EnergyAustralia's submission to

Australian Energy Market Commission

Review of the Electricity Transmission Revenue and Pricing Rules

Revenue Requirements: Issues Paper

1 December 2005

Energy

TABLE OF CONTENTS

1 Introduction

EnergyAustralia is pleased to respond to the Australian Energy Market Commission's (AEMC) Consultation Paper on the *Review of the Electricity Transmission Revenue and Pricing Rules*. The range of issues raised in the Consultation Paper indicates the need for significant amendments to the regulatory principles and procedures in the National Electricity Rules for transmission revenue.

The crucial issue in reviewing the transmission revenue Rules is the design of the incentive regime and, in particular, the operation of the CPI-X mechanism. The implementation of so-called incentive regulation under the Rules has for, some time, been heading towards a more intrusive and information intensive form of regulation. The fear is that regulators are placing themselves in the shoes of the Transmission Network Service Providers (TNSPs) and, inappropriately, influencing investment and operational decisions rather than relying an effective incentive framework. In this submission, EnergyAustralia has identified aspects of the TNSP revenue regulatory framework that require change and has suggested approaches for further review to assist the AEMC in its task.

By definition, EnergyAustralia's network contains transmission elements within the predominantly distribution network. The transmission component of EnergyAustralia's network comprises 12 % of the total network in revenue terms and has the role of supporting the main transmission grid in NSW. As both a transmission and distribution service provider, EnergyAustralia currently faces two diverse regulatory principles and processes for its transmission and distribution networks. Transmission and distribution networks are different in a number of operational ways but are comprised in essence of long lived infrastructure assets that are generally indistinguishable. For the most part the regulatory principles and processes for determining revenue, under the current market design, should be aligned. The intention, in this submission, has been to present proposals appropriate for both the distribution and transmission network businesses and thereby facilitate a single regulatory determination process for EnergyAustralia's network business.

The more immediate short-comings with the current framework that should be dealt with in this Review include:

- aligning the revenue objective and principles with the National Electricity Market objective;
- increasing certainty in revenue regulation by lifting certain parts of the Statement of Regulatory Principles into the Rules such as the "lock in" approach to asset valuation and the Weighted Average Cost of Capital parameters;
- improving regulatory procedures by implementing a propose-respond approach to revenue determinations and improving information processes.

The current timeframe does not provide sufficient opportunity to comprehensively review EnergyAustralia's primary concern with the design of incentive regulation in the Rules. There is a need for review of the incentive regime over a longer consultation period. EnergyAustralia would be a willing participant to such a review by the AEMC.

2 Executive Summary

A summary of EnergyAustralia's key positions in response to issues raised in the AEMC's Transmission Revenue Issues Paper is as follows:

Direction of incentive regulation:

- The crucial area of the regulatory framework requiring reform is the design of the incentive regime and, in particular, the operation of the CPI-X mechanism.
- It is becoming increasingly clear that implementation of CPI-X is less appropriate in the high investment circumstances faced by EnergyAustralia.
- The implementation of so-called incentive regulation under the Rules has for some time been heading towards a more intrusive and information intensive form of regulation which is the antithesis of incentive regulation.
- More innovative and sophisticated approaches are required to ensure that the TNSPs can efficiently and sustainably meet the long term interests of consumers.
- Ofgem's Electricity Distribution Price Control Review (November 2004) introduces an innovative sliding scale incentive mechanism for capital expenditure. This form of incentive regulation warrants further investigation.
- A separate review is required to consider options for designing an effective form of incentive regulation in the Rules, for regulation of transmission revenue.
- Given the significance of the AEMC's review, effectively at the commencement of a new regulatory regime in Australia, we would argue that sufficient time be allocated to establish a more robust regime going forward.

Incentive mechanisms for standards of service:

- Incentive regulation needs to be outcomes focused, ensuring the achievement of TNSP reliability and service requirements rather than focused on reducing costs.
- Economic regulation needs to take account of any standards of service set by the jurisdiction.
- Given the crucial role of transmission services to the wider public and economic interest, EnergyAustralia believes that a framework for establishing and defining national service standards should be achieved through agreements between the relevant State jurisdictions rather than by the AER. The AER is limited by the national electricity market objective to looking after the interests of consumers rather than the wider public interest.

Incentive mechanisms for capital expenditure:

- Incentive mechanisms should be relied on rather than applying a forensic and intrusive review of individual projects on both an ex ante and post basis and through the regulatory test process.
- Under current intensive and intrusive review practices there is the danger that regulators are placing themselves in the shoes of the TNSP management. Any form of regulatory approval process such as project-by-project assessments and ex post assessment places the regulator in the role of the TNSP. Rather than being input focused, the regulator should be focusing on the outcomes.
- While the contingent project concept attempts to deal with uncertain investments the regulatory restraints placed on the recovery of revenue and the individual incentive

mechanisms make it a micro-managed mini-determination. This is an area where regulators have progressively developed an over-engineered approach to regulation.
- A more innovative mechanism, such as a sliding scale approach needs to be considered to address issues of regulatory intrusion.

Incentive mechanisms for operating costs:
- The complex array of issues regarding the trade-off between capex, opex and service standards make carry-over mechanisms difficult tools to administer. The cost of administering and monitoring opex carry-over mechanisms outweighs the benefit.
- The carry-over mechanism for operating costs in the Statement of Regulatory Principles is not supported.

Form of regulation:
- The AEMC proposal for a multi-layered approach to regulation which allows incentive regulation for prescribed transmission services and alternative light-handed forms for excluded transmission services is supported.
- The TNSP to propose the alternative form of regulation from (but not limited to) recognised forms of light-handed regulation such as price monitoring, benchmarking, competitive tendering and negotiate-arbitrate.
- Alternative forms of regulation should meet a set of criteria that ensure avoidance of any misuse of market power, rather than being limited to a specified list.
- The form of regulation should be prescribed in the Rules. The AER should not be in a position to introduce alternatives to the form of regulation or variations to it (such as TFP to determine the X factor) without going through consultation and possibly a rule-change process. An appropriate lead time would be required to change the fundamental form of regulation.

Form of price control:
- The Rules should not preclude other forms of price control such as a weighted average price cap, particularly when applied to a combined transmission and distribution business like EnergyAustralia's.
- AER should not be in a position to impose an alternative form of price control unless in accordance with a rule change process or in agreement with a proposal by the TNSP
- The AEMC should conduct a separate review of the form of price control.

Scope of regulation:
- The Rules should specify which transmission services are prescribed. The Rules should also contain a set of criteria for assessing whether a service could be treated as excluded.
- The AEMC should develop of set of criteria in the Rules for assessing the potential for excluded services. As part of its revenue and pricing proposal, the TNSP should be able to nominate to the AER which services could potentially be excluded. In the event of a dispute, the AER should refer the matter for AEMC for a final decision.
- In some circumstances, transmission connection services may be contestable and so are appropriately dealt with through lighter-handed forms of regulation.

