Submission

AEMC Directions Paper

Economic regulation of Network Service Providers

April 2012

AUSTRALIAN ENERGY REGULATOR

Overview

The Australian Energy Regulator (AER) welcomes the opportunity to respond to the Australian Energy Markets Commission (AEMC) directions paper on the economic regulation of network service providers (NSPs).

In response to the questions raised in the directions paper and submissions made by others in this rule change process, the AER has refined some aspects of its original proposal. The submissions received by the AEMC to date have drawn our attention to the need to clarify the intent of parts of our rule change proposal. Some submissions have also suggested alternative solutions to the identified problems which we consider could better address the concerns raised by the AER. This AER submission builds upon our original proposal and in some areas proposes alternatives to the changes we submitted previously.

Capex and opex forecasts

At the heart of the AEMC consideration should be whether the National Electricity Rules (Rules) satisfy the minimum requirements of the National Electricity Law to deliver a reasonable opportunity for NSPs to recover at least efficient costs, or whether they deliver a higher forecast based on limited adjustments to a business's proposal. In order for the former to be determined, the AER maintains that the process for forecasting efficient costs should be changed in the manner described in its rule change proposal.

The current Rules contemplate a two stage process whereby the regulator first considers the proposal and, if satisfied, may accept the proposal as a reasonable estimate of efficient costs. If not, the regulator may substitute its own forecast. However, the current regime imposes restrictions on departures from the proposal in order to substitute a forecast of efficient cost. The NSPs' revenue proposals should be a central and important aspect of the AER's process, but should not limit the AER's consideration to the extent they do under the current Rules. The outcome is a deviation from the business's proposal, rather than a forecast of efficient costs derived from a thorough consideration of the revenue proposal and other independent analysis.

As a result the current regime allows inflated forecasts that are not necessarily in the long term interests of customers. After five years of applying this framework, the AER is convinced that using a model which removes the restrictions and requires the AER to forecast efficient costs, while continuing to have regard to the revenue and pricing principles (RPP), would better contribute to the achievement of the NEO.

In considering this issue, it will be important for the AEMC to come to a view on whether the current model best incentivises NSPs to provide efficient cost forecasts. This was part of the policy intent set out by the AEMC in 2006. Despite claims from NSPs and their advisors that the current model achieves this aim, the experience of the AER in receiving these proposals demonstrates that change is required for it to be achieved. This submission and its appendices set out at a practical level how this aim has failed to materialise.

The AER considers that its rule change proposal is the most appropriate model (and the one most widely used in other regimes) to encourage efficient forecasts from the NSPs. The fact that the regulator has a clear authority to determine a forecast of efficient cost provides strong incentives on the NSP to ensure that their own cost forecasts are efficient and are set out clearly to the regulator and that engagement is constructive.

Importantly, the AER's preferred model retains the fundamental premise that the NSP has the primary responsibility for running the network. The regulator would approve a total forecast of capital or operating expenditure, following a thorough examination of the regulatory proposal, expert advice and its own independent analysis. The NSP would then determine the individual projects required to meet service and reliability obligations.

What would be different?

In understanding what would be different under the rule changes proposed by the AER, it is important to understand the current limitations on the exercise of regulatory judgement under the current model. Under the current Rules, there is a clear distinction between the AER using supplementary information, such as comparative studies, in an informative sense in assessing the reasonableness of a proposal and the determinative sense of using such information and techniques to form substitute forecasts of efficient costs. While the AER does not consider that the Rules have limited the tools and techniques that can be used in the informative sense, the Rules have restricted their use determinatively.

To address this issue, the AER has proposed a regime where it has the authority to determine a forecast of efficient costs. This would provide stronger incentives for NSPs to submit forecasts that are able to be justified by evidence available to the regulator. In contrast, the current framework creates incentives for NSPs to provide forecasts that inflate expenditure needs and optimise the interests of the NSP. Examples of these types of forecasts and behaviour are included with this submission.

The most significant difference in the Rules proposed by the AER is the ability for the regulator to exercise judgement, considering the proposal and other information and coming to a view on forecasts of efficient costs. In making that decision, the AER would continue to be required to take into account the RPP and to do so in a manner that would contribute to the achievement of the NEO. The AER would continue to be subject to the existing requirements to publish the reasoning and methodologies used in coming to that forecast.

Regulated monopolies have an incentive to submit forecasts that are based on a cost build-up of conservative (ie. risk-averse) estimates of demand, coupled with conservative estimates of costs. In so doing, the NSP will inflate its revenue requirements. The AER considers that regulatory frameworks should be designed with this in mind, and that the regulator should be provided with the flexibility to apply appropriate tools in exercising its regulatory judgement in forming an appropriately justified forecast.

Building on the information contained on the rule change proposal and our subsequent submission of 12 December 2011, this submission provides analysis and evidence of how the current regime inappropriately restricts this from occurring.

Capex incentives

The AER agrees with the AEMC that the current capex incentives framework does not provide a continuous incentive and does not provide sufficient supervision of capex incurred above the forecast. The AER maintains that changes are required to encourage NSPs to constrain expenditure to within the forecast. However, submissions have raised a number of concerns about the specific solution the AER proposed. The AER supports a mechanism which would allow the AER to develop the details of the capex incentive framework, in consultation with stakeholders, through a guideline.

It is appropriate for the AER to have the flexibility to adopt either a high powered or a lower powered depreciation incentive for TNSPs, as part of achieving a balanced capex incentive framework. This would be consistent with the approach currently allowed for DNSPs under chapter 6 of the Rules. Prescribing the use of forecast depreciation in the Rules will not achieve the AEMC's objective of creating an incentive for NSPs to submit accurate capex forecasts, which needs to be addressed through other options. The AER does not consider it is necessary to provide direction in the Rules to govern the exercise of discretion in deciding whether actual or forecast depreciation is to be applied. Such decisions should be taken in the context of the suite of incentives and schemes applicable to the NSP, and designed to take into account the RPP.

In relation to the rule change on related party margins and the capitalisation of overheads, this submission clarifies that the AER's proposal would require consistency with the methods determined to set the forecast in the preceding regulatory determination. The AER did not propose that there be consistency with the amounts of related party margins and the capitalisation of overheads specified in a preceding regulatory determination. In addition, the AER notes that applying a stronger capex incentive, as the AEMC has suggested, will not address the problem in relation to the incentive for a NSP to inflate the amount of capex to be included in the RAB by including inefficient profit margins or making changes in capitalisation policy within the regulatory control period.

On new incentive schemes, the AER maintains that it should be able to fully develop and apply effective incentive schemes, rather than being restricted to test schemes or small scale pilots. This power should be bounded by a requirement to have regard to the governing principles included in the proposed rules.

Determining the rate of return

The AER considers that the rate of return frameworks in chapters 6 and 6A of the Electricity Rules and the National Gas Rules (Gas Rules) each have flaws and none of them should be adopted without amendment. Instead, the AEMC should assess the relative benefits of the existing frameworks, as well as alternative approaches not currently prescribed in either set of rules, and determine an approach that results in the best framework in which the AER is able to make WACC decisions that are consistent with the RPP and that will contribute to the achievement of the NEO or the NGO.

More generally, the AER considers that the rules should define the framework (including the nominal post-tax and return on equity model); define the process for conducting the WACC review; and establish high level principles to be applied in the WACC review. In turn, the WACC review should establish all the values and methods for individual parameters, and the regulatory determination or access arrangement should apply the values and methods established in the WACC review.

The AER's proposal for a binding WACC review conducted *at least* once every five years, however, received limited support. This submission discusses many of the issues raised by stakeholders. Notably, this submission clarifies the AER's concerns with the timing of new information. In this regard, the AER does not agree with the AEMC and SFG that, in general, allowing for all WACC parameters to be considered at every reset will necessarily increase the quality of any WACC estimate.

The AER also considers that submissions of stakeholders, and the AEMC and SFG, undervalued the benefits of the AER's proposal. In particular, the AER considers a single binding WACC review will:

- better allow lessons learned from the previous consideration of WACC issues, including the Tribunal's views, to be reflected in the next consideration of WACC issues—this does not happen effectively with consistently over-lapping reset processes
- facilitate reconsideration of all parameters, rather than focusing on a select few
- provide a more appropriate forum to consult on changes in approach given industry–wide engagement
- better promote user group engagement, given the limited resources of user groups
- increase administrative efficiency.

However, to the extent that the AEMC considers a single binding WACC review undertaken at least every five years does not provide adequate flexibility to keep pace with financing practices and theory, the AEMC should consider a binding WACC review undertaken at fixed two (or three) yearly intervals. This alternative maintains the benefits from the AER's rule change proposal that is achieved through considering WACC issues in an industry–wide forum, as outlined above. Moreover, the AEMC should consider the application of the outcomes of the WACC review to resets where the reset draft decision is released after the WACC review is finalised. These two amendments from the AER's rule change proposal should accommodate stakeholder concerns regarding the ability of a binding framework to adequately react over time to changing circumstances.

Consistent with the general principles discussed above, the AER maintains that the methodology used to determine the debt risk premium should be determined during the WACC review. This includes the definition of the benchmark. In this context, the AER recognises that a number of alternative approaches to determining the debt risk premium have been proposed by stakeholders. The AER considers that it should have the ability to consider each of these approaches at the time of the WACC review. This submission expands on the limitations in the current rules which would prevent the AER from adopting these alternative approaches.

Regulatory process

The AER and other stakeholders have noted problems with the current regulatory process that inhibit the engagement of stakeholders and the AER's ability to assess information provided in support of regulatory proposals within the constraints and timeframes of the Rules.

The AER generally supports the objectives outlined in the AEMC's directions paper. These include that: the AER should have sufficient time to scrutinise initial and revised regulatory proposals; stakeholders should have a reasonable opportunity to comment on material submitted in the process; NSPs should have sufficient time to prepare their revised regulatory proposals; NSPs' initial and revised regulatory proposals should include as much relevant information as is possible; submissions by NSPs should not be used to circumvent restrictions in the Rules on the content of regulatory proposals; and dialogue between the AER and NSPs should be encouraged.

The AER considers that its initial rule change proposals to restrict NSP submissions on their own proposals and to deal with confidential information would help meet those objectives.

Ultimately, the AER considers that its proposed rules improve the efficiency of the regulatory process by:

- encouraging a NSP to submit a complete proposal upfront
- affording stakeholders other than a NSP a reasonable opportunity to make submissions on a NSP's proposal
- reducing impediments to the AER's ability to assess information caused by submissions late in the process and the tight timeframes in the Rules.

The deficiencies identified by the AER should be addressed. The AER recognises that the proposed rules are not the only solution that may achieve this objective. Indeed the AER is open to other options that have been identified. These options could be implemented by themselves or to complement the proposed rules.

One option that may complement the AER's proposed rules is to focus on enhancing the front of the regulatory process by starting the process three months earlier. This may allow the AER to implement a new proposal to consult on and lock in expenditure forecast models as part of the framework and approach paper stage. It may also allow the AER to better deal with confidentiality claims and if appropriate, publish an issues paper.

AEMC's proposed rule making test

While in many areas the AEMC has laid out a robust framework for the consideration of the issues, the AER considers that the AEMC has unduly narrowed the criteria for assessing the proposal, particularly in relation to the proposed capex and opex framework. As highlighted by the submissions on the consultation paper and the discussion at the forum of 2 April 2012, there is considerable debate regarding the operation of the current Rules. However, there also appears to be broad agreement on how the Rules were intended to operate.

The AER is concerned that the approach adopted by the AEMC in first seeking to find a fault with the current Rules, risks the rejection of rule change proposals that are necessary to clarify or better achieve the AEMC's 2006 policy intent. The AER maintains that, at a minimum, changes are required to the Rules to enable the policy intent set out by the AEMC 2006 to be met. However, to the extent that some stakeholders believe that the Rules are already capable of performing in the intended manner, the statutory rule making test would be met by rule change proposals that clarify the operation of the framework. That is, removal of ambiguity in the Rules will promote the long term interests of consumers and should therefore pass the statutory test.

Further, the AER notes the AEMC's intention to review the performance of other regulators in other regulatory frameworks. The AER does not consider that it is appropriate to separate consideration of a particular regulator's practices from the broader statutory framework in which it operates. The AEMC should assess the role and power of other regulators in the context of their framework and objectives. Analysis which compares theory with practice, but fails to consider how the theory is conveyed into practice in the context of the applicable regulatory framework, risks ignoring practical issues which could prevent the policy intent from being implemented.

Table of contents

1 Capex and opex allowances

The AER considers that the process for setting estimates of efficient costs should be changed in the manner described in our rule change proposal. This decision making test was reflected in the proposed rules as follows:

> The AER must determine the total of the forecast of required expenditure of a Network Service Provider for the regulatory control period, and the forecast of the required expenditure for each regulatory year of the regulatory control period, that the AER considers would meet the efficient costs that a prudent Network Service Provider would require to achieve the expenditure objectives.

In addition, the AER's proposed changes to clause 6.12.3 should be implemented to remove the restriction that the substitute forecast must be based on the regulatory or revenue proposal and be amended only to the extent necessary to comply with the Rules.

The objective of the proposed rules is to give the AER the responsibility to determine the forecast subject to the continuing requirements contained in the Law, namely that it must have regard to the RPP and must make its decision in a manner that will contribute to the achievement of the NEO. Significantly, the RPP directs the AER to provide the NSP with the reasonable opportunity to recover at least its efficient costs.

The current regime imposes inappropriate restrictions on departures from the proposal in order to forecast efficient costs. The NSPs' revenue proposals should be a central and important aspect of the AER's process, but should not limit the AER's consideration to the extent they do under the current rules. Instead, the AER should have the opportunity to exercise judgement when deciding which techniques, tools and information to rely on when forming a view on efficient cost forecasts.

This chapter argues that:

- the current regime enables NSPs to propose revenues that maximise their returns by allowing them to propose forecasts that are in excess of what may actually be required to efficiently provide the services required by customers
- while the AER has the ability to undertake top down analysis, its ability to apply the results of that analysis when determining substitute forecasts is inappropriately constrained.

This chapter also describes in more detail how the AER expects the cost assessment process to be affected if its rule change proposal is adopted. In particular, it shows that the NSP's proposal will continue to form the central part of the AER's deliberations, even if the AER is empowered to determine forecast expenditure, rather than only being able to amend a NSPs proposed forecast.

Appendix 1 considers the results of the current regime. Appendix 2 provides examples of the issues that the AER's rule change proposal is designed to address.

1.1 Restrictions on departure from NSP proposal

The first round of regulatory resets has reinforced the AER's view that the current regime imposes inappropriate restrictions on the AER's ability to depart from the NSP's proposal in order to forecast efficient costs. While NSPs are better informed about the costs faced by their business than the AER, this does not mean they have an incentive to ensure the forecasts represent efficient costs. In the context of monopoly businesses, regulation replaces the discipline of competition to ensure businesses are operating efficiently. For a regulated business, the regulator's decision is a key determinant of profits. It is in the regulated business's interest for its forecasts to be as high as possible. This fact has a pervasive influence over the proposals submitted by NSPs.

In contrast, as required by the Law through the RPP and the NEO, the regulator must balance the conflicting objectives of price versus safety, quality, reliability and security of supply. In addition, as noted above the RPP directs the AER to ensure that it provides a NSP with an amount which at least meets the NSPs' efficient costs. By requiring the AER to allow "at least efficient costs", this makes clear that if in doubt, the AER should err in favour of the businesses. The merits and judicial review processes also protects NSPs from the risk of regulatory error.

All regulatory regimes face the challenge of information asymmetry, since the regulator never knows as much about running a business as the business itself. Indeed, it is never intended that the information asymmetry will be fully addressed. It is not practical or efficient for the regulator to replicate the planning and engineering expertise of the businesses. However, the current provisions of Chapters 6 and 6A mean that AER can only reject an NSP's proposal if it is able to demonstrate that the forecast submitted by the NSP does not reasonably reflect efficient costs. Further, the AER must then be able to demonstrate that its substitute estimate is based on and amends the regulatory proposal only to the extent necessary to meet the requirements of the Rules.

The detailed, technical regulatory determination process that has prevailed under the current Rules is the direct product of the framework which requires the AER to forensically address the NSPs' proposal in order to determine a substitute forecast. It is not desirable nor should it be necessary for the AER to assess each individual capex and opex project or line item submitted by the NSP.

Instead, the AER should be empowered to deliberate and form judgments without needing to present its calculations as line variances against the NSPs' proposals. As part of this approach, the AER should have the opportunity to consider and form an opinion on all relevant sources of information, including benchmarking and other sources of top down analysis. While the AER's analysis may not be as detailed as that which is possible within the business, this is entirely appropriate. The objective is to provide an estimate of efficient costs and an appropriate revenue allowance — restraining the incentives inherent in a monopoly position — whilst ensuring this is sufficient for the NSP to meet its obligations and recover at least efficient costs. The AER considers that the regime as currently drafted does not achieve this balance. While the AER has been able to reject proposals that are too high, it has been constrained in its ability to determine substitute amounts. As a result the substituted amount may still be much higher than needed to manage the risk of underinvestment, resulting in consumers paying more than necessary. This is clearly not in the long term interests of consumers.

The AER has carefully considered submissions to the Issues Paper, as well as discussion at the AEMC forum on 2 April 2012. NSPs have expressed the view that the AER already has the ability to interrogate their revenue proposals and where necessary to substitute an efficient substitute.[1] Many other stakeholders, including the AER, argue that the regulator's ability to do this is inappropriately constrained. Where there is consensus about the intent of Chapters 6 and 6A, but ambiguity about whether this intent has been met, the AEMC should amend the rules to resolve this ambiguity. The AER's rule change proposal seeks to provide clarity that the AER has the power to determine forecasts in the way that NSPs claim it already does.

1.1.1 Characteristics of information submitted by NSPs

In its 2006 decision, the AEMC stated that:

> The decision-making process set out in the Revenue Rule will also reduce the incentive for TNSPs to submit forecasts which represent ambit claims. Such exaggerated forecasts would be likely to fail to satisfy the decision criteria to be applied by the AER and therefore to run the risk of being rejected and replaced by the AER with a less favourable forecast.[2]

This expectation has not been realised, and changes to the rules are required to address this limitation. The current cost assessment framework creates perverse incentives for a NSP to:

- submit conservative cost forecasts that are optimised to promote the interests of the NSP which may not be in the longer term interests of consumers, and to
- engage in behaviour that exacerbates the information asymmetry.

These incentives are greater under the current Rules than under a traditional regulatory regime because the current rules make the AER more dependent on information provided by NSPs. This dependence arises because the AER is required to show how a proposal does not reasonably reflect efficient costs, with the primary sources of evidence for this exercise lying with the NSP. This is to be contrasted with a regime which would require the NSPs to provide independently verifiable justification for their estimate of efficient costs and forecasts. Further, there is no effective adverse consequence in the event that the AER rejects a proposal insofar as the AER is limited in the extent to which it can modify the NSPs original proposal. The regime thus operates to encourage NSPs to propose a highly conservative forecast (ie that is overly risk averse without adequate justification) on the basis that if rejected the amount by which it will be reduced is likely to be relatively modest, than propose a more realistic but more modest proposal that is more likely to be accepted.

In summary, in a tactical sense for the NSP it is better to lodge a highly conservative forecast that is rejected and reduced by a small amount than to lodge a modest proposal that is accepted.

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1 See, for instance, the responses to the AEMC's consultation paper submitted by: Aurora Energy (pgs 5-6), Ausgrid (pg 5), ETSA Utilities, Citipower & Powercor (pg 15), the Electricity Networks Association (pg 3), Ergon Energy (pg 7), Grid Australia (pg 25) and Jemena (pg 26).

2 AEMC, *Rule Determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No.18*, November 2006, pg. 53.

The effect of these incentives in the current regime stands in direct contrast to the original intent to provide accurate and fully supported proposals. The current regime can also be contrasted with other regulatory regimes - for instance, the regime that applies in the UK - where it is incumbent upon the NSP to "sell" its proposal to the regulator. In these other regimes the regulator may ignore information that is demonstrably poor quality and the onus is upon the NSP to provide clear information on its efficient costs that would make it more difficult for the regulator to set aside. The regulator is still obliged to justify its decisions (including any decision to adopt a different forecast to the one proposed by the relevant NSP) however, it is not constrained by information submitted by NSPs in the way that the AER is under the current regime.

The AER urges the AEMC to carefully consider the question of how best to incentivise NSPs to provide clear information on its efficient costs and to engage constructively with the reset process. While the regulated monopoly companies have strongly expressed a view that this is achieved through the existing model, the AER experience is quite the opposite. The AER maintains that changes are needed to achieve the policy intent set out by the AEMC in 2006.

The AER's proposed changes to the decision making test are designed to bring the rules closer to the original intent. Under the proposed rules, the AER would be able to determine a forecast that meets the requirements of the principles and objectives. In the face of poor or inadequate information from a NSP, the AER would be able to determine its own forecast drawing more freely on its own analysis and expert advice than is the case at present.[3]

The remainder of section 1.1 considers in more detail how the current regime affects incentives when submitting forecasts (section 1.1.2) and NSP behaviour that compounds information asymmetry (section 1.1.3). Examples of these behaviours are set out in Appendix 2.

1.1.2 Effects on incentives when submitting forecasts

The AEMC has suggested that since the AER has been able to reduce expenditure forecasts by an equivalent level to jurisdictional regulators, it follows that the AER's discretion is not inappropriately constrained.[4] While the AER's reductions to expenditure may be comparable in percentage terms, this does not mean the outcomes are equivalent, or representative of efficient costs. If a forecast departs from efficient costs to a greater extent than occurs under other regimes, the resulting forecast will still not reflect efficient costs even if it is reduced by an equivalent percentage.

The propose-respond model provides strong incentives on NSPs to submit regulatory proposals that are based on a conservative engineering cost build-up that are optimised for the interests of the NSP. Usually, NSP forecasts are a build up of conservative estimate on top of conservative estimate, which combine to form an overstated forecast.[5] The current construction of the rules means that it is entirely legitimate for NSPs to do this. In order for the long term interests of consumers to be promoted, the regulator should be given the authority to balance all available information and determine a forecast.

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3 Section 1.2 demonstrates how the current Rules act to limit the AER's ability to determine substitutes based on its own analysis and expert advice.

4 AEMC directions paper, page 26.

5 Examples are provided in Appendix 2, Table 1.

The conservative forecast proposed by the NSP is likely to include individual projects which would not be considered necessary during the relevant regulatory period if more probable forecasts were adopted. At the forum of 2 April 2012, the NSPs characterised these projects as 'nice to haves' rather than 'must haves to meet statutory obligations'. However, the current Rules require that the AER base its substitute on the forecast from the NSP, even after it has been found to not reasonably reflect efficient costs. Practically, it is not always possible for the AER to demonstrate that each element of a NSPs' forecast is inefficient. As a result, customers are obliged to bear the cost of investments which may not be required for many years, or, if demand outcomes are lower than forecast, may never be required. Alternatively, if an overstated forecast can be sustained the NSP will face less financial pressure and it will be less likely to aggressively pursue efficiency measures. In either case, consumers will bear higher costs than necessary for an extended period.

NSPs have identified several features of current rules which they purport create incentives for them to submit accurate forecasts. Table 1.1 (next page) explains why these features have failed to offset the inherent incentive for a NSP to maximise or overstate its forecast costs.

1.1.3 Incentives to exacerbate information asymmetries

Since any substitute forecast determined by the AER must be based on the NSP's proposal, NSPs have an incentive and an opportunity to engage in behaviour that impedes the AER's ability to carry out the analysis required to estimate a substitute forecast. Examples of NSP responding to these incentives include:

- submitting an enormous volume of technical information which takes a long time to analyse but does not adequately or rigorously demonstrate the efficiency and prudency of proposed costs
- failing to provide or provide in a timely way key pieces of information which would support lower costs
- responding to AER questions in a way that superficially provides the information sought but does not address the substance of the question
- adopting strategies to ensure that the AER and its consultants do not have enough time to conduct proper analysis.

The current rules tend to encourage NSPs to engage the regulator in a "war of information" which inhibits the exercise of sound regulatory judgement. It also has consequences for the ability of other stakeholders to participate in the regulatory process. For instance, Appendix 1 shows how regulatory decision documents have increased in length since the introduction of the current rules. Evidence of NSPs acting in response to these incentives is set out in Appendix 2.

Table 1.1 Incentives to submit accurate forecasts

Feature identified by NSPs	Why this feature fails to prevent inflated forecasts
The risk that AER is at "at large" in setting a substitute if the NSPs' forecast does not reasonably reflect efficient costs[6]	The AER is not "at large" when estimating a substitute forecast. When estimating a substitute, in practice the AER is limited to only addressing those elements of a NSP's proposal that it was not satisfied reasonably reflects the expenditure criteria. As a result, the substitute estimate is essentially the NSP's proposal adjusted by any specific amounts identified by the AER during the undertaking of its analysis. Given that the AER must first explain why it is not satisfied with a proposed total and then demonstrate that its alternative amount complies with the restrictions set out in the Rules, there is very little downside risk for NSPs associated with presenting inflated forecasts - merely that certain elements of an overall proposal may be revised downwards. Under the current Rules, the AER has never accepted a NSP's total proposed forecast. This suggests that the NSPs attach very little reputational cost to having their proposed forecast rejected. It also suggests that any reputational cost is not outweighed by the large potential benefit to NSP if it proposes an overstated forecast in the first instance and the AER accepts it because it is unable to make the case that the NSPs' forecast should be revised.
The AER has strong information gathering powers	The timeframes set out in chapters 6 and 6A limit the AER's ability to fully use its information gathering powers. The ability of the AER to seek further information or clarification following the information provided by a NSP in response to a regulatory information instrument is impeded by the fact that the deadlines for the draft decision and the final decision are fixed. These issues are exacerbated by NSP behaviours that reduce the AER's opportunities to challenge their proposed forecasts, such as by continuously developing new material arguments or by preparing fresh business cases on an ex post basis. As a result, the AER's information gathering powers have been less effective in constraining NSPs' forecasts than may have been anticipated, particularly once the review process has commenced. The AER is working to improve its information gathering process, including through the introduction of a comprehensive annual reporting regime. While this work should improve future reset outcomes, it is unlikely to fully overcome the effects of the incentives on NSPs to engage in behaviour that exacerbates information asymmetries.
Senior management to provide a statutory declaration confirming the accuracy of the assumptions underlying the proposed forecasts	As explained above, it is possible to adopt a series of cautious or conservative assumptions which combine to form an overstated forecast without using deliberately inflated costs. Accordingly, the statutory declaration is a mechanism for securing probity/ due diligence not a mechanism for dealing with inflated forecasts.

1.2 Inappropriate constraints on exercising regulatory judgement

Discussion at the AEMC's forum on 2 April 2012 showed that there is a lack of clarity concerning the extent of the AER's powers under the current regime. In particular, there is a lack of clarity concerning the extent of the AER's discretion to determine a substitute forecast

[6] Energy Networks Association Submission, pg 23.

in the event that it is not satisfied that that the NSP's forecasts reasonably reflects efficient costs.

In practice, the AER's discretion is more limited than envisaged by the AEMC in 2006. This section explains how various features of the current rules combine to create a process that limits the AER's ability to move away from the NSPs' proposal.

In particular, section 1.2:

- discusses the distinction between conducting analysis and relying on that analysis to form a substitute
- explains the limitations on the AER's ability to apply the findings of a survey
- considers when the circumstances of the business should be taken into account and
- comments on the AEMC's proposal to compare the policy intent in the Chapter 6A rule determination with the actual practices of other regulators.

1.2.1 Conducting analysis vs. relying on analysis to form a substitute

The directions paper suggests that NSPs have made a powerful case that the current rules has not constrained the AER in practice.[7] The AEMC states that:

> No evidence has been presented of decisions where the references to "individual circumstances" in the opex or capex criteria limited the AER's ability to apply benchmarking. The AER has certainly applied benchmarking frequently in its regulatory determinations (as appears to be intended by the capex and opex factors).[8]

We do not agree with this conclusion. While the AER may have used various analytical techniques to improve its understanding of NSPs' costs, there is an important distinction to be made between conducting analysis on the one hand and relying on this analysis to determine allowances on the other. The AER can readily apply benchmarks as an informative tool. However, the AER has encountered a number of practical difficulties when seeking to use the results of benchmarking analysis to determine a substitute forecast under chapters 6 and 6A. These difficulties arise as a result of a combination of:

- the requirement to justify substitute estimates based on the NSP proposal
- the lack of clarity surrounding the obligation to consider the circumstances of the relevant NSPs
- timetable issues which mean that by the time that the AER and its advisors are satisfied that the NSPs' forecast should be amended, there is limited time available to conduct the analysis to determine a substitute amount.

This outcome is far removed from the AEMC's original intent, and, it appears, many stakeholders impression of how the regime works at present. Other regulators often use benchmarking techniques to set revenues, determine efficiency dividends, and set performance or incentive targets. For instance, Ofgem develops benchmarks (taking into account data quality and the scope for variability across firms) and then determines

[7] AEMC directions paper, page 27.

[8] AEMC, *Economic Regulation Rule Change Proposal, Draft Determination*, March 2012, pg 23.

allowances based on the unit costs incurred by better performing firms.[9] Firms have the opportunity to make the case that they deserve special consideration. In contrast, under chapters 6 and 6A, the AER is in practice limited to addressing only those elements of a NSP's proposal that it was not satisfied reasonably reflects the expenditure criteria. This limits the AER's ability to rely on top down analysis to determine a substitute since benchmarking is generally more high level than the detailed technical proposals submitted by NSPs.

A further concern for the AER is that the expenditure criteria refer to the "circumstances of the relevant NSP".[10] There are many factors which the AER would routinely take into account during the course of its benchmarking analysis. These include differences related to intrinsic network characteristics, such as physical, topographical, size, density etc, which would be part of any benchmarking calibration and normalisation exercise.

The term "circumstances of the relevant NSP" is unclear. It should be construed as taking account of the characteristics of the network. However, it could be construed as the circumstances of the firm. Indeed, the term has the potential to be construed so broadly as to preclude any form of benchmarking.

When this language is applied in the context of a regime that puts the onus on the AER to discover all relevant information (rather than putting the onus on NSPs to provide all relevant information) benchmarking analysis which meets the required standards becomes extremely difficult. Examples of the problems that have arisen when the AER has attempted to apply top down analysis are set out in Appendix 2.

1.2.2 AER's ability to apply the findings of a survey

The AEMC cites the AER's decision in relation to ETSA replacement capex as an example of where the AER was able to rely on the findings of a survey to apply reductions to projects it had not reviewed in detail.[11] The reductions applied by the AER in this case were based on systemic issues identified in relation to ETSA's forecasting methodology. The AER and its consultants were not convinced that ETSA's forecasts reflected efficient costs, given that they were based on primarily aged-based forecasting (rather than condition-based forecasting) and compounding growth rates. As these principles were systemically applied by ETSA, the AER considered that a general adjustment was justified in the circumstances. In most cases, however, the issues identified by the AER's consultants are not homogeneous.

If the detailed bottom-up review finds that an NSPs' proposal is generally poor quality, with a variety of different issues leading to inflated forecasts, then the AER's ability to apply the survey findings is constrained. For instance, during the TransGrid review the AER's consultants conducted a detailed review of 32% of TransGrid's proposed planned network expenditure. The consultants identified a number of weaknesses in TransGrid's analysis which led them to recommend $77m of cuts to the relevant projects. If an equivalent level of cost savings had been applied to the remaining 68% of projects which were not considered in detail, the cuts would have come to $127.5 million. In practice, the AER extrapolated the

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9 Ofgem's threshold - eg upper quartile, upper third, median firm - varies depending on their confidence in the data. Ofgem, *Electricity Distribution Price Control Review Final Proposals - Allowed revenue - Cost assessment*, 146/09, December 2009, pgs. 4-11.

