submissions that the AER should issue a draft of its decision where there are complex circumstances.[508] However, to the extent the complex circumstances or any lack of information preclude the AER from forming a view, there does not seem to be any value in requiring the AER to make a draft decision at that stage. The Commission considers that it would be difficult to expect the AER to prepare a draft decision in these circumstances and will not be prescribing such a requirement. Nevertheless, the AER may also wish to seek to informally consult in the course of considering such matters.

508 ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 196-197.

11.1.4 Guidance on draft rule

Capex reopener and contingent projects in distribution

Generally, the Commission has decided to align the uncertainty regime in distribution with transmission. This means that the capex reopener, contingent project and cost pass through arrangements will be broadly the same.

Threshold for capex reopener and contingent project applications in distribution

For capex reopeners, the threshold for distribution will be capex that exceeds five per cent of the value of the roll-forward RAB for the first year of the regulatory period. This ensures that the same threshold applies to both transmission and distribution.

As noted earlier, the original intention of the contingent project threshold was for it to be aligned with the regulatory test and five per cent of the MAR, whichever is higher. Under the regulatory test for transmission, the threshold was $10 million. With the implementation of the RIT-T, with a threshold of $5 million, this value was not updated to reflect either the lower threshold or the fact that the RIT-T threshold could be varied by the AER. Therefore, the Commission has updated the threshold for transmission to reflect the RIT-T. Similarly, the contingent project threshold for distribution will be linked to the proposed RIT-D threshold which is also $5 million, taking into account that this threshold may also be varied by the AER, and five per cent of the annual revenue requirement, whichever is higher.

Materiality threshold for cost pass through applications in distribution

The materiality threshold for cost pass through applications in distribution has now been defined by the draft rule to be one per cent of the NSP's annual revenue requirement. This brings it into line with the threshold applied in transmission.

Other aspects of cost pass through applications

Under the existing rules, the roll-forward RAB for the next regulatory period must include all capital costs incurred in the current regulatory period. This may unintentionally include pass through amounts associated with capital costs which have already been approved for under the cost pass through arrangements. For clarity, the NER will be amended to reflect the fact that cost pass through amounts that have already been recovered in a regulatory period cannot be recovered again in the roll-forward of the RAB for the next regulatory period.

For the reasons explained above, the timeframe for the AER to make a decision on applications related to cost pass throughs, contingent projects and capex reopeners will be aligned at 40 business days from the time the AER receives the application and any additional information it requires from the NSP. This timeframe can be extended by up to a further 60 business days if the AER determines that there are issues of sufficient complexity or difficulty that warrant such an extension. Such issues may require the AER to seek expert advice or consult with interested parties on a particular matter.

If the decision needs to be delayed to wait for further information from a third party, then a "stop the clock mechanism" will apply. Such a third party may be a governmental authority from which the AER has requested information or a judicial body or a royal commission that the AER anticipates will make publicly available information that is relevant to the NSP's application.

In the case of either a time limit extension or the application of the "stop the clock" mechanism, the AER must notify the NSP of the extension or delay and also publish notice of this on its website no later than ten business days before the date that the AER would normally have to make its default decision. The AER must also advise the NSP when the "stop the clock" mechanism has ceased to apply, in which case it must again publish a notice on its website to this effect.

Case scenario – example of the "stop the clock" mechanism and extending timeframe by 60 business days

- On 1 July 2013, the AER receives from a NSP in New South Wales an application for a positive cost pass through within 90 business days of the positive event occurring. The application relates to a bushfire.
- At the time of the application, the AER is informed by the NSP that there is a royal commission on the bushfire and the outcome of the decision by the royal commission may have an impact on whether the NSP can recover for that cost pass through and, if allowed, potentially also the amount that the NSP can recover. The royal commission decision will not occur until after the normal decision-making timeframe for the AER i.e. more than 40 business days after the AER received the NSP's application and such additional information regarding the application as the AER requires from the NSP.
- On 15 July 2013, the AER notifies the NSP that in order to determine the NSP's application, it requires information that it anticipates will be made publicly available by the royal commission. This notification occurs no later than ten business days before it would have had to make the default decision. The AER also publishes a notice on its website stating that the clock has stopped.
- On 29 November 2013, the royal commission publishes its decision. As a result of this, the "stop the clock" mechanism ceases to apply. The AER would inform the NSP and publish a notice on its website stating that the clock has restarted. The Commission would also expect the AER to state in that notice the date on which the AER will make its decision. In this case, it will be 30 business days after 29 November 2013, which will be 15 January 2014, taking into account public holidays. This is because ten business days have already elapsed between 15 July 2013 and the time the clock stopped.
- However if, upon reviewing the royal commission decision, the AER determines that it requires more time to address a complex question related

to the application, the AER could extend the decision-making period by a maximum period of a further 60 business days. To do so, the AER would need to notify the NSP of its decision to extend by no later than ten business days before it would otherwise have had to make its decision on 15 January 2014. Therefore, the AER would need to give its notice, with respect to extending the period by the maximum of 60 business days, no later than 31 December 2012. The AER would also need to publish notice of the extension on its website as soon as reasonably practicable. The maximum additional period for the AER to make its decision will then expire on 10 April 2014.

- Note: In the scenario above, the "stop the clock" mechanism could only be triggered by the royal commission. The "stop the clock" mechanism does not apply to considering complex or difficult questions on the matter, where the timeframe can only be extended by a maximum additional period of 60 business days.

Given the introduction of capex reopeners and contingent projects for distribution, the timeframes for the AER to decide on these applications will also be aligned with those in transmission.

Another consequential change relates to the decision making timeframe for negative cost pass through applications. The Commission notes that there is currently no set decision-making timeframe for this type of application, although a timeframe exists on when the application needs to be made. Previously in the Chapter 6A rule determination, the AEMC noted that there are asymmetries between positive and negative pass through applications that justify a difference in their treatment. However, with respect to decision-making timeframes, there should be no difference as the AEMC in 2006 recognised for capex reopeners and contingent projects. The decision-making timeframe for negative pass through applications has therefore been aligned so that there is a "standard" 40 business day timeframe with an option to extend as with the other types of applications. In addition, the AER is now expressly required to notify all NSPs of the occurrence of a negative change event if that event is not notified by the NSP to the AER and the AER proposes to determine a pass through amount.

However, unlike for positive change events, if the AER fails to make a pass through determination in respect of a negative change event within the 40 business day time limit, then the AER will be taken to have determined a zero pass through amount, noting that this 40 business day period can still be extended to accommodate issues that are difficult, and that the "stop the clock" mechanism will still apply where the AER is waiting on information from a governmental authority, judicial body or royal commission. As noted above, the reason for the different treatment of a default decision for negative cost pass throughs compared to positive cost pass throughs is due to the asymmetries between positive and negative pass through applications.

11.2 Material errors

11.2.1 Introduction

The NER allow the AER to revoke and substitute regulatory determinations where a material error arises. Depending on whether it is a distribution or transmission regulatory determination, there are different types of material errors which allow for revocation and substitution of regulatory determinations.

