



# RULE CHANGE

Australian Energy Market Commission

## RULE DETERMINATION

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

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

29 November 2012

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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 established the Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two principal 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

The Australian Energy Market Commission (AEMC or Commission)<sup>1</sup> has made a series of amendments to the National Electricity Rules (NER) and the National Gas Rules (NGR) in response to the economic regulation of network services rule change requests.

This final determination sets out the amendments that have been made to the NER and the NGR and the Commission's reasons for these amendments. It also sets out the transitional arrangements to implement the new rules. This final determination and the final rules reflect the Commission's position as foreshadowed in final position paper published on 15 November 2012.

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

The amendments 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 were made following one full application by the AER of the existing NER to each service provider. The areas covered by the rule change requests were:

- rate of return (under the NER and NGR);<sup>2</sup>
- 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 has made a series of changes that will or are likely to

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<sup>1</sup> 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 this final position paper.

<sup>2</sup> 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 ERA of Western Australia applies the rules in that State.

contribute to the national electricity objective (NEO) and the national gas objective (NGO) (as relevant) taking into account the revenue and pricing principles.<sup>3</sup>

The 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;
- 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 certain provisions, particularly in the NER.

### **Changes to address problems identified**

The Commission has made a number of amendments in response to the rule change requests from the AER and the EURCC. These amendments 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, including the transitional arrangements. The Commission wishes to express its gratitude for the level of engagement by stakeholders as part of this rule change process.

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

#### **Rate of return**

##### *Overall approach*

The most significant changes made in response to these rule change requests relate to how the rate of return for service providers is determined under the NER and the NGR.

The amendments in relation to the rate of return provisions in the NER and NGR 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

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<sup>3</sup> 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.

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*

Under the existing rules, 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 framework for electricity transmission is prescriptive about how the rate of return should be estimated and is not well suited to taking account of changes in market circumstances. The framework for electricity distribution has greater flexibility, but is still relatively prescriptive about how the rate of return should be estimated and varied as circumstances change. The application of the rate of return framework under the NGR has resulted in a similar approach to that taken for electricity, although the framework was intended to allow the approach to estimating the rate of return to better reflect changes in market circumstances.

The AER 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 Commission does not consider that any of existing frameworks represent the best approach to estimating the rate of return.

The common framework to be implemented requires 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 has 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, and consults extensively, when determining the allowed rate of return.

To supplement the considerations at each regulatory determination, the new 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. 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 components of the rate of return consistent with the overall objective. Instead the Commission has provided 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 methodologies, 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 improved by allowing consideration of alternative ways of determining the efficient debt servicing costs of electricity network service providers (NSPs).

Both the AER and the EURCC 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 new framework, the Commission is of the view that the regulator is in the best position to determine the best methodology to estimating a return on debt. This is consistent with the regulator deciding the characteristics of benchmark efficient firms under the rate of return framework. The regulator may decide there should be more than one definition of a benchmark efficient firm across electricity transmission, distribution and the gas sector.

The common framework to be implemented provides that the regulator can use a range of different methodologies to undertake this task. The rules include factors to which the regulator should have regard when determining the best approach to estimating the return on debt. Amongst those factors is the potential impact on the cost

of equity of the approach to estimating the return on debt. For example, if the approach for estimating the return on debt differs materially from the efficient financing approach for a benchmark efficient firm then it may increase the refinancing risk for equity holders. So approaches that minimise this refinancing risk for businesses with particular benchmark efficient characteristics could be passed on to consumers in a cost of equity that is lower than it otherwise would be.

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.<sup>4</sup> The Commission has considered this and does not support this aspect of the EURCC's rule change request. The interest rates that State treasury corporations can secure reflect the credit rating of the relevant state government and not the service provider. If state-owned service providers were to access debt capital markets directly then they would face debt financing costs that reflect their stand-alone credit ratings. If such costs are not reflected in the regulatory framework then investment and resource allocation decisions may be distorted. The Commission considers that the most appropriate benchmark to use in the regulatory framework for all service providers, regardless of ownership, in general is the efficient private sector service provider.

#### **Capital expenditure incentives (electricity)**

The Commission has amended the NER to include a number of "tools" that 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.<sup>5</sup>

The tools will include:

- 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 RAB; and
- 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.

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<sup>4</sup> Note that the term "state-owned" encompasses a variety of terms such as government-owned, and publicly-owned. The term "privately-owned" encompasses a variety of terms such as privately-owned and non-state owned. It is considered that state-owned and privately-owned are the most appropriate and accurate to use and are, therefore, adopted throughout this document.

<sup>5</sup> In this context, references to the RAB are to the RAB that is rolled forward from one regulatory period to another.

The 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.

These amendments are in response to the AER's concerns as well as the Commission's own 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 has 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 potential 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, the tools include a review of the efficiency of past capital expenditure coupled with the ability to preclude inefficiently incurred expenditure from being rolled into the RAB. Ex ante incentives are the primary means to reveal the efficient level of capital expenditure. Such incentives are an important part of the overall approach to the treatment of capital expenditure. The introduction of reviews of the efficiency of past capital expenditure should not be seen as diminishing the role of ex ante incentives. Rather, such reviews are to address a gap in the lack of supervision of capital expenditure that *has* occurred. The ability to reduce the capital expenditure rolled into the RAB is intended for obvious cases of inefficiency, and not as the main means of achieving efficient levels of capital expenditure. While the AER can review any past capital expenditure, the ability to reduce the amount to be rolled into the RAB is limited to the amount of expenditure above the capital expenditure allowance.<sup>6</sup>

This ability will apply to capital expenditure incurred in any regulatory year commencing after the first guidelines are finished.

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<sup>6</sup> 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.



The benefits of a review of the efficiency of past capital expenditure include:

- providing information to other stakeholders regarding the efficiency of the NSP;
- 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 may not always provide adequate assurance that capital expenditure is efficient. The review provides a further and final check on the efficiency of capital expenditure forming part of the RAB.

When considered alongside the amendments made to the 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 has made 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 will be required to publish annual benchmarking reports, setting out the relative efficiencies of NSPs based on the information available to it.

These amendments have been made 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 allowances, not projects.

Increases in the rate of return and expenditure allowances have both been significant factors contributing to higher network charges for consumers, although 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. Nonetheless, 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 considers that benchmarking is a critical exercise in assessing the efficiency of a NSP and approving its 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 will remove any potential constraints in the NER on the way the AER may use benchmarking.

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 has also made a number of detailed changes to the regulatory determination processes in Chapters 6 and 6A of the NER. Consideration of these rule change requests highlighted the difficulties consumers and their representatives experience in participating in the regulatory determination process.

These 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 changes include:

- lengthening the regulatory determination process to commence four months earlier, for both electricity distribution and transmission NSPs. This will provide time for the AER to prepare and publish a mandatory issues paper and hold a public forum. It will also provide time for a cross submissions stage later in the process, if required;
- the application of an optional framework and approach paper as part of the electricity transmission and distribution regulatory determinations processes. This document can be used, where necessary, to settle a number of issues prior to regulatory proposals being submitted. Examples 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 NSPs to nominate to the AER the reasons why it classifies material as confidential. The AER will 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 that the consultation process in the regulatory determination process that will apply in the NER is the minimum that would be required. The Commission encourages greater engagement and interaction between the NSP and consumer representative groups, and the NSP and the AER outside of the formal regulatory determination process set out in the NER.

### **Differences between draft rules and final rules**

The final rules substantially reflect the draft rules, although there are some changes. Key differences include:

- clarification of the drafting of the return on debt factors;
- in respect of precluding any capital expenditure from being rolled into the RAB for overspends, it may only be applied for capital expenditure undertaken in regulatory years that commence after the capital expenditure incentive guidelines have been published;
- the powers of the AER to interrogate and amend expenditure proposals have been further clarified (clauses 6.12.3(f) and 6A.13.2(a) have been deleted entirely);
- the obligation on NSPs to comply with AER expenditure forecasting methodologies has been adjusted so that NSPs may instead provide expenditure assessment information required by the AER separate to their regulatory proposal;
- the new regulatory process has been shortened by two months (meaning it will only be four, rather than six months, longer than at present);
- the framework and approach process may be triggered by a NSP and not just by the AER; and
- the contingent project threshold has been changed to \$30 million or 5% of the annual revenue requirement / maximum allowed revenue (whichever is higher).

### **Transitional arrangements**

The Commission has included transitional arrangements in the final rules to enable the regulators to apply the new rules as soon as possible. This will allow the benefits of the new rules to flow through to consumers more quickly.

Transitional arrangements are required due to overlap between the timing of guidelines required under the new rules and that of upcoming regulatory processes,

which must follow the guidelines. Transitional arrangements are included in the final rules for both electricity and gas. As well as allowing the new rules to be applied as soon as possible, the transitional arrangements are designed to minimise the resourcing burden on stakeholders and minimise price volatility.

Transitional arrangements will apply to regulatory processes until mid-2016, when Aurora and Powerlink are due to submit regulatory proposals. Different transitional arrangements have been designed for different service providers, and in general, the scale of the transitional arrangements reduces as time progresses.

## **Consumer engagement and participation**

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

They include requiring:

- the NSP to indicate in its regulatory proposal the extent to which it has engaged with consumer representatives. The NSP must also include an overview paper in its proposal for consumers;
- the AER to publish an issues paper after receiving the regulatory proposal. The purpose of this paper will be to assist consumer representative groups 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 determining the capital expenditure and operating expenditure allowances, to take into account the extent to which the NSP has engaged with consumers in preparing its forecasts.

## **Drivers for effective regulation**

The Commission is of the view that the package of amendments made to the NER and NGR 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 review body; and
- the effective corporate governance of the NSPs providing services which are subject to economic regulation.<sup>7</sup>

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<sup>7</sup> Corporate governance here refers to governance at both the management and shareholder level.

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.

The interpretation and application of the rules by the regulator is crucial. This final rule determination provides examples and illustrations of how the rules could be interpreted and applied to address problems that exist currently, as well as how their application could adapt when the circumstances change. In drafting the final rules, the Commission liaised with the AER regularly to be as certain as possible that the rules are correct, clear, and able to be applied by the AER, consistent with the Commission's position. The AER has reviewed the final rules and in its view, the final rules can be applied by the AER, consistent with the Commission's final position as set out in this final determination. The next section discusses the role of merits review in effective application of the NER and NGR.

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**

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. On 9 October 2012 the panel published its final stage two report.

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 proposed in its final stage two report that the NER and the NGR could be amended to clarify that decisions under those rules should be more holistic and broader, focussing on overall outcomes rather than component elements.

The recommendations in the final stage two report that seek to encourage a greater focus on objectives and overall outcomes are consistent with the final position in this rule change and are supported by the Commission. Where possible, the final position rule seeks to allow and encourage the regulator to approach decision-making more holistically to meet overall objectives consistent with the NEO, NGO and RPPs. In line with this overall approach, the Commission is supportive of the review body being

constituted, empowered, staffed and resourced in such a way as to be able to take the same holistic approach to the review of decision-making.

The Commission supports the need for accountability of the regulator through some form of merits review. Outcomes for consumers are likely to be improved if the proposed changes in the LMR Panel report to encourage a greater focus on objectives and overall outcomes by the review body are implemented. However, this final rule determination and the final rule proceed on the basis of the merits review arrangements existing at this point in time. As noted by the LMR Panel final report, to the extent that the merits review arrangements change, there may also need to be further rule changes to align the rules with the changes to the NEL and NGL regarding issues such as the definition of a reviewable decision.

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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 sought 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).<sup>8</sup>

## 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.<sup>9</sup> 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 referred 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 considered that the NER invite upwardly biased forecasts and limit its ability to interrogate and amend forecasts provided by NSPs;

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<sup>8</sup> In this final 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.

<sup>9</sup> AER Executive Briefing, 29 September 2011, p. 1.

- capex incentives (electricity) – the AER considered 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 referred 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 stated 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 stated 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 proposed 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 proposed amendments to the NER to set its own estimate of capex and opex, using a range of inputs;
- capex incentives – the AER proposed 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 proposed 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 proposed 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 proposed 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 proposed 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 considered 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 Commission) 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. These consultants have provided reports to the AEMC which are available on the AEMC's website.

Over the course of the rule change process the AEMC engaged the following consultants to undertake analysis and provide reports:

- Professor Stephen Littlechild, Professor George Yarrow - assistance in the area of capex and opex allowances, capex incentive and regulatory process;
- Strategic Finance Group Consulting (SFG) - assistance on the rate of return including a specific report return on debt methodologies and advice on issues raised in the draft rule determination.
- The Brattle Group (Brattle) – on approaches to assessing capex and opex forecasts;
- Covec - on related party margins;

- Economic Insights – on the use of actual and forecast depreciation; and
- Parsons Brinckerhoff – on capital expenditure practices of NSPs.

These reports of these consultants have been published on the AEMC's website.

In making its final rule determination on the rule change requests, 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 NEL and section 303 of the 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.

On 15 November 2012, the AEMC issued notices under section 107 of the NEL and section 317 of the NGL to extend the timeframe for making its final rule determination to 29 November 2012 in order to allow for additional consultation and analysis on transitional arrangements for its implementation. The Commission also published a final position paper on 15 November 2012. The final position paper stated the Commission's final position in relation to each of the matters raised in the rule change requests. The final position paper was intended to inform stakeholders at the earliest possible opportunity of the Commission's position in response to consultation on the draft rule determination while transitional arrangements to implement the changes were being finalised.

The Commission also published a version of the final position rule that reflected its conclusions and decisions as contained in this final position paper. The final position paper and the final position rule were not subject to consultation.

## 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.

On 2 March 2012, the AEMC published a directions paper on the consolidated rule change request and the AER's gas rule change request.<sup>10</sup> 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 on the AEMC's website.

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.

On 23 August 2012 the AEMC published its draft rule determination and draft rules. Submissions on the draft rule determination and draft rules closed on 4 October 2012. A summary of these submissions is published with this final rule determination.

On 14 September 2012 the AEMC published a consultation paper on transitional issues and then on 25 September it published consultation rules on transitional issues. On 26 September 2012 a workshop on transitional issues was held.

This document represents the Commission's final rule determination on the network rule change requests under the NER and the NGR

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<sup>10</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers, Directions Paper*, 2 March 2012.

## **2 Final Rule determination - electricity**

### **2.1 Commission's final rule determination**

In accordance with section 102 of the NEL the Commission has made this final 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.<sup>11</sup>

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

The more preferable rule that the Commission has made (final rule) is attached to and published with this final rule determination. The final rule includes rules for transitional arrangements that will apply to certain NSPs to transition them into the new rules. The key features of the final rules are described in chapters 6 to 12 of this final rule determination.