10 Electricity Rules, cll 6.5.6(c)(2), 6.5.7(c)(2), 6A.6.6(c)(2) and 6A.6.7(c)(2).

11 AEMC, directions paper, pg 23.

results of the survey only in relation to deficiencies which could be shown to be "systemic" rather than specific to the surveyed project. As a result, when the AER sought to extend its findings on detailed sample project reviews to the remainder of the forecast capex allowance, it was able to justify only $13m of savings.

1.2.3 When should the circumstances of the business be taken into account?

The Direction Papers seeks views on when circumstances of the business should be taken into account during benchmarking.[12]

The AER considers that the circumstances of the businesses which should be taken into account when benchmarking are well established; at a high level, factors which are exogenous to the business should be taken into account, endogenous factors should not. (We note that there are likely to be exceptions to these rules which the AER would assess on its merits.)

The AER agrees with Grid Australia's position:

> [W]hen used properly, benchmarking may be effective as a comparative tool to draw inferences about the efficiency of proposed expenditure levels from observed outcomes for similar businesses. Grid Australia also agrees that it is not appropriate for benchmarking to have regard to internal circumstances of a business.
>
> For instance, it would not be appropriate to consider the effect of previous managerial decisions on the capacity for a business to raise capital. However, benchmarking, when properly applied, should have regard to the starting base for businesses and to the exogenous factors that may impact differently across businesses. These include factors such as customer density, local topography and the network that is in place at the time that expenditure forecasts are made (including the age of relevant assets). If benchmarking did not have regard to these factors it would pose an unacceptable risk that a business may not be able to earn sufficient revenue to meet its costs. Therefore, while Grid Australia agrees that the requirement to have regard to the individual circumstances of the business may limit the AER's ability to apply benchmarking properly, the extent to which this is a problem depends on how broad an interpretation is taken of the "individual circumstances of a business.[13]

The AER supports taking into account reasonable differences, other than efficiency, which influence firms' cost outcomes. Indeed, in addition to the drafting of the Rules, limited access to comparable data has constrained the AER's ability to apply benchmarking during the reset process. These issues are discussed in detail in the appendices to several of our decision documents (see for example Appendix I of the Victorian DNSPs final decision document). The AER's work to overcome these deficiencies is described in our response to the Productivity Commission's Enquiry into Electricity Network Regulation.[14]

Our concern is that the language currently used in the Rules is capable of being interpreted extremely broadly. In particular, the recent Tribunal decision on Powercor's vegetation management has raised some ambiguities about the precise meaning of this term which should be clarified.[15]

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12 AEMC directions paper, pg 27.

13 Grid Australia, Response to consultation paper, pg 39.

14 http://www.pc.gov.au/projects/inquiry/electricity/submissions

15 Application by United Energy Distribution Pty Limited [2012] ACompT 1

Grid Australia's proposal to clarify "the circumstances of the firm"

For benchmarking to be a legitimate comparative tool, it must make meaningful comparisons. Any benchmarking analysis which fails to do this would risk conflicting with the RPP.

Accordingly, we consider that the reference in the Rules to the circumstances of the firm is unnecessary and our preference is to delete it. However, Grid Australia's proposed approach - to amend the Rules to clarify when the circumstances of the NSP should be taken into account - would represent a significant improvement on the status quo.[16] Reference to the characteristics of the network rather than the circumstances of the NSP may be sufficient.

1.2.4 Comparing regulatory practice with the policy intent

The directions paper indicates that the AEMC intends to compare the policy intent in the Chapter 6A rule determination with the actual practices of, and outcomes experienced by, other regulators in Australia and overseas.

There is a very real practical difference between the day to day exercise of regulatory functions and powers (and in particular, overcoming any information asymmetries) and how those same functions and powers may be specified in the Rules. Even regulators which have broad statutory powers find themselves constrained in practice. For instance, the AER notes that the AEMC made the following observations concerning Ofgem's use of their powers:

> while Ofgem does appear to have much broader discretion than the AER, in practice the use of this discretion is heavily constrained by the ability of the NSPs to reject price control proposals and initiate a wide ranging appeal process… It appears to the Commission that there may not in fact be such a significant difference between the policy intent of the AEMC in developing the Chapter 6A rules for transmission and the actual practice of Ofgem.[17]

The AEMC appears to be of the view that changes to the rules are unnecessary because other regulators have tended to exercise their broader powers in a manner similar to that envisaged by the AEMC in its 2006 decision. We would argue that the fact that other regulators have exercised their discretion conservatively is an argument in favour of entrusting regulators with discretion. Far from being unnecessary, regulatory discretion is crucial to ensuring that NSPs act responsibly when submitting their cost forecasts (see section 1.1.2).

1.3 AER's proposed solution

The AER considers that our proposed changes to the cost assessment framework are the most efficient and effective solution to the problems identified. Our proposal would both improve incentives on NSPs to provide realistic and well supported forecasts and enable the AER to exercise its powers in the manner envisaged by the AEMC during its 2006 review of the economic regulation framework. Any changes which do not address the incentives on NSPs to submit accurate cost forecasts will not address the underlying problem.

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[16] Grid Australia proposes to amend the Rules to make it clear that "the consideration of individual circumstances extends to the exogenous factors that affect expenditure requirements (like service obligations and geography) and to the starting position of TNSPs at the time that expenditure forecasts are made, but not to factors that are internal to the businesses (such as gearing levels, levels of efficiency, etc.)" Grid Australia, response to consultation paper, pg 38.

[17] AEMC directions paper, pg 27-28.

As explained in section 1.1.2, the current Rules require the AER to base any substitute amount on the NSPs' proposal. As well as affecting the NSP's incentives to submit accurate forecasts, this requirement obliges the AER to determine an NSP's total expenditure by calculating the impact of any deviations from the NSP's proposal. The AER must make a direct link between the substituted amount and the flaw that the AER has identified in the NSP's proposal (which invariably takes the form of a detailed engineering assessment).

In contrast, under the proposed arrangements the AER would have more flexibility to exercise judgement when forming a view on what weight to give various regulatory tools. As with the current regime, these tools are likely to include detailed engineering assessments of NSPs' proposals, high level economic analysis and benchmarking of specific aspects of NSPs' performance.

NSPs would have stronger incentives to provide accurate, well justified forecasts of efficient costs because the AER would have the ability to set aside information that is demonstrably poor quality. Better quality information would lessen the impact of information asymmetry and enable the AER to use the results of its analysis more effectively.

If the AER is of the view that it has a better estimate of forecast costs, it would be free to substitute the better estimate, without being obliged to link the change to a specific flaw in the NSPs' proposal. However the regulator would not be "at large". Any decision to substitute a better estimate would still need to be justified given all relevant information (including the NSPs' proposal), would need to be consistent with the NEL principles and would be subject to merits review.

This submission has identified a number of instances where the lack of clarity surrounding the extent of the AER's discretion has led to a problem (or may lead to a problem in the future). Where there is an agreed intent but lack of clarity in the rules, the AER believes that clarifying the rules should meet the AEMC rule making test. It should not be necessary to find fault in the first instance.

The AER agrees that one of the strengths of the NEM is the stability of its design, and maintaining stability has been at the heart of the development of the AER's rule change proposal. Nothing in the AER's proposal seeks to amend the clear and consistent set of principles established in the law. The following section discusses the constraints on the AER's discretion which are inherent in the overarching regulatory framework.

Obligation to consider the NSPs' proposals

Concerns that the AER's proposal might lead the AER to give insufficient consideration to the NSPs' proposal are unfounded. This is for the following reasons:

- The Law requires that the AER is to take into account the RPP, which includes ensuring that a NSP should be provided with a reasonable opportunity to recover at least efficient costs the operator incurs in providing services and complying with regulatory obligations, when it exercises a discretion in making those parts of a distribution determination or a transmission determination relating to direct control network services.[18] The reference to 'at least efficient cost' reflects the accepted principle in regulatory economics that, given the consequences of a supply failure, a small under-investment in infrastructure has a

[18] NEL, ss 7A(2) and 16(1)(b).

greater economic cost than a small over-investment. In order for the AER to properly take this into account, it is necessary for the AER to consider the NSP's costs.

- The Law also requires that the AER is to ensure a NSP is informed of the material issues under consideration by the AER and given a reasonable opportunity to make submissions in respect of a distribution or transmission determination before it is made.[19]

- The expenditure objectives in the Rules, which the AER proposal does not amend.[20]

- The requirement that the AER must consider, among other things, any regulatory proposal submitted under rule 6.8 or 6.9 as affected through the AER's proposed amendments to clause 6.10.1 and its equivalent proposed rules in respect of chapter 6A.

The adoption of the propose-respond model was motivated in part by a desire to ensure that the NSPs' proposal is central to the regulatory process. It was seen as a way of reducing the risk of the regulator not allowing sufficient investment through not understanding the circumstances of the business properly. However, this approach failed to recognise and appropriately balance the risk of the NSP proposing inflated forecast. While the NSPs' proposal should be a significant part of the AER's deliberations, it is important that it not inappropriately constrain the AER's decision making.

The requirements of and the principles enshrined in the Law maintain the stability and predictability of the regime. The AER proposal allows for a more balanced approach to setting forecasts, while ensuring that networks are funded to provide a safe and reliable electricity supply within these bounds of the Law.

1.3.1 Expanding the status of the pre-submission regulatory process

While the AER considers that the best way to resolve the issues described in this chapter is to authorise the AER to independently determine forecast costs, changes to the regulatory reset process could also improve on the status quo. The AER proposes a process based solution for consideration, namely providing for a pre-submission process that allows for the AER to consult and decide upon the models to be used to assess expenditure proposals.

This additional process-based suggestion involves expanding the pre-submission process to allow the AER to consult upon the models to be used to assess expenditure, with the NSPs being bound to use the models specified in the final framework and approach paper to develop their proposals.

One concern with the current decision making framework is the difficulty in effectively reviewing and assessing expenditure proposals under the current prescribed process and timeframes. Significantly, under the current framework a NSP is not fettered in the methods and models that they may apply to develop and support their expenditure proposals. This leads to the methods underpinning expenditure proposals differing between NSPs, the specific details of which are largely unknown to the AER until a NSP submits its regulatory proposals.

These differences, together with the existing prescribed process and timeframes, exacerbate the information asymmetry problems faced by the AER. The AER does not have the same

[19] NEL, s 16(2).

[20] Electricity Rules, cll 6.5.6(a), 6.5.7(a), 6A.6.6(a) and 6A.6.7(a).

depth of knowledge of NSPs' methods or models that underlie their expenditure forecasts and typically does not have an opportunity to review these models before the regulatory proposal is submitted to the AER. This makes it harder for the AER to identify any deficiencies in the NSPs' proposed expenditure forecasts and in practice compounds the issues with the Rules discussed in earlier sections.

One way of dealing with this problem within the current decision-making model is to allow the AER to specify in the framework and approach paper the standard models or methods – such as the repex or augmentation models - that a NSP must apply to develop and support their expenditure proposals. NSPs would need to justify the expenditure forecasts based on the application of the methods specified in the framework and approach paper and any departures from the 'standard' model outcomes. Further, if deemed necessary, an additional step could be prescribed in the rules, where a NSP could seek to vary or substitute for an alternative method determined in the framework and approach paper subject to satisfying specified criteria in the rules. The AER could assess these proposals and make a decision on whether a NSP could vary or apply an alternative method in advance of submitting its regulatory proposal.

Currently the framework and approach paper only locks in the form of control to be applied in a reset (and if the AER's rule change proposal is accepted it will also lock in service classifications). Necessary amendments to the Rules to adopt this approach include:

- provision that the AER may specify in the framework and approach paper the models or methods to be used by the NSP in its regulatory proposal to support its expenditure proposals
- a requirement that a NSP's regulatory proposal must:
    - use any models or methods specified by the AER in the framework and approach paper (or any variation or alternative model agreed by the AER in advance of the regulatory proposal) in developing and supporting their expenditure proposals
    - demonstrate and provide evidence as to how those models or methods have been used.
- introducing an equivalent process into chapter 6A, to allow the AER to specify the models or methods that a TNSP must apply to develop and support their expenditure proposals.

This approach has the following key features and advantages:

- the AER would be able to consult on the 'standard' models or methods to be applied in an individual determination as part of the framework and approach paper process. All interested parties would be afforded an opportunity to comment through submissions on the preliminary position paper
- once determined as part of the framework and approach paper, there is certainty for both the AER and NSP as to what model will apply
- the model or method specified in the framework and approach paper will also be applied by the AER if it is required to substitute the forecast, thereby further increasing transparency and certainty
- providing for departures in respect of legitimate changes in any assumptions to the specified models or methods affords the flexibility to ensure a NSP is able to use the most

up to date information having regard to its circumstances at the time of it submits its regulatory proposal.

The AER has to date issued Regulatory Information Notices (RIN) under the Law requiring NSPs to provide, prepare and maintain information which the AER considers reasonably necessary to the making of distribution determinations, including in respect of the expenditure proposals. However, the issuing of a RIN is not a process that is able to direct a DNSP to use a particular method or model. Therefore this proposal cannot be implemented without a rule change.

Further, issuing RINs in this context suffers from the following practical shortcomings:

- it does not prevent a NSP from submitting detailed bottom up proposals, in its regulatory proposal
- in the absence of a prior understanding of the specific models a NSP will apply, the information requested can only effectively be used as a cross-check on the regulatory proposal and to identify areas for further investigation of a NSPs regulatory proposal (e.g. repex and augmentation models) and is therefore of little use in estimating a substitute forecast if that is necessary.

In summary, expanding the 'pre-lodgement process' in chapters 6 and 6A to allow the AER to specify the models NSPs must use in their regulatory proposals to generate their expenditure forecasts would address:

- the differing methods or models used by NSPs to develop their expenditure forecasts which exacerbates the information asymmetry problems given this process makes it harder for the AER to effectively identify deficiencies in NSPs' expenditure forecasts
- shortcomings with the RIN process and would complement the reset RIN.

While this alternative may help to overcome problems caused by, or exacerbated by, the current decision-making model in Chapter 6, the AER still maintains that its original rule change proposal would be the most efficient and effective way to deal with the problems identified.

1.3.2 Other changes to the regulatory process

The AER notes that it has already submitted rule change proposals for other improvements to the regulatory process such as on arrangements and timeframes for submissions and for dealing with confidential information. These and other associated proposals are discussed separately in section 4 of this response on the regulatory decision making process.

As noted by the AEMC, process issues should be considered in the context of the other issues raised by the AER including the concerns noted above with the capex and opex framework. The AER welcomes further consideration of changes to the process that would assist it to perform its functions more efficiently.

1.4 Expenditure factors, criteria and objectives

1.4.1 Factors

Process factors and publication of material

The rule change proposal proposed moving the first three expenditure factors to Part E of the rules. It should be noted that this would still require the AER to consider:

- the regulatory proposal or revised proposal
- any written submissions
- analysis undertaken by or for the AER.

The AEMC has indicated an initial position that supports the relocation of these factors. Additionally, the AEMC has indicated support for amending the third factor that requires the publication of analysis before it could be used as the basis for a decision. As set out in the rule change proposal and accepted by the AEMC, this had the potential to make decision making processes unworkable within the prescribed timeframes. The AER considers that there is no need to duplicate procedural fairness requirements in the Rules. Accordingly, it is questionable whether a requirement in the rules to publish analysis relied upon in decision making adds anything to the administrative law protections already afforded to stakeholders.

Mandatory but not exhaustive factors

The AER welcomes the proposed clarification that the expenditure factors are not exhaustive. The AER understands that this is the case currently, but to avoid the potential for the any doubt on this issue, it is useful to amend the Rules to clearly indicate that they are not exhaustive and that the AER may take into account other relevant factors.

However, the AEMC has indicated that rather than make consideration of each and every factor optional, the AER should be required to consider each of them, if only to indicate why one is not relevant. While accepting the AEMC's reasoning in this area, the AER notes the importance of ensuring that the Rules clearly allow for different weight to be placed on the appropriate factors, while still requiring consideration of each.

In addition, the AER has proposed a number of clarifications to the existing expenditure factors that it considers are worthy of further consideration.

Additional expenditure factors

NSPs have expressed a number of concerns regarding the level of discretion afforded to the AER under its rule change proposal. As the AER has previously stated, the ultimate protection afforded to NSPs is contained in the Law. The Law requires the AER to take into account the RPP in exercising a discretion and that its decisions must be made in a manner that will or is likely to contribute to the achievement of the NEO.

We note that the AEMC has recently issued a draft determination for the definition of rebateable gas services in which the AEMC considers that it is appropriate to bind the AER's

use of discretion by explicitly referring to the RPP when making its decision in that proposed rule.[21] While our preference is to not duplicate requirements in the Law and the Rules, given the AEMC's recent draft decision it may be appropriate to consider a similar solution for the determination of capex and opex forecasts.

1.4.2 Expenditure criteria

The proposed rules removed the expenditure criteria. Under the current rules, the expenditure criteria refer variously (across capex and opex, distribution and transmission) to:

- the efficient costs of achieving the expenditure objectives
- the costs that a prudent operator in the circumstances of the relevant Network Service Provider would require to achieve the expenditure objectives
- a realistic expectation of the demand forecast and cost inputs required to achieve the expenditure objectives.

Under the AER's preferred construction of the decision making test, the AER would be required to determine the total of the forecast of required expenditure of a Network Service that the AER considers would meet the efficient costs that a prudent Network Service Provider would require to achieve the expenditure objectives.

The AER did not propose any change to the expenditure objectives which require consideration of the expenditure required to:

- meet or manage the expected demand for standard control services
- comply with all applicable regulatory obligations or requirements associated with the provision of standard control services
- maintain the reliability, safety and security of the system through the supply of standard control services.

While noting the AEMC view that demand forecasts and cost inputs are more significant to the AER's consideration, the AER maintains that these are adequately captured in either the AER's preferred wording of the decision making test or in the expenditure objectives. This is, of course, dependent on the eventual formulation of the decision making test. In any event, the AER suggests that some effort be made to remove duplication between objectives, criteria and factors where possible.

As discussed in the previous section, the AER maintains its view that the criteria relating to the circumstances of the relevant Network Service Provider should be removed. Again, while the AER recognises that the circumstances of the individual network should be taken into account in setting forecasts, the circumstances of the owner should not be taken into account while setting forecasts. As set out in the rule change proposal, the imprecise language used in the rules in this area should be removed.

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[21] AEMC, *Draft Rule Determination, National Gas Amendment (Reference service and rebateable service definitions) Rule 2012*, 17 March 2012.

1.4.3 Expenditure objectives

The AEMC seeks views on whether it is appropriate for the capex objectives to be clarified to better reflect jurisdictional reliability standards. The AER's rule change proposal did not include changes to the capex objectives, however, we agree that there are potential benefits associated with clarifying the relevant wording, particularly with respect to the term "maintain".

While changes to the capex objectives are likely to yield improvements, the lack of clarity also relates to the reliability standards themselves, particularly in Queensland. For instance, Energex was able to seek and obtain $1.8 billion of additional expenditure on the strength of a letter from the Queensland government which confirmed that the government wished to adopt the level of network security recommended in the first Somerville report. There was no amendment to the relevant statutory instrument, however, since the Queensland reliability standard is ambiguous and can be interpreted to support a range of different outcomes.

2 Capex incentives

In its rule change proposal, the AER considered that the current capex incentives framework did not provide continuous incentives for NSPs to seek efficiencies, nor did it provide sufficient discipline in some circumstances on NSPs to contain capex in excess of the original forecast. In order to provide stronger incentives for NSPs to incur efficient capex and to spend no more capex than is necessary for a given level of output, while providing a robust framework to deal with regulatory uncertainty, we proposed the following rule changes:

- amend the RAB roll forward mechanism in chapter 6 and 6A to:
  - automatically allow for capex up to the forecast and to only allow 60 per cent of any expenditure in excess of the forecast to be automatically included in the RAB
  - include or exclude related party margins and capitalisation of overheads from the RAB consistent with how those margins were treated in the capex forecast at the start of the regulatory control period
- amend the RAB roll-forward provisions in chapter 6A to allow the AER to apply either forecast or actual depreciation
- provide for the AER to develop and publish an incentive scheme other than the EBSS, STPIS and DMIS, subject to certain guiding principles in the Rules and amend chapter 6A to provide the AER with the discretion to apply any given scheme to a particular transmission determination
- allow the AER to include a revenue adjustment mechanism to address the situation where shared assets are used for non-standard control services, including unregulated services
- extend the current re-opener provision for TNSPs to DNSPs and introduce a contingent project framework for DNSPs
- included a one per cent materiality threshold before a DNSP may apply to the AER for an adjustment to their allowed revenues under the cost pass through provisions (consistent with the current transmission framework) and amend the pass through provisions to ensure that the cost of any capex pass through is not recovered twice from customers.

Having considered the AEMC's directions paper and the submissions from other stakeholders, the AER supports the AEMC's proposal for a mechanism that would see the AER develop detailed aspects of the capex incentive regime via a guideline. The AER agrees it is preferable for the Rules to avoid prescribing approaches where refinement may be required over time, where important matters of technical detail need to be considered, and where the scheme should be permitted to vary across NSPs. Our reasons are set out in section 2.1.

However, the AER maintains its position in relation to the other elements of its capex incentives proposals.

The AER contends that prescribing the use of forecast depreciation in the Rules will not itself achieve the AEMC's objective of creating an incentive for NSPs to submit 'accurate' capex forecasts. Further, the AER considers that it does not need to be provided with any further guidance in the Rules in the exercise of discretion in its decision to use actual or forecast depreciation to an NSP. The Law already governs the exercise of discretion in this context,

namely by requiring that the AER must take into account the RPP and must do so in a manner that will or is likely to contribute to the achievement of the NEO. Alternatively, if the AEMC believes that further guidance is desirable, the AER considers that it is appropriate that any principles should not unduly restrict the AER exercise of discretion and direct the AER to consider the interactions with the overall capex incentive framework in the AER's decision to use actual or forecast depreciation.

The AER acknowledges there has been some confusion in relation to the related party margins and capitalisation of overheads on whether the proposed rules require consistency with the amount or method from the regulatory determination and which is appropriate. To clarify the AER notes the drafting of the proposed rules refer to the consistency with the methods used to set the forecast and not consistency with the amounts. Also, applying a stronger capex incentive as AEMC suggested will not address the problem in relation to the incentive for a NSP to artificially inflate the actual capex to be included into the RAB by including inefficient profit margins or making capitalisation changes within the regulatory control period. The AER considers that the principles and methods identified in the AER's proposal can be applied to any new contractual arrangements.

The AER does not consider the AEMC's proposal to include the ability for the AER to develop temporary schemes is necessary, given that the AER has often designed schemes that are sufficiently flexible and tailored to different circumstances, such as different revenues at risk (STPIS for distribution). In particular, limiting the AER to only developing temporary schemes with a low revenue at risk is inappropriate given that this is unlikely to incentivise efficient behaviour. The AER's broad new scheme power would also permit the AER to explore the adoption of Ofgem's IQI (which is a form of menu regulation) in some form, as a possible mechanism for improving the accuracy of NSP forecasts, as the AEMC suggests.

The AER disagrees with the exclusion of alternative control services (ACS) assets from the proposed rule changes for shared assets. Simply ignoring the use of ACS assets for other purposes is not considered by the AER to be appropriate as a matter of principle. The AER supports the AEMC's proposal to extend the proposed shared asset rule change to TNSPs so that any incentive on TNSPs to use assets for non-regulated purposes (without providing compensation to customers) will be reduced.

The proposed changes to the rules outlined in this chapter are consistent with the RPP which the AER must take into account and will better allow the AER to make decisions that will or are likely to contribute to achievement of the NEO. This is for a number of reasons, including improving the existing regulatory framework to better reward efficient behaviour and to better discourage inefficient expenditure. The remainder of this chapter sets out the AER's response to the AEMC's consideration of how the capex incentives should be established. In particular, this chapter discusses the following:

- incentives for efficient capex
- uncertainty regime
- actual/forecast depreciation
- related party margins and capitalisation changes
- other incentive schemes

- shared assets.

2.1 Incentives for efficient capex

The AER agrees with the AEMC that the current framework does not provide a continuous incentive nor sufficient supervision of capex above the forecast. For the reasons explained in our rule change proposal, we also consider that in certain circumstances the current rules fail to create the incentives to incur only efficient capex.

The AEMC has stated that regulation cannot compensate for weaknesses in the corporate governance arrangements.[22] Whilst this may be the case, it is important to ensure that the regulatory regime is not designed in a way that creates perverse incentives that have the potential to exacerbate governance arrangement problems. A regulatory regime which fails to prevent such perverse incentives is not in the interests of consumers and is arguably one that will not or is unlikely to contribute to the achievement of the NEO.

The AER also agrees that NSPs do not have an incentive to overspend unless they have an expectation that their excess returns will continue indefinitely. However, where the shareholder receives tax equivalent payments in lieu of corporations tax, the regulated return on equity will understate the actual return on equity. As a result, it is likely that these NSPs would hold a realistic expectation that their actual cost of capital will always be less than the regulated rate.

The proposed 60:40 sharing mechanism was designed to ensure that NSPs do not have an incentive to overspend their capex allowance, regardless of their governance arrangements. The mechanism was asymmetric in order to avoid creating a further incentive on NSPs to inefficiently defer capex into subsequent regulatory periods.

Under the current rules, there is nothing in the expenditure factors or criteria that permit the AER to disallow proposed expenditure on grounds that it was provided for as part of a forecast in a previous regulatory determination. For instance, the AER included $119 million of sub transmission corporation initiated augmentation capex in Ergon Energy's capex allowance to account for 93 projects which moved from the previous regulatory control period into the current regulatory control period.[23] This demonstrates that under the current rules, NSPs have the opportunity to include the same projects in more than one forecast. In these circumstances, it is inappropriate to introduce an incentive mechanism which generates even greater rewards for deferring capex. This is why the AER has not applied a capex EBSS to DNSPs. If this problem is resolved, then the AER would be open to consideration of alternative capex incentives which include symmetrical incentives.

The AEMC has indicated that it is reluctant to prescribe a detailed solution in the Rules and prefers instead to establish a more flexible regime. As explained previously[24], the AER proposed a prescriptive capex incentive because we anticipated that this approach was more likely to be accepted by the AEMC and stakeholders. However, the AER also prefers a more flexible mechanism that is capable of taking into account context of the proposal.

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22 AEMC, Directions paper, p. 21.

23 AER, Final decision - Queensland distribution determination 2010-11 to 2014-15, p. 109.

24 AER Response to AEMC Clarification Questions, 2 February 2012.

Any capex incentive mechanism that is to apply to a NSP should be governed by principles which, among other things, require the AER to take into account the relevant NSP's past expenditure relative to allowances, the incentives inherent within other parts of the economic regulation framework and any other relevant factors.

Finally, we note that several NSPs have argued that the AER's position is inconsistent because we simultaneously argue that the current regime creates incentives to inflate forecasts and overspend forecasts.[25] This position is not inconsistent. There is no reason why the incentive to inflate forecasts cannot co-exist with an incentive to overspend. Indeed, this is the case under the current rules.[26]

2.2 Uncertainty regime

The AER agrees with the AEMC's characterisation of the debate on the uncertainty regime as set out in the directions paper. In particular, we agree that:

> The changes that have been proposed to the uncertainty regime aim to balance other changes the AER proposes in respect of capex/opex allowances and capex incentives. To an extent, then, the need for these changes to the uncertainty regime may depend on whether those other proposed changes are made as part of this rule change process.[27]

The AER's proposals on capex reopeners and contingent projects were designed to be considered in the context of the entire rule change package. We agree that increasing the number of intra-period adjustments has potential costs in terms of expenditure discipline and price stability, and that these costs need to be weighed against the benefits of giving NSPs an appropriate level of protection from changing circumstances.

With respect to the application of a contingent projects regime to DNSPs, the AER agrees that it is worthwhile to consider whether the regime that applies in transmission could be adapted to better reflect the characteristics of distribution projects (which tend to be smaller, more numerous and more homogenous). In undertaking this exercise it is important to ensure that incentives for efficiency are maintained and that including a contingent projects regime does not begin to turn what is an incentive regime into a cost of service regime.

There is a long running debate reflecting uncertainty around the definition of "materially" for the purpose of establishing a minimum threshold for a pass through amount in distribution. The AER maintains that there are benefits associated with introducing a materiality threshold in Chapter 6 consistent with the definition that applies in Chapter 6A.

2.3 Actual/forecast depreciation

The AER maintains its rule change proposal to ensure that it has the flexibility to adopt either a high powered or a lower powered depreciation incentive for TNSPs to achieve a balanced

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25 For example, ENA submission to the directions paper, pp. 30–33.

26 Similarly, there is also no reason why an incentive to overspend capex forecasts cannot co-exist with an incentive to inefficiently defer capex. Since all actual capex is automatically rolled into the RAB without regulatory scrutiny, depending on the circumstances NSPs could have an incentive to proceed with weakly justified projects during the regulatory control period, and defer strongly justified projects so that they can again receive an allowance in respect of those projects during the following regulatory control period.

27 AEMC, Directions paper, p. 52

capex incentive framework, consistent with the approach currently allowed for DNSPs under chapter 6 of the Rules.

The AER agrees with the AEMC that the use of actual or forecast depreciation is part of the capex incentive framework and needs to be considered in that context. That said, the AER disagrees with proposals prescribing the use of forecast depreciation (Grid Australia) or actual depreciation (EURCC, Australian Paper) in the rules.[28] As explained in the AER's rule change proposal, in choosing between the use of actual or forecast depreciation important considerations to take into account include:

- whether there are any differences between the actual and forecast capex that are likely to be driven by permanent efficiency improvements; or
- whether there are any differences that reflect uncontrollable factors; or
- the temporary deferral of investments; or
- the systematic over-forecasting of capex by a NSP.

If the differences are likely to result from uncontrollable factors, the temporary deferral of investments or the systematic over-forecasting of capex, then the use of actual depreciation will result in higher windfall gains/losses than if forecast depreciation is adopted. These windfall gains/losses arise as a NSP will receive a reward/penalty (the return of capital) over the remaining length of the regulatory control period to the extent of the capex underspend/overspend for factors that do not represent lasting efficiencies. This reward/penalty is reflected in a higher/lower opening regulatory asset base (RAB) at the commencement of the next regulatory control period.

In contrast, if the differences between actual and forecast capex are likely to result from permanent efficiency improvements, then the use of forecast depreciation will result in the amount of depreciation included in the opening RAB at the commencement of the next regulatory control period, which is unaffected by actual capex outcomes during the regulatory control period. In this circumstance, the depreciation component does not form part of the capex incentive framework, and NSPs will receive a lower reward for efficiency improvements.

In its submission to the AEMC, the ENA and its consultants PWC and NERA proposed the following general principles that may guide consideration of when it may be appropriate to have more or less details in the rules:

More detail in the rules

- Matters that are capable of general application to all service providers
- Matters that are largely "settled" and are unlikely to require adjustment or refinement over time
- Matters that have no or limited interaction with other elements of the framework

[28] Grid Australia, Submission to the Directions paper, p. 54; EURCC, Submission to the Directions paper, p. 17; Australian Paper, Submission to the Directions paper, p. 23.