The AER is concerned that there may be the potential for a material error that is outside the currently prescribed list for distribution regulatory determinations.[509] In transmission, uncertainty is created by the power to correct material errors caused by false or misleading information provided by the TNSP as there is no express limit placed on correcting such errors only to the extent necessary.[510] There may also be circumstances in which it may be more preferable or appropriate to amend a regulatory determination, as opposed to revoking and substituting the entire regulatory determination.[511]

The AER seeks to remove these differences by broadening its ability to revoke and substitute for material errors in Chapter 6 of the NER. In particular, the AER proposes to replace the prescribed list of material errors in Chapter 6 with a more general reference to material errors or deficiencies.[512] The AER also proposes to limit changes related to false and misleading information under Chapter 6A "only to the extent necessary".[513]. The AER also sought to expand the circumstances for revoking and substituting regulatory determinations to address deficiencies, in addition to material errors, under Chapter 6A.[514] The AER also proposes to have the ability to amend, in addition to revoke and substitute, regulatory determinations in response to material errors.[515]

11.2.2 Submissions

NSPs maintain their previous position from first round submissions that the current scope for material errors should be retained under Chapters 6 and 6A, and that the AER should not be given the ability to "amend" for a material error.[516] They consider

509 AER, Rule change request, Part B, 29 September 2011, pp. 95-96.

510 Ibid.

511 Ibid.

512 Id., p. 96.

513 False and misleading information is already limited in Chapter 6 in this way. For further information, see AER, Rule change request, Part B, 29 September 2011, p. 96.

514 "Deficiency" is already included in Chapter 6. For further information, see AER, Rule change request, Part B, 29 September 2011, p. 96.

515 AER, Rule change request, Part B, 29 September 2011, p. 96.

516 ENA, Directions Paper submission, 16 April 2012, pp. 78-79; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 52; Grid Australia, Directions Paper submission, 16 April 2012, p. 13; Jemena, Directions Paper submission, 16 April 2012, pp. 57-58.

that the current scope of material errors is sufficient and no evidence has been provided to suggest otherwise.[517] Instead, they consider that there have been instances where the AER should have revoked and substituted regulatory determinations for material errors, but the AER did not do so.[518] Specific to transmission, Grid Australia agrees with limiting corrections related to false and misleading information only to the extent necessary.[519]

The AER also maintains the position from its original proposal that it prefers the broader scope for material errors under Chapter 6A over Chapter 6 to allow it to make corrections for material errors, especially once the merits review process takes place.[520] To balance the broad scope available under Chapter 6A for correcting material errors and to allow for some certainty and finality in the process, the AER proposes a six month time limit following the final regulatory determination.[521]

11.2.3 Analysis

Scope for material errors

The Commission considers that the AER has essentially proposed to broaden the scope of material errors under Chapter 6. In the directions paper, the Commission sought supporting evidence to justify broadening the scope for material errors under Chapter 6, in particular as proposed by the AER. There has been no evidence provided to support the view that the AER's current powers have constrained its ability to revoke and substitute a regulatory determination for material errors.

NSPs state that there may have been opportunities for a material error to be corrected in a draft regulatory determination, but the AER has not always utilised its discretion to address the material error.[522] In respect of examples about where the AER has previously been constrained by the NER in correcting material errors, no evidence has been provided that the AER has been constrained in this way. The AER itself observes that the circumstances justifying correction of a material error would be exceptional.[523] On this basis, the Commission maintains the view from the directions paper that, after the final regulatory determination is made, the regulatory determination should only be able to be changed as a result of merits review outcomes or in very clear and exceptional circumstances. Therefore, the Commission is in favour of keeping the scope of the material error provisions under Chapter 6 narrow and focussed on "computational" errors by the AER or situations where the AER has received false or

517 ENA, Directions Paper submission, 16 April 2012, pp. 78-79; Jemena, Directions Paper submission, 16 April 2012, p. 57.

518 Ibid.

519 Grid Australia, Directions Paper submission, 16 April 2012, p. 13.

520 AER, Directions Paper submission, 2 May 2012, pp. 63, 74.

521 Ibid.

522 ENA, Directions Paper submission, 16 April 2012, pp. 78-79; Jemena, Directions Paper submission, 16 April 2012, pp. 57-58.

523 AER, Directions Paper submission, 2 May 2012, p. 74.

misleading information. Provisions such as pass throughs, capex reopeners and contingent projects are the appropriate means by which more substantive changes to the regulatory determination should be made.

In addition, the AER proposal would detract from the finality of its decisions. That said, the AER has expressed its support for the need for finality in a regulatory determination and proposes limiting the timeframe for correcting material errors to six months following the making of the final regulatory determination, which would balance off the AER's proposed expansion of the scope of material errors.[524] Given the Commission's decision to maintain a narrow scope for material errors under Chapter 6, this proposed time limitation for addressing material errors does not warrant further consideration. However, this leaves the question of whether the current scope for material errors under Chapter 6A is still appropriate.[525]

In the Chapter 6A rule determination, the AEMC stated that the circumstances in which a regulatory determination can be revoked and substituted for a material error under Chapter 6A need to be clear.[526] This would increase certainty, transparency and maintain the incentives built into the framework. Subsequent to this, the MCE SCO developed Chapter 6 and prescribed more specific circumstances for when a regulatory determination can be revoked and substituted for a material error.

To further expand on its previous position in 2006, the Commission considers that in addition to providing certainty and transparency and maintaining the incentives built into the framework, the finality of the regulatory determinations must be preserved. Consistent with this position, the Commission considers that the Chapter 6 provisions provide more certainty and finality in the framework than the equivalent provisions under Chapter 6A. Further, there should be no reason why Chapters 6A and 6 should be any different with respect to these types of material errors, which should only relate to computational errors or situations where the NSP has submitted false or misleading information. Therefore, the Commission has decided that the broader Chapter 6A provisions should be narrowed down and aligned with the narrower Chapter 6 provisions. Consequently, the AER's proposal for a six month limitation for correcting material errors will also be unnecessary for Chapter 6A.

Associated with aligning the Chapter 6A provisions with the Chapter 6 provisions, submissions support limiting material errors in regulatory determinations caused by false or misleading information by reference to "to the extent necessary". This is currently the case for distribution regulatory determinations, but not for transmission revenue determinations. The Commission has therefore decided to align the Chapter 6A provision, by aligning the Chapter 6A provisions in this regard with the Chapter 6 provisions.

A further approach to promote certainty and finality in the final regulatory determination is to not permit it to be revoked and substituted for material errors. This

524 Ibid.

525 Grid Australia, Directions Paper submission, 16 April 2012, p. 13.

526 AEMC, *Economic Regulation of Transmission Services*, Rule Determination, 16 November 2006, p. 122.

has been the approach of the regulator Ofgem in the Great Britain. However, in the Australian environment, the Commission considers that there should be a limited degree of flexibility for the AER to address errors in its final regulatory determinations in very clear and exceptional circumstances.