### **2.2 Commission's considerations**

In assessing the consolidated rule change request the Commission considered:

- its powers under the NEL to make the final 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 and draft rule determination;
- 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;<sup>12</sup>
- 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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<sup>11</sup> 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.

<sup>12</sup> Referred to in chapter 1.



- previous decisions of the Commission, including the 2006 Chapter 6A rule determination;<sup>13</sup>
- relevant documents published by the Ministerial Council on Energy (MCE) regarding the development of Chapter 6 of the NEL; 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 final 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 final 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

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<sup>13</sup> 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;
- 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; and
- regulatory certainty in the application of the improved and strengthened rules.

#### **2.4.2 Assessment of the final rule against the NEO**

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

#### **2.4.3 Rate of return**

The final rule introduces 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 degree of risk as that which applies to the NSP subject to the decision. The final rule provides the regulator with sufficient discretion on the methodology for estimating the required return on equity and debt components 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 that achieves the allowed rate of return objective.

The final 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 that is commensurate with efficient financing costs. This should ensure sufficient funds are attracted for network investment, while minimising costs for electricity consumers.

#### **Approach to capex and opex**

The final 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 final 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 final rule provides the regulator with discretion to determine an appropriate capex incentive package for each NSP. As a final check, the final 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.

### **Regulatory determination process**

The final 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 final 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.

### **Transitional arrangements**

The final rule includes transitional rules that allow the regulator and NSPs to apply the new rules as soon as possible with minimal administrative cost and regulatory uncertainty. This should mean consumers will benefit as soon as possible from efficient pricing outcomes consistent with their long term interests.

#### **2.4.4 Implementation costs**

The final 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 final rule. The costs will be outweighed by the outcomes of the determination process.

#### **2.4.5 AEMO's declared network functions**

Under section 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 final 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 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 NEO.

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

- the final rule encourages more holistic, overall decision-making by the regulator. In particular, the rate of return provisions and the capex incentive provisions of the final 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 final 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 final 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;
- the final 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; and
- the final rule includes transitional arrangements to allow application of the new rules to all NSPs as soon as possible.

Chapters 6 to 11 explain in greater detail how the Commission considers that the final rule is likely to better contribute to the achievement of the NEO than the rules proposed in the consolidated rule request. Chapter 12 discusses the rules on transitional arrangements.

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

## **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 (RPP) as required under section 88B of the NEL as the final rule relates to matters specified in items 15 to 24 and 25 to 26J of Schedule 1 to the NEL.

In respect of the transitional arrangements, the Commission has also taken into account five broad principles that, in its view, represent the most important considerations for the new rules. These principles include:

1. the final rules should apply to all service providers as soon as possible;
2. where any transitional arrangements are made regarding determination processes that require consultation, the arrangements should allow for sufficient time for stakeholder consultation;
3. the transitional arrangements should provide service providers with a reasonable opportunity to recover at least the efficient costs they incur in the provision of regulated services;
4. the transitional arrangements should be practicable having regard to the regulator's resourcing constraints, as well as the resourcing capacity of other stakeholders; and
5. the transitional arrangements should minimise the potential for one-off price shocks for consumers.

The Commission believes these five broad principles for transitional arrangements are consistent with the NEO and the RPP. The Commission has borne these principles in mind when assessing the various proposals that have been made about the form that the transitional arrangements should take.

The next section below explains how the RPP have been taken into account.

### **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.

## **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.

## **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 final rule 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.

## **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.

## **Transitional arrangements**

In the context of transitional arrangements, the Commission has expressly considered the RPP on recovery of at least efficient costs as one of the key principles. The transitional arrangements have been put in place so that those NSPs that are in the process of preparing their regulatory proposals for the next regulatory period, or will be required to submit their regulatory proposals while the AER determines its approach to certain issues under the new rules, have certainty as to how the rules are to apply to them.

### **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.

## **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. Achievement of the overall allowed rate of return objective will promote effective incentives as the rate of return determined should be commensurate with benchmark efficient financing costs.

## **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 final rule gives the regulator the power to establish small scale incentive schemes to test innovative approaches to incentives.

## **Transitional arrangements**

In order to create effective incentives that promote economic efficiency, the new rules apply to all NSPs as soon as possible. The transitional arrangements have been developed to progressively apply the new rules to NSPs as they approach their regulatory determinations for the next regulatory period. Different arrangements have been put in place for different NSPs, depending on when their next regulatory period begins. This means that improved incentives can be provided to NSPs going forward.

### **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.

## **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.

## **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 final 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.

#### **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.

##### **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.

##### **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 final rule determination contributes 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.

##### **Regulatory determination process**

The final 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.

##### **Transitional arrangements**

The transitional arrangements principles one and two encapsulate this RPP. By putting in place appropriate transitional arrangements to apply the new rules to NSPs as soon as possible, the regulator is given greater powers to achieve efficient outcomes. This could reduce the risk of potential over or under-investment.

#### **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.

##### **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.



### **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.

### **Transitional arrangements**

Prices should not be distorted when moving from the previous rules to the new rules, unless the underlying economic costs of the NSPs change. The transitional arrangements seek to minimise the potential for one-off price shocks for consumers in this regard and therefore provide appropriate price signals to consumers.

## **3 Final Rule determination - gas**

### **3.1 Commission's final rule determination**

In accordance with section 311 of the NGL the Commission has made this final 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.<sup>14</sup>

The Commission's reasons for making this final rule determination are set out in chapters 6 and 7. The Commission's reasons for the transitional arrangements are discussed in chapter 13.

The more preferable rule that the Commission has made (final rule) is attached to and published with this final rule determination. The final rule includes rules for transitional arrangements that will apply to certain gas service providers to transition them into the new rules. The key features of the final rules are described in chapters 6 and 7 of this final rule determination. The Commission's reasons for the transitional arrangements are discussed in chapter 13.

### **3.2 Commission's considerations**

In assessing the rule change request the Commission considered:

- its powers under the NGL to make the final rule determination;
- the rule change request;
- submissions received during initial consultation on the rule change request and following publication of the directions paper and draft rule determination;
- comments made by stakeholders as part of workshops and forums held as part of the consultation undertaken for the rule change request;
- consultants reports;<sup>15</sup>
- 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;

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<sup>14</sup> 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.

<sup>15</sup> Referred to in chapter 1.

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<sup>16</sup> Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services

- previous decisions of the Commission, including the 2006 Chapter 6A determinations;
- 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 final 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 final rule against the NGO**

The Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NGO because the final 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 degree of risk as that

which applies to the gas service provider subject to the decision. The final rule also provides the regulator with sufficient discretion on the methodology for estimating the required return on equity and debt components 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 that achieves the allowed rate of return objective..

The final rule also 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.

The final rule also includes transitional rules that allow the regulator and gas service providers to apply the new rules as soon as possible with minimal administrative cost and regulatory uncertainty. This should mean consumers will benefit as soon as possible from efficient pricing outcomes consistent with their long term interests.

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

### **3.4.3 Implementation costs**

The final 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 final 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 final rule will, or is likely to, better contribute to the achievement of the NGO than the proposed rule for the following reasons:

- the final 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 final 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 final 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 final 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;
- the final 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; and
- the final rule includes transitional arrangements to allow application of the new rules to all gas service providers as soon as possible.

Chapters 6 and 7 explain in greater detail the respects in which the Commission considers that the final rule is likely to better contribute to the achievement of the NGO than the proposed rule. Chapter 13 discusses the rules on transitional arrangements.

The final rule also includes a number of provisions that are necessary or consequential (as permitted by section 297 of the NGL).

### **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 (RPP) as the final rule relates to item 41 of schedule 1 of the NGL.

The RPP 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.

In respect of the transitional arrangements, the Commission has also taken into account five broad principles that, in its view, represent the most important considerations for the new rules. These principles include:

1. the final rules should apply to all gas service providers as soon as possible;
2. where any transitional arrangements are made regarding determination processes that require consultation, the arrangements should allow for sufficient time for stakeholder consultation;
3. the transitional arrangements should provide service providers with a reasonable opportunity to recover at least the efficient costs they incur in the provision of regulated services;
4. the transitional arrangements should be practicable having regard to the regulator's resourcing constraints, as well as the resourcing capacity of other stakeholders; and
5. the transitional arrangements should minimise the potential for one-off price shocks for consumers.

The Commission believes these five broad principles for transitional arrangements are consistent with the NGO and the RPP. They have been taken into account as follows:

- Section 24(2) - the Commission has expressly considered the RPP on recovery of at least efficient costs as one of the key principles. The transitional arrangements have been put in place so that those gas service providers that are in the process of preparing their regulatory proposals for the next regulatory period, or will be required to submit their regulatory proposals while the regulator determines its approach to rate of return as part of the preparation of the rate of return guidelines, have certainty as to how the rules are to apply to them.
- Section 24(3) - in order to create effective incentives that promote economic efficiency, the new rules apply to all gas service providers as soon as possible.
- Section 24(6) - the transitional arrangements principles one and two encapsulate this RPP. By putting in place appropriate transitional arrangements to apply the new rules to NSPs as soon as possible, the regulator is given greater powers to achieve efficient outcomes. This could reduce the risk of potential over or under-investment.
- Section 24(7) - prices should not be distorted when moving from the previous rules to the new rules, unless the underlying economic costs of the gas service providers' change. The transitional arrangements seek to minimise the potential for one-off price shocks for consumers in this regard and therefore provide appropriate price signals to consumers.

The Commission has borne these principles in mind when assessing the various proposals that have been made about the form that the gas transitional arrangements should take.

## **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 final rule determination and included in the final 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 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.

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 amendments to the NER and NGR at a high level.

### **4.2 Summary of assessment of issues**

The rule change requests raised four broad areas of problems with the rules, as set out in chapter 1. Taking each in turn, the Commission draws the following conclusions as set out below.

#### **4.2.1 Rate of return**

##### **Overall framework**

The AER referred to problems associated with having different rate of return frameworks for electricity distribution, electricity transmission and gas. It 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 has the characteristics necessary to best meet the NEO and NGO, taking account of the 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.<sup>16</sup>

Under the new 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".<sup>17</sup> This will enable the regulator to 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 its expenditure requirements.

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. Further, it is also important that 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 new rate of return 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 service providers. 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 framework for the determination of the allowed rate of return depends, to a significant degree, on how the regulators and the appeal body interpret the new rules. The Commission has taken the opportunity in this final rule determination to explain how the new rules are to be interpreted. Most importantly, the new rules allow the regulator (and the appeal body) to focus on

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<sup>16</sup> In this chapter of the document, 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.

<sup>17</sup> In this document 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.

whether the overall rate of return meets the allowed rate of return objective, which is intended to be consistent with the NEO, the NGO and the RPP.

The Commission has not included in the new 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 existing 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 new rate of return 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 for different types of service providers. The new rule gives the regulator the ability to use a range of different approaches to undertake this task.

As part of its rule change request, the EURCC also argued for the return on debt for state-owned NSPs to be determined differently from privately-owned NSPs. The Commission has considered this proposal in detail and has concluded that it would be inappropriate for the rules to make such a distinction. The Commission maintains its view that the EURCC's arguments in support of its proposal are misplaced, and ignore the competitive neutrality principles that apply to state-owned NSPs.

### **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 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). As a result, it has determined to remove the clause.

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 has removed 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 final rule includes a number of provisions designed to improve the ability of consumers to participate in the regulatory determination 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 determination 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 AER will be required to publish expenditure forecast assessment guidelines and determine how it will be applied at the framework and approach paper stage, which will also apply to TNSPs, see below and section 8.4.3. NSPs will be required to submit complying information with their regulatory proposals. In addition, NSPs are to advise the AER of their approach to preparing expenditure forecasts at the framework and approach stage. 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 and 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% of any expenditure incurred by a NSP above its capex allowance would be rolled into the RAB and, therefore, be 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.

Following the directions paper the Commission undertook further analysis of actual capex by NSPs; engaging consultants to assist. Both the work of the consultants and the Commission's own analysis have identified a range of theoretical drivers as to why a NSP might spend more than its capex allowance. The consultants 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" that 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 the 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 guidelines 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 incurred capex. 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 capex incurred is efficient. 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. This discretion should not be seen as diminishing the role of ex ante incentives. Rather, such reviews are to address a gap in the lack of supervision of capital expenditure that has occurred. The ability to reduce the capital expenditure rolled into the RAB is intended for obvious cases of inefficiency, and not as the main means of achieving efficient levels of capital expenditure.

### **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.

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. Therefore the Commission will give the AER discretion to preclude inefficient related party margins being rolled into the RAB, regardless of whether the NSP spent more than its allowance overall. 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's final rule gives 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 was 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 made 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 include:

- lengthening the regulatory determination process by four 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 documents 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 identify specific confidentiality claims in their regulatory proposals and the AER to report on such claims and also late or out-of-scope material from NSPs.

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 made the final rule to include the following:

- 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 standard control services or prescribed transmission services with any unregulated services; 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.

### 4.2.5 Transitional arrangements

The Commission has included transitional arrangements in the final rules to enable the regulators to apply the new rules as soon as possible. This will allow the benefits of the new rules to flow through to consumers more quickly.



Transitional arrangements are required due to overlap between the timing of guidelines required under the new rules and that of upcoming regulatory processes, which must follow the guidelines. For example, the final rate of return guidelines may not be complete until November 2013, which is after Ausgrid would otherwise be required to submit its regulatory proposal, in May 2013. Delays to the timing for the regulatory process for the NSPs due to submit in 2013 create congestion for the AER for later regulatory processes, which must then also be delayed.

Transitional arrangements are included in the final rules for both electricity and gas. As well as allowing the new rules to be applied as soon as possible, the transitional arrangements are designed to minimise the resourcing burden on stakeholders and minimise price volatility.

Different transitional arrangements have been designed for different service providers, and in general, the scale of the transitional arrangements reduces as time progresses:

- the current rules have been preserved for SP AusNet (transmission) for three years;
- for most other NSPs whose regulatory control periods are due to commence between 2014 and 2016, the regulatory period remains the same but the AER's decision is delayed by a period of time. An interim determination is made for the first year of the period and a true up is applied at a later stage;
- no transitional arrangements are required for NSPs with regulatory control periods commencing post 2016; and
- two gas service providers in Western Australia will have their next access arrangement reviews delayed to accommodate the development of the rate of return guidelines by the ERA and ActewAGL will have its gas access arrangement review delayed by 12 months to accommodate the 12 month delay to its electricity determination.