- Matters that do not require adjustment in light of changing market conditions or changes in sources of information

Less detail in the rules

- Matters whose application will vary as between individual service providers or groups of service providers
- Matters that are still subject to some operational testing and may need "tweaking" from time-to-time as the results of their application become known
- Matters that have a number of "moving parts" and that impact on decisions about other elements of the framework
- Matters that may require adjustment in light of changing market conditions or changing sources of information.[29]

The AER's proposed discretion to use actual or forecast depreciation is consistent with the principles of 'less detail in the rules', which include:

- The application of depreciation is largely not "settled" and is likely to require adjustment or refinement over time
- The application of depreciation may vary between individual NSP due to different spending behaviour
- The application of depreciation has significant interactions with the overall capex incentive framework

In response to Grid Australia's comments on the impacts of using actual depreciation on incentives between short lived and long lived assets, the AER acknowledges that the capex incentive on long lived assets and short lived assets is likely to differ. However, the AER considers that, in practice, it is likely that any differences in incentives between short and long lived assets may not distort investment decision as the potential for an NSP to substitute between short and long lived assets may be limited. For example, network assets are generally not substitutable: a long lived distribution system asset (e.g. transformer) is not a substitute for a short lived asset (e.g. IT equipment). In addition, short lived assets only account for a small proportion of a NSP's RAB (see Table 2.1 below).

The AER's experience is that the decision to use a long instead of a short lived asset is driven by reasons relating to technical requirements, planning restrictions, and supply constraints, etc, rather than a deliberate attempt to gain that extra depreciation. Accordingly, the AER does not consider any potential distortion to be significant enough to warrant the exclusion of actual depreciation from the capex incentive framework.

[29] ENA, Submission to the Directions paper - Design of capital expenditure incentive arrangements, pp. 12–3.

Table 2.1 Victorian DNSP standard assets lives (years)

Asset category	CitiPower	Powercor	JEN	SP AusNet	United Energy
Sub-transmission	50.0	50.0	44.7	45.0	60.0
% of RAB value	12.2%	8.6%	18.1%	9.7%	28.3%
Distribution system assets	49.0	51.0	50.0	50.0	35.6
% of RAB value	85.6%	81.6%	72.1%	84.3%	67.4%
SCADA/Network control	13.0	13.0	10.0	5.0	5.0
% of RAB value	1.3%	0.5%	0%	0%	1.9%
Non network general assets—IT	6.0	6.0	5.1	5.0	5.0
% of RAB value	0%	3.0%	5.9%	4.3%	2.0%
Non network general assets—other	10.0	15.0	19.9	5.0	7.5
% of RAB value	1.0%	6.4%	3.9%	1.7%	0.4%

Source: AER's final decision on Victorian electricity distribution determination on PTRMs, October 2010; AER staff calculation; the calculation may not be exact due to rounding.

The AER maintains that it should have the flexibility to adopt either a high powered or a lower powered depreciation incentive for TNSPs to achieve a balanced capex incentive framework, consistent with the approach currently allowed for DNSPs under chapter 6.

2.3.1 A NSP's behaviour under the use of actual or forecast depreciation

The AER notes the AEMC's concern of whether the use of actual depreciation leads to an incentive for an NSP to overstate its required capex and submit higher forecasts to the AER.[30] While it is not possible to precisely identify the extent to which the use of actual depreciation reinforces the incentive for a NSP to overstate its forecast capex requirements, the AER considers that:

- as previously discussed, there is always an incentive for an NSP to overstate its forecast capex. This is irrespective of the depreciation method adopted
- the issue of incentives for an NSP to overstate its forecast should be addressed separately
- to the extent that an NSP responds to the incentives where actual depreciation is adopted, the AER will be able to have regard to past expenditure out-turns in setting an NSP's forecast capex allowance.

That said, in of itself prescribing the use of forecast depreciation in the Rules will not achieve the AEMC's objective of creating an incentive for NSPs to submit 'accurate' capex forecasts.

[30] AEMC, Directions paper, p. 49.

2.3.2 Appropriateness of further guidance on the use of discretion

The AEMC proposed further work to be undertaken to determine whether further guidance should be provided to the AER in the use of discretion or even just prescribing one method in the rules.[31]

The AER does not consider it is necessary to provide further guidance in the Rules in the exercise of discretion in the decision to use actual or forecast depreciation. The NEL already governs the exercise of discretion in this context, namely by requiring that the AER must take into account the RPP and that it must make its decisions in a manner that will or is likely to contribute to the achievement of the NEO.[32]

Alternatively, if further guidance is desirable, the AER considers that it is appropriate that any principles should be at a high level and direct the AER to consider the interactions with the overall capex incentive framework in the decision to use actual or forecast depreciation.

2.4 Related party margins and capitalisation changes

The AER maintain its rule change proposal to ensure that it has the flexibility to either include or exclude related party margins and capitalisation of overheads from the RAB consistent with how those margins were treated in the capex forecast at the start of the regulatory control period.

2.4.1 The need for different capex incentive adjustment for capitalisation

The AEMC acknowledged that there is an issue in relation to change in capitalisation policy by NSPs during a regulatory control period and considered that the solution proposed by the AER may be appropriate.[33] That said, the AEMC also noted some of these problems might be addressed by applying stronger capex incentives, such as through a capex EBSS.[34]

However, applying a capex EBSS will not provide balanced opex and capex incentives. A NSP will still have incentive to distort its capitalisation policy. As the ESCV stated:

> "Inherent in the current regulatory framework is the fact that the incentives to reduce operating and maintenance expenditure are greater than those for capital expenditure. This is because in the first year of the regulatory period a distributor retains 100 per cent of the operation and maintenance expenditure underspend, while for each of the ensuring years they retain 100 per cent of the incremental gain in underspends. This contrasts to capital expenditure where a distributor retains only the WACC on the annual capital expenditures underspend." [35]

In addition, the AEMC has stated in both the directions and supplementary papers on the power of choice review that there are three factors with current regulatory arrangements that may create a stronger incentive for the NSPs to favour capex over opex, namely:

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31 AEMC, Directions paper, p. 50.
32 NEL, s 16.
33 AEMC, Directions paper, pp. 57–8.
34 AEMC, Directions paper, pp. 57–8.
35 ESC, Electricity Distribution Price Review 2006–10 Issues Paper, December 2004, pp. 106–7.

- the percentage value of cost savings retained by network businesses is more with respect to opex than capex - hence the profit opportunity is greater (i.e. this provides an incentive for a NSP to capitalise operating expenditure during the regulatory control period)

- the opportunity to finance and service their investment at a rate of return lower than their WACC gives the business an extra incentive to invest in capital expenditure

- the rules for treating past expenditure is more mechanistic for capital expenditure than operating expenditure.[36]

The AER has not applied an EBSS to capex and the ESCV previously applied (but subsequently removed) the carryover of capex (in)efficiencies. The reason for this was primarily because including capex might inappropriately provide incentives to inefficiently defer capex into future regulatory control periods.[37] The modelling undertaken by the AER demonstrates that DNSPs would retain significantly more than 30 per cent of the benefits of any capex deferrals given that any capex deferred would be included in a NSPs ex ante forecast for the next regulatory control period. Consequently, the AER considers that it would not be practicable or consistent with the Rules to identify and exclude deferred capex from capex allowances in future regulatory control periods.[38]

Further, the AER considers that applying the EBSS to opex and not to capex creates incentives for a NSP to favour capex over opex. In particular, a NSP may have an increased incentive to capitalise expenditure to secure greater efficiency carryover rewards. In this way, in the next regulatory control period, the NSP would be compensated in its forecast opex (via a carryover of opex efficiencies) and again through depreciation and a return on capital once the amount is recognised as actual capex in the RAB. In this case, there has been no change in the underlying capital cost of service delivery, hence the NSPs would not be penalised for incurring any forgone returns on actual 'capex' above the allowance within the regulatory control period. The MEU and the Victorian Minister agreed that there is an issue in relation to the change of capitalisation policy and supported the AER's proposal.[39] Aurora Energy also agreed with the AER's assessment of the issue.[40]

The AER agrees that there is a bias in favour of capex relative to opex by NSPs under the current rules. Applying a capex EBSS will not address the incentive of a NSP to capitalise opex within a regulatory control period. In any case, for the reasons outlined above, an EBSS for capex is not appropriate in any event.

2.4.2 The need for a different capex incentive adjustment for related party margins

The AEMC seeks submissions on how and to what extent, the incentive for a NSP to overspend or underspend relative to its capex allowance varies depending on whether it uses

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36 AEMC, Directions paper: Power of choice – giving consumers options in the way they use electricity, 23 March 2012, p. 138; Supplementary paper: Demand side participation and profit incentives for distribution network businesses, 23 March 2012, p. 10.

37 AER, AER response to AEMC queries on AER network regulation rule change proposals, 1February 2012, pp. 4–5.

38 AER, Electricity distribution network service providers – Efficiency benefit sharing scheme, June 2008, pp. 36–43.

39 MEU, Submission to the Directions paper, p. 10; DPI, Submission to the Directions paper, pp. 8–9.

40 Aurora, Submission to the Directions paper, p. 10.

a related party or not, having regard to the other incentives for efficient capex, including the scope for the AER to determine efficient capex as part of a distribution or transmission determination.[41] The AEMC also seeks submissions on the degree to which a parent company of a NSP is better off if related party margins that are higher than those allowed for by the AER in the regulatory determination, are due to higher real costs. [42]

The AER considers that related party margins are a "special case" among capex incentive issues. This is because the financial positions of a NSP's shareholders (and therefore a NSP's incentives) depend not just on the action of the NSP but also on the actions of the related party.[43] From the perspective of the parent company of both the NSP and the related party, no real financial cost is borne by the shareholders of the parent company in relation to a related party margin that the AER's rule change proposal addresses. The costs incurred by the NSP are offset by the revenue earned by the related party such that any margins that are artificially inflated will be passed through to customers in regulated charges and retained by shareholders of the parent company.

The only way to remove this incentive to artificially inflate related party margins (where both the related party and the NSP have common ownership) is to disallow in full the recovery of these margins. Even if only some of the inefficient margin is recoverable from consumers (i.e. a NSP overspends and the sharing ratio is applied, and /or a capex EBSS is applied),[44] the NSP still has an incentive to pay the margin to related party. This is because while the NSP incurs a net loss (i.e. the portion of the margin recoverable through regulated revenues less the whole contract margin incurred) from this transaction the related party makes a larger net gain (the whole contract margin received less no costs), leading to an overall net gain to the NSP's and related party's common shareholders.

However, if the related party margins are higher than the forecast allowance due to the actual costs, the capex incentives in the regulatory regime operate as normal. The NSP has limited incentive to overspend against its capex allowance because the NSP would be penalised for incurring any foregone returns on actual capex above the allowance during the regulatory control period. With a stronger capex incentive (ie the sharing ratio is applied, and /or a capex EBSS is applied), an overspend would have a negative financial impact on its parent company, given that the overspend of this actual cost is only partially recoverable through regulated revenues over the life of the assets.[45] Consequently, the NSP's incentive to overspend the actual cost type of margins than the allowance is significantly reduced.

In response to request in the directions paper for further information on the interaction between the overall capex incentives and the proposals on related party margins, [46] the AER undertook modelling of this contractual arrangement on the financial position of NSP's shareholders under different scenarios (that is, under current rules, applying capex sharing ratio only, or applying capex sharing ratio plus RAB adjustment).[47] This analysis clearly indicates that only by completely removing the recovery of this margin can the incentives for a

41 AEMC, Directions paper, pp. 57–8.

42 AEMC, Directions paper, pp. 57–8.

43 AER response to AEMC queries on AER network regulation rule change proposals, 1 February 2012, pp. 7–10.

44 See sections 2.1 and 2.4.1 of this submission why the sharing ratio and a capex EBSS not appropriate.

45 As above.

46 AEMC, Directions paper, pp. 57–8.

47 AER response to AEMC queries on AER network regulation rule change proposals, 1 February 2012, pp. 7–10.

NSP (under a contractual arrangement where the NSP and the related party both have common ownership) to incur this inefficient margin be removed.

Table 2.2 below provides further analysis on the impact of this contractual arrangement on the net financial position of the shareholders of the parent company of the NSP under three scenarios, applying sharing ratio or capex EBSS:

Table 2.2 Net financial impact on shareholders of the NSP's parent company, from spending $1 more of capex, which is normal capex or related party margin

Scenarios	Normal capex		Related party margins	
	Underspend	Overspend	Underspend	Overspend
Scenario 1: Current rules. Margin excluded from forecast, but rolled into RAB at the end of the period	**Financial loss**	**Financial loss**	**Stronger financial gain**	**Stronger financial gain**
Scenario 2: Sharing ratio only. Margin is excluded from forecast, but rolled into RAB at the end of the period applying the 60:40 sharing ratio	**Stronger financial loss**	**Stronger financial loss**	**Financial gain**	**Financial gain**
Scenario 3: Capex EBSS only. Margin is excluded from forecast, but rolled into RAB at the end of the period applying the EBSS sharing ratio.	**Stronger financial loss**	**Stronger financial loss**	**Financial gain**	**Financial gain**

Note: This analysis assumes the regulatory WACC is true WACC.
Colour keys: 'Orange' indicates financial loss, 'Red' indicates stronger financial loss; 'Light blue' indicates financial gain, 'Blue' indicates stronger financial gain.

Under each scenario, the financial position of the related party is the same. That is, the related party receives the margin from the NSP and the related party's financial position is not impacted by whether the regulatory regime permits the NSP to recover the margin.

Under the current rules, the NSP has an incentive to incur $1 more through an inflated inefficient related party margin, regardless of whether this additional $1 leads to an overspend or underspend against its capex allowance. This is because this additional $1 leads to a net financial gain to the shareholders. No real financial cost is borne by the shareholders of the parent company, but the margin will be recoverable from consumers through the return on the assets and depreciation in the NSP's regulated revenue.

However, for actual capex exclusive of a related party margin (e.g. $1 of capex incurred for substation augmentation), the capex incentives in the regulatory regime operates as normal. The NSP has no incentive to incur $1 of additional capex, regardless whether this additional $1 leads to an overspend or underspend against its capex allowance. Doing so would have a negative financial impact on its parent company. The NSP would incur a $1 cost for the actual capex, but would have to wait for the asset to be rolled into the RAB to receive revenue through the return on the assets and depreciation in the NSP's regulated revenue. Due to the time value of money, this has a negative financial impact to the shareholders of the parent company of the NSP.

Applying the capex sharing ratio or capex EBSS (Scenario 2 and 3) means that when spending an additional $1 through a margin, the financial penalty to the NSP is greater than those under the current rules. However the financial benefit to the related party is still greater than this penalty – leading to positive outcome to the NSP's shareholders if the NSP incurs this artificially inflated margin.

This analysis demonstrates that, applying either a capex EBSS or capex sharing ratio does not address the incentive for a related party of a NSP with common ownership to inflate the margin charged by the related party to the NSP. Only by completely removing the recovery of or by disallowing these margins to be rolled into the RAB can the incentive for the NSP to incur this artificially inflated margin be removed.

The AER's proposed rule change is to either include or exclude related party margins from the RAB consistent with how those margins were treated in the capex forecast at the start of the regulatory control period. Accordingly, where the AER has accepted related party margins in the capex forecast then those margins would be rolled into the RAB at the end of the regulatory control period (subject to application of a capex incentive scheme set out in an AER guideline/scheme). The detailed assessment on what is the efficient margin would be determined in a future revenue determination.

2.4.3 Symmetric or asymmetric incentives under the proposal

JEN, CKI, United Energy and Multinet Gas submitted that the AER's proposal on capitalisation and margins:

- is ambiguous and may unreasonably limit the expenditure to be rolled into the RAB
- creates asymmetric incentives
- creates high powered incentive to reduce capex, different from the current design of the Rules.[48]

These submissions demonstrate that there has been some confusion on whether the proposed rules require consistency with the amount or method from the regulatory determination and which is appropriate. However, the drafting of the proposed rules clearly refer to the consistency with the methods used to set the forecast and not consistency with the amounts.

The AER maintains that its proposal will provide for capitalised overheads to be included or excluded in the RAB where necessary to ensure that these costs are allocated consistently with the capitalisation policy in place at the time of the AER's previous determination. The AER also maintains that its proposal will provide for related party margins to be included or excluded in the RAB where they would be considered efficient in the AER's previous determination. However, the AER is open to further refinement to the proposed rule drafting when the AEMC is making its draft decision on the rule change.

[48] CKI, Submission to the Directions paper, pp. 20–1; JEN, Submission to the Directions paper, pp. 55-6; United Energy and Multinet gas, Submission to the Directions paper, p. 14.

2.4.4 Dealing with changing contract arrangements

JEN and United Energy submitted that the proposal on related party margins fails to recognise that a company's contractual arrangements may change during the regulatory control period.[49]

The AER recognises that a company's contractual agreements may change during the regulatory control period. However, the AER considers that the principles and methods identified in the AER's proposal can be applied to any new contractual arrangements. If a NSP's contractual arrangement does change during the regulatory control period, the AER will determine to include or exclude those margins from the RAB at the end of that regulatory control period, depending on whether margins under the new contractual arrangement are efficient, based on the method determined in the revenue determination.

It is also important to note that the AER has not adopted a fixed view on what are efficient margins. The AER currently accepts that related party margins are efficient for a number of purposes in its Victorian electricity distribution determination. These purposes include cost recovery of the related party's corporate overheads and the provision of a return on assets used by the related party in servicing the NSP. Further, where a related party has only a minority ownership stake in a NSP the AER's approach is to presume any margins paid are efficient and accept those margins in the capex forecast.[50]

The AER notes the recent Tribunal decision for Envestra SA gas that the network management fee paid by Envestra to its related party APA should be classed as an efficient operating cost.[51] However, the issue in that Tribunal decision concerned a particular management fee paid by Envestra. This is not the issue that is dealt with by the AER's proposal. The AER's proposal only concerns the consistent treatment of related party margins at the time the RAB is rolled forward and how that treatment is specified in the revenue determination.

That said, the AER also disagrees with Aurora Energy that the AER's proposal is an ex post review of capex. The AER is not seeking an ex post review of capex. The AER considers that a framework is still ex ante so long as any adjustments to be applied at the end of the regulatory control period are also specified on an ex ante basis. The important point is that what makes a framework ex ante is that there is certainty in how those adjustments are made not when they are made.

Ideally, ex ante frameworks would only have mechanistic adjustments at the end of the regulatory control period, such that there is no uncertainty or disagreement on how the adjustment is to be made. The AER recognises that any proposed adjustments to capitalisation policy changes and related party margins (and in particular for changed contractual arrangements), would not be mechanistic. Nonetheless, those adjustments would be based on a method set out in the revenue determination which would be known with certainty. Accordingly, it is a mischaracterisation to describe these adjustments as "ex post" adjustments.

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49 JEN, Submission to the Directions paper, pp. 51–2; United Energy and Multinet gas, Submission to the Directions paper, p. 14.

50 For a discussion of the AER's position on related party margins, see AER, Final decisions – Victorian electricity network service providers – Distribution determination 2011-2015, October 2010, pp. 149-303.

51 Application by Envestra Limited (No 2) [2012] ACompT 3 (11 January 2012).

The AER considers these proposed adjustments are necessary to ensure that a NSP faces an appropriate ex ante incentive to efficiently invest in and operate their networks. While there may be no scope to change the NSP's behaviour at the time of the review of the RAB roll forward, it is nonetheless essential that the NSPs have incentives to ensure that they only incur efficient margins (even where these margins relate to contractual arrangements that are not part of the existing price or revenue cap incentive regime). This proposal is consistent with the rationale of AEMC's rule determination in relation to pass through review.[52]

2.5 Other incentive schemes

The AER maintains its rule change proposal to ensure that it has the flexibility to introduce new incentive schemes, subject to any scheme meeting certain principles. These principles will be set out in chapters 6 and 6A.

2.5.1 Power to develop and implement pilot or test incentive schemes

The AEMC proposes that the AER be allowed to develop small scale pilots or test schemes, acknowledging that:

- there might be value in additional incentive scheme being developed from time to time
- the current rule change process may be overly burdensome for introducing new incentive schemes
- there is a risk that new incentive schemes could be introduced that lead to unexpected and perhaps unwelcome outcomes.[53]

The AER considers that it should be able to fully develop and apply effective incentive schemes not just test schemes or small scale pilots.

Also, the directions paper refers to Ofgem's IQI (which is a form of menu regulation) as a possible mechanism for improving the accuracy of NSP forecasts.[54] The AER agrees that this model has potential benefits and is worth exploring further. The AER's broad new scheme power would permit the AER to explore the adoption of the IQI in some form, taking into account Ofgem's experience, and to make further refinements to it over time as necessary.

The AER disagrees with the submissions that the AER would have a quasi-rule making power as part of developing new schemes, given the institutional arrangements in Australia.[55] The AER recognises the unique institutional arrangements in Australia with separate roles for the AEMC as 'rules maker' and for the AER as economic regulator and 'rules enforcer'.[56] However, as the AEMC noted, these roles do not enable a clear and unambiguous approach

52 AEMC, Rule Determination, 16 November 2006, p. 106.
53 AEMC, Directions paper, pp. 61–2.
54 AEMC, Directions paper, p. 40.
55 JEN, Submission to the Directions paper, p. 53, 57; Auroa, Submission to the Directions paper, pp. 10–11; Ausgrid, Submission to the Directions paper, p. 28; SP AusNet, Submission to the Directions paper, p. 15; United Energy, Submission to the Directions paper, p. 16; ENA, Submission to the Directions paper, p. 36.
56 The COAG Energy Market Review (Parer Report), December 2002.

to the content of rules for the economic regulation of network services and how those rules should be developed.[57]

The AEMC acknowledges, when reviewing the economic regulation of electricity transmission services in 2006, the AEMC separately considered the appropriate balance between codification of the framework in the rules and the conferral of discretions on the AER in different contexts. At the time the AEMC concluded that there was no general principle that could be applied to determine the appropriate extent of codification of rules in all circumstances. The AEMC's general approach was to codify those elements of regulatory methodology and process which were comparatively uncontroversial, unlikely to need to vary in application across different transmission service providers in different circumstances or which are necessary to be determined on an ex ante basis for efficient administration of the regulatory process. [58]

The AEMC also stated that there are significant areas of regulatory decision making that should involve the exercise of judgment and discretion by the regulator:

> This is because good economic regulation should be sufficiently flexible to adapt to the individual circumstances of regulated businesses across different periods of time. Areas of flexibility and discretion also allow the regulatory process to evolve with experience, learning and innovation. Importantly, however, where legal rules confer discretions on regulators the rules should also specify criteria for exercising those discretions. [59]

Consequently, it is not inappropriate for the AER to develop new schemes in its application of the rules nor is this properly characterised as affording the AER a quasi-rule making power. Rather it means that the AEMC should develop and set out in the rules principles which govern the scope and content of any new schemes the AER might develop.

As explained in the proposal, regulatory best practice and the development of innovative incentive schemes is continually evolving. Incentive schemes are an important part of the regulatory toolkit and the framework that should be sufficiently flexible to respond in a timely fashion to developments in regulatory best practice. The AEMC should decide to allow the AER to have the discretion to introduce any new incentive schemes subject to the principles included in the proposed rules and any other relevant principles the AEMC deems fit to prescribe. To that end the AER agrees with the AEMC that there should be a principle that directs the AER to have regard to the interaction of any scheme with other incentive schemes in the framework.[60] It is important to keep in mind that should the AER have this discretion, in introducing and applying any incentive scheme, the AER would continue to be bound by the Law. Specifically, the AER would be required to take into account the RPP and ensure that any the introduction or application of an incentive scheme would or is likely to contribute to the achievement of the NEO.

However, the AER disagrees other principles submitted by CKI, given they are either redundant or unduly restrictive and likely to stifle innovation. The AER notes that Professor Littlechild also disagrees with these other principles.[61]

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57 AEMC, Directions paper, p. 12.
58 AEMC, Directions paper, p. 12.
59 AEMC, Directions paper, pp. 12–3.
60 AEMC, Directions paper, p. 62.
61 AEMC, Directions paper, p. 61.

2.5.2 Appropriateness of constraints on new scheme power

Constraining the AER to only making temporary schemes with very low revenue at risk is inappropriate. The efficacy, if any, of a temporary scheme would be doubtful. This is because if a scheme is temporary, there is no real or continuous incentive for a NSP to pursue efficiency or performance improvements. Further, the efficacy of any scheme is compounded by having a low revenue at risk penalty or reward, which ultimately means that a NSP will not be exposed to the full penalty associated with any efficiency losses or conversely the full reward associated with any efficiency and/performance gains. To the extent that there might be concerns that under the proposed rules the AER is able to set an unreasonably high revenue at risk, this is unfounded given that in implementing or applying any new incentive scheme, the AER must have regard to RPP and must do so in a manner that will or is likely to contribute to the achievement of the NEO. In particular, the AER notes that the RPP, among other things, directs the AER to ensure that a NSP is to be provided with a reasonable opportunity to recover efficient costs.

The AER does not consider the AEMC's proposed temporary schemes necessary. The AER has a demonstrated history of being an accountable and transparent regulator in the developing and implementing the STPIS, the EBSS and the DMIS. When introducing the STPIS to the NSW DNSPs, the AER determined to apply a 'paper trial' to the NSW DNSPs, in light of data concerns along with design issues and uncertainties surrounding interactions with mandated licence obligations. That is, the AER is to collect and monitor service performance data in the 2009–14 regulatory control period. However, revenue will not be placed at risk under the data collection during this period.[62] In addition, that AER has often designed schemes that are sufficiently flexible and tailored to different circumstances, such as different revenues at risk (STPIS for distribution).

As stated in the AER's proposal, the current process to implement new schemes is cumbersome. In order for a new incentive scheme to be applied to NSPs under the current rules, a full rule change process would need to be conducted. This process is not timely and imposes significant costs on all interested stakeholders. It is also an overly costly process to incrementally develop the regulatory regime in order to keep pace with international best practice. The AEMC's proposed pilot scheme makes the introduction of new schemes even more cumbersome, given that a rule change process would subsequently need to be conducted before a full scheme can be implemented.

In conclusion, the AER maintains its proposal to allow the introduction of new incentive schemes, subject to any scheme meeting certain principles.

2.6 Shared assets

The AER considers that the current rules should recognise that some of the assets owned and utilised by NSPs to provide electricity services are also used in the provision of services other than standard control services. Users who effectively pay for the regulated assets currently receive no compensation for use of these assets to deliver other services.

[62] AER, Final decision, New South Wales electricity determination 2009–10-2013–14, p. 244.

The AEMC accepted the AER proposed rule change in principle; however, there were some specific matters where the AEMC differed from the AER's proposal. In this section we raise matters relating to extending the provision to TNSPs, excluding assets used for alternative control services, and the form of the mechanism.

In short, the AEMC should accept the AER's rule changes for shared assets as originally drafted and extend these to TNSPs.

2.6.1 Extending the provision to transmission

The AER supports the AEMC's proposal to extend the proposed shared asset rule change to TNSPs. The AER did not originally seek extension to TNSPs on materiality grounds. However, any materiality issues can be assessed by the AER should a situation emerge where shared assets were used for other purposes by a TNSP. By including this provision for TNSPs, any incentive on TNSPs to use assets for non-regulated purposes (without providing compensation to customers) will be reduced.

2.6.2 Excluding alternative control services

The AER considers the proposed rules on shared asset should extend to all regulated assets, including assets used in the provision of alternative control services (ACS). In the directions paper, the AEMC accepted AusGrid's submission that it was inappropriate for ACS to be covered by the proposed rules as such services are subject to a separate control mechanism.[63] Why this was a problem was not further elaborated on.

Excluding ACS assets as suggested by AusGrid gives rise to the following concerns:

- Some alternative assets such as meters and streetlights (including easements) can have other uses that generate significant income (For example, some smart meters may be able to provide communication services, street lighting easements could provide access for other services, etc). There appears to be no in principle reason for limiting this rule only a subset of regulated assets, allowing customer only to benefit from a subset of assets they fund.[64]

- The classification of services will become more of an issue if the treatment of standard control services (SCS) assets and ACS assets are differentiated in this way. To do so provides an incentive for a NSP to have the assets that generate additional income from other sources classified as ACS.

- The AER's proposal was to cover not only where regulated assets are used for non-regulated activities, but also the situation where shared assets are used for SCS and ACS. Under transitional rules in Queensland, all shared assets used for ACS and SCS are included in the SCS asset base and a compensating revenue adjustment is made to SCS revenues to reflect the use of these shared assets for ACS. Differentiating between SCS and ACS could create a significant definitional issue. For example, is a shared asset primarily associated with a SCS (and therefore subject to the proposed rules) or an ACS (and therefore not subject to the proposed rules)?

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63 AusGrid, Submission to the directions paper, p.33.

64 As noted above, the AER supports the AEMC's direction to extend the proposed rule to TNSPs. It's not clear why the AEMC would extend the rule to one area but restrict it in another.

While it is not clear what reasons underlie AusGrid's concerns, the AER does not see any practical issues in the application of its proposed rules. The proposed rules allow the AER to make an adjustment either through the revenue adjustments in the building blocks or through a separate adjustment mechanism, discussed further below. In this regard, ACS being subject to a separate mechanism would not prevent an adjustment being applied to this mechanism.

The AER recognise that any compensation for the use of shared assets may need to be allocated between users of SCS and ACS. This would be a matter for the AER to address as part of designing the adjustment mechanism. If, for example, a DNSP provides NBN services using poles and easements that included ACS (street lighting) assets, the AER will need to decide how much is shared between SCS and ACS users. Simply ignoring the use of ACS assets for other purposes is not considered by the AER to be appropriate as a matter of principle.

2.6.3 Form of the mechanism(s)

The AER agrees with the AEMC that the AER should have the discretion to determine the appropriate mechanism to be used to provide for the sharing of the revenue. The proposed rules included an adjustment mechanism that allowed for annual revenue adjustments and forecast adjustments to the building block revenue requirement. In the case of the AER using forecast adjustments to the building block revenue requirement, the AER also proposes that it have the option to apply/not apply unders and overs adjustments based on actual outcomes.[65]

The AER considers that its drafting of the proposed rules allow for each of these adjustment options to be adopted dependent on the relevant circumstances. Circumstances would include the way the assets are controlled and the robustness of the forecast revenues from the other activities undertaken by the NSP.

[65] In Queensland, one DNSP has such an unders and overs adjustment, while the other does not. Whether unders and overs adjustments are needed depends in part on a how confident the AER is in the forecasts.

3 Rate of return

In the rule change proposal, the AER outlined a process for determining the rate of return which differs from each of the three frameworks currently used for electricity and gas distribution and transmission networks. Each of these current frameworks is flawed, and none should be adopted without amendment.

The AER considers the best framework is one which:

- the rules define the framework (including the nominal post-tax and return on equity model); define the process for conducting the WACC review; and establish high level principles to be applied in the WACC review
- the WACC review establishes discrete values for stable parameters, or methods for time dependent parameters such as the risk–free rate and the debt risk premium
- the regulatory determination or access arrangement applies, without departure, the values and methods established in the WACC review.

The AER proposed a number of rule changes to align the processes for determining the rate of return across all electricity networks and gas pipelines. The AER proposed a single, common rate of return framework that centred on an industry–wide WACC review in which all parameters (including inter-relationships) are considered.

The outcomes of that industry–wide WACC review are then applied without amendment at each applicable reset—for WACC parameters where the WACC review sets out a methodology (instead of a value), that methodology is applied at that time using relevant updated data. The AER proposed that changes to those WACC parameter values or methodologies occur through undertaking a new industry–wide WACC review, which under the AER's proposal would occur at least once every five years.

The benefits of focusing the debate on appropriate WACC parameter values and methods into an industry–wide WACC review process are that it will:

- better allow lessons learned from previous consideration of WACC issues, including the Tribunal's views, to be reflected in the next consideration of WACC issues—this does not happen effectively with consistently over-lapping reset processes
- facilitate reconsideration of all parameters, rather than focusing on a select few
- provide a more appropriate forum to consult on changes in approach given industry–wide engagement
- better promote user group engagement, given the limited resources of user groups
- increase administrative efficiency.