Amending material errors

The AER proposes that it should be able to amend, as an alternative to revoking and substituting, a regulatory determination as a result of a material error or deficiency where it is more preferable or appropriate to do so. In the directions paper, the Commission considered that the power to amend regulatory determinations will impact on the NSP's ability to have any such amendments reviewed in a merits review, as noted in some submissions.[527] The Commission maintains its view from the directions paper that the provisions relating to material errors should not be changed to include a power for the AER to amend a determination as a result of a material error.

11.2.4 Guidance on draft rule

Aligning the Chapter 6A provisions with the Chapter 6 provisions with respect material errors will mean that the AER may now only revoke and substitute a transmission revenue determination or amend a pricing methodology for the following kinds of material errors or deficiencies:

- a clerical mistake or an accidental slip or omission;
- a miscalculation or misdescription;
- a defect in form; or
- a deficiency resulting from the provision of false or materially misleading information provided to the AER by another party.

As with Chapter 6, for Chapter 6A the substituted revenue determination or amended pricing methodology will only be able to be varied from the revoked revenue determination or existing pricing methodology to the extent necessary to correct the relevant material error or deficiency.

11.3 Shared assets

11.3.1 Introduction

In this draft rule determination, shared assets refer to assets used to provide both regulated and unregulated services. For distribution, the shared asset could be providing a combination of standard control services, alternative control services, or

527 ENA, Directions Paper submission, 16 April 2012, pp. 78-79; Grid Australia, Directions Paper submission, 16 April 2012, p. 13.

unregulated services. For transmission, the shared asset could be providing both prescribed transmission services and unregulated services. This issue is likely to become more relevant in light of the potential for electricity network assets, such as poles and pits, to be used to provide access for the National Broadband Network (NBN).

The AER proposes shared assets cost adjustment mechanisms to allow consumers to benefit where distribution assets are used to provide non-standard control services, including alternative control services and unregulated services.[528] One option is for an ex ante forecast revenue adjustment to the annual revenue requirement. Alternatively, there could be an ex post control mechanism adjustment. This approach could entail an adjustment to annual prices, as opposed to ex ante adjustment to the annual revenue requirement, which could reflect the portion of revenue from the unregulated service. The AER did not propose equivalent changes for transmission assets.

11.3.2 Submissions

In general, stakeholders support the concept that where assets used to supply standard control services are shared with other services, consumers should receive some benefit. Similarly, there was also some support for this concept to be included in transmission. However, there are differences in views on how a shared assets cost adjustment mechanism should operate.

Grid Australia and the Vic DPI consider that the existing cost allocation principles under the NER could be used or, if not, modified to take into account shared assets in transmission and distribution.[529] Aurora Energy also suggests that the term "distribution services" in the NER could include use of assets for non-electrical purposes.[530]

A number of NSPs consider that the shared assets cost adjustment mechanism should be flexible.[531] Ergon Energy and ENERGEX considered that no shared assets cost adjustment mechanism should be prescribed in the NER.[532]UE and MG do not support the AER's proposal on the basis that it is tantamount to transferring the value of existing assets out of the roll-forward RAB, and network prices should be insulated from the profits and losses in unregulated activities.[533] Jemena proposes that the shared assets cost adjustment mechanism should be based on an annual revenue

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528 AER, Rule change request, Part B, 29 September 2011, p. 60.

529 Grid Australia, Directions Paper submission, 16 April 2012, p. 2; Vic DPI, Consultation Paper submission, 8 December 2011, p. 9.

530 Aurora Energy, Consultation Paper submission, 15 December 2011, p. 11.

531 ENA, Consultation Paper submission, 8 December 2011, pp. 38-39; ENERGEX, Consultation Paper submission, 8 December 2011, p. 4; Ergon Energy, Consultation Paper submission, 8 December 2011, p. 14; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

532 ENERGEX, Consultation Paper submission, 8 December 2011, p. 4; Ergon Energy, Consultation Paper submission, 8 December 2011, p. 14.

533 UE and MG, Consultation Paper submission, 8 December 2011, p. 18.

forecast with an ex post true-up adjustment.[534] The joint submission of ETSA, CitiPower and Powercor states that, in order to maintain predictability and transparency, the AER should be required to set out its approach to any adjustment in a framework and approach paper, and adhere to this approach unless there are any unforeseen circumstances or circumstances to justify departing from it.[535]

NSPs consider that alternative control services should be excluded from the uses of assets which would result in additional compensation to consumers as their costs are already recovered through a separate control mechanism.[536] However, the AER considered that excluding alternative control services from a shared assets cost adjustment mechanism would prevent customers of alternative control services from being compensated if those services were provided by a shared asset.[537]

Submissions also suggest that there should be guiding principles for the exercise of the AER's discretion. These might include: any adjustment should be subject to a positive commercial outcome having been achieved; the level of compensation should take into account the risks involved; incentives should be maintained for the NSP to apply assets to non-regulated activities; regulatory oversight should only be imposed where benefits exceed costs; the mechanism should be administratively simple to implement; legacy arrangements and maturity of the market for alternative arrangements should be recognised; the adjustment should be proportionate to the benefits; the adjustment should apply only to revenues after netting of all relevant costs; and there should be an exemption for sharing of new forms of unregulated services for an initial short period.[538]

11.3.3 Analysis

General position

The Commission maintains its position from the directions paper that customers who pay for one type of regulated service that is provided by a shared asset should not be paying for the full cost of the asset. Instead, those customers should be receiving some benefit from the asset being used for a service other than a regulated service. Submissions also generally support this concept; however, there are differences in views regarding the appropriate sharing mechanism that should be used.

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534 Jemena, Consultation Paper submission, 8 December 2011, pp. 107-109.

535 ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 35.

536 Ausgrid, Consultation Paper submission, 8 December 2011, p. 33; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 35; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

537 AER, Directions Paper submission, 2 May 2012, pp. 33-35.

538 Ausgrid, Consultation Paper submission, 8 December 2011, p. 33; ENA, Consultation Paper submission, 8 December 2011, p. 39; ENA, Directions Paper submission, 16 April 2012, pp. 36-37; ENERGEX, Consultation Paper submission, 8 December 2011, p. 4; ENERGEX, Directions Paper submission, 16 April 2012, pp. 2-3; ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 23, 97-98; Jemena, Consultation Paper submission, 8 December 2011, pp. 107-109; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

In a competitive market, a business would seek ways to provide its customers with the lowest possible price, in order to retain its existing customers and gain new ones. One way to do this could be to make more efficient use of the business' assets by employing them for new services. This would increase the number of customers having access to the asset, and allow the business to spread the fixed costs of the asset over this greater number of customers, therefore reducing costs for consumers of the services.

Where a business in a competitive market innovates in this way, it would usually be able to increase its profits for a short period of time, as it would have reduced its average costs below those of its rivals. This provides the incentive for the business to seek such innovations. Over time, however, competitive rivals would employ similar cost-reducing practices, and the additional margin would be competed away so that consumers gained the full benefit of the cost reductions.