## 5 Approach to general issues

### 5.1 General approach

The issues raised 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. However, certain elements should be prescribed in the rules, such as the minimum requirements of 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 decision-making 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 for their proposals and decisions 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;
- 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 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 made by this final 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 and the draft rule determination, these matters need to be considered on a case by case basis.

Amendments have been made to the rules where it has been demonstrated that a clear problem exists. Where evidence of a problem has not been provided, or is not conclusive, then the Commission has not made any changes. A good example in this regard 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.

## **5.2 Drivers for effective network regulation**

The Commission is of the view that the package of amendments that have been made to the NER and NGR as part of this final rule determination provide 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 final rule determination provides examples and illustrations of how the final rules could be interpreted and applied to address problems that exist currently, but also how their application could adapt when the circumstances change.

In their submissions on the draft rule determination, NSPs have proposed greater prescription in the rules. This appears to be driven by a lack of certainty about how the AER would apply increased discretion. The Commission's view is that rules that are made should assume a regulator that follows good administrative decision-making practice with adequate resources, and strives to make the best possible decisions.

In its submission in response to the draft rule determination, the AER stated that the Commission's draft rules represent a significant improvement on the existing NER and address the major issues highlighted in the AER's rule change requests. The AER also referred to some further amendments that would, in its view, improve the operation of the draft rules. Some of these amendments concerned the implementation of the draft rules. The AER suggested some amendments that, in its view, would better achieve the outcomes intended by the Commission.

As for all submissions received, the Commission has carefully considered the AER's comments made in response to the draft rule determination. Particular attention has been given to the AER's comments on the implementation of the rules given its role as regulator and the body primarily responsible for application of the rules. The Commission has carefully drafted the rules to reflect its overall position. In this context, the Commission has also consulted with the AER regularly on matters of drafting to be as certain as possible that the rules are correct, clear, and able to be applied by the AER, consistent with the Commission's position. The AER has reviewed the final rules. In its view, the final rules can be applied by the AER, consistent with the Commission's final position as set out in this final rule determination.

In respect of the second driver, 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. Without a shareholder seeking a commercial return for its investment the management of a service provider will not in practice face the strength of the incentive that would otherwise occur. This is because a shareholder seeking a below commercial rate of return provides the management with an ability to tolerate inefficiencies.

### **5.3 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. On 9 October 2012 the panel published its final stage two report.

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 both the focus on the overall objectives set out in the NEL and the NGL and also encouraging outcomes that are in the long term interests of consumers. The LMR Panel has proposed in its final stage two report that the NER and the NGR could be amended to clarify that decisions under those rules should be more holistic and broader, focussing on overall outcomes rather than component elements.

It is noted that, as a group of experts engaged by the SCER, the LMR Panel can only make recommendations, and it is up to the SCER to determine whether it will implement these recommendations, and if so how. It is worth noting, though, that the recommendations in the final stage two report that seek to encourage a greater focus on objectives and overall outcomes are consistent with this final rule determination. Where possible, the final rule seeks to allow and encourage the regulator to approach decision making more holistically. The main examples of this 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 the NGO and the RPP. In line with this overall approach, the Commission is supportive of the review body being constituted, empowered, staffed and resourced in such a way as to be able to take the same holistic approach to the review of decision-making.

The Commission supports the need for accountability of the regulator through some form of merits review. Outcomes for consumers are likely to be improved if the proposed changes in the LMR Panel report to encourage a greater focus on objectives and overall outcomes by the review body are implemented. This final rule determination and the final rule, however, proceed on the basis of the merits review arrangements existing at this time. To the extent that the merits review arrangements change, there may need to be further rule changes as a result. These could include rule changes that arise directly out of such changes, some of which have been suggested by the LMR Panel.<sup>18</sup> They may also include consequential rule changes to align the rules with the changes to the NEL and the NGL regarding issues such as the definition of a reviewable decision.

#### **5.4 Role of consumers**

In its rule changes request on electricity, the AER identified what it claimed were specific deficiencies in the way the regulatory process operates. Among other things, it stated that these deficiencies are denying some stakeholders the ability to have input into the regulatory process. On the basis of this and other claims in the rule change requests, the Commission has addressed the regulatory process in a holistic way to best deal with such deficiencies. This is discussed further in chapter 10.

The final rules do not attempt to address perceived problems of engagement of consumers generally. For a start, this would go beyond the scope of the problems raised in the rule change requests and would therefore be beyond the Commission's rule-making powers. More conceptually though, this issue is fundamentally about how NSPs and the AER interact with consumers. While the final rules in some areas, such as the expenditure forecasting assessment guidelines, require engagement to occur in a certain way, the rules should provide for the outcomes of engagement, not the engagement itself. Forcing parties to interact is unlikely to be successful in most cases. What is needed is a cultural shift towards greater engagement, and this can only come from the parties themselves. What the final rules provide for in terms of engagement should be seen as a minimum. However, importantly the final rules provide the AER with the ability to have regard to the nature of consumer engagement undertaken by NSPs when evaluating their regulatory proposals.

On the basis that dealing with consumer engagement generally is outside the scope of this rule change, SCER may wish to consider the issue of consumer engagement for processes under the NER or the NGR.

## 5.5 The relationship between objectives and factors

The final rules in a number of places are based on a structure which contains objectives and factors. For example, this structure can be found in both the rate of return provisions and the capex incentive provisions. There are other areas where, although there is no overall objective, there are factors for the regulator to consider. While the relationship between the objectives and factors is clearly expressed in the rules, its significance to the overall outcomes is such that it is further described here. In general the final rules give the regulator greater discretion than it has currently. The objectives and factors show the regulator what it must bear in mind when it exercises that discretion.

The role of the objective is to indicate what the regulator should be *seeking* to achieve in the exercise of its discretion. Some stakeholders appear to have understood the objectives as imposing on the regulator a requirement and that failure to comply with this would mean the regulator is in breach of the rules. This is not the case. Although the language of an obligation is used in some objectives, it is not necessarily expected that the substance of the objective will always be fully achieved, but rather the regulator should be striving to achieve the objective as fully as possible. Where it is used in rate of return and capex incentives, the objective has primacy over other matters which the regulator is directed to consider.

These other matters include factors which the regulator is directed to consider. The rules use language such as "have regard to" and "take into account" to direct the regulator to consider certain factors. Throughout this rule change process there has been discussion over the respective meanings of these phrases. The Commission's approach is that these phrases mean the same thing and nothing is implied by the use

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18 LMR Panel, *Review of the Limited Merits Review Regime, Stage Two Report, Report for the SCER*, 30 September 2012, pp. 57-58.

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of one rather than the other. The Johnson Winter & Slattery advice attached to the Australian Pipeline Industry Association (APIA) submission<sup>19</sup> includes a useful guide to how the phrases should be interpreted. The regulator must actively turn its mind to the factors listed, but it is up to the regulator to determine how the factors should influence its decision. It may, indeed, consider all of them and decide none should influence its decision. It is not intended that the regulator's decision is solely dependent on how it applies any or all of those factors. The intention is that where the rules require the regulator to consider certain factors in conjunction with an overall objective, it should explain its decision including how it has had regard to those factors in making a decision that meets the objective.

The objective, where one exists, should indicate to the regulator how the factors should influence its decision. The regulator should not assume that it may consider the factors (or other relevant provisions) and that this will of itself mean that the objective has been achieved. The overriding consideration for the regulator is the objective.

## **5.6 Approach to the following chapters**

The directions paper and draft rule determination included summaries of responses to consultation in this rule change process. Unless indicated, in this final rule determination, where submissions are discussed, the discussion builds on the previous summary and focuses on new points made by stakeholders.

The draft rules specified the timing of the first guidelines required to be produced by the regulator under the draft rules. On the basis that this is not an ongoing provision of the rules, the timing of the first guidelines is now dealt with as part of the transitional arrangements, and is discussed further in chapters 12 and 13.

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<sup>19</sup> APIA, Draft Rule Determination submission, 4 October 2012, p. 11.

## 6 Rate of return framework

### Summary

- There is a strong case for a common framework under the NER and NGR for determining the rate of return.
- A new common rate of return framework will be implemented that requires the regulator to determine a rate of return (the allowed rate of return) that meets an overall objective focussed on the efficient financing costs a benchmark efficient service provider. The allowed rate of return will be estimated on a determination by determination basis to allow the regulator to better respond to changing financial market conditions.
- The new framework requires the regulator to develop and review rate of return guidelines that set out the approach it intends to take to determining the allowed rate of return. This will supplement the considerations at each regulatory determination/access arrangement. The guidelines must be reviewed at least every three years.
- The framework 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.
- Estimating the rate of return ultimately requires a regulator to exercise judgement about the analytical techniques and evidence to use to make an estimate that is commensurate with efficient financing costs. The new framework does not prescribe methodologies or lock-in specific benchmark characteristics other than providing high-level principles that should be taken into account when estimating various components, such as return on equity and debt. While the judgement as to the best approach is left to the regulator, the preferred methods must be developed to meet the overall allowed rate of objective.

### Difference between draft rule and final rule

- The final rule closely reflects the draft rule. To the extent submissions have raised concerns about the level of prescription and details in the draft rule, the Commission has considered them in this final rule determination. The final rule strikes an appropriate balance between flexibility and certainty for all stakeholders.
- The final rule includes some minor drafting modifications from the draft



rule to further reinforce the primacy of the overall objective when estimating the rate of return. The rules have also been re-ordered to better reflect the factors that the regulator must have regard to in estimating the return on equity and return on debt components in achieving the allowed rate of return objective.

## 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 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.<sup>20</sup>

The current frameworks for estimating the rate of return for electricity transmission, electricity distribution and gas service providers differ in a number of respects. Differences include the extent of discretion available to the regulator and whether the estimate is made at each determination or in a periodic review. The current frameworks are 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.

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.<sup>21</sup> The directions paper also explained the AER's rule change request for the rate of return frameworks for electricity and gas transmission and distribution.<sup>22</sup>

Further analysis was provided in the draft rule determination, which also set out the draft rule provisions proposed to give effect to the Commission's conclusions on the AER's rule change request.<sup>23</sup>

This chapter does not include a discussion on issues relating to the estimation of return on debt although it is an integral part of determining the overall rate of return. Such a discussion is included in chapter 7 of this final rule determination.

The remainder of this chapter is structured as follows:

- section 6.2 summarises the Commission's position in the draft rule determination;

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<sup>20</sup> See NER clauses 6A.6.2(a) and 6.5.2(a). See also NGR rule 76(a).

<sup>21</sup> See AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 67-71.

<sup>22</sup> Id., pp. 71-73.

<sup>23</sup> See AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Draft Rule Determination, 23 August 2012, pp. 32-61.

- section 6.3 summarises the submissions received in response to the Commission's draft rule determination;
- section 6.4 provides the Commission's analysis of issues in response to submissions received on the draft rule determination; and
- section 6.5 provides guidance on the final rule.

## **6.2 Directions paper and draft rule determination**

### **6.2.1 Assessment of existing frameworks**

#### **Chapter 6A of the NER**

The Commission retained its initial view from the directions paper that the rate of return framework under Chapter 6A of the NER is insufficiently flexible to be the best framework for achieving the NEO and RPP in the future.<sup>24</sup> This assessment was based on the view that fixing WACC parameters for long periods produces results that may not reflect current market conditions. Further, it limits the set of information available for estimating parameter values.

The global financial crisis and its continuing impact through the European sovereign debt crisis have highlighted the inherent dangers in an overly rigid approach to estimating a rate of return in unstable market conditions. This is because 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 decisions made at a WACC review to be subject to merits review.

The Commission also expressed concern that the provisions 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. This may result in it not considering the relevance of a broad range of evidence, and may lead to an undue focus on individual parameter values rather than the overall rate of return estimate.

#### **Chapter 6 of the NER**

The Commission's conclusion on the rate of return framework under Chapter 6 of the NER was that, while it was more flexible than the Chapter 6A framework, it had shortcomings that meant it was not the best available framework for achieving the NEO, the RPP and the RPP in future.<sup>25</sup>

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<sup>24</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers, Draft Rule Determination*, 23 August 2012, pp. 39-40; AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers, Directions Paper*, 2 March 2012, pp. 78-80.

<sup>25</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers, Draft Rule Determination*, 23 August 2012, pp. 40-41.

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<sup>40</sup> Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services

The Commission made three specific points on the lack of suitability of the current Chapter 6 rate of return framework as a foundation for a common rate of return framework:

- the rules should allow the inter-relationships between parameters to be appropriately considered. This will encourage the regulator to focus on whether its overall estimate of the rate of return is appropriate;
- the rules and their interpretation have led to an undue focus on individual values rather than the overall estimate of the rate of return; and
- the persuasive evidence test is problematic. Although regulatory certainty is desirable, it 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.

### Part 9 of the NGR

In contrast to the electricity frameworks, the Commission concluded that the NGR rate of return framework provides considerable discretion and flexibility, and is intended to be focussed on obtaining a good overall estimate of a rate of return.<sup>26</sup> The Commission considered that the approach of the rate of return framework in the NGR is better aligned with one that could best achieve the NEO, the NGO and the RPP. This is because the NGR specifies an overall objective for the rate of return that directly aligns the estimation process towards achieving the NGO and the RPP.

However, it was noted that the considerable flexibility of this framework did not appear to have been taken advantage of in practice. This may be due to approaches from the more prescriptive electricity regimes influencing the gas regime. Moreover, recent decisions of the Tribunal have interpreted the NGR rate of return framework to apply in such a way as to reduce the range of information that can be used in estimating the rate of return.<sup>27</sup> Such application could lead to the adoption of relatively formulaic approaches to determining the rate of return rather than focussing on the overall estimate.

The Commission observed that under the current NGR rate of return framework, stakeholders would have to participate in every access arrangement decision to influence the regulator's methodology, which may involve relatively high costs.<sup>28</sup> For

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<sup>26</sup> Id., pp. 41-43

<sup>27</sup> *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).

<sup>28</sup> In the draft rule determination, it was noted the regulator may decide to have a separate consultation, as the Economic Regulation Authority (ERA) did when it developed its bond yield approach for estimating the return on debt that it proposed in recent decisions. See 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 and South-West Gas Distribution Systems*, 28 February 2011; ERA, *Final decision on proposed revisions to the*

some stakeholders, such as consumer representative groups, this could impose such significant costs that it acts as a barrier to participation. On the other hand, developments in the regulator's methodology through gradual learning in each access arrangement process can be good regulatory practice.