The AER's proposal for a common framework across the electricity transmission, electricity distribution and gas sectors received support from most stakeholders. There has been general consensus that there is no good reason to have three separate and different processes. However, the AER's proposal to undertake a single WACC review that is applicable to each of the three sectors received limited support. The two main criticisms from stakeholders were that:

- limiting the debate on WACC issues to the WACC review would not provide adequate flexibility for the reconsideration of WACC issues resulting from changed market conditions or other circumstances

- the AER's determination of WACC parameters would not be subject to merits review.

The AER has reviewed the AEMC's direction paper and submissions from stakeholders. The AER considers the first of these criticisms is misplaced.

The AER considers that the AEMC and other stakeholders have not fully appreciated the flexibility that was incorporated in its proposal. The AER proposed that the review would be conducted at least every five years. This proposal allows the AER to bring forward the WACC review, on application by interested parties or at its own initiation, in response to changing market circumstances or other developments.

The AER agrees with the AEMC and stakeholders that it is important that WACC issues can be considered at an appropriate frequency that allows for the review of changed market conditions, developments in financial theory, and changes in market practice.

The AER does not agree with the AEMC and SFG that, as a general principle, allowing for all WACC parameters to be considered at every reset will necessarily increase the quality of any WACC estimate. This position does not adequately recognise the benefits of reconsidering WACC issues in the context of an industry–wide consultative process. This position also does not adequately appreciate the benefits of only commencing a reconsideration of WACC issues after the previous process has ended (that is, avoiding a continual stream of overlapping processes).

That said, in light of submissions, the AER considers that amendments to its original proposal can be made to provide greater clarity about the application of the outcomes of the WACC review. These amendments include:

- Reducing the lead time between when the WACC review is completed and when it is applied. Specifically, amending the rules to allow the outcomes of the WACC review to be applied to regulatory resets where the draft decision is released after the WACC review is finalised.[66]

- Reducing the maximum interval between WACC reviews. Specifically, for the WACC review to occur at a fixed interval of every two years.[67]

These enhancements to the AER's proposal would reduce the lead time between the finalisation and application of the WACC review. The shortest lead time between the finalisation of the WACC review and its application to a particular reset determination final decision would be five months; the maximum would be just over two years. For comparison, if the current transmission framework was applicable to all NSPs, the maximum lead time would be 5.2 years.

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66 The current Rules require that for the WACC review to be applicable to a given reset, the WACC review must be finalised prior to the lodgement of the NSPs initial regulatory proposal.

67 A fixed interval of every three years is also a reasonable alternative.

The AER considers that these enhancements maintain the benefits from reconsidering WACC issues in an industry–wide forum. These amendments would also result in a framework that promotes an appropriate balance between certainty and flexibility as they:

- enables WACC issues to be reconsidered on a sufficiently frequent basis
- permits the AER's latest considerations on WACC issues to be applied to its most recent resets
- provides NSPs with a degree of certainty regarding the application of the outcomes of the WACC review to their particular reset
- avoids procedural concerns that may arise through applying the latest WACC review methodologies for the first time at the final decision stage.

In respect of the application of merits review, the AEMC and stakeholders are correct that based on the current framework, the AER's proposal would remove the determination of rate of return decisions from merits review. This is because the WACC review is not currently subject to merits review. Clearly this is a major concern for service providers. In principle, the AER does not object to the expansion of the merits review framework to cover the WACC review. A regime that provides for a frequent, industry–wide, holistic consideration of cost of capital issues (including merits review) would be clearly superior to the current approach where issues are considered on a piece-meal basis with overlapping decisions. The AER notes that the Standing Council on Energy and Resources (SCER) is currently reviewing the limited merits review framework and this would be an appropriate issue for consideration by SCER.

However, the AER considers that the rules should not be 'reverse-engineered' to deliver a desired outcome on the application of merits review. Such an approach is highly likely to deliver rules that perform poorly. Instead, the AEMC should determine the appropriate rules that will deliver the best outcome on cost of capital issues. If the AEMC comes to the view that merits review is an essential element it (or any other like minded party) can put that submission to the current LMR process and ultimately to SCER.

Consistent with the general principles discussed above, the AER considers that the methodology used to determine the debt risk premium should be determined during the WACC review. This includes the definition of the benchmark. Essentially, the AER maintains that it should have the ability to consider (and adopt) each of the approaches proposed by stakeholders at the time of the WACC review. This submission expands on the limitations in the current Rules which would prevent the AER from adopting these approaches.

Overall, the AER considers that its proposed rule change best meets the relevant factors identified by the AEMC—that the allowed rate of return reflects efficient financing costs, and provides certainty and transparency for investors

The remainder of this chapter sets out the AER's response to the AEMC's consideration of how the rate of return should be established. In particular, this chapter discusses the following:

- common framework across different sectors
- status of the WACC review

- consideration of merits review
- parameter estimates and persuasive evidence
- cost of debt.

3.1 Common framework across different sectors

The AER's rule change proposal stated that a common framework should be adopted for setting the rate of return under both the Electricity and Gas Rules.

The AER's proposal provided the following justification for this approach:

- The existence of different frameworks creates the potential for investment distortions. That is, inconsistent outcomes can occur not because of differences in industry sectors or differences in market conditions but because of different regulatory frameworks. These differences could create distortions in investment incentives across industries.
- No obvious policy reasons exist to maintain different frameworks. The current differences in the frameworks are the result of historical circumstance and not conscious design.[68] In this context, the AEMC's review provides the opportunity for a holistic review, consideration of what the best framework would look like, and the adoption of that framework across each sector.

The AER's proposal for a common framework received qualified support. Most notably, there was general support for convergence of the electricity distribution and transmission frameworks.[69] Moreover, those submissions that did not support the AER's proposal did so because they tended to disagree with the actual framework proposed, as distinct from the concept of a common framework across gas and electricity.[70]

The AEMC's initial position in its directions paper is a preference for a single framework.[71] The AEMC also stated that the adoption of a common framework does not necessarily imply that the same benchmark efficient firm, or parameter values, should apply for each and every electricity NSP or gas service provider.[72]

The AEMC's position is supported by SFG Consulting (SFG), who in its report prepared for the AEMC, advised of several reasons to adopt a common rate of return framework.[73]

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68 For example, the three frameworks were considered at different times, by different decision making bodies, and with different pre-existing frameworks to consider.

69 See for example: Grid Australia, *Consolidated Rule Request – National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2011, Response to AEMC Consultation Paper*, December 2011, p. 58; ETSA, CitiPower and Powercor, *Joint response to AER and EURCC rule change proposals (ERC0134 / ERC0135)*, December 2011, p. 24.

70 See for example: Energy Networks Association, *Response to Consultation Papers, Proposed Energy Rules Changes: Economic Regulation of Network Service Providers, Calculation of Return on Debt for Electricity Network Businesses*, December 2011, p. 41; The Financial Investors Group, *AEMC Consultation Papers: rule change proposals relating to the economic regulation of electricity (ERC0134 and ERC0135) and gas (GRC0011) networks*, December 2011, p. 34.

71 Australian Energy Market Commission, *Directions paper: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012*, March 2012, p. 93.

72 AEMC, *Directions paper*, March 2012, p. 91.

73 SFG Consulting, *Preliminary analysis of rule change proposals, Report for AEMC*, February 2012, p. 26.

Consistent with the AER's proposal, SFG stated that the models used to determine the WACC are not industry or sector specific. For example, the assessment of whether the Capital Asset Pricing Model (or other models) should be relied upon to estimate the cost of equity, or whether the AER's approach to determining the cost of debt is reasonable, should be independent of whether the model is applied to the gas or electricity sectors. Similarly, the consideration of the definition of the WACC as a pre or nominal post–tax framework should not differ across sectors or industries.

The AER agrees with the AEMC and SFG, that a single framework should be used across all sectors. The AER also agrees with the AEMC (and SFG) that the adoption of a common framework does not necessarily imply that the same benchmark efficient firm, or parameter values, should apply for each and every electricity NSP or gas service provider.

However, there are practical limitations which constrain the regulators ability to accurately identify parameter differences across sectors. Indeed, SFG stated that these differences can be impossible to detect.[74] To some extent, the inability to identify parameter differences is likely to result in consistent parameters being applied. The AER considers that this supports its proposal for a binding WACC review. That is, if similar parameters are likely to be applied—due in part to an inability to accurately determine parameters—there is a reduced benefit of having the flexibility to determine WACC parameters at every reset.

Consistent frameworks do not necessary lead to the same outcomes across all service providers and over time. However, a consistent framework will mean that if different outcomes do arise these will be the result of differences in risk across sectors or changed market circumstances over time, and not from inconsistent regulations (as occurs under the current Electricity and Gas Rules).

For clarity, the AER's proposal of a common framework should not be interpreted as a preference for one of the existing frameworks to be imposed on the others. Instead, the AEMC should assess the positive and negative aspects of the existing frameworks, as well as alternative approaches not currently prescribed in the rules, and determine an approach that results in the best framework in which the AER is able to make decisions that are consistent with the RPP and that will or are likely to contribute to the achievement of the NEO or the NGO. More generally, the AER considers that the best framework is one in which:

- The rules define the framework (including the nominal post-tax and return on equity model); the process for conducting the WACC review; and establish high level principles to be applied in the WACC review.
- The WACC review establishes discrete values for individual parameters, or methods for time dependent parameters such as the risk–free rate and the debt risk premium.
- The regulatory determinations or access arrangements apply, without departure, the values and methods established in the WACC review.

[74] SFG Consulting, *Preliminary analysis of rule change proposals, Report for AEMC*, February 2012, p. 28.

3.2 Nominal post–tax framework and the Capital Asset Pricing Model

As outlined in section 3.1, there are no compelling reasons to adopt different rate of return frameworks across the gas and electricity industry, or the transmission and distribution sectors. Accordingly, the AER has proposed a common framework be adopted.

In the context of a common framework, the AER's rule change proposal submitted that the both the Electricity and Gas Rules should specify that a nominal post-tax approach be adopted.[75] Additionally, the AER proposed that both sets of rules should specify that the return on equity is to be calculated using the Capital Asset Pricing Model (CAPM).[76]

3.2.1 Nominal post-tax or pre-tax framework

As stated in the AER's rule change proposal, the use of a pre-tax or nominal post–tax approach will, in theory, produce equivalent outcomes. This theoretical outcome, however, is only achieved if the effective company tax rate is accurately calculated under the pre-tax framework.[77]

In electricity, the AER has applied a nominal post–tax approach as required by the Rules. In gas, where the AER has the discretion to determine the approach, the AER has also used a nominal post–tax approach in every gas access arrangement to date. A post tax approach was also adopted by the ACCC prior to the AER taking over the economic regulation of electricity and gas transmission.

The AER's reason for not adopting a pre-tax approach is that, as SFG acknowledged, incorporating tax effects via an adjustment to the WACC is a blunt instrument as it requires that the same adjustment must apply to every year of the regulatory control period (despite varying cash flows).[78] Accurately determining the effective company tax rate, however, is difficult, and the alternatives—the company tax rate, or a conservatively high assumption of the effective tax rate—can lead to the systematic overcompensation for company tax.

The problems inherent in a pre-tax approach are recognised by the ERA, whom despite having previously adopted a pre-tax framework, are reconsidering moving toward a nominal post–tax determination.[79] Similarly, IPART have recently shifted to a post-tax approach (albeit real, as opposed to nominal), citing that a post-tax approach leads to a more accurate estimate of a tax liabilities in comparison to a pre-tax WACC.[80]

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75 Australian Energy Regulator, *Rule change proposal, Price and revenue regulation of gas distribution and transmission services, AER's proposed changes to the rate of return provisions of the National Gas Rules*, September 2011, pp. 7–10.

76 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Gas Rules*, September 2011, pp. 11–12.

77 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Gas Rules*, September 2011, p. 8.

78 SFG Consulting, *Report for AEMC*, February 2012, p. 26.

79 Economic Regulation Authority, *Submission: Consolidated Rule Request – National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2011 and National Gas Amendment (Price and revenue regulation of gas services) Rule 2011*, December 2011, p. 4.

80 Independent Pricing and Regulatory Tribunal, *National Electricity and Gas Rules – proposed rule changes to the economic regulation of network service providers*, December 2011, p. 14.

The AER considers that the consistent use of the nominal post–tax approach by the AER, and the evidence from other regulators is indicative of the supremacy of the nominal post–tax approach over the pre-tax alternative. Administrative difficulties may also arise from shifting between a pre and nominal post–tax framework, and detract from any perceived need for flexibility. Accordingly, prescribing a nominal post-tax approach would streamline the access arrangement review process and provide certainty for stakeholders. The AER maintains that its proposal to codify the nominal post-tax approach in a common rate of return framework is appropriate.

However, if the AEMC does not accept the AER's proposal, in the alternative the AER suggests that:

- The Gas Rules be amended such that the adoption of a pre or nominal post–tax approach is to be determined in the WACC review and that the outcome from the WACC review must be subsequently applied in each applicable access arrangement. This contrasts with the current Gas Rules in which the choice of approach is determined in each access arrangement.

- The Electricity Rules be amended, for consistency, to also reflect this alternative Gas Rules change. This contrasts with the current Electricity Rules that mandate the use of a post tax approach.

This alternative approach is at least preferable to the current Gas Rules, and consistency between the two sets of rules is desirable, as:

- there are no reasons for adopting a different approach between the electricity and gas sectors, or between individual service providers

- the arguments around the different approaches are well known and advancements in regulatory theory on this topic are unlikely to occur regularly or quickly

- there are practical administrative benefits in determining the approach in advance of applying it in a particular determination or access arrangement.

3.2.2 Return on equity models

The CAPM is a well accepted financial model and has been applied by the AER (and the ERA) in all gas determinations to date. The robustness and appropriateness of the CAPM and alternative models, however, have been debated at length in recent gas determination processes.[81]

The AEMC's directions paper stated that it is difficult to make the case that allowing the regulator to consider more information would systematically result in a poorer WACC estimate.[82] This view was supported by SFG.[83]

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81 See for example: AER, *Final decision on Jemena Gas Networks*, June 2010, pp. 100–121; AER, *Final decision on Envestra (SA)*, June 2011, pp. 164–175; ERA, *Draft Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, May 2011, p. 111–118; ERA, *Final decision on WA Gas Networks Pty Ltd, February 2011*, pp. 95–102.

82 AEMC, *Directions paper*, March 2012, p. 90.

83 SFG Consulting, *Report for AEMC*, February 2012, p. 27.

The AER does not agree with the AEMC, or SFG. In general, finance theory and methods are slow to develop. Indeed, none of the alternative financial models proposed by gas NSPs—Fama French three factor model (1993), Black CAPM (1972), Merton's inter-temporal CAPM (1973) and dividend yield models (1959)—represent recent theoretical developments. The likelihood, therefore, of one model suddenly becoming a definitively better model than the alternatives is low. That is, the AER has already considered whether alternative models can consistently produce better estimates of the required return on equity than the CAPM. Similarly, the AER has already considered the limitations of the CAPM, as noted by CEG.[84]

In this context, it is notable that SFG stated that it would only be rational for a business to re-package an argument if it felt that it had not been satisfactorily addressed by the AER and that either the AER or Tribunal may now decide the issue differently.[85] The AER considers that this statement ignores the incentives on regulated NSPs. In particular, NSPs are incentivised to re-package any arguments that were not determined in their favour, irrespective of whether the issue was appropriately considered by the AER. Even if the NSP's expectation of convincing the regulator is low, so long as it is not zero it still has an incentive to repackage the arguments. Further, even small changes in the WACC can have a significant impact on regulated returns. These incentives are relevant to the assessment of the CAPM against alternative models.

Further, the choice of the regulator to depart from a reliance on the CAPM would be a significant change in approach, having impacts beyond the energy sector and potentially affecting investment certainty. It appears unlikely, therefore, that there would be a justifiable departure from the CAPM over the medium to long term.

The use of the CAPM, or alternative models, is also directly relevant to the parameters the AER must consider. To the extent that other models are considered, other parameters may need to be considered. Assessing all parameters and alternative models concurrently, however, is practically difficult, and would be particularly so if undertaken during a tight reset timeframe.

Given the above, the AER considers that investment certainty and administrative efficiencies should be given primacy over flexibility. That is, the AER maintains the view that the prescription of the CAPM in a common rate of return framework is appropriate.

However, if the AEMC does not accept the AER's proposal, in the alternative the AER suggests that:

- The Gas Rules be amended such that the use of a specific cost of equity model is to be determined in the WACC review and that the outcome from the WACC review must be subsequently applied in each applicable access arrangement. This contrasts with the current Gas Rules where the choice of model is determined in each access arrangement.

- The Electricity Rules be amended, for consistency, to also reflect this alternative Gas Rules change. This contrasts with the current Rules, which mandate the use of the CAPM.

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84 Competition Economists Group, Proposed changes to the National Gas Rules, A report for APIA, December 2011.

85 SFG Consulting, *Report for AEMC*, February 2012, p. 31.

As above, this alternative approach is at least preferable to the current Gas Rules, and consistency between the two sets of rules is desirable.

3.3 Status of the WACC review

The AER does not agree with the AEMC and SFG that, in general, excluding any information from consideration will lower the quality of any WACC estimate.[86] Allowing the regulator to consider new information at each reset, but without the ability to effectively undertake industry–wide consultations or to extend decision timeframes, will not necessarily produce high quality WACC estimates.[87]

3.3.1 Timing of new information and the continual WACC review

The AER maintains that, as per its rule change proposal, a binding WACC review will produce the best quality WACC estimates. The AER's rule change proposal stated that, in particular, the reduction in the administrative burden on the AER and other stakeholders was a relevant consideration.[88]

In response, the ENA stated that gamma and the MRP were the only parameters determined in the WACC review that have been subject to any form of review.[89] The ENA, however, restrict their focus to parameters considered during the WACC review. This fails to fully account for the wider spectrum of WACC issues considered by the AER.

To demonstrate, table 3.1 lists the WACC issues that have been debated at each reset since the 2009 WACC review.[90] References to the DRP reflect debate as to the method used to determine the DRP (and not the benchmark assumptions set during the WACC review). Similarly, the use of Commonwealth Government Securities as a proxy to measure the risk-free rate has not been debated. However, debate has arisen as to the averaging period for which the risk-free rate is measured.

It is clear from table 3.1 below that debate has progressively arisen around almost every WACC parameter since the completion of the WACC review. The level of gearing and credit rating are the only exceptions. The AER considers that a key driver of this ongoing debate is the overlapping nature of reset processes, coupled with the ability for WACC parameters to be determined at each individual reset. Given this, the rationale for a binding WACC review should also be considered in the context of the impact that the timing of new information has on the AER's ability to produce high quality WACC estimates.

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86 AEMC, *Directions paper*, March 2012, p. 90, SFG Consulting, *Report for AEMC*, February 2012, p. 24.

87 Under section 28ZG of the NEL, if the AER does not make a network revenue or pricing determination within the period of time specified by this Law or the Rules for the making of that determination, the AER must give a report to the MCE that (amongst other things) specifies a date by when the AER considers the determination will be made. The AER, however, does not consider that this clause is appropriate, or intended, to be utilised in the circumstances discussed.

88 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 67.

89 ENA, *Response to Consultation Papers*, December 2011, pp. 42–43

90 This includes issues that have arisen due to NSP's proposals, as well as changes in approach initiated by the AER.

Table 3.1 WACC parameters reconsidered at each regulatory reset (commencing after the finalisation of the 2009 WACC review)

Network	DRP	Equity beta	Equity models	Gamma	MRP	RFR
WACC review, May 2009	X	X	X	X	X	X
Elec. distribution (QLD), May 2010	X	-	-	X	-	X
Elec. distribution (SA), May 2010	X	-	-	X	X	-
Gas distribution (NSW/ACT), June 2010	X	X	X	X	X	X
Elec. distribution (VIC), October 2010	X	-	-	X	X	X
Gas distribution (QLD), June 2011	X	X	X	X	X	X
Gas distribution (SA), June 2011	X	X	X	X	X	X
Gas transmission (NT), July 2011	X	X	-	X	X	-
Elec. distribution (TAS), April 2012	X	-	-	-	X	X
Elec. transmission (QLD), April 2012	X	-	-	-	-	-
Gas transmission (RBP), April 2012	X	X	-	-	X	X
Gas distribution (VIC)	X	-	-	-	X	X
Gas transmission (VIC)	X	X	-	-	X	-

Note: The level of gearing and the credit rating have not been debated, and hence, are not included in the table. Further, for the purposes of the above table, following the release of the Tribunal's decision in regard to Gamma (and the AER's acceptance of this decision), the AER has not considered Gamma to have been contested.
Source: AER analysis.

The AER is limited in its ability to control the timing of new information, particularly in respect of the timing of Tribunal decisions and contemporaneous reset processes. Both the Tribunal decisions and contemporaneous reset processes evidence the significant debate that can occur in respect of WACC parameters. While the timing of Tribunal decisions cannot be addressed through the Rules, the extent to which debate on WACC parameters are continuously ventilated, particularly due to overlapping reset processes, can be addressed.

For example, in the context of the debt risk premium, significant new information arose between the draft and final decisions for the 2011–15 Victorian electricity distribution determinations and the 2011–16 Queensland and South Australian gas distribution NSPs. The complexity of the submissions received in response, combined with the truncated timeframes available for assessment, restricted the AER's analysis of these issues.

3.3.2 Stakeholder engagement

As acknowledged by the AEMC, NSPs have an inherent incentive to argue for the highest possible WACC estimate.[91] This incentive is critical in the context of promoting a rate of return

[91] AEMC, *Directions paper*, March 2012, p. 83.

framework which facilitates informed engagement with all relevant stakeholders. That is, the rate of return framework should encourage user groups and other stakeholders to undertake their role as countervailing agents to the NSPs inherently biased proposals.

In this context, the AER proposes that the current chapter 6 framework is fundamentally flawed. Consumer groups and other stakeholders do not have the same level of resources as regulated NSPs.[92] The ability for these stakeholders to continually act as countervailing agents at each determination or access arrangement, therefore, is limited. SFG's position—to allow all WACC parameters and the rate of return models to be determinable at every reset—exacerbates these resource asymmetries. This can lead to significant changes being made without industry–wide consultation.

SFG, the NSPs, and their industry associations, however, have given minimal regard to the role of industry–wide engagement in producing high quality WACC estimates.[93] Instead, SFG proposed that the AEMC should consider giving the regulator the flexibility to:

- adopt the parameter values that they consider to be most appropriate at the time of each determination or access arrangement,
- consider models other than the CAPM when estimating the required rate of return on equity.[94]

As the AER stated in its rule change proposal, stakeholder engagement is better achieved where all parameters are open for debate in a single focused consultation process, where all affected parties are incentivised to participate and devote resources.[95] Indeed, this was a key consideration of the Tribunal in directing the AER to undertake an industry–wide consultation process to determine the best method for calculating the DRP. Notably, the Tribunal identified that wider industry engagement should lead to greater regulatory consistency and more efficient decision making processes.[96]

The NGR is also compromised by the inherent incentives of regulated NSPs and the inability of stakeholders to participate fully in the regulatory process. The rate of return framework under the NGR, however, provides full discretion to the regulator to substitute a proposed rate of return with the regulators reasonable alternative. Further, the NGR allows the regulator greater flexibility in delaying access arrangements.

3.3.3 Parameter interdependencies

Interdependencies between parameters are also best considered in a single focused consultation process. NSPs have an incentive to propose offsetting adjustments to interdependent parameters only where such changes would be favourable to the business. Moreover, as discussed previously, the resources of consumer groups and other stakeholders are limited. It is less likely, therefore, that the consideration of WACC parameters at every regulatory reset will result in a more balanced consideration of parameter interdependencies.

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92 Moreover, the costs of regulated NSPs proposals are recovered through opex.

93 See for example: SFG Consulting, *Report for AEMC*, February 2012, p. 32.

94 SFG Consulting, *Report for AEMC*, February 2012, pp. 28, 32.

95 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 69.

96 Australian Competition Tribunal, *Application by Envestra Limited (No 2) [2012] ACompT 3*, January 2012, paragraph 95.

In regard to interdependencies, the AEMC also questioned whether the merits review process itself would need to be reviewed. That is, the AEMC questioned whether the Tribunal can review just one parameter in isolation, or whether it can consider the inter-relationships between other WACC parameters that were considered by the AER in its decision. The AER submits that this was not a concern in its rule change proposal.[97]

3.3.4 Contemporaneous WACC review

The AER maintains that allowing for all WACC parameters to be considered at every reset will not necessarily lead to higher quality WACC outcomes. As discussed previously, allowing for all WACC parameters to be considered at every reset is problematic in not promoting industry–wide consultations. This can also materially limit the timeframes in which the AER must assess new information, including parameter interdependencies. In contrast, applying the WACC review outcomes without departure is more likely to provide a rate of return that best reflects efficient financing costs, and provides certainty and transparency for investors.

Submissions to the AEMC, however, have raised concerns regarding how the application of the WACC review outcomes without departure can react to changing market circumstances.[98] The AER considers that the flexibility inherent in its proposal—the ability to bring forward the timing of the WACC review—should be considered in addition to that inherent in the current framework. For example, the DRP and the risk-free rate are time dependent variables which are updated to reflect current market data at the time of the each reset.

Additionally, the AEMC could consider amending the rules to allow the outcomes of the industry–wide WACC review to be applicable to contemporaneous resets—that is, resets that are being undertaken at the same time as the WACC review. The current rules require that for the WACC review to be applicable to a given reset, the WACC review must be finalised prior to the lodgement of the NSPs initial regulatory proposal.[99] Removing this restriction would reduce the lead time that currently exists between the finalisation and application of the WACC review. This would ameliorate many of the concerns raised in submissions regarding the inability for a binding framework to adequately react over time to changing market conditions.

The AER recognises, however, that complications may arise when the WACC review is undertaken contemporaneously with a reset process. This is particularly the case when the methodology, as well as the application of that methodology, are being debated concurrently.[100] Accordingly, the AER considers that the WACC review should only be applicable to resets where the draft decision is released after the WACC review is finalised. This will enable the AER to apply the latest WACC review outcomes in a reset draft decision,

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97 The Tribunal already has the ability to consider submissions proposing offsetting adjustments to related parameters. The Tribunal, however, can only consider offsetting adjustments in isolation. For example, the AER did not propose an offsetting MRP adjustment (following the Tribunal's decision to amend the value determined for Gamma) because the impact of other relevant factors—including updated data on the various measures of the MRP—would also need to be assessed.

98 See for example: Grid Australia, *Response to AEMC Consultation Paper*, December 2011, p. 59; Gilbert + Tobin Lawyers, NERA Economic Consulting and PricewaterhouseCoopers, *Assessment of the AER's proposed WACC Framework, A joint report for the Energy Networks Association*, December 2011, p. 20.

99 Electricity Rules, clause 6.5.4(f) and 6A.6.2(h).

100 These circumstances are similar to the existing electricity distribution rules. For example, in the Aurora Energy electricity distribution determination, both the method for setting the risk–free rate and the application of this method were contested.

and therefore, permit NSPs to respond to that application in their revised regulatory proposals.

3.3.5 Timing of the WACC review

The AER's proposal allows for the timing of the WACC review to be brought forward. This flexibility could be used to address, for example, the impact of a substantial and unforseen market event, or significant changes in financial theory or market practice. The potential and the benefits of the flexibility in the AER being able to do so does not appear to have been properly recognised by the AEMC and in submissions from interested parties so far.

To the extent that this reflects the absence of any trigger mechanisms (or similar) in the AER's proposal, the AER maintains that this approach is reasonable. The prescription of any trigger mechanism would likely result in ongoing debate as to whether such triggers have been met. The analysis required by the AER to address these submissions would likely be substantial and reflect the analysis required to be undertaken in the WACC review itself. In effect, the inclusion of a specific trigger mechanism would require a "mini-WACC review" to determine if an early WACC review should commence.

As an alternative to providing the AER with discretion to determine whether to undertake an early WACC review, the AEMC could consider shortening the period for which new WACC reviews are currently required to be undertaken. For example, instead of prescribing a new WACC review be completed every five years, the AEMC could consider amending the rules to prescribe a new WACC review be completed at fixed intervals of every two, or three years.

As table 3.2 shows, shortening the period for which new WACC reviews are undertaken would limit the existing lead time between the finalisation of the WACC review and when the parameters determined in the WACC review are applied. The AER considers that of the alternatives shown, a two yearly WACC review—applicable to resets where the draft decision is released after the WACC review is finalised—provides the best balance between certainty and flexibility (in terms of how frequently WACC issues are reconsidered). For comparison, if the current transmission framework was applicable to all NSPs, the average and maximum lead times would be 3.1 and 5.2 years respectively.

Table 3.2 Average and maximum times between the WACC review and its application to resets where the draft decision is released after the WACC review is finalised

Time between WACC reviews	Average lead time between WACC review and reset (years)	Maximum lead time between WACC review and reset (years)
Two years	1.2	2.2
Three years	1.7	3.2

Note: This analysis is based on the next WACC review being completed by 30 September 2013 (as discussed below). Varying this date would vary the results shown.
Source: AER analysis.

A two yearly WACC review cycle minimises the average and maximum lead times currently incurred by a five yearly WACC review. Further, a two yearly interval is likely to be sufficient for a Tribunal to complete a review of the AER's decision (should the WACC review become

subject to merits review).[101] That is, a two yearly WACC review is likely to be the shortest practicable period possible.

The AER also considers that a fixed interval of three years—applicable to resets where the draft decision is released after the WACC review is finalised—provides a reasonable balance between certainty and flexibility. Importantly, fixed two or three yearly intervals both provide a better balance between certainty and flexibility than the current electricity distribution and transmission rules.

Additionally, the AER proposes that the next WACC review should be finalised by 30 September 2013.[102] Many regulatory control periods commence on 1 July, and accordingly, the corresponding draft decisions would typically be released in November or December. Ensuring the WACC review is completed by September, therefore, will allow the most recent WACC review to be applicable to a greater number of resets.[103]

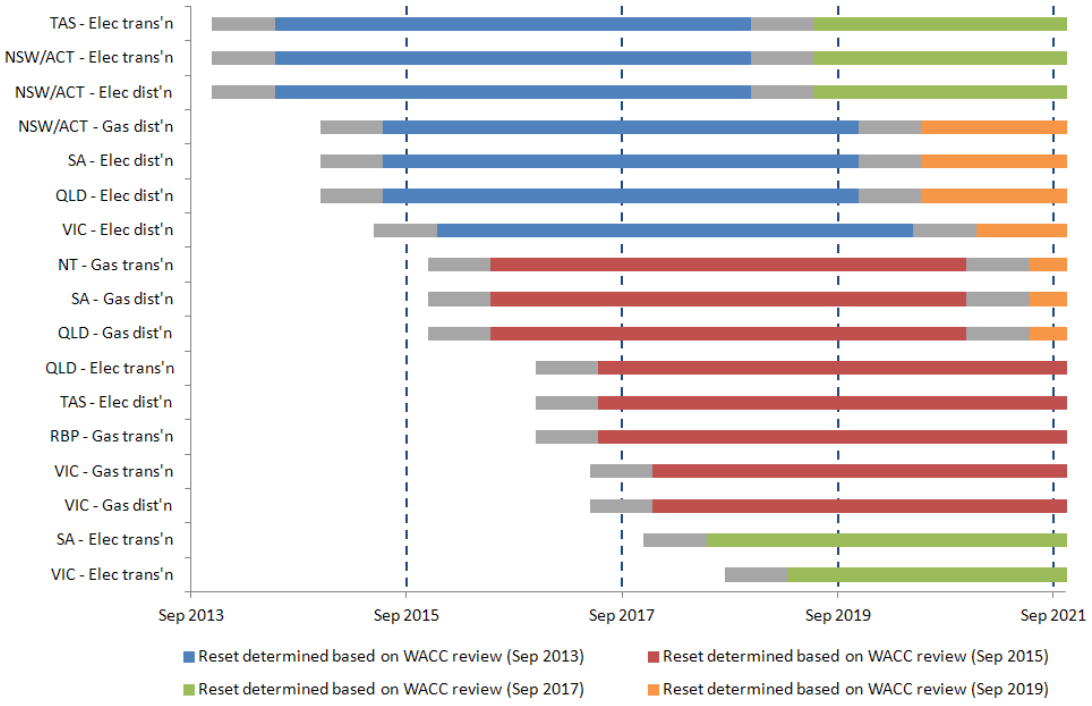
The alternative timing approaches discussed previously are shown in figures 3.1 and 3.2. These charts assume that the next WACC review will apply from 30 September 2013, and every two or three years thereafter. These charts also assume that WACC reviews can be applied to resets where the draft decision is released after the WACC review is finalised (as discussed previously in section 3.3.4). In contrast, the final chart (figure 3.3) reflects the current electricity transmission framework.