Whilst there are differences between a regulated network service and a typical competitive market which mean that a comparison has limits, the key principles still apply. In this case, the competitive market comparison is instructive in highlighting that both the business and consumers of the regulated service should gain some benefit from cost savings brought about by innovations such as sharing of assets. If a NSP uses an asset to provide more than one service, any sharing mechanism should allow the NSP to keep some of the reward for making efficiency gains, but would require the reduction in costs to be passed onto consumers of the regulated service in the long term.

Making prices cost reflective should encourage the NSP to make efficient use of its existing assets. Further, cost reflectivity in prices should result in customers of the regulated service not subsidising the provision of unregulated services. Therefore, by incentivising the NSP to be innovative in its investments by retaining some of the benefits, but also requiring it to reduce the costs to consumers to reflect this innovative use, the shared assets cost adjustment mechanism will be in the long term interests of consumers and promote the NEO.

In the directions paper, the Commission noted that a shared assets cost adjustment mechanism could apply to transmission as well as distribution. This is consistent with the overall principle of harmonising Chapters 6 and 6A of the NER. There were submissions both in support of, and opposed to, this approach.[539] Grid Australia has commented that the cost allocation principles in transmission already provide for asset sharing.

However, the cost allocation principles only allocate costs for future assets, as opposed to existing assets. This creates a problem when an existing asset that is used to provide a regulated service later becomes used to also provide an unregulated service. Under the cost allocation principles, as the costs have already been allocated to this asset, the mechanism cannot accommodate this change in circumstances, unless there has been a reclassification of service.

539 AER, Directions Paper submission, 2 May 2012, p. 34; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32; MEU, Directions Paper submission, 17 April 2012, p. 62.

For these reasons, a shared assets cost adjustment mechanism should be available to the AER to apply to existing assets that provide both distribution or transmission services and any unregulated service. To avoid any doubt, in developing any shared assets cost adjustment mechanism the AER must have regard to the cost allocation principles and the NSP's cost allocation method, and any incentives under the NER.

Restrictions on the shared assets cost adjustment mechanism

As discussed in the directions paper, the AER proposed two shared assets cost adjustment mechanisms in the form of an ex ante revenue adjustment and an ex post control mechanism adjustment.[540] It stated that the control mechanism adjustment could be used for sharing a proportion of the pre-tax profits from the unregulated activities with the users of the regulated services.[541]

The Commission does not consider a shared assets cost adjustment mechanism that shares a portion of the profit or revenue from unregulated services will be possible. By transferring a portion of this profit or revenue to customers of regulated services, the mechanism would be limiting the revenue that the NSP could earn from the unregulated service. This would have the same effect as regulating the unregulated service, which does not appear to be permitted under the NEL and NER.

Shared assets cost adjustment mechanism – cost reduction

Instead, the shared assets cost adjustment mechanism should operate in a way that is not based on the profit or revenue received by the NSP from the unregulated service. The best way this could work is if the sharing was implemented through a reduction in the costs of the shared asset that are recovered from consumers of the regulated service. That is, instead of recovering 100 per cent of the costs of the shared asset from consumers of the regulated service, a lower proportion would be recovered. A number of principles would be taken into account by the AER in determining this proportion, discussed further below, one of which could be the revenue received by the NSP from the unregulated service. However, the shared assets cost adjustment mechanism would not apportion part of the revenue or profit from the unregulated service.

Sharing the benefit resulting from the asset being used to provide an unregulated service, as well as a regulated service, via a reduction in the costs recovered from the consumers of the regulated service, rather than by passing through a portion of the revenue or profits received from the unregulated service, means that there will be a limit on the amount of benefit sharing that is possible. For example, if the costs of the shared assets that are recovered from standard control service customers each year are $1 million in the absence of any sharing, but revenue from the unregulated use is $3 million per year, the maximum benefit that could accrue to standard control service customers would be $1 million per year.

540 AER, Rule change request, Part B, 29 September 2011, p. 60.

541 Id., p. 61.

Where the shared assets cost adjustment mechanism takes the form of a reduction in costs apportioned to consumers of the regulated services, a control mechanism adjustment including annual pricing adjustments would not appear to be appropriate. A control mechanism adjustment would only be appropriate if the adjustment was linked to an external factor, such as the amount of profit or revenue received under a contract with a third party, and this could be converted into a price or revenue adjustment in the control mechanism in a "mechanistic" way without the AER having to make a subsequent decision. Such an approach would be administratively inefficient, given that the AER would be required to annually make these adjustments, and would create too much uncertainty for the NSP.

Instead of an adjustment to the control mechanism, the reduction in the costs allocated to consumers of the regulated services will feed through the building block determination into the annual revenue requirement. This reduction will be determined by the AER at a regulatory determination according to guidelines based on the principles set out below. It should reflect the part of the costs of the relevant asset which are being recovered through charging for the provision of the unregulated service. By reducing the annual revenue requirement for the NSP, the amount recovered from consumers will also be reduced. By including the decision in a regulatory determination, the cost reduction will be fixed for the regulatory period covered by that determination, which provides certainty for the NSP. In addition, this decision would be subject to the scrutiny that comes from consultation as part of the regulatory determination process and any subsequent merits review.

Timing

The cost reduction would only be implemented at a regulatory determination, regardless of when the sharing arrangement actually commences. This means that the NSP would be required to disclose information on its shared assets as part of its regulatory proposal to the AER. It would be possible for the reduction to occur in respect of a sharing arrangement which had not yet commenced, provided it was known with enough certainty at the time of the regulatory determination. If it was not known with enough certainty then the reduction could not apply until the next regulatory determination, even if the sharing arrangement commenced prior to that determination. There would be no reconciliation or "ex post adjustment" in respect of any sharing arrangement that was put in place during the middle of a regulatory period; the cost reduction would only start from the beginning of the next regulatory period. However, the historical use or revenue of the asset could be used as a factor to forecast future sharing of such an asset. Overall, this should provide the NSP who has a sharing arrangement some certainty as to what cost reduction could be expected. The proposed shared assets cost adjustment mechanism could also take into account Jemena's proposal for an exemption period to be given to newly shared assets for a period of several years.[542]

542 Jemena, Consultation Paper submission, 8 December 2011, p. 107; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

In respect of proposals for an ex post adjustment, or "true up", once the actual benefits in a period of a sharing arrangement are known, the Commission considers that this should not be necessary.[543] First, if the sharing arrangements are set on the basis of a contract the revenue received should be relatively easy to predict. Second, the revenue received will be only one factor to consider in setting the cost reduction for consumers, which must be based on the cost of assets shared. Third, to the extent revenues received through the sharing arrangements change, the cost reduction can be adjusted at the next regulatory determination for the next regulatory period.