Overall, the Commission considered that the policy objective of the rate of return framework in the NGR was most consistent with the NEO, the NGO and the RPP. However, recent interpretation of specific rules by the Tribunal meant that the Commission could not be confident that, without amendment, the current NGR framework would be likely to deliver outcomes that best meet the NEO, the NGO and the RPP.

### **Conclusion**

The Commission took the view that none of the existing rate of return frameworks are capable of best fulfilling the requirements of the NEO, the NGO and the RPP. The Commission considered that a new rate of return framework is therefore needed.<sup>29</sup>

Moreover, the new framework should be common across the NER and the NGR. The Commission noted that it 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 recognised that each sector currently has a different framework, and there can be benefits from stability of frameworks over time. However, given the concerns with each of the existing frameworks, the benefits of a common one appeared to significantly outweigh any potential benefits from preserving the stability of any of the existing frameworks.

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;
- 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

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*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.

<sup>29</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Draft Rule Determination, 23 August 2012, p. 43.

<sup>42</sup> Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services

- creates a framework of accountability for both the regulator and the service provider in determining an appropriate rate of return.<sup>30</sup>

There was broad agreement amongst stakeholders about the appropriateness of these five attributes.<sup>31</sup>

In the draft rule determination, the Commission decided that two further key attributes should be considered, which were:

- 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.

## 6.2.2 Features of a new common rate of return framework

### Estimating a rate of return for benchmark efficient service provider

The draft rule determination stated that 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 reflects efficient financing costs will allow a service provider to attract the necessary investment capital to maintain a reliable energy supply while minimising the cost to consumers. The Commission also stated that it is important for recovery of financing costs to be based on benchmark efficient finance costs. This is to provide incentives for firms to adopt efficient financing arrangements and to protect consumers from the effects of inefficient ones.

It was also highlighted that there is a need to bring the focus of the rate of return estimate in the rules back to the NEO, the NGO and the RPP. The Commission's proposed rate of return framework therefore had an overall objective for the allowed rate of return. In order to meet the NEO and the NGO, this objective reflected the need for the rate of return to "correspond to" the efficient financing costs of a benchmark efficient entity, this entity being one with similar circumstances and degree of risk to the service provider.

### Methodologies driven by principles and reflecting current best practice

Achieving the NEO, the NGO, and the RPP requires the best possible estimate of the benchmark efficient financing costs. The Commission stated that this can only be achieved when the estimation process is of the highest possible quality. The draft rule determination stated that this meant that a range of estimation methods, financial models, market data and other evidence must be considered. At the same time, the

<sup>30</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 91-92.

<sup>31</sup> AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Draft Rule Determination, 23 August 2012, p. 44.

regulator requires discretion to give appropriate weight to all the evidence and analytical techniques considered.

The Commission considered 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.

### **Flexibility to deal with changing market conditions and new evidence**

It was determined that 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. The Commission was of the view that neither of these outcomes is efficient nor in the long term interest of energy consumers.

The Commission concluded that 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 outcomes of any review. However, it was also of the view that this approach did raise concerns about the ability of all stakeholders, including consumers and their representative groups, to participate in rate of return determinations on an ongoing basis.

As a result, the Commission's proposed rate of return framework required the rate of return to be determined at the time of each regulatory determination under the NER and each access arrangement decision under the NGR. The Commission considered that a requirement for guidelines (discussed below) on rate of return methodologies to be developed by a regulator would provide the ideal mechanism to achieve both effective consumer engagement and regulatory predictability.

### **Inter-relationships between parameter values**

In its draft rule determination, the Commission stated that, for a rate of return estimate to be reliable, it must properly reflect any interactions between the parameters in the estimation process. In some financial models, two or more parameters are either mathematically linked (ie the relationship between them can be expressed in the form of a mathematical formula) or they may be linked in other ways due to the underlying assumptions made in estimating various parameters. The Commission noted that proper implementation of a model would require that any relationship between parameters be recognised when estimating those parameters as part of deriving the overall rate of return estimate.

Stakeholders suggested that the existing Chapter 6 rate of return framework allowed for such inter-relationships to be taken into account. However, the Commission saw very limited evidence of how this occurs in practice.

The Commission's proposed new rate of return framework explicitly recognised 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**

The decision was taken that, in developing a new rate of return framework, accountability of the regulator and the service provider is important. The Commission's proposed rate of return framework in the draft rule determination achieved this accountability in a number of ways:

- the return on equity estimate was proposed to be derived from a range of different estimation methods, financial models, market data and other evidence, ensuring that it is informed by and tested against the range of relevant evidence;
- the framework required the regulator and the service providers to be continually measuring their choice and application of estimation methods, financial models, market data and other relevant evidence against the overall objective of a rate of return that corresponded to the efficient financing costs of a benchmark efficient service provider; and
- the regulator would be required to develop rate of return guidelines as part of a transparent consultative process and periodically review those guidelines.

In addition, the fact that the proposed rate of return framework would be part of a reviewable decision meant that service providers are able to seek merits reviews of the regulator's decision.

### **Regulatory certainty**

During consultation, regulatory certainty was highlighted by many service providers and investor groups to be an important aspect of the rate of return framework. The Commission recognised 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 will be determined in the future. On the other hand, investors also require certainty that where market conditions change, the regulatory regime will provide enough flexibility to the regulator to make the necessary adjustments to determinate an appropriate rate of return.

In its draft rule determination, the Commission stated that the NGR rate of return framework represented a stronger attempt at ensuring that the determination of the rate of return meets the NEO, the NGO and the RPP. This was because it placed 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 Commission also gave consideration to a suggestion from NSPs that if a rate of return framework based on the NGR determination by determination approach were to be adopted, then there should be an "inertia principle" included in the rules. This

would require the parameter values of previous regulatory determinations to be binding 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.

In its draft rule determination, the Commission took the view that inclusion of an inertia principle would undermine the strength of its proposed rate of return framework. The Commission further noted that its proposed non-binding rate of return guidelines would 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). Rather, it would promote it 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 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 as a reviewable decision, allowing the appeal body to maintain appropriate oversight over the regulator's decision.

#### **More effective consumer participation**

It was noted in the draft rule determination that one of the key drawbacks of the NGR rate of return framework was that it may not allow for more effective consumer participation. That is because it operates on a determination by determination basis. This is particularly so where there are a lot of relatively small consumers and their representative groups have resource constraints which limit their ability to effectively engage on that basis. Accordingly, the Commission 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.

The Commission considered that a useful way to achieve effective consumer engagement would be through the use of guidelines, which also helps to address concerns about regulatory certainty. The rate of return 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.



### 6.2.3 Nominal post-tax rate of return

In proposing a new common rate of return framework, the Commission had to consider whether the mandated nominal post-tax approach in the NER should be extended to the NGR framework. In the draft rule determination, the Commission considered the rationale the AEMC provided in prescribing a nominal post-tax approach in Chapter 6A, in its 2006 Chapter 6A determination. The Commission noted that the nominal post-tax approach was prescribed in the NER because:

- the post-tax approach addressed 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.<sup>32</sup>

The draft rule determination noted that 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 the statutory tax rate or a simple and conservatively high assumption for the effective tax rate.

The Commission also gave weight to comments from the AER and the Economic Regulation Authority (ERA). Both submitted that the use of the company tax rate and a conservatively high assumption of the effective tax rate can lead to systematic overcompensation for company tax. The AER also submitted 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. As a result, the Commission took the view that a common rate of return framework across the NER and NGR should apply the nominal post-tax approach.

The nominal post-tax approach is already applied consistently under the NER. Prescribing a nominal post-tax approach in the NGR offers benefits such as:

- streamlining the access arrangement review process;
- providing certainty for gas service providers as to the basis on which the regulator will determine the allowed rate of return;
- allowing convergence in modelling approaches across the different sectors; and
- improving the ability to compare returns across the different sectors.

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<sup>32</sup> AEMC, *Draft national electricity amendment (Economic regulation of transmission services) rule 2006 - Transmission revenue: rule proposal report*, February 2006, pp. 63-64.

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.

#### 6.2.4 Implications of the Tribunal decision in the ATCO Gas and DBP cases

In developing the new rate of return framework for the draft rule determination, the Commission also provided reasons for why it had not adopted the broad architecture of the NGR rate of return framework given it exhibited a number of the identified key features of a good rate of return framework. The Commission was not convinced that the existing NGR rate of return framework would best meet its proposed approach in light of the recent decisions of the Tribunal in the ATCO Gas and DBP merits reviews and their implications for how the Commission intends its framework to be interpreted.

In both the ATCO Gas and DBP cases, the Tribunal rejected the contention of the applicants that giving primary emphasis to rule 87(1) would reflect the NGO and the RPP.<sup>33</sup> Such a conclusion does not reflect the approach of the Commission to determining an appropriate rate of return. The Commission considers that the primary consideration should 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 the key objective of the new framework.

The Tribunal suggested in both of these cases that rule 87(1) lacks guidance as to how the objective is to be achieved. Further, it stated 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.<sup>34</sup>

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".<sup>35</sup> As a result "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".<sup>36</sup>

The Commission considered 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.

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<sup>33</sup> *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14.

<sup>34</sup> *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].

<sup>35</sup> *Application by WA Gas Networks Pty Ltd (No 3)* [2012] ACompT 12, [63]; *Application by DBNGP (WA) Transmission Pty Ltd (No 3)* [2012] ACompT 14, [84].

<sup>36</sup> *Ibid.*

The Commission therefore emphasised that a focus on the overall estimate of the rate of return was a key objective of the new rate of return framework. The Commission considered that requiring the regulator to have regard to relevant information on estimation methods, financial models, market data and other evidence, 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 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.<sup>37</sup>”

The Commission stated that it was mindful of the potential consequences of removing prescription and allowing the regulator increased discretion. However, the Commission noted that the potential consequences must also 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 considered that no one method can be relied upon in isolation to estimate an allowed return on capital that best reflects benchmark efficient financing costs.

The Commission took the view that a mechanism for addressing, or at least mitigating, the Tribunal’s concerns regarding "idiosyncratic series of regulatory decisions", "less certainty" and "prolonged debate" was the use of guidelines on rate of return methodologies under the new framework.

## **6.3 Submissions**

### **6.3.1 Views on the level of prescription in the rules and level of detail required by the guidelines**

Two closely-related issues that attracted significant comments in most submissions are the level of prescription in the draft rule and the level of detail required in the rate of return guidelines. Views expressed on these two issues are wide-ranging.

The AER suggests that the overall objective for the allowed rate of return is better achieved by removing from the draft rule the requirements for how the overall rate of

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<sup>37</sup> *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].

return is determined.<sup>38</sup> It suggests that such requirements are better cast as criteria to which the regulator must have regard.

By contrast, the ERA takes the view that not specifying a rule like the existing rule 87(2) in the NGR would lead to a prolonged debate through the process of appeal to the Tribunal.<sup>39</sup>

The ENA submits that the AER should be required to provide sufficient details in the proposed rate of return guidelines to enable stakeholders to derive proxy estimates of the rate of return.<sup>40</sup> This call for greater detail being required in the guidelines has widespread support among submissions from electricity NSPs predominantly but not exclusively.<sup>41</sup>

Gas service providers are generally opposed to any detail being mandated in the proposed rate of return guidelines that could potentially lead to "locking-in" of parameter values. Gas service providers are nonetheless of the view that the draft rule should be further strengthened to require the regulator to use multiple methods, models and evidence in estimating the rate of return.<sup>42</sup>

That there is nothing in the draft rule that prevents the regulators from continuing their reliance on CAPM is a common concern.<sup>43</sup> Some submissions advocate that the regulator should be required to assign weights to the financial models that it intends to use and to explain its rationale for both these weights and the choice of models.<sup>44</sup>

In general, consumer representative groups are satisfied with additional flexibility being provided in the draft rule to the regulator.<sup>45</sup> However, the MEU is particularly concerned that the rule should define a benchmark efficient entity and the basis on which this is to be identified.<sup>46</sup> The EUAA approached the issue of discretion and prescription from a different perspective, submitting that, on the basis of its analysis of past performance of the regulator on the level of rate of return set, it is unlikely that

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<sup>38</sup> AER, Draft Rule Determination submission, 5 October 2012, pp. 16-17.

<sup>39</sup> ERA, Draft Rule Determination submission, 4 October 2012, pp. 5-6.

<sup>40</sup> ENA, Draft Rule Determination submission, 4 October 2012, p. 2.

<sup>41</sup> See, for example, SP AusNet, Draft Rule Determination submission, 4 October 2012, pp. 2-3; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, pp. 13-14; Jemena, Draft Rule Determination submission, 4 October 2012, pp. 23-26; UE and MG, Draft Rule Determination submission, 4 October 2012, pp. 10-11; QTC, Draft Rule Determination submission, 4 October 2012, pp. 5-6.

<sup>42</sup> APIA, Draft Rule Determination submission, 4 October 2012, pp. 10-15; APA Group, Draft Rule Determination submission, 4 October 2012, p. 3; DBP, Draft Rule Determination submission, 9 October 2012, pp. 2-4; ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 6-13

<sup>43</sup> See, for example, The Financial Investor Group, Draft Determination submission, 4 October 2012, pp. 17-19; APIA, Draft Rule Determination submission, 4 October 2012, pp. 10-12; QTC, Draft Rule Determination submission, 4 October 2012, pp. 4-5.

<sup>44</sup> See, for example, QTC, Draft Rule Determination submission, 4 October 2012, pp. 6-7; Ergon Energy, Draft Determination submission, 7 October 2012, p. 5.

<sup>45</sup> Consumer Action Law Centre, Draft Rule Determination submission, 5 October 2012, p. 3.

<sup>46</sup> MEU, Draft Rule Determination submission, 4 October 2012, pp. 11-12.