101 The merits reviewability of the WACC review is discussed in greater detail in section 3.4.

102 Currently, clause 6A.6.2(g) states that the AER must conclude the first WACC review by 1 May 2009 and conclude subsequent reviews at intervals of five years with the first interval starting from 31 March 2009. On this basis, the next WACC review must be completed by 31 March 2014. Similarly, clause 6.5.4(b) states that the first review is to be concluded by 1 May 2009 and further reviews are to follow at intervals not exceeding, in any case, five years with the first interval starting from 31 March 2009.

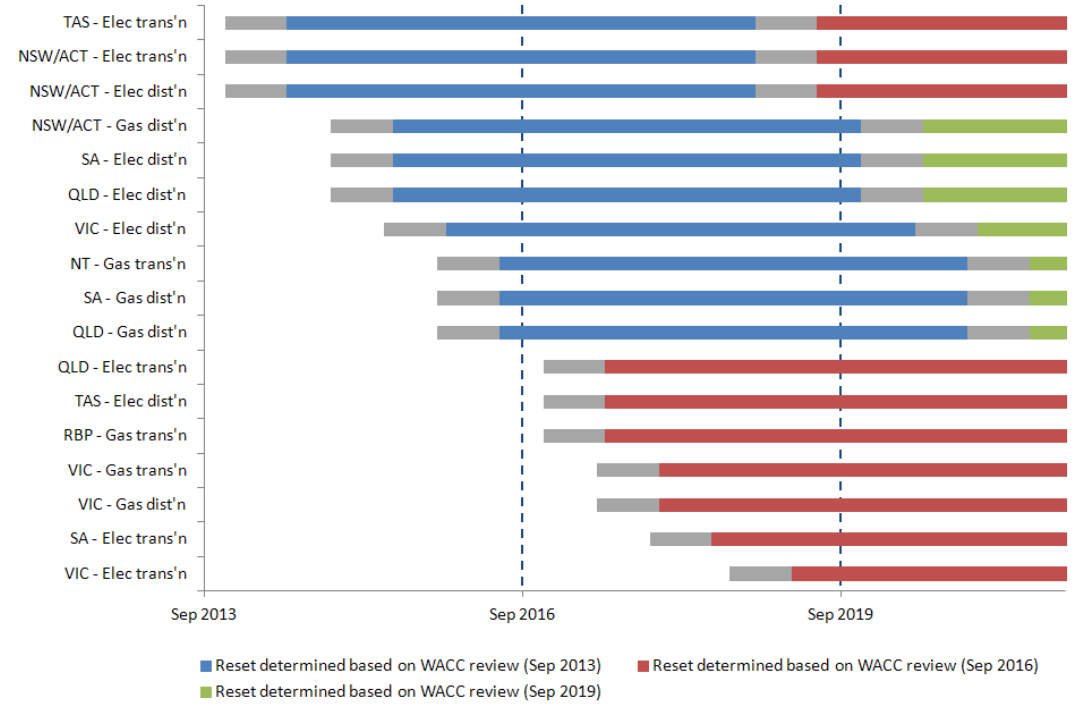
103 For the purposes of this analysis, the AER has assumed that the draft decision for a reset will be released seven months prior to the commencement of the regulatory control period.

Figure 3.1 Two yearly WACC reviews with resets where the draft decision is released after the WACC review is finalised



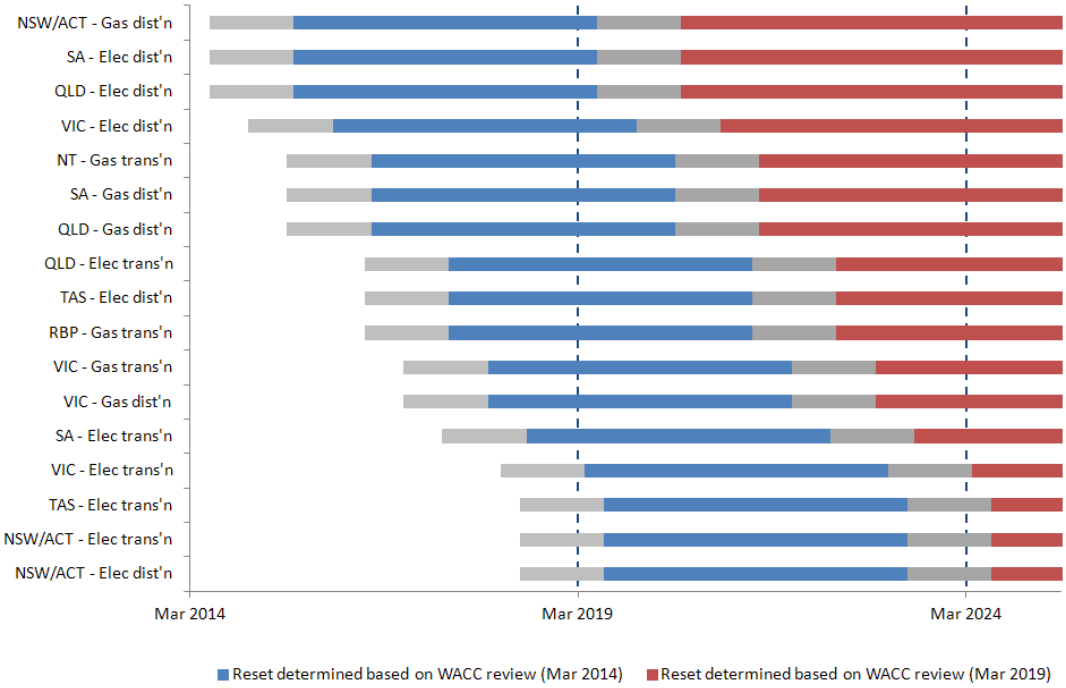
Source: AER analysis

Figure 3.2 Three yearly WACC reviews with resets where the draft decision is released after the WACC review is finalised



Source: AER analysis

Figure 3.3 Five yearly WACC reviews, applicable to resets where the initial regulatory proposal is submitted after the finalisation of the WACC review



Source: AER analysis

Under these alternative timing arrangements, all service providers whose next regulatory control period commenced in the next two or three years would know in advance to present their views in that WACC review. The alternative approach would balance the desirability for the values and methodologies used to set WACC parameters to be reviewed regularly for changes in financial conditions, finance theory and market practice with the need for that review to be conducted in a holistic and comprehensive manner that takes into account the views of all stakeholders.

Additionally, if the SCER were to make the WACC review merits reviewable, this approach would almost certainly result in the position of the Tribunal on previously reviewed parameters being known before the AER commenced the following WACC review. The consideration of merits review is discussed in greater detail in the following section.

3.4 Consideration of merits review

The AER's rule change proposal recognised that a binding WACC review (and hence removing the AER's decision on WACC parameters in distribution determinations and gas access arrangements) would result in such matters not being the subject of merits review.[104] The AEMC, the NSPs and their industry associations, however, stated that as the rate of return contributes a significant portion of NSPs revenues, it is appropriate that there is

[104] AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 83

sufficient regulatory accountability so that any errors potentially made by the regulator can be corrected.[105]

The AER supports that the status of the WACC review should be reviewed. In particular, excluding the WACC review from the merits framework serves no obvious policy objective. Moreover, any assessment of the merits review framework would be able to consider alternatives to allow consumers to more effectively participate in the current review process.

That said, whether the WACC review should be subject to merits review is a matter for the Standing Council on Energy and Resources' review into the limited merits review regime.

3.5 Parameter estimates and persuasive evidence

The determination of individual parameter estimates, particularly in a binding WACC framework, is crucial. Accordingly, the AER considers that in order to take into account the RPP in determining a WACC in a manner that will or is likely to contribute to achievement of the NEO, the AER should have the ability to determine the best WACC estimate possible. The ability for the AER to adopt the best estimate possible, however, is currently restricted under the Rules.

3.5.1 The need for persuasive evidence (at the time of the WACC review)

The Rules currently provide that at the time of the WACC review, where a WACC parameter cannot be determined with certainty, the AER must have regard to the need for persuasive evidence before adopting a value or method that departs from the previously adopted value or method for that parameter.[106]

The AER's rule change submission proposed that the need for persuasive evidence to exist before departing from the previously adopted value or method determined at the time of the WACC review be removed from the Rules. The consideration of past regulatory outcomes in light of current evidence is good regulatory practice.[107] However, this should only be one factor among many that the AER has regard to when determining parameter values (or methods). In effect, the AER's proposed rule change is similar to the existing gas rules, whereby continuity with previous parameter values is secondary to determining the best forecast or estimate possible in the circumstances.[108]

Effectively, the issue is whether the need for persuasive evidence is a high or a low threshold. SFG stated that it is a low threshold, and as such, did not represent a barrier to the AER determining the best estimate. Specifically, SFG stated that it is difficult to imagine a scenario whereby the WACC review estimate was not commensurate with prevailing conditions but persuasive evidence did not exist to depart from the WACC review estimate.[109]

While the interpretation of persuasive evidence put forward by SFG may be reasonable, as noted in the AER's rule change proposal, what constitutes persuasive evidence and whether it

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105 AEMC, *Directions paper*, March 2012, p. 93.
106 Electricity Rules, clause 6A.6.2(j)(4)(ii).
107 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 73.
108 NGR, rule 74(2)(b).
109 SFG Consulting, *Report for AEMC*, February 2012, p. 23.

is a low or high threshold has not been opined on by the Tribunal.[110] Given this ambiguity, the AER considers that the most appropriate solution is to amend the rules so that regard only needs to be had for the previously adopted parameter estimate. If the persuasive evidence test is a low threshold, as SFG posits, then the AER's proposed rule change should have no detrimental impact on the regulatory process. The proposed change will, however, remove the ambiguity that has caused unnecessary debate.

In general, consumer groups supported the AER's proposed change.[111] Additionally, the ERA stated that providing regulators with greater flexibility to take all relevant information into account at the time of any WACC review, and to avoid 'inertia', is likely to be more consistent with the objective of regulation.[112]

Submissions from the NSPs and their industry associations, however, stated that the persuasive evidence test provides stability and investment certainty.[113] Moreover, investment incentives would be diminished if the requirement to consider previously adopted values was removed. These submissions overstate the impact of the AER's proposed rule change. Under the proposed rules, the AER would still have regard to previous regulatory outcomes.

3.5.2 The current framework and persuasive evidence

Subsequent to the AER submitting its rule change proposal to the AEMC, on 6 January 2012 the Tribunal published its reasons for the merits review of the Victorian DNSPs' 2011–15 distribution determinations. In those reasons the Tribunal opined that clause 6.12.3(f) applies to WACC decisions.[114] The AER maintains that clause 6.12.3(f) should be removed from the Rules.[115]

The Tribunal's interpretation gives rise to concerns similar to those discussed above regarding the need for persuasive evidence. Specifically, the restrictions in clause 6.12.3(f) have the potential for undue weight to be placed on the NSP's regulatory proposal at the expense of setting parameters that are appropriate or otherwise in accordance with the interests of stakeholders.

A presumption in favour of the NSP's regulatory proposal is also unnecessary given that the information asymmetries that exist in the NSP's opex and capex forecasts are not present for

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110 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, pp. 72–73.

111 See for example: Energy Users Association of Australia, *Submission to the Australian Energy Market Commission on Rule Change Proposals for the Economic Regulation of Network Services*, December 2011, p. 25; Total Environment Centre, *Submission to the AEMC, Economic Regulation of Network Service Providers, Consultation on Request for Rule Change*, December 2011, p. 1; Carbon and Energy Markets, *Report to the Energy Users Rule Change Committee, National Electricity Amendment (Economic regulation of network service providers) Rule 2011 Consultation Paper*, December 2011, p. 21.

112 ERA, *Submission: Consolidated Rule Request*, December 2011, p. 3.

113 Grid Australia, *Response to AEMC Consultation Paper*, December 2011, p. 66; ETSA, CitiPower and Powercor, *Joint response to AER and EURCC rule change proposals*, December 2011, p. 27; Ausgrid, *Submission to the AEMC on AER and Energy Users' rule change proposals*, December 2011, p. 21.

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

115 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 103.

WACC parameters. For these reasons, the AER maintains its position in the proposed rules to remove clause 6.12.3(f).

3.5.3 Ranges under the Electricity Rules

The AEMC, in its directions paper, stated that AER should consider adopting ranges for parameter values and therefore the overall WACC. The AEMC suggested that this would explicitly recognise the uncertainty in estimating particular parameters.[116]

The relevance of clause 6.12.3(f) to the AEMC's suggested use of parameter ranges, therefore, is critical.[117] Under an approach reliant on ranges, the application of clause 6.12.3(f) would most likely lead to consistently upwardly biased estimates.[118] For example, in adopting an approach reliant on ranges, the AER would presumably set a higher and lower bound for WACC parameters. Rational NSPs, however, would be incentivised to always propose parameter estimates at the top of (or above) that range, which the AER would seemingly be compelled to accept (or pare back to the top of the range).[119] This outcome would prevail irrespective of whether the AER adopted a range for the overall WACC or individual parameters.

Notwithstanding the above, the AER has previously avoided the use of ranges. In particular, the adoption of a final parameter value, or the overall rate of return itself, is likely to still be subjective.

It may also be questioned why the AER did not propose parameter ranges in the WACC review. As discussed in the AER's rule change proposal, the AEMC's considerations in codifying the WACC review outcomes in the current chapter 6A are relevant.[120] The adoption of parameter values within a set range would involve substantial debate, and would not meet the AEMC's objectives. In any case, the AER does not consider that the relevant provisions within the current rules allow for the determination of ranges for rate of return parameters.

3.6 Cost of debt

The current approach to setting the DRP involves the assessment of different data sources to estimate the benchmark—being a 10 year, BBB+ rated Australian corporate bond. This

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116 AEMC, *Directions paper*, March 2012, pp. 66, 85.

117 Noting that the AER's rule change proposal removed this clause.

118 Notably, this view was shared by the expert panel for SCER (formerly the MCE), who stated in 2006 that there is little doubt that a propose-respond model would over time lead to a systematic increase in the returns to regulated entities relative to the receive-determine model. The panel reasoned that this is because it seems improbable that, given the choice of proposing an estimate within a range, the regulated entity will opt for other than its estimate of the upper end of the range. Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, April 2006, p. 78.

119 As noted by the AEMC, NSPs are incentivised to propose the highest possible WACC estimates. AEMC, *Directions paper*, March 2012, p. 83.

120 These include: there was a high degree of stability in parameter values adopted by the regulator in the years leading up to the AEMC's review; the savings in administrative costs and reduced uncertainty through codifying WACC parameters would offset any expected benefits of a reassessment of the WACC at every transmission determination; having short term stability in WACC parameters would create a more stable investment environment; sufficient flexibility to account for developments in theory and market conditions should be provided through a periodic review of WACC parameters by the AER, subject to any discretion and judgment being exercised in accordance with clear criteria. AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, November 2006, p. 83.

benchmark is estimated at the time of the reset and there are no adjustments to the DRP throughout the regulatory control period.

In general, the difficulties that currently prevail in measuring the DRP are widely acknowledged. That is, there are very few Australian corporate bonds with the term and credit rating consistent with the benchmark.[121] Moreover, the current rules inhibit the development of alternative cost of debt approaches, and provide little to no ability for the regulator to respond to the changing financing practices of service providers.[122]

As such, consistent with its rule change proposal, the AER maintains that:

- the DRP methodology should be determined in the WACC review, including the definition of the benchmark against which the DRP is measured
- the rules should be sufficiently flexibility to enable the AER to implement the DRP method determined during the WACC review.

3.6.1 Prevailing cost of debt

The AER's rule change proposal included a list of published debt issuances by owners of regulated electricity networks and gas pipelines.[123] The AER observed that the difference between these debt issuances and the DRP calculated during electricity determinations and gas access arrangements is significant. In addition to the AER's rule change proposal, the Energy Users Rule Change Committee (EURCC) also provided evidence demonstrating the ongoing divergence between regulated DRPs and the actual debt costs incurred by NSPs.[124]

A number of submissions acknowledged that the regulatory cost of debt in recent years is being set above the actual borrowing costs of service providers. However, these submissions also stated that the reason for the difference between the benchmark DRP and the published debt issuances by owners of regulated networks was entirely due to refinancing risk, and not shortcomings in the current rules.[125] In particular, CEG stated that if the actual debt costs data was adjusted to a ten year maturity, then the equivalent ten year implied DRPs were, on average, materially higher than the AER's allowances.[126]

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121 See for example: Grid Australia, *Response to AEMC Consultation Paper*, December 2011, p. 66; ENA, *Response to Consultation Papers*, December 2011, p. 45; Queensland Treasury Corporation, *Submission to the Australian Energy Market Commission*, December 2011, p. 21; Ergon Energy Corporation Ltd, *Economic Regulation of Network Service Providers, Consultation Paper, Australian Energy Market Commission*, December 2011, p. 15; FIG, *AEMC Consultation Papers*, December 2011, p. 46.

122 While these problems are largely confined to the Electricity Rules, given the importance of consistency in regulation, the AER has not seriously considered or pursued cost of debt approaches under the Gar Rules for gas service providers that it could not do also adopt for electricity NSPs. The problems with the Electricity Rules therefore impact those for gas.

123 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 80.

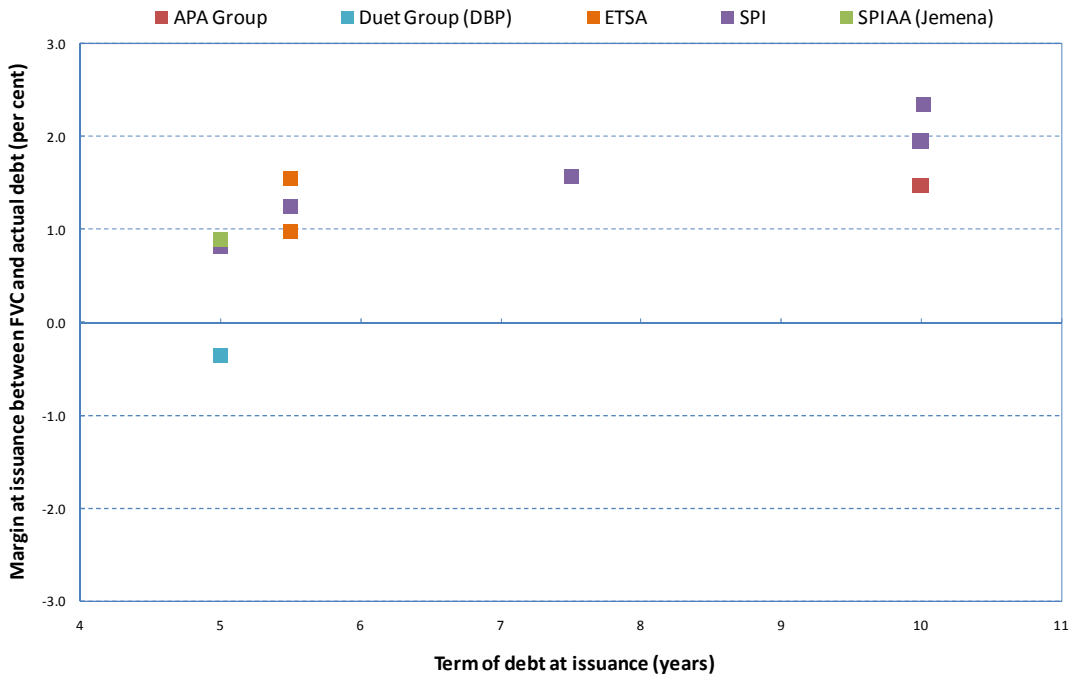
124 EURCC, *Proposal to change the National Electricity Rules in respect of the calculation of the Return on Debt*, October 2011.

125 See for example: SFG Consulting, *Report for AEMC*, February 2012, pp. 42–45; ETSA, CitiPower and Powercor, *Joint response to AER and EURCC rule change proposals*, December 2011, p. 31; CEG, *A report for APIA*, December 2011, pp. 42–43.

126 CEG, *Critique of AER rule change proposal, A report for ETSA Utilities, Powercor and CitiPower*, December 2011, p. 2.

The AER acknowledges that some, but not all of the differences in the DRP and the observed market data may be due to refinancing risk. However, as shown in figure 3.4, the Bloomberg fair value curve—which has effectively been the only benchmark measure available to the AER—has consistently implied higher debt margins than those observed by the NSPs. This has been the case even after adjusting for equivalent maturities.[127]

Figure 3.4 Margin (at equivalent terms) between Bloomberg fair value curve estimates and the observed debt issuances of regulated NSPs



Source: AER analysis; AER, Rule change *proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 80.

Irrespective of whether the benchmark is systematically biased, the AER considers that it remains incomplete. This relates not to any recent changes in market conditions per se, but to an incomplete description of factors affecting bond yields.

3.6.2 Summary of cost of debt approaches

This section summarises the approaches to calculating the cost of debt used by other regulators, as well as the alternative approaches proposed by the EURCC and ETSA Utilities, CitiPower and Powercor Australia.

Section 3.6.3 then explains how these approaches are not currently permissible under the Rules. This highlights the undue restrictions the AER faces in adopting a cost of debt approach that has regard to the approaches undertaken by other regulators, consistent with regulatory best practice.

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127 Specifically, the AER has calculated the margin between the debt in table 7.5 of its rule change proposal and the Bloomberg fair value curve at the same maturity. That is, if the debt in table 7.5 was issued in January 2010 for a five year term, then the corresponding five year Bloomberg fair value curve from January 2010 has been used to determine the margin. This removes any maturity or timing mismatches, and therefore, the impact of refinancing risk.

The AER does not propose that any one of these approaches be codified in the Rules. Rather, both the Electricity and Gas Rules should permit the AER to determine the best approach to setting the cost of debt from time to time through the WACC review, and then apply that approach to all resets.

Independent Pricing and Regulatory Tribunal (New South Wales)

The Independent Pricing and Regulatory Tribunal's (IPART) approach to setting the cost of debt is based on a sample of bonds from the Australian and US market that meet the following criteria:

- bonds are issued either in AUD or USD by Australian firms
- bonds have a remaining term to maturity of at least 2 years
- bonds have a credit rating of BBB to BBB+ according to Standard & Poor's
- bonds are fixed, unwrapped and have no embedded options
- the issuing company is not affected by factors such as mergers and acquisition activity
- prices are available from Bloomberg.

Once the sample of bonds has been determined, IPART adopt the median of the sample of observations, as well as Bloomberg's BBB, five year fair value curve, to select a point estimate for the debt margin.[128] IPART also includes an allowance on the debt margin for debt raising costs.[129]

Economic Regulation Authority (Western Australia)

The Economic Regulation Authority's (ERA) approach to setting the cost of debt is based on a sample of bonds that meet the following criteria:

- credit rating of BBB-/BBB/BBB+ by Standard & Poor's
- time to maturity of 2 years or longer
- bonds issued in Australia by Australian entities and denominated in Australian dollars
- inclusion of both fixed bonds and floating bonds
- inclusion of both bullet and callable/putable redemptions.

The ERA then determines a weighted average, giving greater weight to bonds within the sample that accord most with the notional benchmark. The ERA's benchmark has no defined term, though the ERA's averaging approach gives greater weight to long term bonds. The actual term of the ERA's DRP changes from decision to decision as it reflects the maturities of the actual bonds in the market at the time the DRP is sampled.

Office of Gas and Electricity Markets (United Kingdom)

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128 That is, the Bloomberg fair value curve is given the same weight as each individual bond.

129 IPART, *Developing the approach to estimating the debt margin, Other Industries — Final Decision*, April 2011.

The Treasury Corporation of NSW proposed that an alternative model for setting the DRP is that currently used by the Office of Gas and Electricity Markets (Ofgem) in the United Kingdom.[130]

The Ofgem model sets the DRP based on a ten year, simple trailing average index (with the provision for companies to justify alternative weighting to the trailing average in exceptional circumstances). The actual index used is an average of non-financial indices of maturities greater than or equal to ten years, and with credit ratings in the broader A and BBB bands.

Further, the Ofgem model updates the DRP allowance annually during the regulatory control period.

Energy Users Rule Change Committee

The Energy Users Rule Change Committee (EURCC) proposed that the benchmark DRP should be determined with reference to the embedded cost of debt incurred by NSPs. For privately owned NSPs, the DRP would reflect a trailing average of benchmark costs, while the DRP for government owned networks would be based on actual state government borrowing costs. The EURCC's proposal was opposed by many NSPs and government treasury bodies, but was supported by user groups.[131]

In effect, the EURCC approach represents a shift from a forward looking approach (as currently prescribed under the Rules), to a backward looking approach.

ETSA Utilities, CitiPower and Powercor Australia

ETSA Utilities, CitiPower and Powercor Australia stated that the current rules are deficient and should be amended. These NSPs did not agree with either of the AER or the EURCC's proposals, however, and instead, stated the cost of debt should be defined as the sum of:

- the forward looking fixed swap rate with a term equal to the length of the regulatory control period
- the debt margin over swap, determined using a rolling backward-looking benchmark approach, with a term equal to the benchmark maturity structure of an efficient DNSP
- other debt financing costs.[132]

3.6.3 Current benchmark is both too prescriptive and incomplete

The current benchmark is specified in clause 6.5.2(e) as the margin between the annualised risk-free rate and the observed annualised Australian corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk-free rate, and a credit rating from a recognised credit rating agency.[133] As discussed below, the AER considers that this definition is both too prescriptive (for example, the types of debt considered) and

130 Treasury Corporation of NSW, *Submission to AEMC on economic regulation of network service providers rule change request*, December 2011, pp. 14–17.

131 See for example: Treasury Corporation of NSW, *Submission*, December 2011.

132 ETSA Utilities, CitiPower and Powercor, *Joint response to AER and EURCC rule change proposals*, December 2011, p. 33.

133 The chapter 6A clause is almost identical, but states a specific credit rating from Standard and Poors.

incomplete (for example, the inability to define the benchmark by reference to factors other than the term and credit rating).

Type of debt

As detailed above, the current benchmark prescribes that the DRP must be determined based on Australian corporate bond rates. The AER considers that this level of prescription leads to a benchmark that bears little resemblance to the debt portfolios of NSPs.

In particular, the definition excludes other sources of debt finance which are available to, and used extensively by NSPs, such as bank debt and private placements. These are relevant sources of information that, as stated by Grid Australia and the Queensland Treasury Corporation, the AER should have the capacity to consider in setting the DRP.[134]

That said, it might be that it is impractical to set the DRP by reference to bank debt. For example, a challenge in the use of bank debt would be that as it is generally not market traded and is, therefore, more challenging to observe the pricing of this form of debt over time. Regardless, the Rules do not currently permit the AER to consider setting the DRP by reference to bank debt (even in part), despite bank debt becoming a more significant source of funding for service providers since the GFC.

The determination of the benchmark DRP has also involved considerable debate regarding the inclusion or exclusion of non-standard bonds, such as callable, adjustable coupon and subordinated debt. The AER considers that these features are important when assessing the comparability of bond yields, a view that is widely supported. It is unclear, however, the extent to which the benchmark definition allows for non-standard features to be adjusted, or to be excluded should adjustments not be possible.

Term and credit rating

As part of the WACC review, the AER is able to review the term of the risk-free rate (for which the maturity of the DRP must equal), and the benchmark credit rating. Both the term and credit rating must be set as specific values, as distinct from a range.

Conversely, the ERA and IPART have the ability to set broader definitions for the term and credit rating of benchmark debt. This allows the ERA and IPART to set the DRP based on a wider data set—for example, bonds with maturities in excess of two years, or with credit ratings within the BBB band. Importantly, these ranges do not require the ERA or IPART to consider, ex ante, whether the resultant sample produces an outcome which is consistent with a discrete benchmark. Effectively, the ERA and IPART define and measure the benchmark together.

To illustrate this difference, the AER's draft decision for Aurora Energy and Powerlink measured the DRP by reference to bonds with maturities between seven and 13 years. The average maturity of the bond sample was 9.7, which the AER concluded was sufficiently close to the benchmark term of ten years. Had the average term of the sample been seven years, however, the AER considers that, unlike the ERA or IPART, it would not have been able to accept this as being sufficiently representative of the benchmark.

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[134] Grid Australia, *Response to AEMC Consultation Paper*, December 2011, p. 70; Queensland Treasury Corporation, *Submission*, December 2011, p. 21.

In contrast, SFG stated that the interpretation question is whether the benchmark specification defines the dataset available for analysis, or whether it represents a benchmark which can be estimated with a more expansive dataset.[135] SFG interpreted recent Tribunal statements on this matter to be that the benchmark specification in the rules does not prescribe the dataset. Accordingly, in terms of the above example, it appears that SFG's view would be that so long as the average term of the bond sample fell within the broader range used to measure the benchmark, then this would be consistent with the benchmark definition of ten years.

The AER is also restricted in its ability to use different terms when measuring the cost of equity and the cost of debt. This restriction was evident during the WACC review, whereby the AER maintained a ten year term for the cost of equity based only on factors relevant to the cost of debt. That is, although present value principles suggested that the cost of equity should be measured based on a term matching the length of the regulatory control period, the AER gave primacy to debt re-financing risk (which suggested a longer term).

The AER agrees with Grid Australia and Ausgrid, that the regulator should have the ability (but not the requirement) to use a different risk-free rate between the cost of equity and debt.[136]

Other relevant factors

The AER considers that defining the benchmark based on the term and credit rating leads to an incomplete assessment of the factors that influence corporate bond yields. The AER's rule change proposal listed a number of other factors that the AER should be able to consider in setting the DRP.[137]

In regard to credit ratings, the submission made by DBNGP (WA) Transmission Pty Limited to the ERA is instructive—credit ratings provide an incomplete and imprecise measure of default risk.[138] Implicit in this statement is that factors other than the credit rating (and the term of the debt)—for example, industry type—are relevant to the determination of the benchmark.

The Tribunal, however, has interpreted the current rules as requiring the DRP to be set in reference to the overall market, and not with regard to the cost of debt measured relative to a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the network.[139] The Tribunal also stated that the AER cannot exclude bonds on the basis that they do not exhibit certain industry characteristics when the benchmark makes no such distinction. That is, the AER cannot consider industry factors in setting the DRP.[140] As stated in the AER's rule change proposal, this implies a DRP that is consistent with the RPP and will or is likely to contribute to the achievement of the NEO is one in which that the cost of debt for

135 SFG Consulting, *Report for AEMC*, February 2012, p. 43.

136 Grid Australia, *Response to AEMC Consultation Paper*, December 2011, p. 70.

137 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, pp. 77–78.

138 Dampier to Bunbury Pipeline, *Response to ERA Discussion Paper – Measuring the Debt Risk premium: A Bond-Yield Approach, Public version*, January 2011, p. 18.