Building block approach cost components:

- The scope for regulatory discretion should be reduced by prescribing the key regulatory parameters for the building block approach.
- The Rules should prescribe the principles for determining the building block cost components, with the AER to prepare guidelines for the "mechanics" for implementing policies. As an example, the accounting treatment for recognising capital expenditure in the asset base is currently being considered by the AER.
- The lock-in arrangement for asset valuation as described in the SRP is supported. This method should however be prescribed in the Rules.
- The Weighted Average Cost of Capital (WACC) aspects in the SRP are supported and should be incorporated in the Rules.
- EnergyAustralia supports the establishment of a periodic review of the generic cost of capital for transmission businesses.
- The application of the effective income tax positions of the networks under the current post-tax approach will have captured the cost savings for the benefit of consumers and therefore it is important to ensure that the approach is continued to be applied to ensure that the networks are not subject to a double dipping of income tax from the regulatory regime.

Discretion in and design of the Rules:

- The Rules should provide a greater level of prescription in order to reduce regulatory uncertainty.
- The Statement of Regulatory Principles should not continue to be used in its present form as a non-binding policy document.
- Limiting regulatory discretion and providing TNSPs with reasonable access to avenues of appeal would result in the delivery of high quality regulatory decisions.
- The key elements of the building block approach presently defined in the SRP (asset valuation and WACC) should be formalised in the Rules. Other aspects require amendment before being incorporated into the Rules (such as the policy on roll-forward of capex).
- The level of prescription and detail currently provided in the SRP should be substantially enhanced when these aspects of the regime are included in the Rules.

Regulatory procedures:

- The AER will be conducting reviews for about 40 network service providers. This huge workload will require a change in the way economic regulation is administered. The AEMC no doubt recognises that the framework needs to be more efficient, by streamlining regulatory process without lessening effective incentives.
- EnergyAustralia supports a procedure, to be included in the Rules, where the TNSP is obliged to propose a revenue path based on the form of regulation and building block cost components.
- The AER assesses the proposal against the NEM objective and form of regulation and price control, cost components and incentive mechanisms in the Rules.
- The AER should assess the reasonableness of the TNSP's proposal against the Rules.

3 Design of Incentive Regulation

The crucial issue in the review of the transmission revenue Rules is designing an incentive regime that aligns the interests of consumers with the commercial interests of TNSPs. This requires a careful reconsideration of the CPI-X incentive regime, together with the interaction of the lower level incentives on capital and operating expenditure and standards of service. Overall, an overly complex array of incentive mechanisms developed under the Rules and, in particular, the Statement of Regulatory Principles.

The implementation of so-called incentive regulation under the Rules has for some time been heading towards a more intrusive and information intensive form of regulation. The danger is that regulation is heading towards a 'cost to serve' approach. Ideally, incentive regulation should be designed to elicit behaviour that motivates monopoly businesses to be rewarded for efficient behaviour that meets required performance outcomes in the absence of direct competition.

The experience so far in the electricity industry is that the implementation of regulation under the CPI-X mechanism has been trending in the opposite direction to the original intention of incentive regulation. The fear is that regulators are placing themselves in the shoes of the TNSP and have increasingly greater influence on commercial planning and operational decisions.

In the most recent transmission revenue determination processes, the direction in electricity regulation has been for greater information requirements and intensive scrutiny, in place of designing a true incentive framework. The regulatory experience so far has involved:

- focus on costs rather than on performance outcomes achieved by the TNSP
- repeated intensive investigation into capital expenditure programs. Capital expenditure projects are subject to review ex ante (to set the revenue allowance) and ex post (to assess efficiency or prudence). They are also required to pass the regulatory test
- intrusiveness through attempting to second guess the capital expenditure requirements of the TNSP and then to reassess the allowed capital allowance ex post
- failure to adequately address the legitimate need for a TNSP to spend on unforseen events
- a mini-determination approach to contingent projects, whereby incentive schemes are applied to individual projects.
- overly complex carry-over mechanisms for operating expenditures.

If the economic justification for regulation is to replicate outcomes that would be expected in a competitive market, monopoly regulation often appears to have lost sight of this and imposed arbitrary "rules".

EnergyAustralia believes that there is scope to improve the incentive regime to redress this increasing degree of intrusiveness in regulatory practices. Areas for further research include developments in the UK where the Office of Gas and Electricity Markets (Ofgem), as part of the 2004 Electricity Distribution Price Control Review, devised an innovative sliding scale incentive mechanism for capital expenditure.

As the AEMC is no doubt aware, the sliding scale mechanism is accompanied by reliability and service performance incentives and allows a distribution network owner (DNO) to choose between:

- a lower capex allowance but with a "higher-powered incentive" that allows the business to retain significant benefits if they can do even better than the low figure
- a higher allowance but with a "lower powered incentive" that gives relatively smaller reward for underspending the higher allowance.

Ofgem's stated intention has been to:

- Retain an efficiency incentive throughout the period
- Reduce emphasis on Ofgem's or its consultant's view of the appropriate capex
- Reduce the perceived risk that the price control causes under-investment
- Allow but not encourage overspending in excess of the allowance
- Reduce the possibility of "high" capex companies making very high returns from underspend
- Reward the low capex companies (provided they can deliver acceptable performance)
- Avoid strong incentives to underspend by cutting corners and not delivering outputs, thus storing up problems for subsequent periods.

Under the approach Ofgem was aiming to be "incentive compatible" with the capital expenditure requirements of DNOs. This demonstrates a very astute awareness by Ofgem of the type of problems faced by both regulators and the businesses in attempting to balance regulatory and commercial objectives.

The sliding scale mechanism provides scope for the DNO to spend above the base case capital expenditure allowance proposed by Ofgem. This attraction of the sliding scale approach is that it offers DNOs the ability to choose the incentive scale that suits their circumstances. The benefit to the regulator is that it reveals information about the capital investment requirements of the DNO and puts a brake on short–term gaming incentives to either over or under spend on capital. This approach avoids the need for ex post investigation of the actual projects as long as the DNOs have met reliability and service standards requirements.

An options based regulation form of regulation offered by Ofgem with the sliding scale mechanism warrants further investigation by the AEMC. Not only for capital expenditure but also possibly for standards of service and operating expenditures.

EnergyAustralia is very interested in the form of incentive regulation designed by Ofgem and it is clear from the Consultation Paper, that the AEMC is aware of its features. These are key issues that require further investigation and consideration. Given the timing of this review at the commencement of a new era in the regulation of monopoly infrastructure in Australia, we would suggest that the AEMC allocates sufficient time for the review of incentive regulation. A separate more detailed options paper on the form of incentive regulation would be a useful initiative and be strongly supported by EnergyAustralia.

4 Form of Regulation

4.1 Existing Arrangements

1.	*Should the rules specify the form of regulation for prescribed transmission services (as currently) or leave this open for the AER to determine?*
2.	*Are there areas, in addition to those noted above, where the Rules and current regulatory practices differ?*

EnergyAustralia's view is that the form of regulation for prescribed transmission services should be specified in the Rules. Greater prescription in the Rules on the form of regulation will reduce the level of uncertainty that discretion entails.