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<sup>50</sup> Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services

greater discretion for the AER will significantly impact on the regulator's ability to (potentially) set lower rates of return.<sup>47</sup> This view is shared by other consumer representative groups who commented on the draft rule determination.<sup>48</sup>

### 6.3.2 Departure from the rate of return guidelines

Electricity NSPs and the ENA suggest that the removal of a persuasive evidence test from the NER rate of return frameworks skews the balance too far toward flexibility from transparent and evidence-based decisions.<sup>49</sup> The electricity service providers are concerned that the Commission's draft rule was increasing the AER's discretion at the same time as evidentiary thresholds were being removed.<sup>50</sup> These submissions called for stronger requirements on a party proposing departure from the rate of return guidelines to justify its reasons and evidence for doing so, based on sound theoretical arguments and verifiable evidence.<sup>51</sup>

By contrast, the APIA and other gas service providers are not particularly in favour of the draft rule requirement for the regulator and the service provider to explain departure from the guidelines as they are concerned that this would result in a tendency for regulators to adhere to guidelines, even in the face of evidence for departure at the time of an access arrangement decision.<sup>52</sup> Arguments were made that though the rate of return guidelines would not be mandatory in their application, they would clearly have presumptive force, leading to concerns that the rate of return guidelines could "inadvertently become a way of entrenching non-reviewable errors".<sup>53</sup>

### 6.3.3 Development of the rate of return guidelines

Some stakeholders are concerned about the adequacy of the proposed consultation procedures for the periodic review of the rate of return guidelines. For example, some submissions suggested that thirty business days was insufficient time for responding to consultation papers or draft guidelines, and the consultation period should be

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<sup>47</sup> EUAA, Draft Rule Determination submission, 3 October 2012, pp. 6-7.

<sup>48</sup> ATA, Draft Rule Determination submission, 4 October 2012, pp. 7-8; UnitingCare Australia, Draft Rule Determination submission, October 2012, pp. 7-8.

<sup>49</sup> See, for example, ENA, Draft Rule Determination submission, 4 October 2012, pp. 12-13; Grid Australia, Draft Rule Determination submission, 4 October 2012, p. 3; SP AusNet, Draft Rule Determination submission, 4 October 2012, p. 2; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, pp. 11-12.

<sup>50</sup> See for example, SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 3.

<sup>51</sup> See for example, ENA, Draft Rule Determination submission, 4 October 2012, pp. 12-13; Grid Australia, Draft Rule Determination submission, 4 October 2012, p. 3; SP AusNet, Draft Rule Determination submission, 4 October 2012, p. 2; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, pp. 11-12.

<sup>52</sup> See, for example, APIA, Draft Rule Determination submission, 4 October 2012, p. 14; ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 10-13.

<sup>53</sup> ATCO Gas, Draft Rule Determination submission, 4 October 2012, p. 12.

increased to at least sixty business days.<sup>54</sup> APIA is of the view that, given the introductory nature and the broad range of matters to be considered, the proposed timetable for the first set of rate of return guidelines is too short.<sup>55</sup> Another concern raised by APIA is the absence of a consultation step before the regulator issues its draft guidelines.<sup>56</sup>

Some submissions called for the review period of the guidelines to be lengthened to a four year cycle.<sup>57</sup>

On a related issue, a question was raised as to which rate of return guidelines would apply to a regulatory determination, particularly given the frequency of guideline updates. For example, the submission from SA Power Networks (formerly ETSA Utilities), CitiPower and Powercor claimed that the draft rule was ambiguous as to which rate of return guidelines would apply to a service provider where the guidelines were issued between the draft and final regulatory determinations. These NSPs suggested that this issue could be resolved by amending the draft rule to mandate the application of the guidelines that are in force at the time the framework and approach paper is published.<sup>58</sup> Similarly, it was suggested that it is important that the first guidelines be finalised before any service provider is required to submit under it.<sup>59</sup>

#### **6.3.4 Nominal post-tax basis requirement**

Generally, submissions that commented on the draft rule proposal to mandate the rate of return calculations on a nominal post-tax basis were seeking clarification that the AEMC's intention is to preserve the "vanilla WACC" approach currently adopted by the AER.<sup>60</sup>

There were some submissions that did not support the Commission's draft rule proposal. ATCO Gas submits that there should not be a requirement in the rules to use a nominal post-tax approach, claiming that such a requirement would be inconsistent with the flexible approach intended by the Commission.<sup>61</sup> Contrary to the ERA's previous submission to the rule change request, while it supported the specification of

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<sup>54</sup> See for example, ENA, Draft Rule Determination submission, 4 October 2012, p. 15; QTC, Draft Rule Determination submission, 4 October 2012, p. 8; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 4.

<sup>55</sup> APIA, Draft Rule Determination submission, 4 October 2012, p. 12.

<sup>56</sup> APIA, Draft Rule Determination submission, 4 October 2012, p. 13.

<sup>57</sup> ENA, Draft Rule Determination submission, 4 October 2012, p. 15; Jemena, Draft Rule Determination submission, 4 October 2012, p. 25.

<sup>58</sup> SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 13.

<sup>59</sup> APA Group, Draft Rule Determination submission, 4 October 2012, p. 4.

<sup>60</sup> See for example, ENA, Draft Rule Determination submission, 4 October 2012, p. 10; SP AusNet, Draft Rule Determination submission, 4 October 2012, p. 2;

<sup>61</sup> ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 5-6.

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<sup>52</sup> Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services

a post-tax rate of return under the NGR, it stated that there should be no requirement for the approach to be on a nominal basis.<sup>62</sup>

The AER did not express any disagreement with a nominal post-tax approach being made mandatory under the draft rule.<sup>63</sup>

### 6.3.5 Departure from NSP's proposal on rate of return

The ENA and some NSPs disagree with the Commission's proposal that the allowed rate of return decisions be removed from those decisions that the regulator must make on the basis of what the NSP proposes in its regulatory proposal. That is, they consider that the constraints that apply to the AER's decisions by virtue of clauses 6.12.3(f) under Chapter 6 and 6A.13.2(a) and 6A.14.3(b) under Chapter 6A should apply to the AER's rate of return decisions.<sup>64</sup>

The ENA argue that, while a carve out from clauses 6.12.3(f), 6A.13.2(a) and 6A.14.3(b) might be appropriate for forecast opex and capex to discourage strategic behaviour, it is not necessary for rate of return since it is not affected by information asymmetry.<sup>65</sup> It was submitted that retaining the existing position would improve regulatory certainty and predictability given the increased uncertainty stemming from the increase in flexibility afforded to the regulator under the draft rule.<sup>66</sup>

### 6.3.6 Other Issues

Though generally most submissions agree with the overall approach taken by the Commission in the draft rule determination and the draft rule, there were numerous submissions that either suggested the drafting could be improved to better give effect to the Commission's intention or that certain concepts required clarification.

A common suggestion is that the words "commensurate with" should be included as part of the words of the overall allowed rate of return objective. For example, the ENA states that unless there is a deliberate reason for not doing so, the allowed rate of return objective should ideally use terminology consistent with the NEL and the RPP, and not doing so could give rise to unintended consequences.<sup>67</sup>

A related but distinct proposal calls for the reinstatement of "commensurate with the prevailing conditions in the markets for funds" as part of the proposed overarching

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<sup>62</sup> ERA, Draft Rule Determination submission, 4 October 2012, pp. 2-5.

<sup>63</sup> AER, Draft Rule Determination submission, 5 October 2012, p. 17.

<sup>64</sup> See, for example, ENA, Draft Rule Determination submission, 4 October 2012, pp. 19-21; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, pp. 12-13.

<sup>65</sup> ENA, Draft Rule Determination submission, 4 October 2012, p. 20.

<sup>66</sup> SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 13.

<sup>67</sup> ENA, Draft Rule Determination submission, 4 October 2012, p. 20.

allowed rate of return objective.<sup>68</sup> It was also recognised though that a potential adoption of the trailing average approach to debt for some NSPs may have necessitated the excision of this phrase.<sup>69</sup>

In a similar vein, there is concern from gas service providers that the requirement for the return on equity estimation to "take into account" the prevailing conditions in the market for equity funds is not as strong as under the existing rule 87 of the NGR and argued that this needed to be strengthened.<sup>70</sup>

Regarding this same draft rule provision, submissions from the ENA and others suggest that the Commission should clarify that it is not seeking to prevent the consideration of historical or realised returns.<sup>71</sup>

The QTC submits that it is important to clarify that references to "best estimates" relate to those which best promote the NEO, the NGO and the RPP, rather than the most accurate estimate from a purely statistical perspective.<sup>72</sup>

Some stakeholders also query what the intention was regarding the proposed requirement in the draft rule for consistent application of estimates of financial parameters.<sup>73</sup>

The submission from APIA seeks further clarity as to what was intended by "efficient financing costs". APIA suggests that efficient financing costs does not have a readily recognised meaning in the context of economic regulation. Similarly, APIA suggests that "benchmark efficient entity" requires clarification.<sup>74</sup> The MEU is strongly in favour of "efficiency" being defined in the NER and NGR as well as what it considered to be a "benchmark" entity and the basis on which this is to be defined.<sup>75</sup> ATCO Gas expressed the view that benchmarking should reflect the realities of the regulated entity.<sup>76</sup> A different approach is proposed by the Financial Investor Group (FIG), which recommends that "efficient entity" should be defined with reference to a benchmark network business in a competitive market.<sup>77</sup>

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68 APIA, Draft Rule Determination submission, 4 October 2012, pp. 8-9; DBP, Draft Rule Determination submission, 9 October 2012, p. 3.

69 APIA, Draft Rule Determination submission, 4 October 2012, pp. 9-10; APA Group, Draft Rule Determination submission, 4 October 2012, p. 3.

70 See, for example, APIA, Draft Rule Determination submission, 4 October 2012, p. 9.

71 ENA, Draft Rule Determination submission, 4 October 2012, p. 15; SP AusNet, Draft Rule Determination submission, 4 October 2012, p. 3.

72 QTC, Draft Rule Determination submission, 4 October 2012, p. 5.

73 See, for example, ENA, Draft Rule Determination submission, 4 October 2012, p. 10; ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 7-8; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 11.

74 APIA, Draft Rule Determination submission, 4 October 2012, p. 7.

75 MEU, Draft Rule Determination submission, 4 October 2012, pp. 6-12.

76 ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 3-5.

77 The Financial Investor Group, Draft Determination submission, 4 October 2012, pp. 17-19.



## 6.4 Analysis

This section responds to issues raised in submissions to the draft rule determination and sets out the Commission's reasoning for its final rule determination.

### 6.4.1 Level of prescription in the rules

There is broad support from stakeholders on the Commission's draft rule to introduce a flexible rate of return framework that is common across the electricity and gas transmission and distribution sectors. However, there is considerable concern about how the regulator may exercise the necessary discretion that comes with having a flexible framework that can evolve over time.

Therefore, a fundamental issue raised in submissions is how much prescription the NER and NGR and the rate of return guidelines should have to best allow the realisation of the Commission's policy intent. This section provides the Commission's response to some of the key aspects of this issue.

#### Flexibility and Certainty

The Commission explicitly recognised in the draft rule determination the potential tension between flexibility and certainty in the rate of return framework.<sup>78</sup> Resolving this tension must always be guided by what is most likely to achieve the NEO, the NGO and the RPP.

The Commission understands from submissions that much of the concern with the additional flexibility provided in the new framework reflects a lack of understanding from stakeholders about how the regulator will apply the new rules. Stakeholders also appear to be concerned about the direction on the various estimation techniques the regulator may take under the new framework. For instance, the current regulatory approach of using only the CAPM for estimating the return on equity was cited as an example that could be used to undermine the outcomes expected in the new framework. This would be where the regulator may choose to continue to justify using the CAPM without considering other models. To this end, varying suggestions were made to explicitly require the regulator to consider and provide weights to different financial models to improve the certainty of other models having some utility.

The Commission considers that the NER and the NGR in this context are about providing the regulator with the ability and necessary guidance to regulate the revenues and prices of monopoly networks service providers. In discharging their economic regulatory functions the AER and the ERA are required to consider their decisions in terms of achieving the NEO, the NGO and the RPP. The regulator should be expected to follow good administrative decision-making practice. In this context, such practice requires a full and considered explanation for decisions and adherence to due process, rigour and objectivity required under administrative law principles. That

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<sup>78</sup> See, for example, AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Draft Rule Determination, 23 August 2012, p. 51.

the regulator would strive for the highest quality estimates to best achieve the NEO, the NGO and the RPP can be necessarily expected. If a service provider considers that the regulator has fallen short in this regard, then it can consider appealing the regulator's decision. The Commission is of the view that the NER and the NGR cannot, and should not, be an exercise in rigidly specifying actions for the regulator that are already incumbent upon it.

The Commission's focus has been to appropriately balance flexibility and certainty in the NER and the NGR. While certainty for investors and service providers is of considerable importance, it is not the only consideration. The certainty of which parameters should be estimated, how they should be estimated and once estimated, locking them in for substantial period of time is a feature of the existing NER frameworks. However, this approach to achieving certainty has considerable drawbacks.

The cost of this certainty through the prescriptive rigidity in the rules not only affects service providers when market conditions adversely change, but also consumer interests. This is not to suggest that providing certainty should not be an objective and cannot be achieved through other means. Indeed, the Commission has attempted to provide some level of certainty to balance the flexibility objective through requiring the regulator to develop and periodically review rate of return guidelines on the methodologies it intends to use to estimate the rate of return over a three year period. That is, certainty on the regulator's approach is provided through another mechanism that still preserves the level of flexibility that should naturally exist in rate of return estimations.

### **Rules**

The Commission has taken the view that guidance in the NER and the NGR is beneficial unless it limits the flexibility of the regulator to make decisions more likely to achieve the NEO, the NGO and the RPP. The Commission disagrees with suggestions that the level of guidance included in the draft rule makes the AER less likely to be able to achieve these objectives than were there less prescription. Equally, the Commission disagrees that more prescription is needed than that provided by the draft rule. Rather, the Commission is of the view that the right level of balance has been struck by providing a framework for how the regulator should perform its duties, while at no stage undermining the primacy of the overall allowed rate of return objective.

The Commission has attempted to bring together a number of characteristics into a common rate of return framework that addresses many of the deficiencies in the current frameworks. One of the criteria the Commission has applied to determine the best framework for the NER and the NGR includes allowing methodologies for parameters to be driven by principles and to reflect current best practice.

Providing high level, principled guidance to the regulator in performing its task is an appropriate role for the NER and the NGR. Further, it enhances regulatory accountability, transparency and predictability. Nonetheless, such guidance must not impede the estimation of a high quality rate of return estimate that uses all relevant

evidence and methods. The Commission does not consider that a framework relying on a relatively mechanistic approach to estimating the rate of return will be best placed to achieve the NEO, the NGO and the RPP.

### **Guidelines**

Responses from many service providers expressed a desire for more certainty from the proposed new rate of return framework. This includes more detail being required from the rate of return guidelines, including requiring the regulator to state specific parameter values in the guidelines.