Other issues

As referred to in the AER's original proposal, shared assets cost adjustment mechanisms currently exist under jurisdictional arrangements.[544] The approach that has been previously used in Queensland has been grandfathered in NER clause 11.16.3. This grandfathering extends until the next Queensland distribution determination in 2015. Since the mechanism applied is a forecast revenue adjustment made to the building blocks, this could be accommodated under the proposed rules. In South Australia, a profit sharing mechanism has been used, with a portion of the profits from unregulated activities passed onto regulated service users of the shared asset.[545] As described above, such a mechanism would not seem to be permitted under the general NEL and NER provisions.

In respect of distribution, the above approach only addresses the situation where the one use of the asset is to provide standard control services and another use is to provide an unregulated service. The AER also points out that there may be the circumstance where the asset is used to provide both alternative control services and unregulated services.[546] The Commission accepts that alternative control service customers of a shared asset should be paying costs reflective of its use for the provision of alternative control services, and agrees with the AER that there should be no reason why standard control service customers benefit from the use of a shared asset to provide unregulated services, while alternative control service customers do not.

Nevertheless, some submissions state that the AER's proposal would result in customers of alternative control services being over-compensated through a revenue decrement as well as a separate control mechanism, and that alternative control services should be excluded.[547] The Commission considers that the AER has considerable discretion in setting the control mechanism for alternative control services under NER clauses 6.2.6(b)-(c) and 6.2.5(a)-(b) and so may impose requirements that only permit the NSP to recover such costs associated with the provision of alternative

543 AER, Rule change request, Part B, 29 September 2011, p. 61; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

544 AER, Rule change request, Part B, 29 September 2011, p. 59.

545 Ibid.

546 AER, Directions Paper submission, 2 May 2012, pp. 34-35.

547 Ausgrid, Consultation Paper submission, 8 December 2011, p. 33; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 35; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

control services as are appropriately allocated to those services. Therefore, in respect of distribution, the shared assets cost adjustment mechanism to be created only deals with the circumstance where the asset is used to provide a standard control service.

Where one use of the asset is for standard control services and the other use is for alternative control services, the standard cost adjustment described above should still apply for the costs recovered from the standard control service customers.

Guidelines and principles

Bearing in mind the shared assets cost adjustment mechanism described above, the Commission considers that to facilitate NSPs seeking out and entering into sharing arrangements of the kind discussed here, NSPs will need some certainty about how the AER would determine the cost adjustment appropriate for a particular sharing arrangement.

Part of this certainty will be provided by principles guiding the AER's determination, and which will be set out in the NER. NSPs raised a number of principles that could be applied in this regard.[548] In setting these principles, consistent with the NEO, the Commission takes the view that the approach to a shared assets cost adjustment mechanism should:

- provide clarity and certainty on how the AER would approach sharing the costs;
- provide cost reflective prices to consumers;
- promote innovation in NSP investments; and
- be able to be implemented in practice.

On this basis, the principles to which the AER must have regard are:

- the NSP should be encouraged to use assets that provide standard control services for the provision of other kinds of services where that use is efficient and does not materially prejudice the provision of standard control services;
- a shared assets cost adjustment should not be dependent on the NSP deriving a positive commercial outcome from the use of the asset other than for standard control services;
- a shared assets cost adjustment should be applied where the use of the asset other than for standard control services is material. This means the benefit of

548 Ausgrid, Consultation Paper submission, 8 December 2011, p. 33; ENA, Consultation Paper submission, 8 December 2011, pp. 38-39; ENA, Directions Paper submission, 16 April 2012, pp. 36-37; ENERGEX, Directions Paper submission, 16 April 2012, pp. 2-3; Ergon Energy, Consultation Paper submission, 8 December 2011, p. 14; ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 23, 97-98; Jemena, Consultation Paper submission, 8 December 2011, pp. 107-109; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

sharing the cost of the asset based on use should outweigh the administrative costs of implementing the shared asset cost adjustment mechanism;

- the manner in which costs have been recovered or revenues adjusted in respect of the relevant asset in the past and the reasons for adopting that manner of recovery or adjustment should be taken into account;
- a shared assets cost adjustment should be compatible with the cost allocation principles and cost allocation method; and
- a shared assets cost adjustment should be compatible with incentives that the NSP may have under the NER.

The Commission considers that the above principles promote its objectives on what the shared assets cost adjustment mechanism should achieve.

With respect to determining the appropriate portion of costs for the purposes of a shared assets cost adjustment, the most obvious approach is for the AER to base this on the relative use of the asset for the provision of the different kind of services such as the technical use or physical use. Another possible way could include using the ratio between the proportion of revenue from the asset for standard control services and the proportion of revenue from the asset for other than for standard control services over the current regulatory period. However, this should not be taken as precluding the AER from considering other possible bases for sharing the costs of the asset.

The Commission does not accept the principle that the NSP should only have to pass on the benefit of a shared asset if it receives a net profit as a result. This was proposed to recognise the associated risks of the NSP with sharing arrangements.[549] In general, the NSP should bear the risk so it takes this into account when deciding whether to enter a sharing arrangement. The NSP is the party best able to assess and manage this risk.

In addition, for added certainty, the draft rule requires the AER to set out in guidelines what its approach will be for determining the appropriate cost reduction for sharing arrangements, having regard to the above principles. Such guidelines may, for example, set out a particular methodology which the AER intends to use.

In the directions paper, the Commission considered including a draft rule requiring the AER to specify the shared assets cost adjustment mechanism at the framework and approach paper stage. Given that the shared assets cost adjustment mechanism will now be prescribed in the NER, with supporting guiding principles and guidelines, it is unnecessary for a framework and approach paper to deal with this matter. This means the NSP would need to submit information on its shared assets to the AER in the regulatory proposal.

549 Ausgrid, Consultation Paper submission, 8 December 2011, p. 33; ENA, Consultation Paper submission, 8 December 2011, pp. 38-39; Jemena, Directions Paper submission, 16 April 2012, pp. 26-27, 31-32.

For the reasons previously given, the Commission has also decided that a similar regime regarding shared assets should be implemented in the context of transmission.

11.3.4 Guidance on draft rule

The following case study is provided in this section to explain how the shared assets cost adjustment mechanism would work.