The AER should not have power to impose a new form of regulation on a Transmission Network Service Provider (TNSP). Moving to untested forms of regulation such as total factor productivity (TFP) could introduce additional regulatory uncertainty and may require lead times of possibly one or two regulatory periods.

The AER should not be able to adopt TFP-style regulation without going through a Rule change process or without the agreement of the TNSP. This will ensure that alternative forms of regulation, which may be inherently risky, cannot be imposed on TNSPs without their agreement.

The preferred approach is that future regulatory developments be subject to the Rule change process. This will help to ensure the regulatory framework is still dynamic to some degree by allowing new approaches.

3.	*To what extent do the alternative forms of regulation identified above, warrant further investigation and analysis in the course of the Review?*

Research into alternative forms of regulation is an important stream of work. However at this stage in transmission regulation, the primary area in need of investigation is designing a more effective incentive framework (as discussed in section 3).

This type of investigation (particularly the possible use of TFP) would require review over a much longer consultation period than is available under the current process. For instance, Ofgem's 2004 Electricity Distribution Review took nearly three years. It is however, a model which potentially could be readily "borrowed".

4.	*Should the Rules provide the flexibility to adopt alternative forms of regulation in appropriate circumstances, and if so, what are those circumstances?*

EnergyAustralia supports the AEMC's proposed multi–layered approach to regulation for network services.

As the AEMC paper has already highlighted, where greater competition and/or reduced market power exists for particular services, those services should be subject to a more light-handed form of regulation.

EnergyAustralia would prefer that the regulatory procedures allow greater scope for the TNSP to propose regulatory and pricing arrangements. The Rules should allow the TNSP to propose to the AER a form of regulation for services that are deemed to be excluded. The flexibility should be afforded to the TNSP depending on the type of service and degree of market power. For instance where connection services are contestable and the project is tendered out, then the pricing for that service should be market based – the price monitoring based on the tender prices would be appropriate in these circumstances

5. Are there any additional forms of regulation that should be considered?

The consultation paper lists a comprehensive list of the current viable forms of regulation that could potentially apply to transmission businesses.

The alternative form should not be limited by definition but should meet a set of criteria (set out in the Rules) that ensures the avoidance of the misuse of market power.

4.2 Extent of Market Power

6. To what extent does the degree of TNSP's market power differ for different transmission services? To what extent are transmission customers able to act in a way that constrains the conduct of TNSPs?

TNSPs provide connection services to generators, distribution systems and in some cases directly to large customers. The shared transmission network provides service to all market participants.

EnergyAustralia has several large transmission connected customers and hundreds of larger customers connected to its sub-transmission and high voltage networks. Our experience has been that large customers (both transmission and distribution connected) are able to adequately negotiate services.

TNSP customers such as generators and retailers are sufficiently resourced and possess the necessary capabilities to effectively advocate their positions in the political and regulatory spheres.

However, it is worth mentioning that while the current regulatory framework does not encompass a settled view of liability arrangements across industry sectors, DNSP's will not be able to negotiate satisfactory connection agreements because of the market power of TNSP's.

7. Would a multi-layered regulatory approach, based on degrees of market power associated with different services, be appropriate?

A multi-layered approach to regulation of TNSP services would be a beneficial model. For example, connection activities are to a greater or lesser extent contestable and a lighter handed form of regulation would be appropriate.

This type of approach has already been adopted by the Independent Pricing and Regulatory Tribunal in NSW, where distribution pricing principles are published for connection activities and contestable metering, and price monitoring has been adopted for public lighting. These services are all open to contestability by other parties.

8.	*Are there transmission services that are likely to be suitable for a less intrusive form of regulation, such as price monitoring?*

In the short term, the scope to introduce a lighter form of regulation is limited to connection services. Connection service are contestable, but metering and use of system are largely monopoly services. Access to and security of existing equipment would render connection services non-contestable in most instances. However, certain components such as the construction of greenfields connection equipment could be contestable.

In relation to metering services on the transmission network, security and access constraints preclude metering at transmission locations being provided on a contestable basis. Transmission metering should be included within the prescribed service.

In the longer term, however, price monitoring may be an attractive alternative to the current (and often "forensic") approach to regulation. Price monitoring may deliver improved price stability and investment certainty, while at the same time may significantly reduce the costs on society of regulatory intervention.

4.3 Information Asymmetry

9.	*How significant are information asymmetry problems for electricity transmission regulation?*
10.	*What issues arise under the current building block approach in respect of information asymmetry?*

The regulatory approach should have some clarity about what information is relevant to the application of the particular form of regulation adopted, and how feasible is it to obtain, verify and use that information.

Under the current National Electricity Law, the AER has extensive scope to request information from a TNSP. EnergyAustralia's experience has been that regulatory requests for information have not been well targeted or well planned in advance.

In many ways, the notion of "information asymmetry" has generically been used by some regulators to argue for more intrusive powers to conduct "forensic" reviews of network businesses.

Network businesses will necessarily always possess more information about the nature and operation of their respective businesses than the regulator. However, a regulator needs to recognise because it will always have less information about the business than the business itself, it should target its information requirements accordingly. Regulators should be obliged to clearly articulate their information requirements in advance to ensure that they receive the specific information they require, with an appropriate level of detail.

Equally as important, however, is that, in recognising that more information will always reside with the business, the regulator must of necessity set clear and appropriate incentives and allow the business to operate as it sees fit under those incentives. The reporting of actual outcomes, as already occurs in a significant level of detail under the regulatory reporting process in place by all major regulators, needs to be relied on as demonstration of the "revealed" actual costs of the network. Expanding the "forensic" nature of regulation by requiring more and more information from the businesses, with no clear view as to how that information is to be used and without apparent concern for the costs associated with providing the information, will not result in more effective regulation. It will, however, undoubtedly increase the costs to businesses and, ultimately, customers arising from the heightened regulatory intervention.

We do not believe the case for increasing powers to obtain additional information to address an unspecified reliance on "asymmetry of information", has been made. We caution against moving towards a more micromanaged approach to economic regulation as appears to be favoured amongst some regulators. (A related observation is that unless a clear incentive model is adapted, there is no natural boundary for the only information sought under present trends. The logical end point is for the regulator to simply step into management shoes).

Perceived problems with information asymmetry can be dealt with by:

- Having a clear regulatory model.
- Specifying the purpose of the information request.
- Issuing information guidelines and requests well ahead of each review period
- The adoption of a template approach (similar to that used by IPART in its 2004 Electricity Distribution Price Review and the ESC in its 2006 Electricity Distribution Price Review). This is an appropriate way to set out information requirements well in advance of receiving initial submissions from TNSPs.
- The ESC process provides a high degree of clarity to the information requirements by providing commentary on how the information will be used.
- The ACCC developed information requirement guidelines that were designed to check compliance with regulatory controls. Currently, all of the TNSPs in the NEM are reporting against these regulatory account requirements.