While the Commission supports the rate of return guidelines having as much detail as possible, it is concerned that the guidelines should not be seen as a determinative instrument for calculating the rate of return without reference to the determination or access arrangement process. The role of the guidelines is to provide stakeholders with an opportunity to engage with the regulator to determine how it will estimate the rate of return at the time of the regulatory determination or access arrangement. That is, they are more about providing service providers, investors and consumers with certainty on the methodologies of the various rate of return components and how the regulator will assess the relevant estimation methods, financial models, market data and other evidence in meeting the overall allowed rate of return objective.

The guidelines also provide the regulator with an opportunity to specify how it will deal with any unpredictable changes in market conditions at the time of any regulatory determinations or access arrangements. The Commission expects that the guidelines will provide service providers and other stakeholders with an ability to make a good estimate of the rate of return for particular businesses at particular points in time. The Commission recognises that the guidelines could allow this to occur in a number of ways, including through the way the methodologies are explained and/or by providing ranges of possible outcomes.

### **Continued reliance on CAPM**

A major concern expressed in numerous submissions is that under the proposed changes the regulator would still be able to, in effect, make exclusive use of the CAPM when estimating a rate of return on equity. The Commission understands this concern is potentially of considerable importance given its intention is to ensure that the regulator takes relevant estimation methods, models, market data and other evidence into account when estimating the required rate of return on equity.

As discussed above, the Commission takes the view that the balance between flexibility and prescription has been adequately achieved in the final rules. It would be counterproductive to attempt to prescribe a list of models and evidence, which would almost certainly be non-exhaustive and could lead to rigid adherence to them in a mechanistic fashion.

Similar problems exist with assigning weights that must be given to relevant estimation methods, financial models, market data and other evidence. In many circumstances it could be the case that the likelihood of achieving the NEO or the NGO

may be increased by examining a range of methods and data and making judgements aided by, for example, the location and/or clustering and/or statistical precision of estimates. That is, formulaic rules such as giving particular methods a fixed weighting may not be the best way to assess the information.

#### **6.4.2 Departure from the guidelines**

The Commission has considered suggestions from the ENA and other service providers to strengthen the role of the guidelines. This would be through a requirement that the regulator (and service providers) to provide “reasons and evidence” or some other definable evidentiary threshold when seeking a departure from the guidelines.

The intention of the rate of return guidelines is *not* to be binding on either the regulator or the service provider. The role of the guidelines is to be distinctly different to how the existing Statement of Regulatory Intent (SORI) on WACC operates under the current Chapter 6 and 6A rate of return frameworks of the NER. The rate of return guidelines are not intended to explicitly lock-in any parameters or methodologies from which departure would not be permitted. In order for the guidelines to have some purpose and value at the time of the regulatory determination or access arrangement process, they must have some weight to narrow the debate. However, there should not be any "inertia principle" or "persuasive evidence test" applying to the application of the guidelines. Requirements on the regulator (and service providers) of this nature to justify departures from the guidelines would undermine the purpose of them.

To this end, the Commission’s draft rule required the regulator to explain reasons for any departure from the guidelines in a regulatory determination decision and required service providers to explain reasons for any proposed departures from the guidelines in their regulatory submissions. The draft rule also required the regulator to have in place a rate of return guideline at all times after the publication of the first guidelines. This means that, under the Commission’s draft rule, there would be a guideline in force to act as a reference point both for the regulator and the service provider at any point in time. In this respect, the Commission is satisfied that its draft rule achieved the intended purpose and therefore the final rule reflects that approach.

#### **6.4.3 Development of the guidelines**

The Commission recognises that the preparation of the first rate of return guidelines will require extensive consultation. The transitional arrangements for the implementation of the final rules address the timeframes required for the development of the first rate of return guidelines under the NER and the NGR. As further discussed in the transitional rules chapters 12 and 13, a period of up to 12 months has been provided for finalisation of the first rate of return guidelines.

In the Commission's view, subsequent rate of return guidelines would likely involve more incremental changes in approach, and hence, the process may be shorter. Even where substantial changes are contemplated, these are likely to be limited to a small

number of parameters and/or methodologies. If complex issues are identified and greater time is required for consideration, the regulator has the ability to extend the process for reviewing the guidelines. This flexibility was provided in the draft rule. For the final rule, the Commission has retained the three-yearly review cycle for the guidelines so that they can be kept current and allow change to be more incremental. The Commission recognises that whenever the guidelines are being reviewed, there will be some service providers who will be required to submit their regulatory proposals at some point in the cycle.

In these circumstances, there could potentially be some uncertainty as to which version of the guidelines applies. However, the Commission is not convinced that mandating the application of the guidelines that was in force at the time of the framework and approach paper is the best way to deal with this uncertainty. Any mandated application of the rate of return guidelines undermines its flexibility and shifts the guidelines closer to a binding document.

A preferable way to address the issue is to retain the draft rule approach. This does not preclude the regulator from including in the new guidelines measures that provide certainty to those service providers that would be affected. Further, the draft rule provisions on the guidelines in the NER required the AER to consider transitional issues where there may be changes to regulatory approach in future determinations.<sup>79</sup>

The draft rule provisions therefore provided the AER with sufficient flexibility to consider how changes to its guidelines would impact on those service providers that would be required to submit their regulatory proposals during the course of the finalisation of the guidelines. It would not be appropriate for the rules to mandate which guidelines should apply to service providers in the transitory phase. This is because the extent and impact of any changes to the guidelines resulting from the periodic review will vary from review to review, depending on the issues that are raised. Therefore, it would seem appropriate to give the regulator the ability to determine which rate of return guidelines should be applicable in any individual case. As the guidelines are not binding, the AER can apply them flexibly to take into account such timing issues.

Ultimately the rate of return framework is about making the best estimate of the rate of return. While the guidelines plays an important role in the process as the point of departure for the regulator, service providers and other stakeholders at the time of a determination or access arrangement, whether a previous or recently revised version of the guidelines is used as the point of departure should not fundamentally affect the ultimate aim of making the best possible estimate of the rate of return.

For the final rule, the Commission has not made any changes from the draft rule on this issue. However, the Commission acknowledges that no equivalent rule of NER

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<sup>79</sup> See draft rule NER clauses 6.2.8(d) and 6A.2.3(d).

clauses 6.2.8(d) and 6A.2.3(d) existed or was proposed in the draft rule for the NGR.<sup>80</sup> The final rule for the NGR rate of return includes the equivalent NER clause for the AER and the ERA to consider transitional issues in making of the rate of return guidelines.

#### **6.4.4 Nominal post-tax issues**

Two specific issues were raised in response to the Commission's draft rule to prescribe the nominal post-tax approach. First, the ERA and some gas service providers did not support mandating the nominal post-tax approach, although on different grounds. Second, a number of submissions sought clarification of the definition of the nominal post-tax rate of return.

##### **Prescribing a common approach**

The Commission notes that there is widespread support among stakeholders to have a consistent and common rate of return framework across the three sectors covered under the NER and the NGR. However, the ERA and some gas service providers did not support mandating the nominal post-tax approach under the NGR, although on different grounds.

In the draft rule determination the Commission observed that, from a theoretical perspective, the choice of nominal or real or post-tax or pre-tax treatment of rate of return estimate should make no difference to outcomes for service providers or consumers. This issue has arisen from the fact that the AER currently uses a post-tax nominal framework for estimating the allowed rate of return for electricity NSPs under the NER. In contrast, a number of gas service providers have historically had their allowed returns determined using a pre-tax real framework, particularly those that have been regulated by the ERA.

Furthermore, the ERA submitted in response to the consultation paper that it was supportive of the proposal to adopt a common framework using a nominal post-tax basis. However, since that time the ERA has developed a new approach based on a hybrid real post-tax revenue model. The ERA submits that its hybrid real post-tax revenue model has some advantages over the AER's post-tax revenue model (PTRM).

The ERA submits that, relative to the AER's PTRM, its hybrid approach delivers:

- more regulatory revenue over the life of assets, as compared to the AER's approach;
- an identical present value of regulatory revenue as the full nominal approach under most circumstances over the life of the assets; and

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<sup>80</sup> See final rule clauses 6.2.8(d) and 6A.2.3(d) of the NER that states that if a guideline indicates that there may be a change of regulatory approach in future regulatory determinations, the guideline should also (if practicable) indicate how transitional issues are to be dealt with.

- revenue that is aligned closely with the service providers 'actual' after tax position (as opposed to the regulatory tax position of the benchmark firm).

As a result, the ERA argues that the rate of return framework should also allow regulators the ability to adopt a rate of return approach which best reflects the efficiency objectives of the NGO. However, it is not clear that any of these differences would support the conclusion that the ERA's hybrid approach better meets the NGO or the NEO, and the ERA submits only that "there is evidence to suggest that the best form of post-tax model remains open to question".

The Commission has sought advice from SFG in relation to this issue.<sup>81</sup> SFG notes the inconclusive nature of the ERA's view on how allowing alternative approaches to the nominal post-tax rate of return better meets the NGO. In SFG's view, there are a number of more compelling reasons to support retention of the draft rule approach. Specifically:

- the ERA submission does not suggest that the AER's PTRM is in any way inconsistent with the NEO or the NGO;
- the ERA submission does compare and contrast the PTRM against its hybrid approach in terms of consistency with the NEO or the NGO;
- retaining the Commission's draft rule mandating a nominal post-tax approach achieves the much supported objective of a common rate of return framework across all sectors; and
- a significant majority of service providers under the NER and the NGR are already regulated by the AER under the PTRM.<sup>82</sup>

The AER has also responded to the ERA's submission on this issue, noting that the revenue differences identified by the ERA are driven by the adoption of specific modelling assumptions rather than whether a nominal rate of return or real rate of return framework is applied.<sup>83</sup> For example, the AER considers that the likely cause of the identified revenue differences are the result of employing different tax input modelling and cash flow timing assumptions between the AER's modelling approach and the ERA's modelling approach.<sup>84</sup>

After considering SFG's advice and AER's views, the Commission considers that at this point, there is insufficient evidence to conclude that allowing the flexibility of using approaches other than a nominal post-tax framework as sought by the ERA would necessarily lead to outcomes that better meet the NGO or the NEO.

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<sup>81</sup> SFG Consulting, *Response to submissions on rule change proposals*, Report for the AEMC, 5 November 2012.

<sup>82</sup> *Id.*, pp. 7-8.

<sup>83</sup> AER, Draft Rule Determination supplementary submission, 25 October 2012, p. 1.

<sup>84</sup> *Ibid.*

It is evident that the differences in views have arisen because of certain modelling assumptions, rather than any fundamental economic requirement to have different approaches being applied to different service providers to determine their efficient revenues/prices. Since the majority of service providers under the NER and the NGR are already subject to the nominal post-tax approach as applied by the AER, it would be more practical to have a common approach already in place extend to all service providers. A common approach will mean that the rate of return can be compared on a consistent basis. Further, as the AER notes, it also avoids the need to direct resources to maintaining different revenue models that deliver the same outcome in terms of the underlying rate of return framework.<sup>85</sup> Consequently, the final rule mandates the use of the nominal post-tax approach to rate of return under the NER and the NGR (see further below on clarification of the form of nominal post-tax approach).

The Commission has also considered comments from APIA that there may be some potential unintended consequence for those gas service providers requiring a transition from the real pre-tax basis to a nominal post-tax basis. APIA states that the nominal post-tax approach to a gas service provider's capital base will create a discontinuity in the cash flows. This is because of the implicit tax asset base under the pre-tax real calculations will not be the same as the capital base.

It is not the Commission's intention that gas service providers, or indeed consumers, face any unnecessary costs resulting from any transition from a real pre-tax approach. To the extent possible, the Commission would expect the impact on the limited number of gas service providers and their consumers from the change in approach to be neutral. In relation to the specific issue raised by APIA, advice from SFG indicates that there could potentially be a financial loss to a service provider due to expropriation of value from its asset base resulting from the change.<sup>86</sup> However, SFG did not suggest that this issue justifies not applying a common nominal post-tax approach. SFG suggests that this would be a transitional issue under a change of basis for determining the rate of return and could be dealt with by preserving the starting value of the affected gas service provider's capital base.<sup>87</sup>

Based on SFG's advice, the Commission agrees with APIA that some form of transitional provisions should be considered for those gas service providers that would be affected by a change from the real pre-tax approach to the nominal post-tax approach. While APIA has proposed a specific method for addressing the specific potential unintended consequence that they have identified, the Commission considers that a more general approach would be appropriate.

As discussed in section 6.4.3, the final rule provides sufficient flexibility for the regulator to consider potential transitional issues either through the guidelines, or at the time of individual access arrangement reviews. The reason the Commission prefers leaving this issue for the regulator to address is that it is difficult to identify precisely

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<sup>85</sup> Id., p. 2.

<sup>86</sup> SFG Consulting, *Response to submissions on rule change proposals* Report for the AEMC, 5 November 2012, pp. 9-11.

<sup>87</sup> Ibid.



what the impact will be on those gas service providers at this point in time. The potential effect will depend on the individual circumstances of the affected gas service provider and is better examined at the time of their access arrangement review to enable full consideration of the relevant information. As a result, through this general approach, the regulator could consider the transitory impact in greater detail when developing the rate of return guidelines and make any specific adjustments it considers appropriate tailored to the affected gas service provider at the time of its individual access arrangement decision.

On a related issue, the Commission notes that APIA has sought clarification that the actual tax position of the service provider is not relevant for the purposes of calculating tax. The Commission notes that the final rule (and the draft rule and the existing rule) clearly requires the rate of return framework to be applied to a benchmark efficient firm and not to the particular position of the specific service provider being regulated. For example, while this would be strictly a matter for the regulator to determine in accordance with the overall allowed rate of return objective, the Commission expects that in the same way the regulator would need to estimate the gearing and credit rating values with reference to a benchmark efficient firm, tax liabilities would also be calculated with reference to a benchmark efficient firm. This would provide the particular service provider with an incentive to beat the efficient benchmark and an effective penalty if it does not.

#### **Clarification on the intended nominal post-tax approach**

In the draft rule, the Commission intended that the AER would continue to use the same definition of WACC as it currently does under its PTRM, as required under the NER. Specifically, the Commission intended that the AER would continue to use the version of the post-tax nominal WACC that has become known as the “vanilla” WACC. To this end, the Commission adopted the same language in the draft rule as that which currently appears in Chapters 6 and 6A of the NER. However, it has become apparent that by removing the WACC formula that is specified in the existing Chapter 6 and 6A and retaining the “nominal post-tax” reference in the rules has the unintended effect of creating ambiguity as to which form of WACC computation would be permissible.