139 Australian Competition Tribunal, *Application by Jemena Gas Networks (NSW) Ltd (No 5) [2011] ACompT 10*, June 2011, paragraph 74.

140 Australian Competition Tribunal, *Application by Jemena Gas Networks (NSW) Ltd (No 5) [2011] ACompT 10*, June 2011, paragraph 74.

an efficient NSP is consistent with the cost of debt in the market more generally.[141] This is an unlikely situation.

Forward looking benchmark

The Rules currently mandates that the rate of return must be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds. The AEMC has questioned whether this prevents the AER from determining the DRP based on a trailing average of the cost of debt, as proposed by the EURCC.[142]

The AER considers that a trailing average of actual costs is likely to still represent a forward looking rate of return, in so far as the actual debt costs of a business would comprise of debt that will mature in the future. The issue of whether a trailing average is representative of prevailing conditions in the market for funds, however, is problematic under the current framework. That is, while embedded debt portfolios may be consistent with prevailing conditions for the benchmark firm, the AER considers they would only be consistent with prevailing conditions in the market for funds if the market for funds itself had been relatively stable for an extended period of time. This has clearly not been the case.

Notwithstanding the merits or otherwise of the EURCC proposal, the AEMC recognised that it has received substantial support from a range of stakeholders.[143] In this context, the AER should at least be able to consider the EURCC proposal—or other backward looking approaches, such as those adopted by Ofgem in the United Kingdom—when determining the best method for setting the DRP. As discussed above, there is significant uncertainty as to whether the current rules allow the AER to do so. Accordingly, the AEMC should amend the rules to remove this ambiguity.

Annual resets

As discussed in section 3.6.2, the approach for setting the DRP adopted by Ofgem updates the DRP allowance on an annual basis. This update is applied through the price control formula.

The AER has the ability under chapter 6 to amend the price control formula. As such, the AER would not be restricted in adopting the annual DRP update implemented by Ofgem. The chapter 6A framework, however, does not provide the same level of flexibility. To the extent that an annual update was to be applied through amendments to the price control formula, a rule change would be required.

3.6.4 Prescription of broad principles

As noted previously, the AER does not propose that the benchmark or any one approach to setting the DRP be codified. Rather, the AER should be able to determine the benchmark and the best approach to setting the cost of debt through the WACC review (subject to guiding principles in the rules). This approach would apply to all resets, up until the next WACC review.

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141 AER, *Rule change proposal, AER's proposed changes to the rate of return provisions of the National Electricity Rules*, September 2011, p. 79.

142 AEMC, *Directions paper*, March 2012, p. 121.

143 AEMC, *Directions paper*, March 2012, p. 112.

4 Regulatory decision making process

This section focuses on Chapter 7 of the directions paper on the regulatory determination process. Process issues directly affect other issues, including the capex and opex allowances.

The AER welcomes the AEMC's willingness to consider changes to the regulatory process to address a range of issues including process changes to address some of the concerns raised by the AER in other areas.

To recap, the proposed rules:

- restricted late submissions and NSPs from making submissions on their regulatory proposals
- afforded the AER the ability to give weight to confidential information to discourage the making of blanket and unsubstantiated confidentiality claims.

Ultimately, the changes improve the efficiency of the regulatory process by:

- encouraging a NSP to submit a complete proposal upfront
- affording stakeholders other than a NSP a reasonable opportunity to make submissions on a NSP's proposal
- reducing impediments to the AER's ability to assess information caused by submissions late in the process and the tight timeframes in the Rules.

The deficiencies identified by the AER must be addressed. The AER recognises that the proposed rules are not the only solution that may achieve this objective. Indeed, other options, which the AER is open to, have been identified in the directions paper and were discussed at the AEMC's workshop on 2 April 2012. These options could be implemented by themselves or to complement the proposed rules.

One option is to start the regulatory process three months earlier to allow the AER to:

- consult on and lock in expenditure forecast models as part of the framework and approach paper stage (as discussed in section 1.3.1)
- better deal with any confidentiality claims
- if appropriate, publish an issues paper.

Another option is to give the AER the power to 'stop the clock' on the assessment time it is allowed in the Electricity Rules if it needs to assess incomplete or deficient initial (or revised) regulatory proposals. This power exists under Rules 43(3) and 11 of the Gas Rules. This would further encourage complete proposals.

These options complement the proposed rules that restrict a NSP from making a submission on its own proposal. The AER's original proposal (as modified) would restrict NSPs to providing a revised proposal and a submission on the draft decision. The modifications required to ensure consistency with the Electricity Law are discussed in section 4.1.1.

To the extent that additional time at the beginning of the process promotes better information in regulatory proposals and better engagement on those proposals this may help reduce the need for submission of additional material towards the end of the process.

The AER also proposed rules designed to make the process more efficient. Taking into account the directions paper and submissions from other stakeholders:

- Consultation on aspects of the framework and approach paper (ie. service classification, schemes, and the form of control) should not be compulsory in the framework and approach paper, however consultation could be triggered by the AER or the NSP.

- As originally proposed, the matters listed in chapter 6 from which a material error may arise should be removed, consistent with the list in chapter 6A. This is important to allow for correction of agreed errors outside the merits review process. One option to provide for greater finality would be to allow only a six month period from the making of a decision to apply the provisions.

- Timeframes for assessment of cost pass through, contingent project, and capex reopener applications should be able to be extended. However, the AER proposes to revise how the extension of time should occur. Where the AER considers the assessment involves questions of unusual complexity or difficulty, the AER should (as per its original proposal) be allowed to extend timeframes up to 100 business days. Additionally, a "stop the clock" mechanism, as proposed by NSPs, should be available in circumstances where the AER is waiting on information (or an outcome) from an external party.

The remainder of this section discusses in more detail each of the AER's proposals as well as the associated issues and suggestions that were raised in response to those proposals in stakeholder submissions and the AEMC's directions paper.

4.1 Submissions and timeframes

The AEMC directions paper notes a number of process issues raised by stakeholders in response to, or related to, the 'submissions received during a determination' proposal outlined in the AER's rule change proposal.

In its rule change proposal, the AER raised the issue that NSPs, subsequent to the lodgement of their proposals and revised proposals, often make submissions that should otherwise have formed part of their regulatory proposals. This leads to two key issues, namely it:

- denies other stakeholders the opportunity to consider the additional information when making submissions

- impedes the AER's ability to assess this information given the tight timeframes prescribed in Chapters 6 and 6A.[144]

NSPs have submitted that there are legitimate reasons why such submissions should be made. These include material impacts from external circumstances to the regulatory determination process, inability for NSPs to collect all relevant evidence to respond to AER draft decisions (especially over the Christmas and New Year period), a new AER approach

[144] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p85-88

developed or new information relied upon by the AER that was not subject to consultation, and alternative approaches or evidence raised by stakeholders[145].

The AEMC directions paper acknowledges that one of the reasons why the regulatory determination process does not appear to have worked as intended is because the volume of material submitted by NSPs after the draft determination has exceeded that which was envisaged by the AEMC in 2006. The AEMC also notes that:

- a restriction imposed on the revised regulatory proposal should not be permitted to be circumvented through the use of submissions
- NSPs' submissions appear to be contributing to the broader problem that the process is not providing an opportunity for all stakeholders to effectively scrutinise material provided by NSPs
- the AER is not provided with a clear period of time to assess all the relevant material in order to make a decision, without the significant risk that a NSP may submit further information close to the date on which a final regulatory determination is due to be made
- the Christmas period creates a significant risk that NSPs cannot engage adequate resources to respond to a draft determination in a timely manner
- greater dialogue before the draft determination may influence the behaviour of NSPs after the draft determination is made[146].

While the AER broadly agrees that these concerns arise under the current framework, the effect of late submissions in denying other stakeholders opportunities for engagement and impeding the AER's assessment processes remains a key deficiency in the Rules.

The AEMC's directions paper notes that given the broad range of problems that have been identified, it is considering a range of options regarding the overall regulatory determination process with a view to meeting a number of objectives that it has outlined.[147]

The AER welcomes the AEMC's willingness to consider changes to the regulatory process and the objectives that it has outlined in the directions paper. We generally agree with the objectives listed by the AEMC. However, as discussed earlier in this paper, the AER is making a further proposal that seeks to improve the way the regulatory determination process works. A key objective of that proposal, not currently captured in the objectives outlined by the AEMC, is to deal with the form and presentation of expenditure proposals differing between NSPs, which, together with the prescribed process and timeframes, exacerbate the information asymmetry problems faced by the AER. Further information is available in the expenditure chapter of this response. This proposal is consistent with, and works with other proposals that seek to enhance the front of the regulatory process. Such proposals should seek to address the information asymmetry problems faced by the AER and should seek to further stakeholder engagement in the process.

[145] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p127

[146] Ibid, p128-129

[147] Ibid, p130

Ultimately, the AER considers that its proposed rules to restrict NSP submissions on their own proposals (along with the proposed rules to address confidential information) improve the efficiency of the regulatory process by:

- encouraging a NSP to submit a complete proposal upfront
- affording stakeholders other than a NSP a reasonable opportunity to make submissions on a NSP's proposal
- reducing impediments to the AER's ability to assess information caused by submissions late in the process and the tight timeframes in the Rules.

The deficiencies identified by the AER must be addressed. The AER recognises that the proposed rules are not the only solution that may achieve this objective. Indeed, other options, which the AER is open to, have been identified in the directions paper and were discussed at the AEMC's workshop on 2 April 2012. These options could be implemented by themselves or to complement the proposed rules.

The AER's rule change proposal and a number of other options are discussed below.

4.1.1 Restricting NSP submissions on their own proposals

The AER's proposed rules sought to further encourage NSPs to provide complete proposals reflecting the best available information upfront. It therefore proposed restricting an NSP from making a submission on its own proposal, and where there are concurrent proposals, on another NSP's proposal unless there are material differences between the two. That said, it also recognised that there will be circumstances where it is nevertheless appropriate for an NSP to make a submission. To this end it does not restrict the ability of a NSP to make a submission[148].

NSPs did not agree with the AER's proposed solution. The ENA instead proposed a new process for submissions and cross-submissions following the draft decision and revised regulatory proposal, similar to the process used by the NZ Commerce Commission (discussed further below)[149]. Energy user and consumer groups supported the AER proposal on the basis that the current process encourages strategic behaviour by NSPs and that the AER's proposal would improve opportunities for stakeholder engagement.

The AEMC notes that implementing the AER's proposal may be difficult if it results in inconsistencies between the Electricity Law and Electricity Rules. It also notes that ETSA Utilities, CitiPower and Powercor suggest the AER proposal may result in an inconsistency between sections 16 and 28ZC of the Electricity Law and the Electricity Rules[150]. The AER recognises that the proposed restrictions on NSPs making submissions on the draft determination or on the AER considering late submissions may, on one view, operate in a manner that is inconsistent or at odds with sections 16(1)(b) and 28ZC of the Electricity Law.

[148] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p88-89

[149] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p128

[150] Ibid, p129

That said, the AER's proposed rules to restrict NSPs from making submissions on their own revenue or regulatory proposal and the revised versions thereof is not, on any view, inconsistent or at odds with the Electricity Law. There is no reason that justifies allowing a NSP to make a submission on its own regulatory or revised regulatory proposal. Specifically, and unlike in the context of the draft determination, the occasion to afford a NSP procedural fairness does not arise here; a NSP cannot be said to be aggrieved by its own revenue or regulatory proposal. Yet, and as was noted in our original rule change proposal,[151] NSPs routinely take the opportunity to make a submission in response to the invitation for submissions on their revenue or regulatory proposals from interested stakeholders that the AER is required to make. Such submissions often contain information or material that should have formed part of a NSP's revenue or regulatory proposal.

Further, to the extent possible, the Rules should ensure that such information or material is properly submitted in a revenue or regulatory proposal rather than through a separate submission. To this end, given proposed restrictions on NSPs making submissions on the draft determination in the AER's proposed rules are excluded, the proposed rules require further modification.

In summary, the AER's proposed rules should be implemented subject to the following modifications:

- Retain the element of the AER's proposed rules to restrict NSPs from making submissions on their own revenue or regulatory proposal and the revised versions thereof.
- Remove proposed restrictions on NSPs making submissions on the draft determination or on the AER considering late submissions which may, on one view, operate in a manner that is inconsistent or at odds with sections 16(1)(b) and 28ZC of the Electricity Law.
- Include new Rules in order to:
  - ensure NSPs' submissions on the draft decision do not to contain material that is out of scope – that is, material (properly characterised) that should have been included in the revised regulatory proposal
  - ensure the AER is not required to take into account information in NSP submissions on the draft decision that is out of scope.

4.1.2 Enhancing the front of the regulatory process

As noted, the AER recognises that its proposed rules are not the only possible solution to the problems that it has identified in its rule change proposal and welcomes the AEMC considering other options that would help meet the objectives outlined by the AER.

An option for dealing with the problems that the AER has identified is to focus on enhancing the front of the regulatory process so that the process produces better quality information and better scrutiny of that information by stakeholders. There appears to be support from stakeholders for such changes. A process which produced better quality information early in

[151] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p.85

the process would improve the AER's ability to assess all relevant information when making its determinations, and may also reduce some of the problems that currently arise with submissions late in the regulatory process.

One option is to start the regulatory process three months earlier. This could allow the AER to:

- implement the proposal to consult on and lock in expenditure forecast models as part of the framework and approach paper stage
- better deal with any confidentiality claims
- if appropriate, publish an issues paper.

The AER's proposal to use the framework and approach paper process to consult on and determine the models used by NSPs to justify their expenditure proposals is one option that may achieve better information and better stakeholder engagement. This proposal is discussed at section 1.3.1 of this submission.

The additional time could also be used to allow the AER to better interrogate the proposals of the NSP to ensure that they are compliant and contain the appropriate quality and type of information for consultation with stakeholders and for assessment by the AER. Part of this time may be used to better deal with confidentiality claims (and may complement the AER's proposals in that regard - see further discussion in section 4.2).

Another option for dealing with proposals that do not contain all relevant information is to give the AER the power to 'stop the clock' on the assessment time it is allowed in the Electricity Rules if it needs to assess incomplete or deficient initial (or revised) regulatory proposals. This power exists under Rules 43(3) and 11 of the Gas Rules. This would further encourage complete proposals.

Further time at the beginning of the process may also enhance opportunities for stakeholders to engage with the NSPs proposals. The AER notes that, where appropriate, an issues paper may assist in making regulatory proposals more accessible to consumers. While an issues paper could assist in drawing out some of the key issues in NSPs' proposals for stakeholders, given the complexity of the proposals, an issues paper will take time and resources for the AER. In order to allow greater scope for the AER to prepare an issues paper where appropriate, the time and resourcing implications would need to be reflected in an extension of the timelines allowed in the determination process. The AER is of the view that it should continue to have the option to publish an issues paper, but that it should not be required to do so. There are circumstances where an issues paper may not add value for stakeholders, including where there are similar issues being considered in other concurrent or recent processes. New processes may also evolve for NSPs to engage with consumers early in the process. The AER considers it appropriate that it continues to have the flexibility to publish an issues paper where it is relevant to stakeholders and would assist stakeholders to engage in the process.

Greater use of an issues paper may not replace the need for alternative ways for NSPs to make it easier for consumers and other stakeholders to engage with their regulatory proposals. For example, stakeholder forums provide an opportunity for NSPs to present the key features of their regulatory proposal to consumers and other stakeholders. NSPs and the

AEMC should consider if there are further opportunities for NSPs to engage more effectively with a range of stakeholders early in the process and to make NSPs' proposals more accessible to consumers.

The AER notes that the options discussed above to enhance the start of the regulatory process complement the proposed rules that restrict a NSP from making a submission on its own proposal.

4.1.3 Cross submissions

The AER notes that the ENA's proposal for a cross-submissions process appears to give greater opportunities for stakeholders to comment on material submitted by the NSPs. However, the process would need to be designed carefully to so that incentives for the provision of information by NSPs are appropriate and so that the process does not prove to be unduly burdensome for the AER to administer.

In practice the AER is concerned that it is not possible to design an administratively feasible cross-submissions process that truly provides a beneficial opportunity for all stakeholders to partake in the process - even if the relevant timeframes were extended. Allowing all parties to comment on each other party's submissions would potentially create a vast amount of new material for the AER to consider towards the end of the regulatory process. This would multiply the number and size of submissions that the AER would need to assess. For example under a cross-submissions process, if the AER received 50 submissions each submitter would have the right to provide a submission on the other 49 submissions. While not all would exercise this right, the process has the potential to become unwieldy and would be difficult for the AER to administer, even if the timeframes were accordingly extended.

Cross-submissions may assist in affording stakeholders other than a NSP a reasonable opportunity to make submissions on a NSP’s proposal (although providing additional consultation stages to which NSPs may provide submissions by definition still affords the opportunity for the provision of new information which is not open for comment). However, because cross-submissions allow for the provision of further information towards the end of the regulatory process it does not appear to be helpful in terms of addressing the other objectives of the AER's proposal. That is, it does not appear to encourage a NSP to submit a complete proposal upfront or reduce impediments to the AER's ability to assess information caused by submissions late in the process and the tight timeframes in the Rules. The AER notes that options should seek to balance the three objectives that the AER has outlined.

4.1.4 Extending timeframes at the end of the process

The AER notes that it would be preferable for any extension to timeframes to occur by moving the start of the process, rather than by potentially delaying the end of the process. However, the AEMC's directions paper raised the option of delaying the publication of the final regulatory determination until a specified number of days after the last material submission is received. The AEMC suggests that this option would place the onus on the NSP to decide whether the benefit of providing late submissions outweighs the detriment of delaying the final regulatory determination and consequently the next regulatory control period.

The AER is concerned that such an option may introduce greater uncertainty and disruption to the decision making process as the incentives on the NSP to delay (or to not delay, as the case may be) the process are unclear and will vary in each case. Greater uncertainty on

decision making timeframes would make it more difficult for the AER to plan its resourcing and as noted by the AEMC there may be knock on impacts for the AER's reset timetable going forward. It is also unclear how this proposal would work where multiple NSP proposals are being assessed concurrently, as one NSP's decision to submit late material could impact other NSPs or cause regulatory periods to be out of alignment. The AEMC also notes that the option could also impact on the annual pricing proposal process.

In addition, in circumstances where the decision is delayed beyond the start of the next period, any change in prices would necessarily be reflected over four years, rather than over five. This reduces flexibility in managing the revenue smoothing process and may result in a greater degree of price instability than would otherwise be the case.

4.2 Confidential information

The AER in its rule change proposal noted that:

- confidential information in a regulatory proposal risks denying other stakeholders the chance to respond to, scrutinise, and make informed comment on information to which the AER must have regard
- the Rules do not provide for the AER to exercise its judgment in determining the weight to be given to confidential information in a regulatory or revenue proposal
- there is a degree of uncertainty as to what the term 'indicate' means in the current Rules.[152]

NSPs disagreed with the AER's characterisation of the problem and the proposed rules, submitting that:

- the Electricity Rules and Electricity Law already provide an appropriate balance, and give the AER sufficient discretionary powers to address confidentiality claims in initial and revised proposals - the AER has power to give confidential information less weight or to reject it[153]
- the AER has not provided evidence that excessive claims of confidentiality are undermining the regulatory process[154]
- the volume of confidential information in (initial and revised) regulatory proposals would not reduce as a result of the AER's proposal[155]
- the AER's proposal would "substantially alter the calculus it applies when assessing confidential information", and the integrity of the regulatory determination process would be undermined.[156]

[152] Ibid, pp.99-100

[153] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p.135; ENA Consultation Paper submission, Attachment D, 8 December 2011, p.15

[154] ENA Consultation Paper submission, Attachment D, 8 December 2011, p.14-16

[155] Ibid, p.62

[156] Ibid, 8 December 2011, p.15-19; ENA, Consultation Paper submission, 8 December 2011, p.62; ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp.36, 179

The AEMC emphasised the importance of testing the probative value of as much of an NSP's initial or revised proposal as is possible with stakeholders.[157] The AEMC also acknowledged that "it would be expected that only relatively small parts of initial or revised regulatory proposals should be claimed to be commercially sensitive, and therefore confidential".[158] The AEMC also stated that the AER appears to have existing powers under the Electricity Law and common law to use discretion in determining the weight to be given to confidential information in initial or revised regulatory proposals, and to apply the public benefits test to disclose confidential information in some circumstances.[159]

This led the AEMC to consider whether the issue is primarily that the AER has insufficient time to apply the existing powers.[160] The AEMC believes that possible solutions to the issues raised in the AER's proposal include:

- extending the AER's time to apply its existing powers to assess claims of confidentiality
- aggregating information "to a level at which confidentiality concerns would fall away".[161]

At this point, it is worthwhile clarifying that the purpose of the proposed rules was to provide a strong disincentive for NSPs to make blanket and unsubstantiated confidentiality claims. In the AER's experience, the making of claims is commonplace when a NSP submits its regulatory proposal. Ultimately, a large part if not most of the claim is unsubstantiated. The scope of such claims in practice makes it an impossible task to properly assess the merits of each individual confidentiality claim given the tight timeframes prescribed in chapters 6 and 6A. Further, the resources spent assessing unsubstantiated confidentiality claims effectively diverts resources from the AER's main decision-making function.

A clear example of this problem is shown in the page count summarised in table 4.1, in the context of the regulatory proposals submitted by the Victorian DNSPs in respect of the 2011-15 distribution determinations. Only a relatively small part of the material in the confidential versions was truly commercially sensitive and genuinely confidential.

[157] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p.135
[158] Ibid, p.136
[159] Ibid, p.136
[160] Ibid, p.136
[161] Ibid, p.136

Table 4.1 Page count – documents submitted by DNSPs in the AER's Victorian electricity distribution determination (2011-15)

	Regulatory proposal		Revised regulatory proposal	
	public	confidential	public	confidential
Business 1	1,540	4,584	4,157	5,599
Business 2	2,960	5,231	9,337	10,235
Business 3	1,869	22,811	1,704	2,626

Note: The AER's page count is approximate. It does not account for differences in the type of documents between the Victorian DNSPs, and does not include spreadsheets submitted, publicly available AER or AEMC documents, or legislation and regulations.

The AEMC suggested that it would consider options for addressing the timelines for assessing confidentiality claims. The AER recognises that extending the timeframes may assist it in assessing large confidentiality claims and if necessary, allow it to properly apply the disclosure process set out in section 28ZB of the Electricity Law. As discussed in section 4.1.2 an extension of three months (including to address confidentiality claims) could form part of broader changes to enhance the front of the determination process. That said, it is not clear whether this would actually address the fundamental issue that there is no disincentive under the current Rules for a NSP to make blanket and unsubstantiated confidentiality claims. If the intention of a NSP was to squeeze the AER's timeframes, then an extension of time or even a stop the clock mechanism to assess confidentiality claims might address that. However, if the intention was simply to place an onerous impost on the AER for the purposes of keeping as much information confidential as possible, this is unlikely to be addressed by extending the timeframes.

Conversely, the proposed rules do address the fundamental issue here. A strong disincentive for NSPs not to make blanket and unsubstantiated confidentiality claims is provided by explicitly:

- requiring NSPs to identify, instead of indicate, parts of a regulatory or revenue proposal that are claimed to be confidential[162]
- providing the AER with the discretion to give such weight it considers appropriate to confidential information in an initial or revised regulatory or revenue proposal.[163]

An extension of timeframes would be a complement to these proposed rules.

For completeness, it is worth pointing out that prescribing the AER with the discretion to give such weight to confidential information is not inconsistent with the Electricity Law, the common law and the protections it must afford information given to it in confidence under the Competition and Consumer Act. Rather, and noting that such information has not been made publicly available, it explicitly clarifies the position under the Electricity Law and the common law. It is this clarification that will discourage NSPs from submitting blanket confidentiality claims. Lastly, it is difficult to see how this would undermine the integrity of the determination

[162] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p.90

[163] Ibid, p.91

process or "substantially alter the calculus" applied by the AER as claimed by the NSPs.[164] If the information a NSP provides is truly confidential, the AER will protect it as it is currently required to do.

4.3 Framework and approach paper

The AER's rule change proposal noted a number of issues with the current framework and approach paper process:

- the potential for an inefficient three stage consultation process on the development and application of incentive schemes in distribution
- the potential for a mismatch between a particular service classification and the form of control to apply to that service
- that the Rules don't strike the right balance between certainty and flexibility regarding the extent to which service classifications and control mechanisms are 'locked in' at the framework and approach stage[165].

While DNSPs did not agree with all of the AER's proposed solutions, they did agree that the framework and approach paper could be made more efficient, and with the need to balance flexibility and certainty of service classifications[166].

The solutions that the AER proposed were:

- removing consultation on the application of incentives schemes in the framework and approach paper
- allowing the AER to change the service classifications and form of control mechanism following the framework and approach paper, but only if circumstances arise that were unforseen at the time of the framework and approach paper.[167]

The ENA proposed providing greater discretion to the AER and DNSPs to limit the scope of the framework and approach paper or to bypass it altogether. Regarding the AER's proposal for an 'unforseen circumstances' trigger, ETSA Utilities, CitiPower and Powercor agree that the AER should be able to revisit the formulaic expression of the form of control mechanism.[168] However they submitted that the type of form of control mechanism should be locked in at the framework and approach stage.[169] They expressed concern that not locking in

[164] ENA Consultation Paper submission, Attachment D, 8 December 2011, p.15-19; ENA, Consultation Paper submission, 8 December 2011, p.62; ETSA, CitiPower and Powercor, Consultation Paper submission, 8 December 2011, pp.36, 179

[165] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p92-94.

[166] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p139.

[167] AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, p94.

[168] Examples of the form of control mechanism are a weighted average price cap or a weighted average revenue cap. The formulaic expression of the form of control mechanism refers to the mathematical formula used to implement that control mechanism.

[169] ETSA, CitiPower, Powercor, Joint response to AER and EURCC rule change proposals (ERC0134 / ERC0135), 8 December 2011, p.37

the type of form of control mechanism to be applied would lead to regulatory uncertainty and constrain the DNSPs' ability to assess any new type of form of control mechanism that is proposed.[170] The Victorian DPI considered that the retention of consultation on the application of incentive schemes in the framework and approach paper was important for stakeholder engagement.[171]

The AEMC's directions paper provides support for the framework and approach paper to be made optional subject to an appropriate trigger. However, it also notes that incentive schemes should remain part of the framework and control paper. The AEMC notes that AER's proposal of 'unforseen circumstances' as the trigger for allowing changes to a control mechanism or service classification appears broadly appropriate from a policy point of view[172].

In considering the framework and approach paper process, the AEMC should also take into account the AER's proposal to use the framework and approach paper process to consult on and determine the models used by NSPs to justify their expenditure proposals. This was discussed at section 1.3.1 of this submission.

Whilst accepting this option is at odds with making the entire framework and approach paper optional, the Rules could prescribe that certain elements thereof, such as in relation to the operation of incentive schemes are optional subject to an appropriate trigger. Such a trigger could be activated where either a NSP or the AER considers that a substantive change from the position in a previous framework and approach paper may be required. To this end the AER generally welcomes the direction outlined by the AEMC for the framework and approach paper process. The AER agrees with the AEMC's statement that if there are no material changes to a particular component of the framework and approach paper then the framework and approach paper should not be necessary for consultation on that particular component.[173]

The AER also welcomes the AEMC's comments on the AER's proposal for 'unforseen circumstances' as the trigger for changing the form of control mechanism or a service classification. The AER supports the proposal on the basis that it provides an appropriate balance between flexibility and certainty, as well as consistency between the treatment of service classifications and control mechanisms.

Furthermore, for clarification, the AER's proposal is that the type of form of control mechanism continues to be locked in at the framework and approach paper. The ability to change the form of control mechanism if unforseen circumstances arise only relates to changes to the formulaic expression of the form of control mechanism.

4.4 Material errors

The AER's rule change proposal expressed three main areas of concern about its ability to correct material errors under the Rules:

[170] Ibid, p.37

[171] AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p139-140.

[172] Ibid, p142.

[173] Ibid, p141.

- Firstly, that a material error may arise from errors outside of the prescribed list in chapter 6.

- Secondly, in chapter 6A, the absence of an express limit on correcting errors caused by false and misleading information creates uncertainty and "has the potential to undermine the finality of the decision making process by reopening matters not necessary for the correction of the error".

- Thirdly, if an error is to be corrected, there may be circumstances where it is more appropriate or preferable to 'amend' a regulatory determination, instead of 'revoking and substituting' the entire determination.[174]

NSPs noted that there have been no examples of the AER being unable to use its power to revoke and substitute for material error.[175] The AEMC believes that a final regulatory determination should only be able to be changed through "merits review or in very clear and exceptional circumstances".[176] The AER agrees that circumstances justifying correction of a revenue determination are exceptional.

While the AEMC has recognised there is no reason why the material error provisions in chapter 6 and 6A differ, it favours keeping the scope of material error provisions narrow and limited to the type of situations listed in chapter 6. The AEMC also notes that pass throughs, capex reopeners and contingent projects are appropriate if more substantive changes to a regulatory determination are needed.[177]

It is worth clarifying that the purpose of the AER's proposal was primarily to allow it to resolve issues outside the review process in instances where there was agreement between all relevant parties that it was an error to be corrected. This could avoid costs for all parties. Under the current Rules, it is more likely that this could occur under chapter 6A than chapter 6. To clarify, the AER recognises the importance to be attached to the finality of a decision and to this end, it was never the intent of the AER's proposal to allow it to unilaterally reopen a decision. In any case, the AER has never done so under chapter 6A.

The AER recognises that a balance must be found between its ability to efficiently correct errors and the need to preserve the finality of its decisions. One option that might address concerns regarding the finality of the AER's decisions could be to prescribe a timeframe, for example a six month period from the making of a decision, which the chapter 6A provisions can be applied. The AER considers that a six month period is an appropriate balance that on the one hand provides an opportunity for NSPs to seek agreement with the AER and other interested parties to correct any alleged errors, as an alternative to seeking merits review and on the other hand, preserves the finality of AER determinations after the six month period.

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174 AER, Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules, September 2011, pp.95-96

175 ENA Consultation Paper submission, Attachment D, 8 December 2011, p.65; ENA Consultation Paper submission, Attachment D, 8 December 2011, pp.23-24; Jemena, Consultation Paper submission, 8 December 2011, pp.94-95

176 AEMC, Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012, 2 March 2012, p.146

177 Ibid, p.146

4.5 Timeframes for assessment of events and WACC review

4.5.1 Assessment of cost pass throughs, contingent projects and capex reopeners

The AER's rule change proposal explained that the timeframes in the Rules for the AER's assessment of (positive) cost pass through, contingent project, and capex reopener applications will not always be adequate.[178] The AER considers that the assessment of some applications may involve questions of unusual complexity or difficulty, or requires the AER to obtain further information than the NSP submitted in its application.[179]

The majority of NSPs' submissions agreed that the current fixed timeframes for the AER to assess these applications may not be sufficient in all cases.[180] The AEMC agreed that the fixed timeframes in the Rules may need to be extended for the AER to properly assess pass through and capex reopener applications.[181] However, the AEMC also considers that the AER has not provided sufficient evidence to show the need for an extension to the contingent project assessment timeframe in the Rules.[182]

Contingent project capital allowances are pre-assessed in a determination and trigger events are specified.[183] However, when a trigger event occurs, the AER's role is to examine not only the occurrence of that event, but also the efficient amounts of capex and opex to be added to every remaining year of the regulatory control period.[184] Once approved, a contingent project must be allowed to be completed if it straddles a further regulatory control period.[185]

If a contingent project has not changed in scope since the determination, the need for new analysis by the AER may be low. Contingent projects are capital projects which are likely to undergo frequent changes of scale, scope and refinement of their implementation timetable. This will be true in both transmission and distribution networks, although the projects will be of a larger scale in transmission. Together these considerations often require the AER to assess the project to be undertaken afresh.