11.	*To what extent would these be addressed by the adoption of an approach that relied on benchmarks to a greater extent?*

EnergyAustralia does not support greater reliance on benchmarking as a form of regulation for prescribed transmission services. Benchmarking can provide a useful comparison of trends in outcomes. However, while high level benchmarks can provide useful indicator of what issues

should be pursued, on the whole benchmarking is unlikely to reveal the underlying reasons for the results.

EnergyAustralia appreciates the attractiveness of pursuing a mechanism for developing target expenditures that avoids the current endogenous cost build-up approach, which is burdened with detailed information. Benchmarking on its own, however, provides no better an alternative, as with it comes the inevitable (but critical) debate as to why an individual TNSP is different from the benchmark target. Benchmarking:

- fails to take into account the different equipment age and risk profiles of TNSPs;
- implicitly assumes homogeneity across Australian transmission businesses that does not exist[1];
- ignores the interdependency of replacement capital expenditure and maintenance expenditure (ie. the 'capex / opex trade-off').
- ignores service standard outcomes, which are in part tied to maintenance expenditure.

TNSPs are sufficiently different, to effectively rule out the exclusive use of exogenous measures in setting opex targets.

In light of the reasons presented above, EnergyAustralia maintains that benchmarking is most effectively used only as a 'sanity check' in determining the reasonableness of targeted operating and maintenance expenditures – not to be used to establish the targeted future expenditure level.

4.4 Firm Costs

12.	*To what extent are TNSPs faces with demand and cost circumstances that make it relatively easy (or difficult) to make comparisons across businesses, and over time?*

EnergyAustralia's transmission business is a small component of a larger distribution network. This makes our transmission business unique in its configuration relative to other businesses. Augmentation costs are largely directly related to the aggregated customer demand on the network and the emergence of large loads such as the proposed Kurnell water desalination plant (ie. generator connection is at this stage less of an issue).

Furthermore, EnergyAustralia's cost structures are strongly influenced by the urban/CBD nature of most of its territory and the need for most developments to be undergrounded or constructed in heavily built-up areas.

The location and size of generation, load centres and interconnections makes for quite different network topologies for each TNSP, and this unique topology can drive quite different investment decisions as a result. Therefore, it will be extremely difficult to make cost comparisons between TNSPs.

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1 The ACCC recognise this in the draft SRP as well: *"the ACCC has concerns that TNSPs in Australia may not be comparable because of their different scope and scale of activities."* p.26

4.5 Form of Price Control

13.	*Are there concerns with the current operation of the revenue caps applied to TNSPs? If so, what change would be appropriate to overcome these problems?*

From an operational perspective, the current revenue cap does not provide major issues with its administration, and EnergyAustralia does not currently suffer from unders/overs account problems that can arise under a revenue cap due to the fact that most of the revenues under the NER are actually set on historic volumes (and therefore set regardless of volumes in the current period).

EnergyAustralia is required to maintain separate distribution and transmission pricing regimes and separately account for the revenues and prices of each under different forms of regulatory control. Although EnergyAustralia is the only Australian network business subject to dual regulation, other distributors own transmission assets which have been included in their distribution asset bases.

There is considerable scope for the regulation of an integrated transmission and distribution business like EnergyAustralia to be streamlined, with the presence of a single National regulator. The key features that would enable this simplification are as follows:

- Consistency in the regulatory treatment of transmission and distribution businesses, to the extent of allowing a single regulatory determination for the combined transmission and distribution business;
- An internal partition of the business costs would enable the transmission pricing allocation to be performed;
- A single regulatory control formula, applied to the revenue or prices of the whole network business;
- A single set of performance standards and measures, again applied to the whole network business.

EnergyAustralia would be pleased assist in facilitating these outcomes. The important issue to be recognised at this stage is that the current review of regulatory arrangements for transmission and their inclusion in the Rules should not preclude this outcome.

14.	*Does the fact the Rules preclude changes to the MAR within the regulatory period present difficulties in relation to the appropriate treatment of capital expenditure?*

Under incentive regulation, there needs to be an appropriate allocation of risks between the TNSP and its customers. While EnergyAustralia supports incentive regulation, it should not be implemented at the expense of a TNSP's ability to efficiently fulfil it regulatory obligations. The Rules should be targeted at providing incentives for the efficient operation within a TNSP's control and allow for costs to be considered for events that are outside its control. Precluding a change to the MAR has the potential to result in decisions that do not optimise performance.

It is impossible to foresee all events that may impact on the need for expenditure. Without a mechanism to cater for unforeseen and material events as they arise, a TNSP would suffer a greater exposure to revenue risk. A more appropriate allocation of risks would be to ensure that the Rules enable the pass through of unforeseen costs and material events that may arise within a regulatory period to be reflected through an adjustment to revenues within that period.

This would result in the TNSP only being able to pass through the costs of an event if and when the event actually occurs. EnergyAustralia therefore proposes that a cost pass through mechanism be catered for in the Rules, such that the revenues within a regulatory period can be adjusted during the period should a material pass through event occur.

The risk of unforeseen events occurring without a mechanism to pass through the associated costs also includes:

- Required investments may not be made if there is uncertainty about recouping the expenditure. (For instance TransGrid raised issues in its proposed participant derogation);
- Deferral incentive – capital expenditure may be deferred until later in the regulatory due to insufficient funding; and
- Replacing other necessary investments such as replacement capex.

It is important to distinguish between re-opening a revenue determination to correct an error in its original formulation, and re-opening a revenue determination to address the financial impact of an unexpected event. EnergyAustralia's firmly held view is that the AER should only be able to reopen a revenue determination where it was based on misleading information or a material, manifest error (this is reflected in Rule 6.2.4 (d)(1) and (2)).

At present, the re-opener provisions in the Statement of Regulatory Principles (SRP) are not appropriate because they provide substantial scope for revenue determinations to be revisited. This is likely to weaken the incentive characteristics of the regulatory regime.

In relation to adjustments during a revenue determination to address the financial impact of an unexpected event, EnergyAustralia's view is that this issue is best addressed through cost pass-through arrangements. Similar to IPART and the ACCC's approaches, a pass-through mechanism should be available for:

- Sustained growth materially above assumed forecasts;
- Service standard events;
- Taxation events;
- Insurance events; and
- Any event that is beyond the TNSP's control, which has a material impact on the finances or service performance of the TNSP. For instance, in EnergyAustralia's case the prospect of a desalination plant within its area could not have been anticipated at

the time of the review process yet it has significant potential to impact on EnergyAustralia's capex and opex requirements.

The final re-opener provision should only be triggered at the TNSP's request, in order to ensure that the company is insulated against events that could have a material impact on it. EnergyAustralia proposes that the materiality threshold should be the lower of either 1% of annual revenue or $3m. The materiality threshold should also allow for an aggregation of events that may individually be below the threshold, but cumulatively exceed the threshold.