As noted in SFG's advice on this issue:

“[T]here are a number of different WACC formulas that can all be identified as post-tax nominal definitions of WACC. Officer (1994), in the paper that forms the basis for the regulatory rate of return framework, sets out four such definitions in the section of his paper titled “The after-tax cost of capital” (pp. 6-8). Each of these four definitions of the after-tax nominal WACC is coupled with a unique corresponding definition of the cash flows. The definitions of the after-tax nominal WACC differ in terms of whether the tax benefits of (a) the deductibility of interest payments, and

(b) the assumed effect of dividend imputation tax credits are incorporated in the WACC or in the cash flows.<sup>88</sup>

After considering the potential consequences of retaining the draft rule wording of "nominal post-tax", the Commission has amended the wording in this final rule to clarify that the rate of return is to be determined a "nominal vanilla" basis. The final rule will ensure that those service providers regulated by the AER under the NER and NGR will continue to have their rate of return estimated on the same "vanilla" WACC framework. However, as discussed in the section above, those gas service providers regulated by the ERA will be impacted by this and will need to be transitioned from the real pre-tax WACC.

#### **6.4.5 Internal consistency and interrelationships**

As with the draft rule, the final rule requires the regulator to have regard to inter-relationships between financial parameters used in estimating the allowed rate of return.

A number of submissions have sought some clarification of the Commission's intentions in relation to the requirement for the regulator to have regard to any interactions between parameters within a model. In particular, some submissions expressed a concern that if the allowance in relation to the return on debt were estimated on the basis of historical averages, the allowance in relation to the return on equity would also have to be estimated based on the same historical averages. This is not the Commission's intention.

If a historical average is used to estimate the allowance for the return on debt, there is no requirement for the resulting estimate, or any part of it, to constrain the estimate of the allowance for the required return on equity. The return on equity must reflect the prevailing conditions in the market as it is a forward-looking financial concept. The estimation of an historical average is a different exercise altogether, and one estimate does not constrain the other. For example, the historical average of the risk-free rate (as part of the return on debt estimation) and the contemporaneous risk-free rate (as part of the return on equity estimation) are different parameters that need not take the same value. The return on debt estimation is discussed in more detail in the next chapter.

The final rule also requires that the return on equity estimation to have regard to the prevailing conditions in the market for equity funds. There is no corresponding requirement on the allowance for the return on debt, since the final rule (and the draft rule) allows the return on debt to be estimated with reference to an historical average as well to the prevailing conditions in the market.

The final rule makes clear the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt.

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88 *Id.*, p. 2.

#### **6.4.6 Benchmark efficiency**

Under the Commission's final rule, the regulator must determine a rate of return that is consistent with that required by a benchmark efficient firm with similar risk characteristics to the service provider in question.

The Commission believes that the concept of efficiency and the benchmark characteristics that relate to the risk of service providers should be left to the regulator to determine. It would be inappropriate for the NER and NGR to seek to define either the concept of efficiency or prescribe what the risk and benchmark characteristics should be.

The NEL and the NGL themselves do not seek to define efficiency in terms of the NEO and the NGO respectively. Including a particular definition in the NER and the NGR risks constraining the regulator's ability to make the best possible decisions.

Furthermore, the concept of a benchmark service provider and the risks that a benchmark service provider may face are not rigidly static and can change over time. As a result, it would be impossible to list all relevant characteristics in the NER and the NGR and expect them to remain appropriate. The Commission is of the view that the regulator and the industry should have an opportunity to discuss these matters periodically and make incremental changes to what constitutes a benchmark service provider as the risk profile changes. The periodic review of the rate of return guidelines provides the ideal forum for such matters to be examined in detail.

#### **6.4.7 Departure from NSP's proposal**

The Commission has given further consideration to whether or not the rate of return decisions should be subject to the constituent decision constraints of the NER. These constraints relate to the AER's ability to substitute any amount or value on the basis of the NSP's regulatory proposal and amended from that basis only to the extent necessary to enable it to be approved in accordance with the rules.<sup>89</sup>

The ENA and other NSPs have not made a sufficient case as to why such a restriction should apply to constrain the AER's ability to determine the rate of return with reference to the NSP's regulatory proposal. Instructively, such a requirement does not exist in the NGR and gas service providers have not sought to have such a requirement included in the rate of return framework.

The AER's rate of return decision made at the time of the NSP's regulatory determination would be informed by its decisions in the rate of return guidelines and an assessment of evidence and market conditions at the time of the individual regulatory determination. This would include any reasons for departure from the guidelines provided by the NSP in its regulatory proposal. In order for the AER to make a decision on rate of return that best meets the overall allowed rate of return

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<sup>89</sup> See NER clauses 6.12.3(f) and 6A.13.2(a).

objective, by necessity the AER must have the flexibility to consider information beyond that which is provided by NSPs in their proposals.

Furthermore, it is somewhat perplexing for NSPs to suggest that the AER should only limit its assessment of the rate of return with reference to whatever rate of return proposal NSPs make. Considerable comments have been made about the rate of return being a benchmark concept that is only relevant to any individual NSP to the extent that the assumed risks of the benchmark firm reflects the similar risk characteristics to the service provider.

The Commission's final rule clearly specifies that the allowed rate of return must meet the overall rate of return objective. In order for its final 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 determined that these clauses should not apply for rate of return decisions. In addition, as section 8.4.1 of this final rule determination discusses, the Commission has determined that the restrictions these clauses place on the regulator in general are not appropriate, and has removed them from the NER altogether.

#### **6.4.8 Other issues**

The Commission has decided not to reference "prevailing conditions in the market for funds" in the overall rate of return objective. This is because the objective would then be in conflict with the allowance for the return of debt where it is estimated on a trailing average basis. The Commission considers that it is clear from the return on equity provisions that the "prevailing conditions" concept continues to apply there, and that it also does apply, to the extent possible, for the return on debt estimation.

Also, references to "prevailing conditions" are not meant to exclude from any consideration historical or realised returns. However, the Commission does not consider that any drafting changes to the draft rule are required for the final rule to give effect to this. The final rule (as with the draft rule) is drafted in sufficiently broad terms to allow for such financial concepts to be taken into account for the purposes of developing appropriate estimation methodologies.

In response to stakeholders concerns, the Commission has substituted the words "correspond to" in the draft rule allowed rate of return objective with "commensurate with" in the final rule. While the approach behind the use of "correspond to" in the draft rule was to make the wording plain English, the Commission recognises that "commensurate with" is well understood, and has been applied without an issue in the past. There is benefit in retaining existing terminology. For the avoidance of doubt, the Commission intends "commensurate with" to mean that the rate of return can only ever be estimated as a reasonable approximation rather than identified with total precision. Whether or not the estimated rate of return meets the allowed rate of return objective will invariably require some level of judgement, but this judgement should be based

with reference to all relevant estimation methods, financial models, market data and other evidence that could reasonably be expected to inform a regulator's decision.

## 6.5 Guidance on final rule

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

The final 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 final 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 be commensurate with 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 allowed rate of return objective incorporates the concept of a benchmark efficient service provider, which means that the regulator can conclude that the risk characteristics of the benchmark efficient service provider are not the same for all service providers across electricity transmission, electricity distribution and gas and/or within those sectors. The Commission would expect a regulator in developing its guidelines (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 of 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 the process is a joint estimation exercise and that the regulator must ensure that the overall estimate of the rate of return satisfies the overall objective.

To determine the rate of return, the regulator is also required to have regard to relevant estimation methods, financial models, market data and other evidence. The intention of this clause of the final rule is that the regulator must consider a range of sources of evidence and analysis to estimate the rate of return. In addition, the regulator must 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. In doing so, the regulator should also have regard to taking an internally consistent approach and, to the greatest

extent possible, use consistent estimates of values that are common across the process, as well as properly respecting any inter-relationships between values used.

The final rule requires the allowed rate of return to be determined on a nominal vanilla WACC basis with proper regard to dividend imputation (gamma). This is also consistent with the existing 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 reflects the best available evidence at the time of a decision and would therefore result in a rate of return that meets the overall objective.

In addition, since the vanilla version of the nominal post-tax rate of return framework will apply to gas service providers under the NGR, the Commission's final 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. Furthermore, the Commission expects the regulator to address any transitional provisions for service providers that have had a basis other than a nominal post-tax basis for the rate of return. Any transitional adjustment required with the change in basis should seek to achieve a neutral financial impact on the affected service provider and consumers.

The final rule distinguishes between the allowed rate of return objective (ie the rate of return must be commensurate with 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 other requirements that the regulator must have regard to.

The final rule has been structured in such a way as to reinforce the focus of the estimate of the rate of return to be on the achievement of the allowed rate of return objective. Estimating the return on equity and return on debt are likely to be necessary components to determine the overall rate of return that meets the overall objective. However, as achieving the overall objective has primacy the regulator would need to consider the overall estimate against the overall objective and not just add together and weight its estimates of the cost of equity and debt. Guidance has been provided in estimating both these components through factors that the regulator must have regard to.

In light of comments from stakeholders, the Commission has reordered the drafting from the draft rule in the final rule to better group the factors that should be considered as part of the determination of the rate of return that meets the overall objective. There is no change as to the intended operation of these clauses. While the final rule gives the regulator discretion in the factors it must have regard to, the Commission considers 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. The role of factors that the regulator must

have regard to or take into account in achieving the objective is more generally discussed in section 5.5

There was some confusion from stakeholders on the draft rule's use of "have regard to" and "take into account" in the drafting structure for the new rate of return provisions. The Commission's view on this issue is also discussed in section 5.5.

### **Estimating return on equity**

The final rule sets out two requirements for the return on equity estimation. The first is that the estimation must contribute to achievement of the allowed rate of return objective. The second is that the estimation have regard to the prevailing conditions in the market for equity funds.

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 requiring that the regulator have regard to relevant estimation methods, financial models, market data and other evidence and is leaving to the judgement of the regulator the relative weights to be 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 efficient use of, the relevant services. However, this requirement does not mean that the regulator is restricted from considering historical data in generating its estimate of the required return on equity. Rather, it ensures that current market conditions are fully reflected in such estimates to ensure that allowed rates are sufficient for efficient investment and use. In summary, the regulator must make its estimate in a way that contributes to the achievement of the overall objective and in doing so must have regard to the prevailing conditions in the market for equity funds.

### **Rate of return guidelines**

The Commission expects the regulator to develop the rate of return guidelines with the intention to allow a more focussed discussion on wider issues around estimating the rate of return, including the choice of estimation methods, financial models, market data and other 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. The Commission also expects the regulator to widely engage with stakeholders, including consumers and consumer representative groups.

These guidelines must be reviewed at least every three years in accordance with the defined consultation procedures. The final rule requires the AER to develop separate guidelines for service providers in the electricity transmission, distribution and gas

sectors, 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 final 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 differ in some respects from the distribution consultation procedures, the Commission's final rule amends the transmission consultation procedures to align them with the distribution consultation procedures, so as to allow the AER to undertake the review of the guidelines for TNSPs and DNSPs jointly and concurrently.

In addition, the final 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.

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 consultation procedure timeframes are the minimum required under the rules and it is expected that the regulator will use the ability in the consultation procedures to extend the minimum consultation periods to provide stakeholders with an adequate opportunity to respond to any complex or significant issues that arise in any review period.

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 to 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.

In keeping with the Commission's objective of limiting unnecessary prescription, these guidelines will 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 flexibility 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 guidelines should not be seen as a determinative instrument for calculating the rate of return.

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 Commission considers that this could be achieved in a number of ways, including by providing indicative ranges for the rate of return estimate for particular types of service providers or through the way the approach to the estimate is explained.

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 guidelines, the regulator must state, in its reasons for the regulatory determination or access arrangement decision, the reasons for departing from the guidelines.

The final 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. The Commission expects that, in developing and reviewing the guidelines, the regulator will address any transitional issues for service providers who have either commenced their regulatory determination process or are close to finalising their regulatory proposal during the period when the guidelines are reviewed and updated.

## 7 Return on debt

### Summary

- Consideration of return on debt methodologies other than the current prevailing market conditions approach has received broad support from stakeholders. Historical trailing average approaches have sufficient merit to be an option for regulators to consider.
- The best methodology for estimating return on debt may not be the same for benchmark efficient service providers with different characteristics. Therefore, the rules should not prescribe a particular methodology for estimating the return on debt component. However, the rules should provide some guidance as to how the best methodology should be determined. The rate of return guidelines will provide a forum to discuss and analyse the best approaches to estimating the return on debt.
- The Commission has not made 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 fundamental premise behind this proposal, that state-owned service providers borrow funds in debt capital markets at rates lower than comparable private-owned network service providers, is not correct. It is the treasury corporations of the respective state governments who are able to borrow at rates lower than the private sector due to their ability to issue government guaranteed bonds.
- The most appropriate benchmark to use in the regulatory framework for all service providers, regardless of ownership in general, is the efficient private sector service provider. If state-owned businesses issued their own bonds, without a government guarantee, they would face materially similar borrowing costs to privately-owned service providers. In the absence of competitive neutrality provisions, electricity consumers are unlikely to be better off from defining a separate benchmark for state-owned service. The most appropriate benchmark to use in the regulatory framework for all service providers, regardless of ownership in general, is the efficient private sector service provider.

### Difference between draft rule and final rule

- The final rule largely reflects the position the Commission took in developing its draft rule. However, the criteria that the regulator must have regard to when considering the best methodology to estimating the return on debt have been refined in the final rule to better give effect to the Commission's intention.

## 7.1 Introduction

The existing 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 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).<sup>90</sup> 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.<sup>91</sup>

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 directions paper.<sup>92</sup> It also explained the rule change requests from the AER and the EURCC on return on debt that have been consolidated by the Commission.<sup>93</sup>

The remainder of this chapter is structured as follows:

- Section 7.2 summarises the Commission's position in the directions paper and draft rule determination;
- Section 7.3 summarises the submissions received in response to the Commission's draft rule determination;
- Section 7.4 provides the Commission's analysis of issues in response to submissions received on the draft rule determination; and

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<sup>90</sup> NER clauses 6.5.2(b) and 6A.6.2(b).

<sup>91</sup> See NGR rule 87(1).

<sup>92</sup> See AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers*, Directions Paper, 2 March 2012, pp. 97-98.

<sup>93</sup> *Id.*, pp. 98-101.