The example of ElectraNet's contingent project application for reinforcement of the Adelaide CBD demonstrates the detail and complexity that is often involved in the AER's assessment of contingent project applications. This contingent project was approved in ElectraNet's capex allowance for the 2008-13 period. The project was subject to a trigger event of development approval being obtained from the SA Government. The terms of that development approval altered the scale and scope of the project from the project approved in the AER's revenue determination. It required substantially more of the project to be installed underground. This

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178 AER, *Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules*, September 2011, pp.99-100

179 Ibid, pp.100-101

180 AEMC, *Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012*, 2 March 2012, p.149

181 Ibid, p.150

182 Ibid, p.150

183 Electricity Rules, clause 6A.8.1(b&c)

184 Electricity Rules, clause 6A.8.1(e)(1)

185 Electricity Rules, clause 6A.8.2

significantly increased the scope of the project and also, the tender process came in with higher than anticipated costs.

Consequently, ElectraNet applied for a significantly different profile of expenditure from that envisaged in the determination. This forced the AER to conduct a detailed examination of the changed profile of expenditure to determine the key amounts to be included in each remaining year of the regulatory period and the total capital and operating allowance required for the project. The financial impact was an increase from $103 million in the determination to $136 million in the application. The AER approved $131.38 million.

A key consideration in assessing ElectraNet's application was that ElectraNet had submitted tender information about two bids. A higher cost bid which was deemed to be compliant with the tender specification and a lower cost bid which was not compliant. The AER was required to make its decision in a very short period of time because of the timeframes specified in the Rules. Further, because of this time constraint, the AER felt pressured to accept that the higher cost bid represented a market tested assessment of the efficient costs.

It is difficult for the AER to anticipate the nature and scope of technical support it will require until a contingent project application is received. Contingent project applications are received infrequently, making it prohibitively expensive for the AER to have a contractor on standby. However, properly conducting the public acquisition process for a technical advisor is also impractical for the AER under the current timeframes - even fast track processes can take between two to three weeks.

Therefore, the AER's experience is that in practice, assessment of contingent project applications can involve significant complexity and, as is the case for pass through applications, further assessment time may be needed.

Stop the clock mechanism

The AER's proposed rules addressed the problem of inadequate assessment time for contingent project, capex reopener and pass through applications by allowing the extension of the assessment period up to 100 business days.

NSPs' submissions generally proposed a "stop the clock" mechanism, which would allow the AER to exclude the time taken to make a "relevant inquiry" or obtain information from third parties.[186] The AEMC considers that a "stop the clock" mechanism may be an appropriate way of extending the time for the AER to assess pass through and capex reopener (but not contingent project) applications. The AEMC submitted that the AER's proposed rules do not account for factors that may cause an assessment period to exceed 100 business days.[187]

The AER considers that there are generally two different reasons for needing additional assessment time. The first reason is that the AER is waiting on an external event or information from an external source. In these circumstances the AER agrees with the AEMC that a "stop the clock" mechanism may more appropriately allow the AER to extend timeframes. The second reason is where the AER considers that its assessment involves

[186] AEMC, *Directions paper – national electricity amendment (economic regulation of network service providers) Rule 2012 – national gas amendment (price and revenue regulation of gas services) Rule 2012*, 2 March 2012, p.149

[187] Ibid, p.150

questions of unusual complexity or difficulty. In this circumstance, for reasons of regulatory certainty, the AER's original proposal of extending the timeframe to 100 business days would be more appropriate than a "stop the clock" mechanism.

Therefore, the AER considers that the "stop the clock" mechanism should allow the AER to "stop the clock" where:

- the AER is waiting on information from external parties (including NSPs)
- the AER is waiting on the outcome of an external event that would impact on the assessment, or
- the AER is making a "relevant inquiry" for its assessment, including but not limited to where the AER is seeking advice from external consultants.

In addition to the "stop the clock" mechanism, the AER also considers that its original proposal to extend timeframes to 100 business days should apply where the AER considers that the AER's assessment involves questions of unusual complexity or difficulty and therefore more assessment time is needed. The 'stop the clock' mechanism could still be used to extend the timeframe past 100 business days in the circumstances proposed above.

For the reasons outlined above, the ability for the AER to extend its assessment time (whether via a "stop the clock" mechanism, the AER's original proposal, or a combination of both) should also be available to the AER in its assessment of contingent project applications.

4.5.2 Timeframes for the conduct of WACC reviews

The AER's rule change proposal explained that the maximum 80 business day timeframe for the conduct of the WACC reviews under chapter 6 may not always be sufficient or commensurate with the complexity and significance of this task.[188] Additionally, the inability of the AER to extend the timeframe for review under chapter 6, imposes a practical constraint on the AER's ability to extend the timeframe for a joint transmission and distribution WACC review.[189]

The AER supports its proposed rules to increase the time for WACC reviews from 80 business days, to a fixed 100 business day period.[190] The AER believes that a 100 business day period is more appropriate, considering the WACC review's complexity and significance. NSPs' submissions agreed with the AER's characterisation of the problem and proposed solution. However, it is recognised that this will be governed by the eventual rate of return model determined through this rule change process. While noting that the time required was not discussed by the AEMC, in the event that the AEMC determines a periodic review for the rate of return, the AER maintains that it is appropriate for a 100 day review period to be mandated.

[188] AER, *Rule change proposal – economic regulation of transmission and distribution network service providers – AER's proposed changes to the National Electricity Rules*, September 2011, p.97

[189] Ibid, p.97

[190] Ibid, p.98

Appendix 1 Results of the current regime

Each forecast determined in a distribution determination or transmission determination that the AER has made to date has been done so in accordance with chapters 6 and 6A. Therefore, we are unable to produce a counterfactual which demonstrates the difference between allowed costs and efficient costs. The AER can only speculate about the results of being able to apply a holistic, top down assessment, based on sound engineering and economic information and advice. That said, the AER considers there is evidence that further efficiencies could have been identified, while still meeting the requirements of the revenue and pricing principles.

This appendix collates relevant information, including evidence that suggests price rises may have been higher than necessary to meet efficient costs. It also analyses the drivers of current price increases, and assesses the sensitivity of building-blocks estimates to variations in forecast costs. Finally, this appendix shows that regulatory decision documents have become substantially longer under the current regime.

For those NSPs for which data is available, profits increased by an average of 50 per cent during the first year of the regulatory control period under the current rules framework.[1] On its face, this suggests that the increase in regulatory allowances is higher than required to merely offset higher costs.

Further evidence in support of the contention that the current Rules have led to higher than necessary price rises has arisen during the course of public inquiries in Queensland and NSW, where several government-owned NSPs have identified potential cost savings. For instance, the latest Somerville report states that each of Energex and Ergon Energy have identified savings of around $550 million and $450 million respectively in relation to customer and corporate initiated works (ie about $1 billion in total).[2] The Somerville report also recommends changes to security standards which Energex and Ergon Energy have indicated result in reductions of around $250m for each business. These savings are not expected to be detrimental to the performance of the networks. Ergon Energy's capex forecast is discussed in more detail in Appendix 2. Similarly, as part of the NSW Electricity Network and Prices Inquiry, Ausgrid advised that it was able to reduce capital expenditure by about $425m over the AER determination period.[3]

During the period since the 2009 regulatory determination Endeavour Energy has been able to reduce expenditure in the early years of the regulatory period by re-phasing its capital program, and it expects to underspend its allowed operating revenue for the remainder of the period.[4] Endeavour Energy underspent its capex allowance by 30.3 per cent in 2009/10 and 31.1 per cent in 2010/11. During the same period Endeavour underspent its opex allowance by 14.6 per cent and 13.7 per cent.. These outcomes give rise to questions about whether the increase in allowed revenue afforded to Endeavour Energy was excessive.

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1 This figure excludes the Victorian DNSPs, whose new reset only came into effect in 2011, and Electranet, which does not publish an Annual Report. Source: NSP Annual Reports.

2 Electricity Network Capital Program Review 2011, p.73.

3 Industry and Investment NSW, NSW Electricity Network and Prices Inquiry, December 2010, pg 51.

4 Industry and Investment NSW, NSW Electricity Network and Prices Inquiry, December 2010, pg 50.

That said, the increase in allowances allowed for Endeavour Energy at the last regulatory reset was substantially lower than the increases for Ausgrid or Essential Energy. These differences in regulatory outcomes have a significant impact on customers.

IPART recently released its draft report on retail prices to apply in NSW from 1 July 2012.[5] The draft decision includes an average retail electricity price increase of 16.4 per cent – with just over half of the increase (8.4 per cent) attributable to higher network costs. The increase is on top of similarly significant increases in previous years. Customers located in Ausgrid and Essential Energy's supply areas face significantly higher price increases than customers located in Endeavour Energy's supply area (see Figure 1.1).

Figure 1.1 Increases in NSW network prices 2012/13

Estimate of average nominal increases in network prices for small customers 2012/13 (%)	
Ausgrid	22.3
Endeavour Energy	4.8
Essential Energy	16.6

Source: IPART, Changes to Electricity Retail Prices from 1 July 2012, Draft Report, April 2012, p54.

In its report IPART notes its concern that network charges are higher than they need to be, due to certain aspects of the current regulatory framework, including the economic regulation of networks under the Rules and the standards for network reliability and security. It notes that the Rules should be changed to remove the bias towards higher network prices and inefficient outcomes, and the governance of the NSW electricity businesses should be improved.

Scenario analysis

The AEMC's directions paper asks for further evidence on the link between capex and opex allowances and increases in network costs.

As an illustration of the effects of holding expenditure at lower levels, the AER has undertaken some scenario analysis on NSW DNSPs (see Figure 1.2). As noted, it has been observed that in the first year of the current regulatory control period (2009-10) a number of NSW DNSPs underspent their expenditure allowances. The following hypothetical example shows the impact of holding expenditure levels to those actual 2009-10 expenditure levels throughout the regulatory control period. This results in significant reductions in the amount of revenue that would need to be recovered from consumers.

[5] IPART, Changes to Electricity Retail Prices from 1 July 2012, Draft Report, April 2012.

Figure 1.2 Scenario analysis

NSW DNSPs 2009-14 distribution determination						
	Ausgrid		**Endeavour Energy**		**Essential Energy**	
	Total unsmoothed revenue ($m)	% change	Total unsmoothed revenue ($m)	% change	Total unsmoothed revenue ($m)	% change
AER decision (after WACC appeal)	8515.2	-	4789.6	-	6054.3	-
Hold actual 2009-10 capex level across period*	8209.9	-3.6%	4487.4	-6.3%	5875.7	-2.9%
Hold actual 2009-10 opex level across period*	8559.0	0.5%	4535.8	-5.3%	5819.4	-3.9%
Hold actual 2009-10 capex and opex level across period*	8255.1	-3.1%	4234.6	-11.6%	5641.6	-6.8%

Source: AER analysis.

* Scenarios involve capital expenditure and/or operating expenditure held constant in real terms throughout the regulatory period at 2009-10 actual expenditure levels.

Drivers of network price increases

The AER has analysed its first round of distribution resets to highlight the drivers of network price increases. Figure 1.3 illustrates what has driven the price rises in terms of the regulatory building-blocks.

The analysis in Figure 1.3 involves converting the initial (P_0) and subsequent (x-factor) real price adjustments across the regulatory period into a single initial real price adjustment (as represented by P_0). That single adjustment is then broken into its constituent parts to identify the drivers of network price increases.

The results show that increases in forecast expenditure are the single largest driver of network charge increases. Increases in forecast capex resulted in average price increases of 13.5 per cent across all DNSPs and increases in forecast opex contributed a further 4.8 per cent price increases.

Figure 1.3 Drivers of price increases, all DNSPs*

Building block component	Impact on network charges
Growth in sales volumes	0.2%
Higher WACC	4.8%
Total impact of incentive schemes	-1.3%
Opex overspends/underspends during previous regulatory period	1.4%
Increases in forecast opex	4.8%
Capex overspends/underspends during previous regulatory period	3.4%
Increases in forecast capex	13.5%
Other factors incl. difference between actual rev. & allowances**	-3.6%
Total increase in average revenue over 5 year period	23.5%

Source: AER analysis

* Figures describe impact of AER final decision. It does not include adjustments following Tribunal decisions.

** This row shows the impact of aligning forecast tariff revenues in the final year of the previous regulatory period with benchmark costs for that year. This can be influenced by energy consumer forecasting errors, adjustments for final year capex forecasting errors, and differences between smoothed and unsmoothed revenue requirements.

If, as the AER contends, the process for determining capex and opex forecasts is flawed, then this analysis demonstrates that there is a large potential impact on customers.

Declining productivity

NSPs cite rising peak demand as a key factor contributing to the need for increased allowances. However, Figure 1.4 shows a significant increase in capex per MW since the current rules came into effect - i.e. capex levels have been increasing at a considerably faster rate than peak demand, due to additional expenditure on replacements, reliability improvements and other expenditure.

Figure 1.4 DNSP capex per MW ($'000s, 2009-10 dollars)

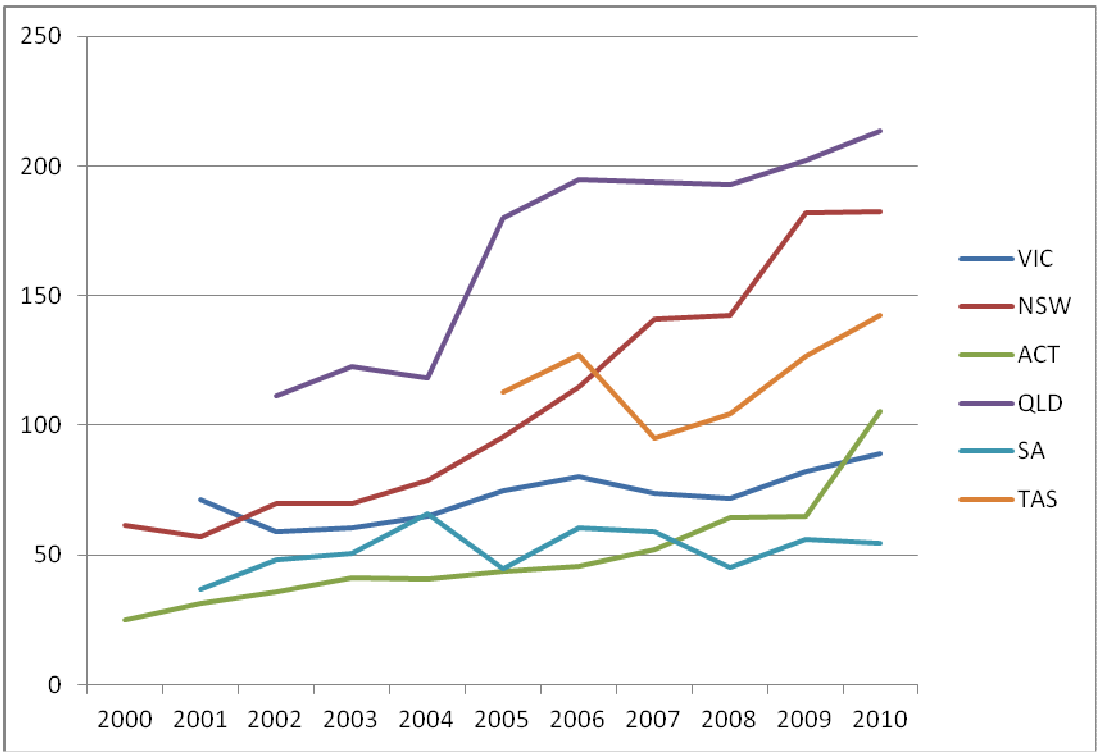
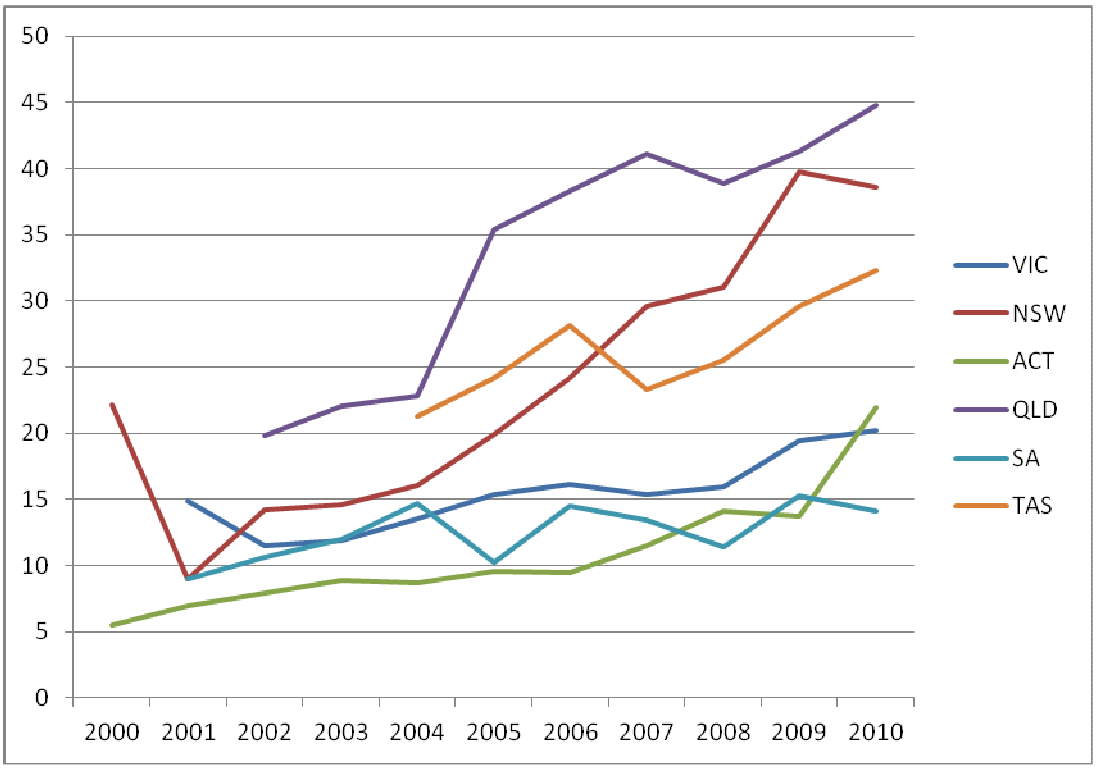


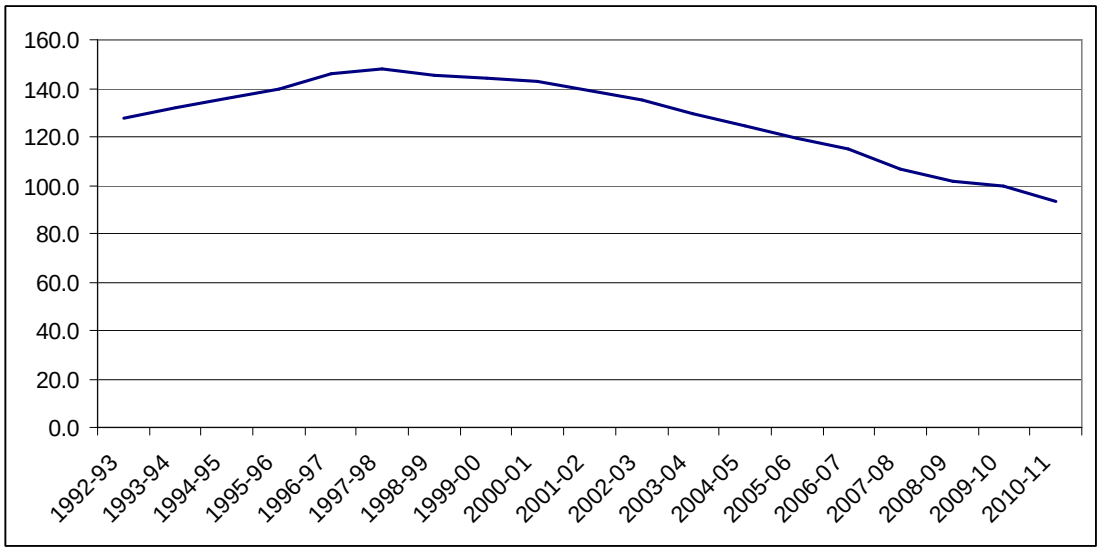
Figure 1.5 DNSP capex per GWhr ($'000s, 2009-10 dollars)



Similarly, Figure 1.5 shows increasing capex per unit of throughput - i.e. per unit of electricity transported by the distribution networks. This parameter drives prices and partially reflects declining average demand, which means that DNSPs' fixed costs have to be recovered over fewer units.

In addition, ABS data (see Figure 1.6) shows a significant decline in multi-factor productivity in the electricity, gas, water and waste industries since the late1990s.

Figure 1.6 Multi factor productivity index - electricity, gas, water & waste*



* Chain volume gross value added at basic prices. Reference year 2009-10 = 100.0.
Source: Australian Bureau of Statistics, Series 5260.

The Productivity Commission considers that the impact of this decline is sufficiently substantial to warrant further investigation.[6]

One reason that explains why observed productivity has been decreasing is the substantial growth in network investment that has occurred in recent years in an environment where electricity output growth has been constrained. To the extent that output growth remains relatively constrained, improving the sector's productivity performance will require a moderation of this input growth.

In its draft report on price increases to apply from 1 July 2012, IPART also noted the importance of productivity in the energy sector and proposed a number of changes, including changes related to the AER's proposals on network regulation, that it considers are needed to limit future cost increases to more appropriate levels.[7] In particular, IPART stated:

> Over the last 5 years, the network cost component of retail electricity bills in NSW has increased by 72% in real terms, with the largest increases over the last 3 years. This is largely due to significant increases in the network businesses' operating and capital expenditures, which have not only led to higher electricity prices but also to a decline in network productivity.[8]

IPART suggested that action is required to lift the productivity of the energy sector including improvements in economic regulation, network efficiency and infrastructure utilisation, and adjustments to network reliability standards.

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6 Productivity Commission, Annual Report 2010-11. Appendix A.
7 IPART, Changes to Electricity Retail Prices from 1 July 2012, Draft Report, April 2012.
8 IPART, Changes to Electricity Retail Prices from 1 July 2012, Draft Report, April 2012, p80.

Productivity in the electricity industry has significant flow on implications for the broader Australian economy, given electricity is a significant input cost for Australian businesses. Analysis of energy market reform proposals give an indication of the significant scale of benefits that accrue to the economy as a whole if productivity improvements can be made. For example, at the time of the Parer review in 2002, ACIL Tasman predicted total gains to the economy of $2 billion per annum at 2010 or around 0.5 per cent of GDP if the recommendations were implemented[9].

Impacts on the broader economy

While it is not possible to quantify the exact impact on prices or the broader economy that would result from the AER's proposals, even a relatively small reduction in allowed revenues and prices would have significant positive flow on effects for the economy as a whole. As an example of such effects, in 2004, as part of a submission to the Productivity Commission's draft report on its Review of the Gas Access Regime, the ACCC provided general equilibrium modelling commissioned from ACIL Tasman[10], which was designed to show the benefits of applying access regulation to the electricity and gas industries.

While the ACIL Tasman modelling does not quantify the effects of the AER's proposals, it is nevertheless useful in giving an indication that prices that are higher than optimal result in significant adverse impacts on the broader economy.

ACIL Tasman modelled three scenarios, a reference scenario with the access regime existing at the time, and two counterfactuals intended to show upper and lower bound estimates of the impact of removing access regulation. The 'lower bound' estimate involved using maximum aggregate revenue requirements (MAR) that were applied for by the network owners in their most recent revenue determination. In all cases the MAR originally sought exceeded the eventual final determination. In those cases where data on the TNSP applications was not available, a conservative increase of 5 per cent was applied to the maximum allowable revenue. The 'upper bound' estimate included a relatively arbitrary increase of 50 per cent to the regulated maximum allowable revenue for TNSPs and 25 per cent for DNSPs[11].

When compared with the reference scenario the 'lower bound' results indicated that access regulation had lowered load-weighted prices to end-users by approximately 9.3 per cent on average over the modelling period, while the 'upper bound' results suggests average price reductions in the order of 21 per cent.

The economic impacts of the price and volume changes for gas and electricity as a result of access regulation were then modelled using ACIL Tasman's general equilibrium economic model. ACIL Tasman found increases to gross domestic product due to the modelled sectoral price and volume impacts from the then current access regime for electricity and gas amounted to between $2,406 and $11,163 million in NPV terms (2002 $) over the modelled 15-year horizon. While the electricity and gas sectors were not separately modelled, ACIL Tasman said it would expect around 90 per cent of the aggregate benefits to be attributable to electricity access regulation.

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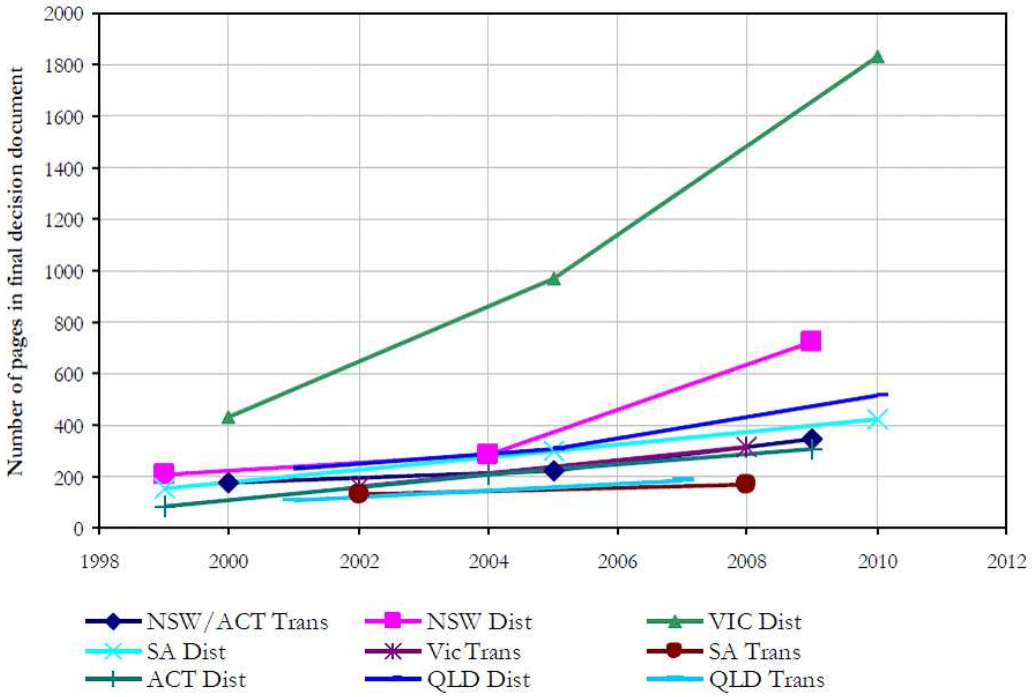
9 COAG, Towards a Truly National and Efficient Energy Market, Energy Market Review Final Report, 2002.

10 ACIL Tasman, Impacts of Access Regulation: Gas and Electricity, prepared for the ACCC, January 2004.

Length of regulatory decisions

The chart below shows the number of pages per regulatory decision document over time.[12]

Figure 3: Evolution of the length of regulatory decisions over time



Over time, regulatory decisions have become lengthier and more detailed. Some stakeholders have suggested that this is proof of the current regime working and providing incentives on NSPs to provide high quality information. However, to the extent that there has been an improvement in the quality of some forecasting data, no casual link between the regime and improved data has been shown. In many cases, the NSPs in question were coming off very low bases in terms of the quality of information available to support their proposals. It is to be expected that as each reset progresses, the internal systems and capital controls of these businesses would improve, regardless of the economic regulatory regime within which they operate.

What is clear is the negative impact that large volumes of information have on the ability of stakeholders to meaningfully comment on regulatory proposals. The AER maintains that its rule change proposal is the most appropriate model to incentivise high quality information provision in support of accurate forecasts. While large quantities of data are unavoidable in most regulatory reset processes, the AER's proposal maximises the potential for the material presented to be useful and accurate.

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[12] Darryl Biggar, Public utility regulation in Australia: Where have we got to? Where should we be going? Working paper no. 4, July 2011, ACCC/AER Working Paper Series

Appendix 2 Examples of issues that the AER's proposals seek to address

This appendix includes specific examples drawn from some of the AER's recent determinations. They are presented to illustrate circumstances rather than individual NSPs and the identification of the specific determination provides context to the illustration. While only some determinations are referred to and a few examples are presented in this appendix, they are used for the purpose of illustrating a much broader trend. The characteristics illustrated in the examples are encountered in addressing a large number of issues in each determination. These issues are then encountered in each determination.

Part 1 An outcome of the current regulatory regime

This part sets out two examples that illustrate the lack of disincentives on NSPs not to significantly overstate their forecasts. This is driven by the pre-eminence given to the NSP's regulatory proposal. These also illustrate that this behaviour is compounded by the benefits available to NSPs from exploiting the constraints placed on the AER by the regulatory framework when developing and applying an efficient substitute forecast.

It is recognised that these examples also show that the AER was willing to reduce the proposed expenditure. However, these reductions are made within the constraints placed on the AER. In particular, the reductions are based on the proposal and are therefore subject to the peculiarities contained therein. Such a reduction to a significantly over forecasted amount does not lend itself towards an outcome that is targeted at achieving the NEL objective.

The following two examples are taken from Ergon Energy's 2010-15 distribution determination process.

Corporation initiated augmentation capex

Regulatory proposal

Ergon Energy's Corporation Initiated Augmentation (CIA) capex relates to the capex required to augment the capacity of its network, based on forecast demand loads. In its 2010-15 regulatory proposal Ergon Energy proposed CIA capex of $1991 million, or 33 per cent of its total capex. This represented a 90 per cent real increase relative to its CIA capex in the previous period.

AER draft decision

In reviewing the regulatory proposal the AER sought advice from its engineering consultant on Ergon Energy's CIA capex proposal. The AER's consultant attempted to reconcile the information in Ergon Energy's network planning documentation and the CIA capex forecast, but was unable to establish a clear relationship. The AER's consultant also noted concerns with the quality and availability of the options analysis and business case documentation supporting Ergon Energy's CIA capex proposal. Given the lack of net present value analysis to demonstrate selection of the most efficient option, the limited availability of business case documentation, and no clear reconciliation between the planning documentation and the CIA

capex proposal, the AER's consultant was unable to conclude that Ergon Energy's CIA capex proposal was efficient.

Given the role of demand in forecasting CIA capex, the AER also sought advice from its demand forecasting consultant regarding the appropriateness of the demand forecasts underpinning the CIA capex proposal. The AER's consultant had previously identified a number of issues with Ergon Energy's demand forecasting approach and concluded that it did not provide a realistic expectation of demand. In relation to CIA capex, the AER's consultant considered Ergon Energy's forecasts to be overstated by the equivalent of 18 months of demand growth. [The AER notes that its rejection of Ergon Energy's demand forecast was a matter that Ergon Energy was granted leave to have reviewed, but Ergon Energy did not proceed with this ground for review].

In its draft decision the AER agreed with both of its consultants findings and concluded that Ergon Energy's CIA capex proposal was not prudent and efficient. A reduction of $526 million was applied on the basis of its consultant's advice.

Ergon Energy's revised proposal

In its revised regulatory proposal Ergon Energy rejected the AER's draft decision and increased its original CIA capex proposal by $85 million as a result of applying revised cost escalations and the reallocation of shared costs. Ergon Energy provided analysis by its consultant on a sample of its CIA capex as evidence that its capex forecasts reconciled to the relevant planning documentation that Ergon Energy had provided to the AER. After submission of its revised regulatory proposal, Ergon Energy also provided a copy of an updated sub-transmission planning documentation for 2009 (Ergon Energy's regulatory proposal was based on 2007 planning documentation). Ergon Energy also undertook a reconciliation of the projects proposed for the regulatory period in both the 2007 and 2009 planning documents.