A precedent for the type of issues EnergyAustralia can envisage occurred in the UK, where in 2004, Ofgem introduced special arrangements for all three transmission licensees during the control period. The arrangements provided an allowance for transmission companies to invest in response to unforseen increased connections from renewable generators[2] due to a change in government policy.

15. Should the Rules continue to be prescriptive in relation to the form of direct or indirect price control to be adopted by the AER for the TNSPs? If so, what form of price control should be prescribed?

16. Alternatively would there be benefit in allowing the AER guided discretion regarding the form of price control? If so what guidance would be appropriate?

EnergyAustralia has long been a proponent of the weighted average price cap form of price control. The weighted average price cap provides an incentive to set efficient prices. EnergyAustralia believes that the Rules should not preclude other forms of price control from being proposed by the TNSP. That is, the revenue cap should not be the only form of price control prescribed in the Rules.

EnergyAustralia considers that a full review into the form of price control would require an extensive consultation process and is something that the AEMC should consider in the medium term. In the interim, however, EnergyAustralia believes that the Rules should not preclude a TNSP from proposing (and should not preclude the AER from accepting) an alternative to the revenue cap.

17. Alternatively would there be benefit in allowing the AER guided discretion regarding the form of price control? If so what guidance would be appropriate?

18. What factors ought to be taken into account when choosing the form of price control?

19. How do the incentives provided under the different forms of price control impact on the efficient development and operation of the transmission system?

20. What advantages or disadvantages would there be in allowing greater pricing flexibility for TNSPs under a price cap form of price control?

At an operational level, there are some differences between transmission businesses compared to distribution businesses:

[2] Ofgem, *Transmission Investment for Renewable Generation*, December 2004

- Transmission assets (like distribution assets) are predominantly long lived, with fixed costs;
- Transmission investment can more often be driven by complex issues such as stability and dynamic voltage control and fault levels. Distribution assets on the other hand are largely driven by thermal constraints.which is not directly related to energy consumption. Transmission does not have the same degree of correlation between new capex and load growth as distribution. In distribution, myriad of small investments can more readily be related to peak period energy and demand growth;
- Transmission costs are a small proportion of the overall cost of network services and of the overall cost of delivered electricity to most end use customers; and
- There is very limited opportunity to respond to changes in demand within a regulatory period. TNSPs plan networks over a much longer time horizon and so minimisation of variations in revenue is more important than to a distributor.

However, from a commercial perspective, these differences do not of themselves warrant a different regulatory treatment of the form of price control. EnergyAustralia notes that, in addition to electricity distribution in NSW (and Victoria) – where the WAPC is in place – gas transmission and gas distribution are also subject to price (rather than revenue) caps as the form of price control. Again, there is no compelling reason why electricity transmission should be treated on a different basis.

The criteria for choosing the form of price control can be derived from the national electricity market objective. These include:

- Efficient pricing incentives – ie. encouraging network businesses to pass on price signals which reflect their long run marginal costs and deliver the economic incentives for customers' usage and investment decisions;
- Revenue and volume risk minimisation;
- Revenues that match costs for the range of operating conditions;
- Cost of administration including the extent of information requirements; and
- Scope for gaming including the ability to ensure compliance to the Rules.

Efficient pricing requires that marginal price equals marginal cost. This also gives the correct incentives for demand side management. EnergyAustralia notes, however, the need to price environmental costs explicitly (energy tax/carbon trading) where there are external mechanisms in place to address environmental concerns. While it is the obligation of the economic regulator to recognise the costs of environmental compliance, the economic regulator's primary role is to facilitate long term efficient investment. To do so necessarily requires the need for networks to price efficiently. For the economic regulator, the requirement to price efficiently should be the primary consideration.

In IPART's recent distribution pricing review, a mechanism was introduced to ensure that any incentive within the WAPC to not pursue demand management alternatives was avoided. IPART adopted a 'D' Factor to address any potential demand management concerns.

21.	*What advantages or disadvantages are there in adopting a hybrid form of price control?*

EnergyAustralia notes that the Consultation paper did not describe the form that a "hybrid" form of price control could take. Should the regulator theoretically be able to exactly identify the parameters that form the hybrid formula, there could be some attraction to this methodology. A form of regulatory control such as the hybrid revenue cap may suit the circumstances of an individual TNSP and should not be precluded by the Rules.

EnergyAustralia submits that the AEMC should conduct a Review of the form of price control as a separate review to allow further consideration of the issues.

5 Scope of Regulation

5.1 General Issues

The National Electricity Law (section 35(3)(a)) requires the AEMC to make Rules that "*provide a reasonable opportunity for a regulated transmission system operator to recover the efficient costs of complying with a regulatory obligation*". The Law also requires the AER in making a transmission determination to provide a reasonable opportunity for the recovery of efficient costs of complying with regulatory obligations (section 16(2)(a).

The Law defines regulatory obligation broadly whereas clause 6.2.4(c)(2) of the Rules only refers to a narrow set of service standards. The Rules need to be amended, to ensure consistency with the Law so that the AER takes into account the cost of complying with the full range of "regulatory obligations" referred to in the Law.

5.2 Definition of transmission services

In the Rules, the definition of "transmission network" in Chapter 10 allows the AER to deem certain assets between 66kV and 220kV to be part of a transmission network. Also, clause 6.2.1(d) the Rules provide for the TNSP to deem these parts of its network to be subject to distribution price regulation, subject to the agreement of the AER and relevant Jurisdictional Regulator.

EnergyAustralia maintains that it is only appropriate for the AER to be able to deem any part of a network as transmission with the agreement of the relevant network service provider.

5.3 Services within Scope of Revenue Cap

22.	*Is the delineation of those services covered by the main regulatory control set out in the current Rules appropriate? Does this delineation reflect those transmission services with substantial market power?*

Currently, the services covered by the revenue cap are referred to as "prescribed". Transmission services outside the revenue cap include:

- excluded – as decided by the AER as not forming part of the revenue cap;
- contestable service - as deemed by the jurisdiction to be subject to competition; and

- that part of a prescribed transmission service which is provided to a standard which is higher or lower than any standard described in Schedule 5.1 to the Rules, outlined in the standards published in accordance with clause 6.5.6(b) of the Rules, or required by any regulatory regime administered by the AER [6.4.3C(b)(5) NER];

In the Rules, *transmission services* are defined as the services provided by a *transmission system* which are associated with the conveyance of electricity through the *transmission system*. *Transmission services* include *entry services, transmission use of system service*s and *exit services* which are provided by part of a *transmission system.*

Prescribed services are predominantly the use of network services. Entry and exit services (connection) are deemed contestable services in NSW.

This delineation of services does appropriately reflect the extent of market power.