Case scenario

- In year 2 of a regulatory period the NSP enters into a commercial agreement with NBN Co to allow NBN Co to use electricity poles currently used for standard control service purposes. The rate is $2,000 per pole per year. The NSP's costs are $500 per pole per year.
- Given that this occurs during a regulatory period, no shared assets cost adjustment mechanism is applied until the next regulatory determination.
- In its regulatory proposal for the next regulatory determination, the NSP provides details of the shared assets in accordance the AER's regulatory information instrument.
- During the regulatory determination process, the AER decides whether to apply the shared assets cost adjustment mechanism in respect of the NBN arrangements for the next regulatory period. In making this decision, the AER takes into account the guidelines on how to apply the shared assets cost adjustment mechanism and the principles on whether a shared assets cost adjustment mechanism should apply. Some considerations at this point could include the materiality of the shared asset.
- Next, the AER would need to decide on the reduction in the costs for the assets that should not be recovered from standard control customers based on the guidelines. However, it would not directly pass through any of the profits or revenue gained from the NSP as a result of providing NBN Co access to its asset. A possibility could be to base this decision on the number of customers who will benefit from the electricity poles being used to provide NBN services compared to the number of customers who receive standard control services through the use of those electricity poles. For the purposes of this exercise, it may be too difficult to determine the number of customers, but it may be easier to determine that there is an equal share in the technical and/or physical use of that pole for standard control services and NBN services. It may decide the cost reduction should be on a pole by pole basis over the forthcoming regulatory period.
- Once the AER determines the appropriate reduction of costs for standard control service customers, the AER needs to incorporate this into its building block determination. This determination leads to adjustments being made to the annual revenue requirement and therefore being

reflected in pricing to customers in the annual pricing approval process. In this case, based on the asset being shared according to physical and/or technical use, which has been attributed at 50 per cent, the reduction in the annual revenue requirement is $250 per pole per year. This reduction only starts to apply from the following regulatory period and there would be no cost reduction for the period in which the commercial agreement was first put in place.

11.4 Small scale incentive schemes

11.4.1 Introduction

The AER proposes that it should have the power to develop incentive schemes outside of those already provided for in the NER.[550] The AER also proposes to amend Chapter 6A of the NER such that it would have discretion to decide whether or not to apply the existing incentive schemes to NSPs at the time of the regulatory determination.[551] The Commission's initial view as set out in the directions paper was that the NER should allow the AER to develop small scale pilot or test incentive schemes within an environment that limits the sum of money at risk and the length of time of the scheme.[552] In addition, it suggested that it is appropriate for the AER to have discretion to determine whether or not incentive schemes should apply at the time of a regulatory determination in Chapter 6A of the NER, consistent with Chapter 6.

11.4.2 Submissions

In response to the directions paper, the AER maintains that it should be given discretion to introduce new incentive schemes, not just small scale pilot or test incentive schemes. [553] It suggests that small scale pilot or test incentive schemes will not be effective and will make the process of introducing new incentive schemes even more cumbersome than the current arrangements.[554] NSPs consider that there is merit in allowing the AER to develop small scale pilot or test incentive schemes.[555] Their views are generally reflected by the ENA which is not supportive of giving the AER a broad power to develop new incentive schemes.[556] Most of the consumer representative groups that responded and IPART query the ability of small scale pilot or test incentive schemes to establish the effectiveness of an incentive scheme. No

550 AER, Rule change request, Part B, 29 September 2011, pp. 56-58.

551 Id., p. 57.

552 AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, p. 62.

553 AER, Directions Paper submission, 2 May 2012, pp. iii, 31.

554 Id., pp. 31-33.

555 Ergon Energy, Directions Paper submission, 16 April 2012, p. 8; ETSA, CitiPower and Powercor, Directions Paper submission, 13 April 2012, p. 33-34; Jemena, Directions Paper submission, 16 April 2012, p. 25-26.

556 ENA, Directions Paper submission, 16 April 2012, p. 36.

stakeholders commented on giving the AER discretion to apply the current incentive schemes at the time of a determination.

11.4.3 Analysis

The Commission maintains its position to allow the AER to develop small scale pilot or test incentive schemes. The AER should have the ability to innovate in this way without having to go through the full rule making process, which may be overly burdensome. It is good regulatory practice to test or pilot a scheme before full implementation as incentive schemes could otherwise be introduced that lead to unexpected and perhaps unwelcome outcomes as identified by Professor Littlechild.[557] A permanent scheme should, however, be subject to the rule making test given the potential impact of the scheme.

The extent of a small scale incentive scheme should be limited by the sum of money at stake, i.e. revenue at risk, and the period for which the scheme lasts. In addition the scheme should be subject to consultation with relevant NSPs and other stakeholders before being implemented.

The sum of money at stake should balance the need to be high enough to understand how the scheme is likely to operate but not so high that there is a significant impact on a NSP if the scheme does not operate as intended. The Commission considers that this balance would be met if the revenue at stake was one per cent of revenue for a regulatory year if the NSP agrees with the scheme, or up to 0.5 per cent of revenue for a regulatory year if the NSP does not agree with the scheme. The lower revenue at risk that can be placed on the scheme if the NSP does not agree to it is to reflect that the NSP will have no choice as to whether a scheme is applied to it and the scheme will not have been subject to the rule making process. The AER should also be able to undertake paper trials, i.e. a scheme in which no money is at risk, as part of its discretion. Concerns have been raised by stakeholders about the ability of small scale incentive schemes to establish the effectiveness of an incentive scheme.[558] The limits described above should be high enough such that the effectiveness of a scheme will be able to be determined.

In terms of a restriction on the period of a scheme, any scheme should last for a maximum of two regulatory periods. If the AER wishes the scheme to continue after this point then it will need to apply for the scheme to be made permanent through the rule change process. This length of time should be long enough for the AER to make a decision on whether the scheme is effective and therefore whether it should be a permanent scheme in the NER.

557 Stephen Littlechild, Advice to the AEMC on Rule Changes, 11 February 2012, p. 19.

558 AER, Directions Paper submission, 2 May 2012, pp. 31-33; Consumer Action Law Centre, Directions Paper submission, 16 April 2012, p. 5; EUAA, Directions Paper submission, 16 April 2012, p. 25; IPART, Directions Paper submission, 16 April 2012, p. 10; UnitingCare Australia, Directions Paper submission, 9 May 2012, p. 48.

In addition to these requirements, the ENA suggested that there should be a draft rule requiring the AER to seek the agreement of the NSP before commencing the trial and that a scheme should be limited to only parts of a NSP's operations, for example, certain regions or certain classes of customers. The Commission does not agree that the draft rule should require the AER to seek the agreement of the NSP before commencing the trial as this would simply give the NSP a right of veto. However, as noted above, the revenue that can be put at risk from the scheme is lower if the NSP does not agree to the scheme. Restricting the scheme to only parts of a NSP's operations would also overly restrict the AER.

Consistent with the general approach in respect of this rule change, the AER should have to take into account certain factors when developing these schemes. The principles developed for capex sharing schemes are broadly appropriate here. These address key issues, such as the fact that a scheme should not penalise efficient NSPs. At the same time, the principles are broad so that they do not overly restrict the AER. These factors are also in line with those put forward by the AER for its proposed power to develop other incentive schemes.[559] The Commission considers that those factors put forward in the joint submission of ETSA, CitiPower and Powercor are too restrictive.[560]

The Commission maintains that it is appropriate to allow the AER to have discretion to determine whether incentive schemes should apply at the time of a regulatory determination in Chapter 6A of the NER, consistent with Chapter 6.