AER final decision

The AER sought advice from its engineering consultant on the revised CIA capex proposal. The AER's consultant undertook a review of the 2007 and 2009 planning documentation in relation to the projects reconciled by Ergon Energy's consultant, in the expectation that there would be a high degree of correlation in the projects between the two documents.

However, based on its analysis the AER's consultant concluded that the 2007 planning documentation (the basis of the CIA capex forecast) did not reflect the likely timing of projects based on the latest available information and therefore did not represent a reasonable basis for the capex forecast. Therefore, the AER's consultant was unable to conclude that Ergon Energy's proposed sub–transmission CIA capex represented prudent and efficient expenditure.

The AER's consultant recommended two adjustments to the proposed CIA capex:

- adjustment to the sub-transmission component of CIA capex to account for the planning reconciliation issues identified (a reduction of $234 million).

- general adjustment to CIA capex on the basis of Ergon Energy's overstated demand forecasts, equivalent to the deferral of 18 months of demand related CIA capex (a reduction of $392 million).

The AER reviewed and accepted its consultant's advice, and asked Ergon Energy to model the CIA capex reductions. It is noted that in modelling the demand deferral reduction Ergon Energy calculated a substantially lower reduction of $266 million than had been modelled by the AER's consultant ($392 million). The AER accepted Ergon Energy's modelling of this adjustment and the final decision therefore included a reduction of around $500 million to a CIA capex allowance of $1577 million.

This significant over forecasting is compounded by the requirement that, if the AER rejects the amount, it must amend the proposal only to the extent necessary to be approved in accordance with the Rules.

Further, by requiring such an approach, the Rules effectively force the AER and its consultants to undertake a forensic review of all the material provided. After detailed examination of models, review of numerous documents and discussions with Ergon Energy, the AER and its consultants were unable to establish the efficiency of the CIA capex. Given the time constraints, the AER had to rely on high level adjustments to develop a substitute forecast (for example 18 month deferral assumption). It is likely that if the AER was permitted to use its own forecast rather than being constrained through having to determine an amount the basis of the current regulatory proposal, then the final efficient CIA capex allowance may have been lower.

Tribunal review

In addition to other matters, Ergon Energy sought review of the adjustment of its CIA capex before the Tribunal but did not pursue the matter beyond leave for review being granted. The AER was unclear at the time as to why this matter was not proceeded with. The AER considers that it is likely that Ergon Energy's focus at the review would have been on the reasonableness of the AER's forecasting methodology. This view is supported by correspondence from Ergon Energy at the end of the determination process.

Post decision actuals

A review of Ergon Energy's 2010-11 regulatory accounts indicates that its forecast CIA capex for 2010-11 was $267 million but it had significantly underspent this allowance by around [c-i-c]. This represents a large reduction from what was allowed by the AER in its determination. While Ergon Energy indicates that the underspend was due to flooding and delays in obtaining planning approvals, the outcome appears to confirm the concerns the AER had at the time of the determination about Ergon Energy's demand forecast and project reconciliation. It also raises questions about the original CIA capex proposal put forward by Ergon Energy being significantly overstated.

2011 Somerville report

The recent Somerville report accepted savings of approximately $500 million each from Energex and Ergon Energy in relation to customer initiated capital works and corporate initiated capex (which includes Ergon Energy's CIA capex) from that approved by the AER in its 2009 determination. The Somerville report states that the savings result from lower than expected demand outcomes in this period as some of the proposed works were delayed or

deferred. The report also states that the savings would not be detrimental to the existing performance of the networks.

Customer initiated capital works

Regulatory proposal

Customer initiated capital works (CICW) capex relates to work required to service new or upgraded connections which have been requested by customers. Ergon Energy's original proposal included CICW capex of $1695 million, or 28 per cent of the total capex proposal.

AER draft decision

The AER sought advice from its engineering consultant on Ergon Energy's CICW capex proposal. The AER's consultant identified a number of issues regarding the applicability of the growth forecasting variables used as part of Ergon Energy's CICW forecasting methodology. In particular, it considered (and the AER agreed) that the application of dwelling stock growth forecasts to forecast growth in commercial and industrial connections was not appropriate.

Based on its consultant's advice, the AER concluded that the robustness of Ergon Energy's CICW capex forecast was not supported by its forecasting methodology. Ergon Energy believed that there was a correlation between its CICW baseline expenditure, dwelling stock growth and gross regional product, but was unable to provide any evidence, such as correlation analysis, to substantiate its view.

The AER considered its consultant's alternative forecasting approach, which used historical connection costs and forecast customer number growth to replicate a 'business as usual' scenario, was a reasonable approach to establish an alternative forecast. Based on this forecasting approach the AER reduced Ergon Energy's proposed CICW capex by $318 million.

Revised proposal

Ergon Energy's revised proposal rejected the AER's draft decision and increased its original CICW capex proposal by $152 million as a result of amendments to its forecasting methodology as well as revised cost escalations and the reallocation of overheads.

Ergon Energy provided analysis undertaken by its consultant analysing the reasonableness of its original CICW forecasting methodology (not its revised methodology) and critiqued the AER's consultant's alternative CICW capex forecast. Ergon Energy stated that the AER's consultant had made an error in using incorrect historical data in determining its alternative CICW capex forecast. Further, Ergon Energy considered that the AER's draft decision on CICW capex was not realistic and exposed it to considerable risk of unfunded connection requirements.

Final decision

The AER sought advice from its consultant on the revised CICW capex proposal. The AER noted that Ergon Energy had used dwelling stock growth as the driver variable for all categories of CICW capex in its revised proposal. This included large connections as well as small commercial and industrial connections, despite the concerns raised by the AER in the draft decision regarding the applicability of this forecasting variable.

The AER considered that the analysis presented by Ergon Energy's consultant did not demonstrate causality between dwelling stock growth forecasts and commercial and industrial connections. The AER concluded that Ergon Energy's revised proposal had not provided sufficient persuasive new information to alter the AER's conclusion regarding Ergon Energy's forecast of CICW capex as set out in the draft decision.

The AER's consultant amended its alternative CICW forecasting model to account for the historical data error identified by Ergon Energy. Otherwise the AER's consultant maintained that its model provided for a prudent and efficient level of CICW capex to support future customer connection activities at levels consistent with Ergon Energy's recent historical experience.

Therefore, the AER concluded that Ergon Energy CICW capex forecast was not prudent and efficient, and applied a reduction of $402 million. This resulted in a CICW allowance of $1444 million, an increase of approximately $67 million from the AER's draft decision.

This outcome again demonstrates significant over forecasting. Further, the use of the same methodology for the CICW driver variable that was rejected in the draft decision shows Ergon Energy's focus on the Rule that the AER must amend from the basis of the proposal only to the extent required to make it reasonable. This focus results in the AER having to determine a reasonable method to adjust the driver variable to reduce the forecast rather than determine an efficient estimate. Whilst the adjustment was made based on historical costs, an efficient estimate developed by the AER could have been lower.

Tribunal review

Although Ergon Energy sought to have this matter reviewed before the Tribunal, it did not pursue this matter beyond obtaining leave to review. The focus of Ergon Energy's review on this issue was likely to have been on Ergon Energy's perceived flaws in the AER's consultants alternative CICW capex forecasting model (the basis of the substitute forecast), rather than disputing the AER's decision to reject its forecast. This view is supported by correspondence from Ergon Energy at the end of the determination process.

Post decision actual and 2011 Somerville review

A review of the 2010-11 regulatory accounts for Ergon Energy indicates that CICW was forecast to be $298 million but the actual expenditure that year was [c-i-c], a large reduction. The AER accepts that some of the underspending is the result of flooding and delays in obtaining planning approvals. However, the AER is also aware that Ergon Energy has identified savings of approximately $500 million from its (CIA and CICW capex) as part of the 2011 Somerville review. These reductions are in addition to the significant demand driven capex adjustments the AER made as part of its 2009 determination.

During the 2009 determination, Ergon Energy claimed that any cuts the AER was to make to its original CICW forecast would 'expose it to considerable risk of unfunded connection requirements.' The adjustments made by the AER in its determination; the significant underspend in 2010-11; and Ergon Energy's agreement to future reductions all suggest that Ergon Energy's original CICW capex forecast was significantly overstated.

AER comment

The fact that so soon after the AER's determination reductions of the magnitude described in the Somerville review can be obtained in addition to the significant reductions made by the AER, illustrates the incentives for NSPs to over forecast.

The above examples demonstrate the significant difficulties faced by the AER in determining the efficient forecast for just a few aspects of capex. In a determination, this scenario is multiplied many fold. Both the AER and its consultant's were faced with reviewing a substantial amount of supporting information that had apparently been developed using internally developed network plans. However, after considerable time and effort the AER and its consultants were not able to reconcile the information and therefore determine that it was efficient.

As a result of the way in which the current rules are framed, the AER took a significant risk in relying on its own consultant's forecasts to reduce Ergon Energy's forecast expenditure. It took this approach given the inadequacies found with Ergon Energy's forecasts and Ergon Energy's inability to satisfactorily address those issues. However, had the matters been reviewed it is possible that the Tribunal may have found that the AER's forecasts did not meet the NER requirement that the AER only amend the regulatory proposal to the extent necessary.[1]

The examples also demonstrate several instances where Ergon Energy's actions exacerbated the information asymmetries that exist. For example, in relation to CICW capex, one of the key issues related to whether causality existed between the CICW baseline, dwelling stock growth and gross regional product. As part of its revised proposal Ergon Energy submitted an amended forecasting model that relied on this causality despite the AER rejecting this linkage in its draft decision. As a result of the amendments to the model and revised cost escalators Ergon Energy proposed an even higher CICW forecast than in its original regulatory proposal. Ergon Energy also provided its consultants report that analysed the reasonableness of Ergon Energy's earlier model (not the amended one); critiqued the AER's consultants forecasting approach; and attempted to demonstrate that the claimed causality existed. A similar approach was adopted by Ergon Energy in responding to many of the issues raised by the AER in its draft decision (for example, the demand forecasting issue).

Although, Ergon Energy did not proceed with reviewing the matters before the Tribunal, the AER ran the risk of its forecast (which was necessarily based on a high level approach) being rejected on the basis of the below mentioned interpretation of the current framework [underline added for emphasis]:

> It is apparent from what the Tribunal has already said that the Tribunal is of the opinion that the AER did seek quantification from EA. EnergyAustralia had the opportunity to provide the quantification sought. There is a suggestion in the PwC report that efficiency gains may not be readily identifiable by EA. If that be so, it may have adopted the course it submits the AER should, namely, apply a percentage reduction, as Integral Energy did. <u>As submitted by EA</u>, <u>unlike other regulatory regimes, this regime gives considerable weight to the business experience, calculations and judgments of the regulated entity. EnergyAustralia is far better placed than the AER to undertake the exercise required to quantify the efficiency gains or to arrive at judgements</u>

[1] NER, clause 6.12.3(f)

about any percentage reduction for inferred savings. Because EA failed to undertake that exercise, the AER was simply unable to determine a substitute amount on the basis of a current regulatory proposal. The Tribunal is satisfied that the AER complied with cl 6.12.3(f)(2), assuming it applies to this decision making process.[2]

Part 2 Evidence of specific issues

Table 2.1 sets out of evidence which demonstrates the difficulties experienced by the AER in applying top down analysis to determine substitute forecasts.

Table 2.1 Examples of constraints on AER's ability to rely on top-down analysis

Reinforcement capex

Victorian DNSPs	In its 2011–15 Victorian draft distribution decision, the AER sought to apply benchmarking to address what it considered to be over-forecasting of capital needs by the Victorian DNSPs.
2011–15 distribution determination	In estimating the required forecast of reinforcement capex for each DNSP, the AER's consultant applied an individual 'weighted average probability assessment' to each DNSP. This analysis had regard to the individual circumstances of each DNSP and the fact that the propensity to over-forecast was not observed by every DNSP. This assessment also considered the quality of the forecasting process employed by each DNSP, each DNSP's historical trend to underspend forecasts and the AER's own investigation of the methodologies used by each DNSP to determine its reinforcement capex forecast.[3] As a result of this assessment the AER reduced the forecast reinforcement expenditure by between 37 per cent and 62 per cent.[4] The Victorian DNSPs in their revised regulatory proposal disagreed with the AER's weighted probability analysis. The DNSP's submitted that the AER had amended their regulatory proposals greater than the extent necessary to make their proposals compliant with clause 6.12.3(f) of the NER.[5] During the reset process the AER's consultants examined more than one hundred reinforcement projects for each DNSP. Although the AER sample of projects by value was in excess of 30 per cent the AER could not confidently demonstrate that 30 per cent (or any number) was 'statistically significant' to such that it could be extrapolated across the balance of the proposals. In practice, it is difficult to be confident that any sample group meets the requirements of the Rules, particularly given the lack of clarity of the obligation to consider the 'circumstances of the relevant NSP' – there is always scope to argue that the sample would be more representative if certain projects were included (or excluded). Further, the timetable associated with the regulatory determination process makes it difficult to vary the sample group at a later stage in the process. In the final decision, the AER accepted that applying the 'weighted average probability assessment' approach may mean that its substitute forecast was not based on the Victorian DNSPs' regulatory proposals and arguably could be seen to lead to a greater change to the businesses proposals than the extent necessary for it to comply with the NER, (as required by clause 6.12.3(f)). For this reason, in the final decision the AER did not apply the benchmarking approach to determine an allowance for this category and reverted to a traditional 'bottom-up' analysis to complete its decision. The difference in outcomes was an

2 Application by EnergyAustralia and Others (includes corrigendum dated 1 December 2009) [2009] ACompT 8 (12 November 2009), para 201.

3 AER, Draft decision, Victorian distribution determination, June, 2010, p.335.

4 AER, Draft decision, Victorian distribution determination, June, 2010, p.336.

5 In particular Jemena, see Final Decision - Appendices, Victorian distribution determination, October, 2010, p.525

increase of over $300 million in capital allowances. But for clause 6.12.3(f) and had the AER been confident that its benchmarking approach could be sustained on review, it is probable that the increase in capital expenditure would have been significantly less than $300 million.

The AER noted in its final decision that both timing considerations and the desirability of further testing its approach were factors in moving away from the benchmark approach. It should be recognised, however, that while it is always useful to have more time to undertake and test any analytical approach, at the end of the day, it was the constraints in the rules, noted above, that were probably of greater import. The AER was not however, minded to be overtly critical of the rules framework in its individual decisions. It considers, given the importance we attach to maintaining regulatory certainty, that it should limit any commentary regarding the shortcomings of the Rules to an appropriate forum, namely this Rule change proposal.

Zone substation expenditure

EnergyAustralia 2009–14 distribution determination

The AER in its 2009-14 NSW draft distribution decision was not satisfied that the zone substation capex proposed by EnergyAustralia reasonably reflected the efficient costs of the capex criteria.[6]

The AER gave particular attention to a report by EnergyAustralia submitted in its regulatory proposal. The AER compared SKM and EnergyAustralia's zone substation cost estimates and concluded that EnergyAustralia's estimates were systematically higher than SKM's estimates. The AER noted that on average, SKM's cost estimates were 6 per cent lower than EnergyAustralia's.[7]

The AER in its draft decision, recognised that there was a degree of uncertainty regarding the efficient level of substation costs and concluded that the efficient costs that a prudent operator in EnergyAustralia's circumstances would require was a value midway between EnergyAustralia's and SKM's estimates.[8] Accordingly, the AER reduced EnergyAustralia's zone substation capex proposal by $34 million.

EnergyAustralia in its revised regulatory proposal submitted that the SKM sample was not representative of EnergyAustralia's work program and if SKM's estimates were adjusted to reflect EnergyAustralia's actual work program the difference between its estimate and SKM's would fall from 6 per cent to 3.2 per cent.[9][10]

The AER in its final decision agreed with SKM's advice and EnergyAustralia's revised regulatory proposal that any analysis of substation cost estimates should be weighted to account for the particular substations proposed in the next regulatory control period.[11] The AER also considered that by adopting this approach, and covering the error identified, the difference in cost estimates between SKM and EnergyAustralia falls to 3.2 per cent.

Therefore, notwithstanding that the AER's original adjustment reflected only a 3 per cent reduction in costs, in its final decision the AER accepted that EnergyAustralia's proposal reasonably reflected the capex criteria and did not make any deductions.[12]

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6 AER, Draft decision, NSW distribution determination, November, 2008, p.469.
7 AER, Draft decision, NSW distribution determination, November, 2008, p.462.
8 AER, Final decision, NSW distribution determination, April, 2009, p.138.
9 EnergyAustralia, Revised regulatory proposal, p.41.
10 Given that the adjustments to its own consultant's analysis proposed by EnergyAustralia related to its actual work practices, this is an example of where top down analysis has been undermined as a result of the conflation of exogenous and endogenous factors.
11 AER, Final decision, NSW distribution determination, April, 2009, p.139.
12 AER Final decision, *NSW Distribution Determination 2009-10 to 2013-14*, pg 137-139.

Table 2.2 provides examples of NSP conduct that has the effect of compounding the information asymmetries faced by the AER.

Table 2.2: Examples of behaviour that compounds information asymmetry

Over forecasting

Powerlink

2012-17 transmission determination

Powerlink in its transmission revenue proposal for the 2012-17 transmission period proposed several augmentation projects of the existing 275 kV network to make it capable of operating at 500 kV. Powerlink intends to operate these projects at 275 kV for an indefinite period.

The AER in its draft decision did not accept $544 million ($2011-12) of capex associated with these projects on the basis that it was not satisfied that the incremental cost of building any of the 500kV capable infrastructure over and above 275 kV reasonably reflects the capex criteria.[13] The AER also identified considerable uncertainty in the timing of, and need for, the 500 kV network upgrade[14]. In particular the AER considered that three of the four projects are unlikely to be required in the next regulatory control period, particularly (although not only) given the reduced demand forecast proposed by the AER.[15]

When undertaking the regulatory test for these projects in 2009, Powerlink made certain assumptions which rendered all options other than its preferred option infeasible. These assumptions related to the availability of easements, the potential for generation growth in South East Queensland, an unrealistic demand forecast and an inappropriate hurdle requirement for the "commitment" of non-network alternatives. Since the 2009 regulatory test was conducted, Powerlink has revised its demand forecast downwards three times and as a result the commissioning date for the project has been delayed twice.

Given these circumstances, the AER requested that Powerlink develop a 275kV build option as a counterfactual to the 500kV build and to test its assumption that it is impossible for Powerlink to acquire any additional easements in South East Queensland. In response Powerlink developed four new of 275 kV network options as well as seven new generation options, and tested these in net present value analysis.

However, the 275kV planning options proposed by Powerlink were not feasible. For example, Powerlink developed 275kV build options which required 810 new easements and 18 additional corridors. Following this, Powerlink provided two expert reports which concluded that it was not possible to obtain the easements and corridors associated with Powerlink's new options. This example shows that Powerlink responded to the AER's information request in a manner that did not directly provide the AER with the information it sought.

Further, on detailed investigation the AER determined that Powerlink's claimed generation scenarios were actually a method to offset demand to mimic the required reduced demand forecast. No generation growth was in fact modelled. In addition, Powerlink's modelling assumed only 150 MW of generation output from South East Queensland, even though 850 MW of capacity is already installed.

As Powerlink had not provided any feasible 275 kV alternatives (as requested), AER, its consultants (EMCa) and Powerlink met to identify credible 275 kV build options that meet Powerlink's N-1 planning criteria and other constraints. Following this meeting, the AER together with EMCa developed a number of more realistic alternatives, including an option which does not require any additional easements/corridors.

Finally, when modelling the scenarios requested by the AER, Powerlink extended its

13 AER, Draft decision, Powerlink transmission determination, November, 2011, p.28.
14 AER, Draft decision, Powerlink transmission determination, November, 2011, p.28.
15 AER, Draft decision, Powerlink transmission determination, November, 2011, p.28.

planning horizons from 2039 to 2055. Since the relevant models assume gradual demand growth over time, lengthening the planning horizon advantageous for the purposes of justifying Powerlink's 500 kV option. The RIT-T guidelines recommend a 20-25 year planning horizon.

The AER's final decision upheld the draft decision. Powerlink's behaviour set out above is an example of an NSP acting in response to the perverse incentives created by the current regime.

Failing to highlight key pieces of information

Powerlink

2012-17 transmission determination

Powerlink in its revenue proposal and revised revenue proposal for the 2012-17 transmission period failed to alert the AER to its new union collective agreement when providing information on the quantum of labour cost escalation. Rather, Powerlink's new union collective agreement was brought to the AER's attention via the Australian Services Union Queensland (Services and Northern Administrative) Branch website.[16]

The AER considered that this information was crucial to the AER deciding the efficient labour cost forecast because the new union collective agreement had a lower proposed wage increase than that proposed by Powerlink in its revenue proposal and revised revenue proposal.

Changing the justification and/or basis of a cost forecast

Powerlink

2012–17 transmission determination

Powerlink in its revised revenue proposal for the 2012 -17 transmission period rejected one of the AER's proposed adjustments to its market impact component[17] on the ground that the relevant constraint was co-ordinated with a generator outage. When the AER's inquiries showed this claim to be false, Powerlink did not respond to the AER's question concerning outage co-ordination but instead claimed that the outage should be excluded from the performance history on a different ground, namely that it was an outage of non-prescribed transmission services[18].Therefore, the AER was required to undertake further analysis and investigation of this newly proposed ground at a late stage in the reset process.

ETSA Utilities

2010-15

distribution determination

ETSA Utilities in its regulatory proposal for the 2010-15 distribution period submitted that the deteriorating age and condition profile of its distribution network will lead to an increase in the opex during the next regulatory control period.[19]

The AER in its draft decision disagreed with ETSA Utilities submission and considered that the impact of ETSA Utilities' increasing asset age was overstated in its modelling.[20] The AER considered that ETSA Utilities had not appropriately modelled the likely impact of asset age on its opex forecast, as it did not accurately calibrate the opex/age curves in its modelling.[21]

ETSA Utilities in its revised regulatory proposal made adjustments to its asset age escalation model. ETSA Utilities also advised its consultants to remodel the age profile of its assets based on the AER's proposed adjustments as well as ETSA Utilities' revised regulatory proposal. As a result of the revised modelling, ETSA Utilities stated that errors were identified which overstated the asset age escalators.[22]

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16 http://www.asuqld.asn.au/index.php

17 The market impact component is one of the parameters subject to financial incentives as part of the Service Target Performance Incentive Scheme.

18 Powerlink, Response to information request of 20 March 2012, STPIS market impact component, 21 March 2012.

19 ETSA Utilities, Revised regulatory proposal, July, 2009, p.159.

20 AER, Draft decision, South Australia distribution determination, November 2009, p.205.

21 AER, Draft decision, South Australia distribution determination, November 2009, p.195.

22 AER, Final decision, South Australia distribution determination, May 2010, p.117.

Therefore, the effect of the new information was that the amended revenue requirement was greater than the AER's estimated amount in the draft decision, although slightly less than the original proposal. Further, the issue of estimation of impact was made more difficult as the AER did not have access to working models, and errors were corrected only when they resulted in a favourable impact on the final revenue allowance.

Providing responses which fail to answer the question

Ergon Energy 2010-15 distribution determination

'Other costs'

Ergon Energy in its regulatory proposal to the AER for its 2010-15 Queensland electricity distribution determination submitted an 'other costs' component which was calculated by summing the sponsor costs and the project risk held by asset manager contingency costs.[23]

The AER, in its draft decision considered that planning for contingencies is not unreasonable, however it is not appropriate for a DNSP to impose contingency costs on all customers as contingencies may not eventuate and individual customers have different attitude towards the risk associated with contingency costs.[24] As such, the AER was not satisfied this component reflects the efficient cost of providing quoted services and therefore removed the 'other costs' component from Ergon Energy's formula used to derive prices for quoted services.[25]

Ergon Energy in its revised regulatory proposal rejected the AER's proposal to remove 'other costs'. Ergon Energy submitted that the AER had not understood the intent of its 'other cost' component and that 'other costs' does not just represent contingency costs but any 'other' costs', Ergon Energy incurs in performing a service such as hire of equipment or assets etc.[26]

The AER in its final decision considered that Ergon Energy did not provide sufficient information to support its contention that 'other costs' includes costs other than contingency costs such as hire or supply of equipment and assets of labour.[27] The AER on three occasions requested additional information from Ergon Energy. Ergon Energy responded by providing a limited amount of additional information which did not directly answer the questions the AER asked.

The AER concluded that it was not satisfied that the inclusion of the 'other costs' formula component reflects the recovery of efficient costs and therefore maintained the position it took in its draft decision.[28]

Ergon Energy sought review of this aspect of the AER's decision before the Tribunal. The Tribunal held that the AER erred in rejecting the 'other costs' component.[29] The Tribunal held that sufficient information was provided to at least continue further enquiry.[30] The Tribunal therefore found that in the circumstances of this case the AER had made an error of fact. The Tribunal also commented that Ergon Energy had a critical role to play in providing information to the AER to assist the AER in making a distribution determination which reflects the national electricity objective and the revenue and pricing principles and Ergon Energy failed to fulfil this role adequately in relation to 'other costs'.[31]

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23 Ergon Energy, Regulatory proposal, July, 2009, pp. 491-492.
24 AER, Draft decision, Queensland draft distribution determination, November, 2009, p.419
25 AER, Draft decision, Queensland draft distribution determination, November, 2009, p.420.
26 Ergon Energy, Revised regulatory proposal, January, 2010, p 231.
27 AER, Final decision, Queensland distribution determination, May, 2010, p.367.
28 AER, Final decision, Queensland distribution determination, May, 2010, p.367
29 Application by Ergon Energy Corporation Limited [2010] ACompT 6, at 2.
30 Application by Ergon Energy Corporation Limited [2010] ACompT 6, at 43.
31 Application by Ergon Energy Corporation Limited [2010] ACompT 6, at 50.

Customer service costs

The AER in its draft decision did not accept Ergon Energy's forecast opex allowance for metering and customer service activities. The AER identified a double count of alternative control metering and customer service costs as part of the other operating costs forecast for Ergon Energy's standard control services.[32]

In its revised regulatory proposal Ergon Energy rejected the AER's draft decision regarding metering and customer service costs. Ergon Energy submitted that it had presented incorrect data in its supporting documentation provided as part of its regulatory proposal and had led to the AER's conclusion.[33] Ergon Energy also submitted that it provided updated and corrected spreadsheets to the AER leading up to the draft determination which was not given due consideration by the AER.[34]

The AER's consultants considered that the information provided by Ergon Energy in its revised regulatory proposal was not sufficient for its analysis.[35] The AER's consultants relied on a document provided by Ergon Energy (which Ergon Energy used to inform its budget forecasts). Where the data within the document could not be reconciled against the regulatory information notice, the consultants sought further information from Ergon Energy. The AER's consultants also noted among other things that Ergon Energy had been provided with the opportunity to outline further detailed corrections to support its original forecasts, particularly in relation to Ergon Energy's customer service costs. However Ergon Energy had not provided any further information in this regard.

The AER in its final decision considered that there was some ambiguity in relation to customer service costs that should be attributed to standard control services.[36] The AER also considered that Ergon Energy's inability to reconcile the information used to inform its budget forecasts and its opex forecasts means the AER does not consider Ergon Energy's claim that the opex forecast only incorporates standard control services has been substantiated. The AER therefore reduced Ergon Energy's proposed customer service opex by $33 million.[37]

Ergon Energy sought review of the AER's decision not to accept Ergon Energy's forecast customer service costs before the Tribunal. The Tribunal affirmed the AER's decision. The Tribunal held that Ergon Energy at no stage clearly made the argument that it was not reasonably possible to undertake the reconciliation that was repeatedly asked for by the AER. Further, the Tribunal held that Ergon Energy did not provide sufficient information in order for the AER to be satisfied that its operating expenditure proposal reasonably reflects the operating expenditure in the NER.[38]

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32 AER, Draft decision, Queensland draft distribution determination, November 2009, pp. 685-689.
33 Ergon Energy, Revised regulatory proposal, January, 2010, pp. 165–167.
34 Ergon Energy, Revised regulatory proposal, January, 2010, pp. 165–167.
35 AER, Final decision, Queensland distribution determination, May, 2010, p.177.
36 AER, Final decision, Queensland distribution determination, May, 2010, p.180.
37 AER, Final decision, Queensland distribution determination, May, 2010, p.180.
38 Application by Ergon Energy Corporation Limited (Customer Service Costs) (No 2) [2010] ACompT 10 at 64-65

EnergyAustralia 2009–14 distribution determination

The AER in its 2009-14 NSW draft distribution decision considered that the majority of proposed step changes included in EnergyAustralia's opex should be removed. The AER reduced EnergyAustralia's opex by $303 million, primarily in relation to step changes. [39]

Following the AER's draft decision, EnergyAustralia submitted a large amount of information (including additional consultant reports). The AER considered this additional information did not fully address the issues the AER had raised in its draft decision. Based on the information available, the AER in its final decision reduced EnergyAustralia's controllable opex by $212 million.

EnergyAustralia sought review of the AER's decision on step change and escalation of maintenance costs (which accounted for $199 million of reductions). The Tribunal noted that the AER was correct in rejecting the maintenance cost forecast based on an exponential relationship between maintenance costs and the average age of assets.[40] In relation to EnergyAustralia's submission that the AER's percentage reduction was arbitrary and illogical, [41] the Tribunal observed that quantification was sought by the AER and that EnergyAustralia should have offered a percentage reduction as it is better placed than the AER to quantify efficiency gains or percentage reduction for inferred savings. It did not do so and the AER was unable to determine a substitute amount based on the proposal.[42] The Tribunal upheld the AER's decision and recognised the difficulties the AER encountered in obtaining information to support EnergyAustralia's proposal.

Providing information late in the process

Victorian DNSPs

The day before the AER was due to publish its 2010-15 Victorian distribution determination, Victorian DNSP United Energy Distribution attempted to submit for consideration a large quantity of new material relating to the WACC.

Powerlink

Six weeks after submissions on the AER's 2012-17 Powerlink draft transmission decision closed, Powerlink attempted to submit new information to the AER.

Energex

The AER in its 2010-15 Queensland distribution draft decision was not satisfied that the major property project expenditure proposed by Energex was prudent and efficient. The AER noted that Energex had not provided business case documentation or other supporting documentation to justify the expenditure proposed.[43] Therefore, the AER reduced Energex's non-system capex by $158 million.

Energex in its revised regulatory proposal did not accept the AER's proposed reduction. Energex also in its revised proposal sought to address the AER's concerns by submitting its corporate strategic plan (which were endorsed by the Energex Board in December 2009) and relevant business case proposals.[44]

The AER considered that Energex's revised regulatory proposal and supporting documentation provided new information relevant to the assessment of the prudence and efficiency of the proposed major building projects in relation to the capex approval process, risk assessment analysis, business cases and alternative project options, and project delivery and timing.[45]

The documents provided by Energex in its revised proposal appeared to have been prepared after the draft decision, i.e, no supporting evidence was provided by Energex at the start of the distribution determination process. Also, this example demonstrates a NSP proposing forecasting expenditure without providing supporting information.

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39 AER, Final decision, NSW distribution determination, April 2009, p.167.
40 Application by EnergyAustralia and Others [2009] ACompT 8 at 251.
41 Application by EnergyAustralia and Others [2009] ACompT 8 at 200.
42 Application by EnergyAustralia and Others [2009] ACompT 8 at 201.
43 AER, Draft decision, Queensland distribution determination, November, 2009, p.492.
44 Energex, Revised regulatory proposal, January, 2010, p.15.
45 AER, Final decision, Queensland distribution determination, May, 2010, p.88.