5.4 Services outside scope of Revenue Cap

23.	*Are there other transmission services that may be amenable to a negotiate-mediate-arbitrate model of regulation?*
24.	*Are the 'negotiate-mediate-arbitrate' arrangements applying to transmission access services operating satisfactory?*
25.	*Is there an opportunity to improve the efficiency of these arrangements and, if so, what problems need to be addressed?*
26.	*To what extent do TNSPs provide services on a basis higher or lower that the service standards referenced in the Rules?*
27.	*What issues arise in relation to the negotiation provisions in the Rules for these services?*
28.	*Are there currently any services provided by TNSPs that fall under the provision for excluded transmission services?*

Customer requested service standards that differ from the Rules or jurisdictional standards should be subject to negotiation between the parties with the scope for mediation or dispute resolution. The types of services amenable to the "negotiate-mediate-arbitrate" model of regulation would appear to be connection assets, where contestability cannot be offered due to security requirements associated with existing switchyards and equipment.

Current services that are treated as excluded services include:

- Connection equipment.
- (Currently) provision of metering equipment at the transmission boundary.

EnergyAustralia has had no experience operating under a negotiate-mediate-arbitrate model of regulation at the transmission level; however, this arrangement operates satisfactorily for distribution connected customers. In cases when EnergyAustralia provides higher levels of service to many larger distribution customers that for security reasons require a second supply from the network, the costs of the second supply are generally borne directly by the customer concerned. EnergyAustralia has no issues with the negotiation provisions in the Rules for connection services.

While EnergyAustralia has not been required to supply an end use customer directly from the transmission network, it potentially could apply to transmission exit equipment either for an end use customer or where EnergyAustralia takes supply from TransGrid.

EnergyAustralia would argue that it is important to retain a set of negotiation guidelines, along the lines of those promulgated by the ACCC, to assist parties in the negotiation.

5.5 Contestable Services

29.	*Are the current arrangements for defining and separating contestable transmission services satisfactory? In what ways could they be improved? Are there other transmission services that could be treated as contestable?*
30.	*Are the current arrangements in the Rules for identifying and classifying different elements of transmission service as prescribed, excluded and contestable appropriate? What potential improvements could be made?*
31.	*To what extent is there scope for any element of the existing set of prescribed services to be provided on an excluded or contestable basis, thereby reducing the scope of the current revenue capped services? What services would these be?*
32.	*Are there any elements of existing transmission services not presently included as prescribed services that should be brought within that definition?*

In reality, there are few transmission services that could be treated as contestable apart from connection services. The Rules should contain a clear set of criteria for assessing when services could be excluded and subject to lighter form of regulation. A similar mechanism already exists in the IPART determination for excluded distribution services. The type of criteria could include:

- where there is less market power/more competition from other providers; and
- Where a customer has agreed to negotiate a service.

The TSNP should be able to propose that a service is contestable. The AEMC, as the market development body, is the appropriate body to assess and decide whether a service should be excluded based on the above criteria. As indicated in the response to the following questions, EnergyAustralia believes that it is not appropriate for the AER to set the scope for services that it will regulate.

The Rules for delineating the different transmission services are untidy and the definition of prescribed services is circular. There needs to be a clearer layout of the classes of services.

Currently under Schedule 6.2 clause 2.2.3 meters are included as connection services. In reality, transmission boundary meters are not contestable due to access restrictions which apply to switchyards where the metering is located. The inclusion of transmission metering equipment within prescribed services would simplify the current regime by recognising these services are not contestable due to security reasons.

33.	*Should the services to be included within the scope of the main regulatory control be set out in the Rules or left to the discretion of the AER? If the latter, what is the extent of appropriate guidance in the Rules as to the principles that the AER should adopt in making this determination?*
34.	*Who is the appropriate body to determine the potential contestability of service? What guidance (if any) should be set out in the Rules on the principles to be adopted in such an assessment?*
35.	*Who is the appropriate body to determine the form(s) of regulation for services falling outside of the main regulatory control? What guidance (if any) should the Rules provide on the form of this regulation?*

As noted previously, to be consistent with the governance principle of separating the rule maker and rule enforcer, the AER should not have discretion to determine which services it regulates. This responsibility should lie with the AEMC, based on appropriate criteria.

In EnergyAustralia's view, the AEMC should decide on the potential contestability of services in conjunction with the jurisdiction as is currently allowed under the Rules (see definition of "contestable service" in the Glossary).

Relating to what guidance (if any) should be provided in the Rules, the Rules should provide guidance and contain a list of the forms of regulation that could be applied to excluded services. EnergyAustralia views that it is then appropriate for the TNSP to propose the form of regulation to the AER. If the proposal is reasonable and meets the NEM objective, then the AER should be obliged to approve the proposed form of regulation.

6 Performance Obligations and Incentives

6.1 General Comments

The CPI-X form of incentive regulation was originally introduced to drive efficiencies in monopoly businesses to overcome incentives for "gold plating" under "cost to serve" models of regulation. In low productivity environments (such as when CPI-X was first introduced) there is scope for cost cutting and CPI-X is relatively effective in reducing costs and improving productivity.

However, it in becoming increasingly clear to EnergyAustralia that implementation of CPI-X is less appropriate in the high investment and higher productivity circumstances experienced by network businesses today. It is EnergyAustralia's view that there needs to be more innovate and sophisticated approach to aligning the efficiency incentives for expenditures to ensure that the TNSP's can sustainably meet the long term interests of consumers.

In particular, incentive regulation is in danger of losing its primary focus, with regulators, who:

- repeatedly engage in very detailed investigation of capital expenditure projects, which is very information intensive.

- incrementally "over-engineer" the regulatory regime making it very complex and costly to administer (ie. the operating cost provisions of the SRP).
- place a greater focus on cost cutting and price reduction rather than meeting service standards over the longer term.

6.2 Network Performance

36.	*What role should there be for economic regulation under Chapter 6 of the Rules to reinforce or supplement express network or service performance obligations?*

As a starting point, the regulatory incentive design for transmission should take into consideration any regulatory obligations set by out by the National Electricity Law including the reliability and service standards applied to the TNSP, including those imposed by the jurisdiction.

EnergyAustralia's view is that the Rules should explicitly state that there should be no duplication or overlap of service standard regulation between the AER and the jurisdictional requirements.

Transmission services have a crucial role in facilitating trade in the national electricity market, with wide public and economic interest. EnergyAustralia believes that national consistency in the framework for setting reliability and service standards would be beneficial. However,, but this should be addressed through agreements between the relevant State ministers rather than by the AER. The AER is limited by the national electricity market objective to looking after the interests of consumers rather than the wider public interest.

EnergyAustralia does not support an incentive regime in situations where the jurisdiction has established a comprehensive standards of service regime (such as under the distribution licence requirements in NSW). In the event that a jurisdiction has introduced service standards and targets for transmission, an economic incentive mechanism should only be introduced with agreement from the TNSP. Furthermore, as stated in the response to Question 13, EnergyAustralia believes a single set of performance criteria to be appropriate for an integrated transmission and distribution business.