11.4.4 Guidance on draft rule

The draft rule is intended to give the AER a broad discretion as to the schemes it may design. The schemes are intended to provide for incentives not already covered by the existing incentive schemes in the NER and may cover matters not related to expenditure by NSPs. For example, the AER could design a scheme which provides rewards for NSPs which engage more effectively with consumers. The draft rule is intended to provide broad discretion so that the AER could develop any type of scheme that contributes to the NEO.

The AER will apply the schemes consistently with the way that other incentive schemes are applied. That is, the AER will set out its likely approach to the application of a scheme to a particular NSP in the framework and approach paper for the NSP. The NSP would then set out in its regulatory proposal how it proposes the scheme should apply, including any proposed values. The AER would then set out how the scheme will apply to the NSP in the draft and final determination for the NSP.

559 AER, Rule change request, Part B, 29 September 2011, p. 57.

560 ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp. 22, 90-91.

12 Proposed transitional arrangements

12.1 Introduction

The draft rule provides for significant changes regarding capital expenditure incentives, the determination of the rate of return and the overall regulatory determination process. The latter will involve changes in timing as well as substance.

The package of changes included in the draft rule requires a period of time for implementation. For example, the rate of return provisions involve the AER, and the ERA, making a number of guidelines, schemes and instruments, including one which is the reference point for the NSP's proposal on what it considers should be its allowed rate of return. Also, the AER must make capex incentive guidelines, setting out how the AER proposes to apply the capex incentive tools generally. The draft rule allows varying periods of up to 12 months for the making of the first versions these guidelines, given the complexity of the subject matter and the requirement to consult thoroughly with stakeholders.

These implementation tasks will not be finalised by the time a number of NSP regulatory proposals are due, which would make the application of the draft rule to these particular regulatory determination processes problematic. Therefore, additional provisions are required to enable these NSPs to transition to the new arrangements. Some transitional provisions are also required for certain gas service providers.

12.2 Commission's general approach to transitional arrangements

The Commission's intention is that the package of provisions contained in the draft rule would commence and be applied to the maximum extent possible for each NSP's next regulatory determination, once a final rule determination is made in mid-November 2012. For reasons of practicality, timing and fairness, however, arrangements are required to transition NSPs to the provisions contained in the draft rule.

The Commission intends to release a paper on transitional arrangements by mid-September 2012.

Abbreviations

ACCC	Australian Competition and Consumer Commission
ACT	Australian Competition Tribunal
ADIs	Australian Deposit-taking Institutions
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
APIA	Australian Pipeline Industry Association
Brattle	The Brattle Group
capex	capital expenditure
CAPM	Capital Asset Pricing Model
CIA	corporation initiated augmentation
CICW	customer initiated capital works
Commission	see AEMC
CPA	Competition Principles Agreement
CPI	consumer price index
CUAC	Consumer Utilities Advocacy Centre
DBNGP	Dampier to Bunbury Natural Gas Pipeline
DBP	See DBNGP
DNSP	distribution network service provider
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
ENA	Energy Networks Association
ERA	Economic Regulation Authority of Western Australia

ERA	Economic Regulation Authority of Western Australia
ESAA	Energy Supply Association of Australia
ESCOSA	Essential Services Commission of South Australia
ESCV	Essential Services Commission of Victoria
EUAA	Energy Users Association of Australia
EURCC	Energy Users Rule Change Committee
GDP	Gross Domestic Product
GFC	global financial crisis
IPART	Independent Pricing and Regulatory Tribunal
LMR	Limited Merits Review
MAR	maximum allowed revenue
MCE	Ministerial Council on Energy
MEU	Major Energy Users
NBN	National Broadband Network
NEL	National Electricity Law
NEM	National Electricity Market
NEO	national electricity objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
NPV	net present value
NSP	network service provider
NSW T-Corp	New South Wales Treasury Corporation

OEB	Ontario Energy Board
Ofgem	Office of Gas and Electricity Markets
Ofwat	Office of Water Services Regulation Authority
opex	operating expenditure
OTTER	Office of the Tasmanian Economic Regulator
PIAC	Public Interest Advocacy Centre
QCA	Queensland Competition Authority
QTC	Queensland Treasury Corporation
RAB	regulatory asset base
RIIO	Revenue = Incentives + Innovation + Outputs
RIN	Regulatory Information Notice
RIPUC	Rhode Island Public Utilities Commission
RIT-D	Regulatory Investment Test for Distribution
RIT-T	Regulatory Investment Test for Transmission
RPP	Revenue and Pricing Principles
SA DMITRE	South Australian Department of Manufacturing, Innovation, Trade, Resources and Energy
SCER	Standing Council on Energy and Resources
SCO	Standing Committee of Officials
SFG	Strategic Finance Group Consulting
SKM	Sinclair Knight Merz
SORI	Statement of Regulatory Intent
STPIS	service target performance incentive scheme
TEC	Total Environment Centre
TNSP	transmission network service provider

UE and MG	United Energy and MultiNet Gas
Vic DPI	Victorian Department of Primary Industries
WACC	Weighted Average Cost of Capital
WAPC	weighted average price cap

A Detailed examples of potential capex sharing schemes

This appendix includes a non-exhaustive list of possible ways in which the AER might design a capex sharing scheme under the draft rules.[561]

Figure A.1 below presents two different models: Model 1 presents a stylised example similar to that provided by the ENA's consultants of a capex efficiency carry-over scheme with a five year carry-over period using a WACC of 7.5 per cent; Model 2 presents a stylised example of the ex-ante or fixed incentive rate scheme previously used by Ofgem.

Figure A.1 Examples of efficiency carryover scheme and ex ante incentive rate scheme with periodic true-up

Model 1: ESC "capex efficiency carry over" scheme										
Year	1	2	3	4	5	6	7	8	9	10
Forecast capex	300	330	270	300	330					
Actual capex	280	310	300	290	320					
Underspend	20	20	-30	10	10					
Annual financing benefit	1.50	1.50	-2.25	0.75	0.75					
Year 1 benefit	1.50	1.50	1.50	1.50	1.50					
Year 2 benefit		1.50	1.50	1.50	1.50	1.50				
Year 3 benefit			-2.25	-2.25	-2.25	-2.25	-2.25			
Year 4 benefit				0.75	0.75	0.75	0.75	0.75		
Year 5 benefit					0.75	0.75	0.75	0.75	0.75	
Benefit / Carry over	1.50	3.00	0.75	1.50	2.25	0.75	-0.75	1.50	0.75	0.00
Discount factor (to end of year 5)	1.38	1.29	1.20	1.11	1.04	0.96	0.90	0.83	0.78	0.72
Total benefits (PV at end year 5)	39.02									
DB benefits (PV at end year 5))	12.73									
Incentive rate	32.62%									
Model 2: Ex-ante incentive rate with true-up at start of regulatory period										
Annual underspend	20	20	-30	10	10					
Total Benefits (PV at end year 5)	39.02									
Target share of underspend (PV at end	12.73									
Benefit already received										
Cumulative underspend	20	40	10	20	30					
Financing benefit from underspending	1.5	3	0.75	1.5	2.25					
Total benefit already received (PV at end	10.84									
Additional benefit required (PV at end	1.88									
Realised incentive rate	32.62%									

In the Model 1 scheme, the business has a total underspend across the five years of $30 million in nominal terms. This has a present value of $39 million at the end of year 5. In keeping with earlier Australian schemes the benefit to the business is taken to be the financing cost forgone from having underspent the capex allowance contained in the allowed revenue requirement. This has a present value of $12.7 million (at the end of year 5) leading to the business retaining 32.6 per cent of the available benefit.