- Section 7.5 provides guidance on the final rule.

## 7.2 Directions paper and draft rule determination

### 7.2.1 Options to use different methodologies

In the lead up to the draft rule determination, the AEMC undertook extensive consultation with stakeholders on the merits of allowing the rate of return to consider a historical trailing average approach to estimating the return on debt. The Commission noted the widespread, though not unanimous, support for consideration of a historical averaging approach.<sup>94</sup> A case was made, for example by the QTC, New South Wales Treasury Corporation (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 argued 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.<sup>95</sup> The Commission also noted 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.<sup>96</sup>

To inform its analysis, the Commission engaged SFG to advise on the potential impacts of adopting a historical trailing average approach to estimating the return on debt. SFG was 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.<sup>97</sup>

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) the average cost of debt will be the same over the long run. This is regardless of whether the return on debt estimate is based on the prevailing debt cost spot rate or an average of that spot rate.<sup>98</sup> Changing to an averaging approach will not,

<sup>94</sup> 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.

<sup>95</sup> 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.

<sup>96</sup> See for example, APIA, Directions Paper submission, 16 April 2012, pp. 20-21; APA Group, Directions Paper submission, 16 April 2012, p. 6.

<sup>97</sup> SFG Consulting, *Rule change proposals relating to the debt component of the regulated rate of return*, Report for the AEMC, 21 August 2012.

<sup>98</sup> *Id.*, p. 4.

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.<sup>99</sup>

SFG was also requested to provide analysis of 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 proposed approaches of EURCC,<sup>100</sup> the QTC<sup>101</sup> and SA Power Networks (previously ETSA Utilities), CitiPower and Powercor.<sup>102</sup> SFG compared these approaches to the current approach, 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 regulator cannot occur without regard to the service provider's financing practices. In particular, SFG considered that the regulatory framework should aim to provide incentives for service providers to engage in efficient financing practices. It should also seek to minimise distortions to the financing practices as well as to the incentives to undertake efficient capex.

In summary, SFG 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

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<sup>99</sup> Id., p. 5.

<sup>100</sup> A method based on a five-year rolling average of the yield on five-year bonds, with annual updates during each regulatory period, no specified transition arrangements.

<sup>101</sup> A method based on a ten-year rolling average of the yield on ten-year bonds, annual updates, transition arrangements, and provision for capital expenditure to earn a return based on the prevailing rate and not the historical average.

<sup>102</sup> A method based on a ten-year rolling average of the debt risk premium on ten-year corporate bonds added to the five-year swap rate at the time of the determination.

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 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.

In its draft rule determination, the Commission noted that the apparent diversity of stakeholder views was consistent with modelling analysis from SFG. It 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. However, for others, the current prevailing rate approach is slightly better at minimising the volatility of returns.<sup>103</sup>

In its draft rule determination, the Commission considered that the long-term interests of consumers would be 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. In its draft rule, the Commission therefore proposed 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 involved using a "spot rate" methodology that used market data to reflect prevailing conditions in the market for funds or averaging estimates of the return on debt over historical periods, or some combination thereof.

The draft rule did not set the return on debt by reference to any particular base rate and DRP. The Commission took this view to allow the regulator sufficient flexibility to determine historical averages of either the entire return on debt or just the DRP component. Furthermore, the Commission's intention was to ensure that there is the flexibility to set a DRP against a base rate other than the Commonwealth government

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<sup>103</sup> 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.

bond rates (eg bank bill swap rates), if that was considered appropriate by the regulator. The Commission considered this flexibility to be 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.

The Commission also noted that regulators in some overseas jurisdictions have adopted similar approaches to the type of historical trailing average approaches that were discussed during this rule change process. For example, Ofgem, as part of its transmission and gas distribution price controls to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model, has 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. Also, 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.<sup>104</sup>

The Commission's draft rule proposed some factors that the regulator must have regard to when considering the approach to estimating the return on debt. The purpose of these factors was to identify some factors that the Commission considered should be had regard to when the regulator considers the best methodology to use to estimate the return on debt, and if the service provider wants to propose a different methodology. The regulator is only required to have regard to the factors and the consideration of the factors is sub-ordinate to the regulator's estimate of the rate of return aiming to meet the overall rate of return objective.

Amongst such factors was the extent to which a particular approach to estimating the return on debt may affect 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. Such an outcome would be to the benefit of consumers.

The impact on the incentives for efficient capex is also an important consideration. The incentives for efficient capex are stronger when the difference between the return on debt and the debt servicing costs of the service provider is minimised.

### **7.2.2 Specification of benchmark characteristics**

In the directions paper the Commission sought views on the appropriate benchmark to use for estimating the return on debt. Given the evidence, in the draft determination the Commission considered 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 did not reach a view on whether the characteristics the regulators have used to define the benchmark were appropriate. Under the Commission's draft rule on the rate of return framework, the regulator would need to consider this issue as part of developing its rate of return guidelines,

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<sup>104</sup> Ofgem, *Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues*, 31 March 2011.

and that process will provide an opportunity for all stakeholders to submit their views and discuss any differences of view.

Separately, the Commission considered how to measure the return on debt for particular characteristics of a benchmark efficient service provider. In this respect, the draft rule did not mandate the use of any particular measurement approach. The Commission was of the view that this flexibility would give the regulator the ability to consider the best information and evidence to inform such a measurement.

### **7.2.3 Return on debt for state-owned service providers**

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.

A different view was taken to the EURCC on the application of the Competition Principles Agreement (CPA). Specifically, how the competitive neutrality principles to state-owned service providers are applied and the ability of the NER to legally affect the ability of jurisdictional governments to levy debt neutrality fees in accordance with the CPA.

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.<sup>105</sup> 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.

Contrary to the EURCC's contention, the Commission's view was that the application of the CPA to state-owned service providers is not a relevant consideration under the NEO. 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 service providers has corporatised them and imposed similar commercial and regulatory obligations to those faced by the private sector, including:

- full Commonwealth, State and Territory taxes or tax equivalent payments;<sup>106</sup>
- 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

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<sup>105</sup> Competition Principles Agreement subclause 3.(1).



- regulations applying to private sector competitors.

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 their state treasury corporations) as part of the application of the competitive neutrality principles. These fees are mandated in various state legislation and code of practice instruments.

The extent to which the debt neutrality or government guarantee fees are payable by state-owned network service providers is a policy matter for each jurisdictional government under the Competition Principles Agreement. In the draft determination the Commission also set out a number of other reasons as to why it would not be appropriate to set the return on debt allowance for state-owned network service providers differently to privately-owned network service providers. Briefly, some of the reasons include:

- the adoption of competitive neutrality principles can encourage greater commercial discipline on state-owned service providers. It will mean, for example, that state-owned service providers are better informed about the true standalone cost of borrowing in the debt markets, allowing for improved decisions on whether to borrow funds to undertake capex or pursue non-network solutions. The debt neutrality fees play an important role in ensuring that state-owned service providers do not face artificially lower cost of capital that may distort their investment decisions;
- it will potentially create artificial geographical market distortions in generation and network capacities across the NEM because of the pricing signals that would be created due to network ownership;
- it risks distorting the incentives of efficient capital financing structures of state-owned network 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; and
- the separate roles of shareholders and taxing authority where governments are also the owners of the service providers.

## 7.3 Submissions

### 7.3.1 Options to use different methodologies

The Commission's draft rule determination to allow different methodologies to estimate the return on debt under a flexible rate of return framework received widespread support. However, submissions from service providers expressed concerns that, under the draft rule, a new methodology could potentially be imposed on them

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<sup>106</sup> 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).

by the regulator that could be unsuitable to their financing practices. They argue that the choice of methodology should not be at the sole discretion of the regulator.<sup>107</sup> The main arguments they make in relation to this are that:

- some service providers' debt portfolios may make a trailing average approach untenable;<sup>108</sup>
- a one-size-fits-all approach is inappropriate and the rules need to be flexible enough to accommodate different approaches across different service providers;<sup>109</sup> and
- service providers are better placed to judge optimal debt management strategies.<sup>110</sup>

The MEU is concerned that allowing service providers to seek a different return on debt estimation methodology, rather than having it imposed unilaterally by the regulator, would allow for "gaming" by the service providers.<sup>111</sup>

Another key issue of concern for stakeholders is the criteria or factors proposed by the Commission for assessing the appropriate approach for estimating the return on debt. The QTC submits that it agrees broadly with three of the criteria but one of them is unnecessary.<sup>112</sup> APIA suggests that the factors are duplicative of the requirements of the NGO and the RPP and create either ambiguity or "double legislation" and are therefore redundant and should be removed.<sup>113</sup> The ENA submits that the criteria do not provide adequate guidance to the regulator and some are unlikely to be consistent with the NEO, the NGO and the RPP.<sup>114</sup>

In particular, the ENA is concerned that some of the factors in the criteria:

- are ambiguous and the AEMC's stated intention has not translated to the rules;

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<sup>107</sup> See, for example, ENA, Draft Rule Determination submission, 4 October 2012, pp. 22-27; QTC, Draft Rule Determination submission, 4 October 2012, p. 11; APIA, Draft Rule Determination submission, 4 October 2012, p. 17; SP AusNet, Draft Rule Determination submission, 4 October 2012, p. 3; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 16; APA Group, Draft Rule Determination submission, 4 October 2012, p. 3; Ergon Energy, Draft Rule Determination submission, 7 October 2012, pp. 5-6.

<sup>108</sup> See, for example, DBP, Draft Rule Determination submission, 9 October 2012, pp. 4-5; The Financial Investor Group, Draft Rule Determination submission, 4 October 2012, pp. 20-21.

<sup>109</sup> See, for example, ENA, Draft Rule Determination submission, 4 October 2012, pp. 23-25; The Financial Investor Group, Draft Rule Determination submission, 4 October 2012, pp. 20-21; APIA, Draft Rule Determination submission, 4 October 2012, p. 17.

<sup>110</sup> See, for example, APIA, Draft Rule Determination submission, 4 October 2012, p. 17; ENA, Draft Rule Determination submission, 4 October 2012, p. 25; SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 16.

<sup>111</sup> MEU, Draft Rule Determination submission, 4 October 2012, p. 18.

<sup>112</sup> QTC, Draft Rule Determination submission, 4 October 2012, p. 9.

<sup>113</sup> APIA, Draft Rule Determination submission, 4 October 2012, p. 16.

<sup>114</sup> ENA, Draft Rule Determination submission, 4 October 2012, p. 26.

- appear to be conflicting and do not provide any guidance as to how conflicts between them are to be resolved;
- does not include any measures to ensure service providers are afforded a reasonable opportunity to recover benchmark debt costs over the long term; and
- do not require the regulator to take into account legitimate business interests around transition and changes in methodology after transition.<sup>115</sup>

The ENA suggests that clearer rules-based guidance is essential.<sup>116</sup> There is also a suggestion from some service providers that a higher level of prescription be included in the rules. For example, this should extend to setting out the form of debt (BBB+ Australian corporate bonds) and should include more directly relevant criteria against which to assess the proposed methodology.<sup>117</sup>

In a similar vein, there are also calls from some stakeholders that the rules should set out some details (eg benchmark gearing, credit rating, maturity) that the regulator should have to address in the rate of return guidelines.<sup>118</sup> The QTC suggests that given the relationship between efficient debt strategies and efficient debt costs, the guidelines should describe the main characteristics of efficient debt funding and risk management strategies for infrastructure service providers.<sup>119</sup> These characteristics would then need to be taken into account by the regulator when assessing a proposal and for determining the benchmark.<sup>120</sup>

### 7.3.2 Specification of benchmark characteristics

#### The appropriate benchmark

The MEU suggests that there should be more emphasis on the concept of best practice to ensure that debt is secured in the most efficient way.<sup>121</sup> The MEU also takes the view that the term of the debt used as the benchmark should be in line with the length of the regulatory period.<sup>122</sup> It has no fixed view on the averaging period used for interest rates, other than it needing to be consistent and stable.<sup>123</sup>

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115 Id., pp. 22-23.

116 Id., p. 23.

117 SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 17.

118 ENA, Draft Rule Determination submission, 4 October 2012, p. 25.

119 QTC, Draft Rule Determination submission, 4 October 2012, p. 8.

120 Ibid.

121 MEU, Draft Rule Determination submission, 4 October 2012, p. 12.

122 Id., pp. 17-18.

123 Id., p. 19.

The main concern of the ERA is ensuring that the proposed rule changes do not preclude its bond yield approach.<sup>124</sup> It considered that it does not.<sup>125</sup>

The QTC is concerned that broad regulator discretion could lead to debt benchmark characteristics that constrained the ability of service providers to adopt efficient debt financing and risk management strategies.<sup>126</sup> It suggests that the rules should require the regulator to demonstrate that their benchmark would not do this.<sup>127</sup>

Gas service providers stress the individually distinct nature of gas pipelines, which implies the need for more than a one-size-fits-all approach to any benchmark.<sup>128</sup> ATCO Gas, for example, argues that:

- the benchmarking process should not be used to ignore or "assume away" risks;
- the benchmarking process should not treat unlike businesses as though they are alike;
- in general, credit ratings should not be benchmarked; and
- the benchmarking process should not be used to ignore market realities.<sup>129</sup>

The joint submission from SA Power Networks, CitiPower and Powercor calls for the return on debt benchmark to be based on BBB+ 10-year Australian corporate bonds.<sup>130</sup> These NSPs argue that this has been the consistent definition in the past and does not require a change.<sup>131</sup> They reiterate their suggestion that, in estimating the return, the regulator should have regard to a wide range of data, including BBB+ bonds with maturities less than 10 years and bonds with different credit ratings.<sup>132</sup>

The ENA and some service providers suggest that the draft rules did not sufficiently distinguish between benchmark specification and estimation.<sup>133</sup>

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124 ERA, Draft Rule Determination submission, 4 October 2012, p. 6.

125 Ibid.

126 QTC, Draft Rule Determination submission, 4 October 2012, pp. 13-14.

127 Ibid.

128 See, for example, APA Group, Draft Rule Determination submission, 4 October 2012, p. 4; ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 3-5.

129 ATCO Gas, Draft Rule Determination submission, 4 October 2012, pp. 4-5.

130 SA Power Networks, CitiPower and Powercor, Draft Rule Determination submission, 4 October 2012, p. 15.

131 Ibid.

132 Ibid.

133 See, for example, Jemena, Draft Rule Determination submission, 4 October 2012, p. 26; ENA, Draft Rule Determination submission, 4 October 2012, p. 24.