Under these circumstances, the principles that should apply to an economic incentive regime include:

- Economic incentive need to align with or supplements the jurisdictional standards and targets
- If the network meets the jurisdictional requirements, then, there should be no penalties for not meeting the AER targets ie. rewarding out-performance only.

37.	*What service performance measures should be targeted? Should they be general in nature or targeted at different categories of network users? Should they be based on technical measures of availability and outages (as at present) or market impacts? Precisely what measures would be more appropriate to promote the NEM objective?*

The service performance measures to be targeted should be firm-specific. The substantial differences between the networks of the different TNSPs and the diversity and complexity of their operating environments make common measures inappropriate.

Measures should be technical in nature rather than incorporating market impacts. In EnergyAustralia's situation transmission circuit availability is an appropriate measure (with single events capped), but measures such as outage duration are not appropriate.

38.	*How should target performance levels be set? If market impact measures are proposed, how should the difficulties surrounding the identification of TNSPs' roles in causing market impacts and the measuring of market impacts be addressed?*

Performance levels should be firm-specific and determined based on historical performance (with at least five years of history before financial incentives are applied). The elements of EnergyAustralia's transmission network do not currently impact on the market pool price (other than through ensuring the reliable connection of customers). Nevertheless, a key reason that EnergyAustralia does not support the use of market impact measures is because of the difficulties surrounding the identification of TNSPs' roles in causing market impacts and the measurement of these impacts.

39.	*How should achievement or non-achievement of performance levels be linked to TNSPs' regulated remuneration?*
40.	*What share of a TNSPs' regulated remuneration should be at risk through service performance incentive schemes?*

Financial incentive levels should be based on a proportion of the TNSP's revenue cap. This amount should be capped. Dead bands should apply and be set at such a level that the TNSP is rewarded for a material improvement in service standards.

EnergyAustralia believes one percent of maximum allowed revenue, as currently applied to EnergyAustralia, is an appropriate maximum share of a TNSP's revenue.

In particular, EnergyAustralia does not support the use of market based incentives or penalties as these could cause very significant alteration of the risk profile of TNSP businesses.

6.3 Capital Expenditure

41.	*What role, if any, should Rules for economic regulation have in providing incentives for TNSP's to avoid inefficient over or under-investment in network assets?*

As discussed in section 3, the current regulatory regime is not an effective form of incentive regulation. The incentive regime should be designed to facilitate commercial decisions by the TNSP's and not change or undermine those decisions that would otherwise be efficient and

desirable by consumers. EnergyAustralia is wary about the direction regulation is heading in that there is a danger that regulators are placing themselves in the shoes of the TNSP management in influencing key commercial decisions such as capital investment

EnergyAustralia believes that there is scope to improve the incentive regime to meet these requirements through mechanisms such as the sliding scale mechanism for capital expenditure developed by Ofgem in the UK as part of the 2004 Electricity Distribution Price Control Review. As the AEMC is no doubt aware, the sliding scale mechanism allows a distribution network owner (DNO) to choose between:

- a lower capex allowance but with a "higher-powered incentive" that allows them to retain significant benefits if they can do even better than the low figure
- a higher allowance but with a "lower powered incentive" that gives relatively smaller reward for underspending the higher allowance.

DNOs that choose the lower allowance get a reward for spending no more than their allowance. Ofgem's aim was to be "incentive compatible" based on the requirements of DNOs.

Ofgem's stated intention has been to:

- Retain an efficiency incentive throughout the period
- Reduce emphasis on Ofgem's or its consultant's view of the appropriate capex
- Reduce the perceived risk that the price control causes under-investment
- Allow but not encourage overspending in excess of the allowance
- Reduce the possibility of "high" capex companies making very high returns from underspend
- Reward the low capex companies if they deliver what they say
- Avoid strong incentives to underspend by cutting corners and storing up problems for subsequent periods.

The sliding scale mechanism provides scope for the DNO to spend above the base case capital expenditure allowance proposed by Ofgem. This attraction of the sliding scale approach is that it offers the DNO the ability to choose the incentive scale that suits their circumstances. The benefit to the regulator is that it reveals information about the capital investment requirements of the DNO and puts a brake on short–term gaming incentives to either over or under spend capital. This approach avoids the need for ex post investigation of the actual projects as long as the DNOs have met reliability and service standards requirements.

An options based form of regulation as offered by Ofgem with the sliding scale mechanism warrants further investigation by the AEMC and this approach has the potential to avoid the need for the forensic investigation of projects that has been applied by regulators to date. However, it is acknowledged that this greater reliance on TNSP planning and evaluation processes in the assessment of the appropriateness and efficient delivery of projects.

EnergyAustralia is particularly concerned about the administration of contingent project policy in the SRP. While the contingent project concept attempts to deal with uncertain investments, the regulatory restraints placed on the recovery of revenue and the individual incentive

mechanisms essentially serve to make it a "micro-managed mini-determination". This is an obvious area where regulators have instituted an over-engineered approach to regulation. It is obviously not a feasible approach going forward as it requires a high level of administration and compliance checking. This approach does not reflect the intentions of incentive regulation.

EnergyAustralia does not support continuation of the SRP's contingent project policy. Instead, EnergyAustralia believes that such projects should be incorporated into the "pass-through" provisions. Additionally, these projects should be rolled into the asset base at the next regulatory review. The incentive mechanisms should not be based on each individual project.

42.	*Are economic incentives necessary to ensure that TNSPs provide the market with information about forecast constraints and reliability shortfalls?*

TNSPs are already required to provide information on where critical circuits would affect the operation of the market. This aspect is covered by the Rules and NEMMCO's procedures.

43.	*Are economic incentives necessary to ensure TNSPs consider both network and non-network solutions (including demand management and other energy sources) to forecast constraints and reliability shortfalls? How could such incentives operate?*

Economic incentives are needed, not so much for the consideration, but for the adoption of non-network solutions. There are two key issues acting against non-network solutions including:

- Opportunity cost of regulated revenue; and
- Higher risk profile relative to network solutions.

Demand management solutions increase operating expenditure (due to leasing of equipment) but decrease (due to deferred capital expenditure) the size of the asset base and therefore return of capital is forgone. This acts as a disincentive for non-network solutions over the longer term. This issue also strikes at tradeoffs between operating and capital expenditures and the treatment of efficient incentives.

The other key item is the higher risk profile of non-network solutions. Network solutions are familiar, tried and proven and predictable in their impact on network performance. Non-network solutions such as demand management and embedded generation alternatives are often not. Many approaches are not commonly applied and their proponents inexperienced with little track record.

Overall there is limited ability to implement or judge the probable effectiveness of non-network solutions.

To overcome these additional risks, there needs to be a build up of experience but this comes at a cost. Without some form of regulatory or policy assistance including recognition of the costs of 'learn-by-doing', the potential for non-network solutions will not be fully explored.

A better mechanism for embedded generators may revolve around specific incentive payments relating to identifiable benefits to the capital expenditure program of the network service provider. At our level, we would be happy to reward an embedded generator up to the level of any avoidance of actual costs, and not rely on "avoided TUOS/DUOS" concepts, which are flawed.