The Model 2 scheme is designed to achieve the same incentive rate as that obtained from Model 1, namely 32.6 per cent, for illustrative purposes. Again, the NSP obtains a financing benefit from having underspent its capex allowance although in this case that only goes through to the end of the current regulatory period. Again the present value of the underspend is $39 million (at the end of year 5) and the NSP receives a financing benefit of $10.8 million through to the end of the regulatory period. To achieve the specified incentive rate of 32.6 per cent the NSP requires total benefits of $12.7 million in present value terms (at the end of year 5) meaning an additional benefit of $1.9

561 These examples have been developed with advice from Economic Insights.

million will have to be given to the NSP in the form of additional allowed revenue requirement at the start of the next regulatory period.

Figure A.2 provides a stylised example of how a scheme involving an annual true up of efficiency gains and losses (as Ofgem plans to use) might work (Model 3).

Figure A.2 Example of ex ante incentive rate scheme with lagged annual true-up

Model 3: Ex-ante incentive rate with annual lagged true-up										
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Forecast capex	300	330	270	300	330					
Actual capex	280	310	300	290	320					
Underspend	20	20	-30	10	10					
Year 1 effect										
Underspend	20									
Total Benefits (PV at end year 2)	22.29									
DB's target share of benefit	7.27									
Benefit already received										
Financing benefit from underspending	1.50									
Benefit already received (PV at end year 2)	1.67									
Additional benefit required (PV at end year 2)	5.60									
Year 2 effect										
Underspend		20								
Total Benefits (PV at end year 3)		22.29								
DB's target share of benefit		7.27								
Benefit already received										
Financing benefit from underspending		1.50								
Benefit already received (PV at end year 3)		1.67								
Additional benefit required (PV at end year 3)		5.60								
Year 3 effect										
Underspend			-30							
Total Benefits (PV at end year 4)			-33.44							
DB's target share of benefit			-10.91							
Benefit already received										
Financing benefit from underspending			-2.25							
Benefit already received (PV at end year 4)			-2.51							
Additional benefit required (PV at end year 4)			-8.40							
Year 4 effect										
Underspend				10						
Total Benefits (PV at end year 5)				11.15						
DB's target share of benefit				3.64						
Benefit already received										
Financing benefit from underspending				0.75						
Benefit already received (PV at end year 5)				0.84						
Additional benefit required (PV at end year 5)				2.80						
Year 5 effect										
Underspend					10					
Total Benefits (PV at end year 6)					11.15					
DB's target share of benefit					3.64					
Benefit already received										
Financing benefit from underspending					0.75					
Benefit already received (PV at end year 6)					0.84					
Additional benefit required (PV at end year 6)					2.80					
Summary										
Financing benefits (nominal)			1.67	1.67	-2.51	0.84	0.84			
Financing benefits (PV at end year 5)			2.08	1.93	-2.70	0.84	0.78			
Total financing benefits (PV at end year 5)						2.93				
Additional benefits required (nominal)			5.60	5.60	-8.40	2.80	2.80			
Additional benefits required (PV at end year 5)			6.96	6.47	-9.03	2.80	2.60			
Total additional benefits required (PV at end year 5)						9.80				
Total DB benefits (PV at end year 5)						12.73				
Realised incentive rate						32.62%				

Again the same data as used in Models 1 and 2 are used and the same ex–ante incentive rate of 32.6 per cent is chosen for illustrative purposes. The underspend from year 1 is now trued–up at the start of year 3 and so on leading to the year 5 underspend being trued–up at the start of year 7. The NSP now effectively only retains one year of financing benefits on a rolling basis through the regulatory period. In Model 3 the year 1 true–up is done at the start of year 3 in present value terms at the end of year 2, the year 2 true–up is done at the start of year 4 in present value terms at the end of year 3 and so on.

Converting the smaller financing benefits to present values terms at the end of year 5 for comparison with Model 2, the NSP has retained benefits of $2.9 million out to year 7. Converting the larger additional benefits required series to present value terms at the end of year 5, the NSP requires additional revenue of $9.8 million (delivered in a series of annual revenue requirement additions in years 3 through to 7) to achieve the specified ex–ante incentive rate.

The main difference between Models 2 and 3 is that the periodic true–up in Model 2 allows the financing benefit to make up most of the NSP's overall benefit whereas the lagged annual true–up in Model 3 requires most of the NSP benefit to come from additional allowances.

B Example of a formulaic expression of a control mechanism

The formulaic expression of the control mechanism is the formula associated with that form of control mechanism. For example, for a WAPC (a form of control mechanism), the formulaic expression is a formula such as in Figure B.1.[562]

Figure B.1 Example of a formulaic expression of a control mechanism

$$\frac{\sum_{i=1}^{n}\sum_{j=1}^{m} p_t^{ij} \times q_{t-2}^{ij}}{\sum_{i=1}^{n}\sum_{j=1}^{m} p_{t-1}^{ij} \times q_{t-2}^{ij}} \leq (1+CPI_t)\times(1-X_t)\times(1+S_t)\times(1+L_t)$$

where a DNSP has *n distribution tariffs*, which each have up to *m distribution tariff components*, and where:

regulatory year "t" is the *regulatory year* in respect of which the calculation is being made;

regulatory year "t-1" is the *regulatory year* immediately preceding *regulatory year "t"*;

regulatory year "t-2" is the *regulatory year* immediately preceding *regulatory year "t-1"*;

p_t^{ij} is the proposed *distribution tariff* for component *j* of *distribution tariff i* in *regulatory year t* ;

p_{t-1}^{ij} is the *distribution tariff* being charged in *regulatory year t-1* for component *j* of *distribution tariff i;*

q_{t-2}^{ij} is the quantity of component *j* of *distribution tariff i* that was delivered in *regulatory year t-2*;

CPI_t is calculated as follows:

> The Consumer Price Index, All Groups Index Number (weighted average of eight capital cities) published by the Australia Bureau of Statistics for the March Quarter immediately preceding the start of *regulatory year t*;

divided by

> The Consumer Price Index, All Groups Index Number (weighted average of eight capital cities) published by the Australia Bureau of Statistics for the March Quarter immediately preceding the start of *regulatory year t-1*;

X to be determined using the building block approach;

S_t is the Service Target Performance Incentive Scheme factor to be applied in *regulatory year t*; and

L_t is the *licence fee* pass through adjustment to be applied in *regulatory year t*.

562 AER, *Framework and approach paper for Victorian electricity distribution regulation*, May 2009, p. 140.