44.	*Are Rules or incentives necessary and appropriate to require TNSPs to undertake funded augmentations, or to require TNSPs to allow other parties to develop transmission assets to connect to TNSPs' networks?*

The AEMC has pointed out the lack of an explicit obligation in the Rules for a TNSP to connect a customer. In NSW, this obligation does exist for DNSPs through the network licences and it would be difficult to argue that transmission required different treatment[3]. However, given the externalities associated with transmission and the scale of the potential connection customers – there need to be clear rules about obligations, negotiation guidelines about capital contributions and treatment of connection related expenditure.

45.	*How significant is the difference between a periodic revaluation and lock-in approach to the RAB in terms of incentivising efficient investment and asset management behaviour by TNSPs?*

Given the longer investment cycle for transmission, a lock-in approach provides greater certainty to a TNSP compared to a periodic revaluation. That certainty is a result of the removal of stranding and optimisation risk associated with past investments. In contrast, the regulatory uncertainty of periodic revaluation would need to be balanced by a higher rate of return on capital.

In addition, the incentive created under a periodic revaluation would be to accelerate depreciation and invest in shorter-life assets is order to abbreviate the period for potential stranding. These, however, are not considered likely consequences of the periodic revaluation approach.

46.	*What are the implications of a lock-in approach to the RAB for the development, content and application of other incentive schemes targeted at capital expenditure, operating expenditure and network performance?*

There will be a need to understand the implications of operating a lock-in approach with any given capex incentive mechanism. These will tend to be of a transitional nature and will relate to the return on and return of capital associated with new investment:

[3] In NSW only retailers and distributors are licensed under the *Electricity Supply Act* (NSW) so there are no jurisdictional TNSP licence conditions that impact directly on the obligations of TNSPs. (However, because of the various definitions, it is possible that obligations imposed under a DNSP licence may also apply to "transmission" assets held by that DNSP.

- At the beginning of the period, forecast expenditure is approved by the regulator and the return on and return of capital associated with this forecast spend is included in the notional revenue requirement for the TNSP as part of the building block approach.
- During the period, new investment occurs and will invariably differ to the forecast made at the beginning of the period.
- At the end of the period, under a lock-in approach, efficient actual capex is rolled into the asset base.

The transitional issue EnergyAustralia envisages will surround the treatment of the return on and return of capital associated with the difference in forecast (allowed) and actual capital expenditure.

This may be embedded in the definition of the capex incentive framework itself (as it is with the ex-ante approach adopted by the ACCC for EnergyAustralia's current revenue cap) where the difference in the return on and return of capital will be worn by the TNSP as a form of reward (penalty) for spending under (over) the capex allowance.

6.4 Return on and of Capex

47.	*How do ex ante and ex post capital assessment regimes (as formulated in the DRP and SRP) affect TNSP incentives to only engage in efficient investments?*

The ex ante approach involves setting the capex requirements ahead of time. However there is a concern that legitimate projects may be deferred in order to stay within the regulatory capex allowance. Furthermore, experience has shown that it is necessary to continually update capital plans, both to accommodate new circumstances and given the benefit of detailed information emerging from the capital planning cycle itself.

This is an area where EnergyAustralia believes that economic regulation should be designed to avoid undermining commercial decisions by the TNSPs that are appropriate, efficient and desirable by consumers.

In order to overcome this problem we support an approach based on:

- Ex ante assessment of expenditure requirements;
- Pass through of unforeseen capital expenditure requirements that pass the internal planning and evaluation processes. This provides the process to ensure that the appropriate investment is selected; and
- Rolling forward of the efficient actual investment (regardless of the ex ante cap) at the next regulatory period.

The problems with the ex post approach is that decisions are reviewed with the benefit of hindsight. This amounts to much greater uncertainty and risk for the TNSP.

An important factor in the regulatory design is to have certainty in the regulatory capital assessment regimes. This includes Rules to contain whether an ex ante or ex post regime will be applied and the regulatory criteria for assessing projects.

48.	*What are the practical and administrative strengths and weaknesses of ex ante and ex post capital assessment regimes?*

The benefit of the ex ante approach is that it provides some certainty to the TNSP about returns. However, as discussed above there is a risk that unforeseen circumstances may result in the need for additional investment. Without a form of pass-through provision there is a risk that legitimate projects (including replacement expenditure) may be deferred until a later regulatory period.

Another weakness of the ex ante review is that it is difficult to fully cost projects 5-10 years ahead. The logistics involved in obtaining sites together with planning the availability of resources all make for uncertainty in the costing of projects. Therefore ,EnergyAustralia supports adoption of actual costs into the regulatory asset base (and not those used in the regulatory test).

The weakness of an ex post review is that the assessment is conducted with the benefit of 20/20 hindsight with minimal appreciation of the issues faced at the time. This adds a significant degree of risk to the TNSP.

49.	*If TNSP investment programmes should be subject to ex ante assessment should low or high powered incentives for expenditure be adopted and if so why? Is there a risk with either approach that investments that would otherwise be efficient may not be undertaken at the appropriate time? Under ex ante regime, if TNSPs are not penalised for exceeding capital caps how should the risk of inefficient investments be managed?*

The issue raised by the AEMC relates to the dilemma that occurs in how to design incentive regulation with a five year regulatory period to apply to long lived and lumpy transmission assets. There is a risk that any form of regulatory limit on capital expenditure could lead to the deferral of necessary investments. This issue was raised in response to questions about the ex ante approach.

There are a number of ways to deal with this dilemma including:

- Adopting a type of sliding scale mechanism such as adopted by Ofgem which attempts to be “incentive compatible”.
- placing a greater reliance on capital and evaluation planning processes within the TNSP. For instance, the AER could “endorse” the TNSP processes and gain confidence that these projects will be assessed and delivered efficiently.
- allowing the pass through of projects (ie. similar to contingent projects).

50.	*Should regulatory determination be capable of being reopened to incorporate the cost of specific and unforseen capital projects into any existing revenue or price caps? Where regulatory determination can be reopened in this way, is the overall risk of inefficient investments increased and if so how can that be managed?*
51.	*What are the respective implications of an ex ante or an ex post approach to the regulatory assessment of capital investments for the development, content and application of other incentive schemes targeted at operating expenditure and network performance?*

It is important to distinguish between re-opening a revenue determination to correct an error in its original formulation (as per the Rules), and re-opening a revenue determination to address the financial impact of an unexpected event (pass-through event).

At present, the SRP refers to the belief that there should be provisions for the revenue cap to be reopened during the regulatory period.

EnergyAustralia cautions against provisions that allow reopening of all elements of a determination except under the circumstances described in the Rules (ie. material error, misleading information). The potential for re-opening a determination with scope for revenue determinations to be revisited will weaken the incentive characteristics of the regulatory regime and only act to increase uncertainty.

EnergyAustralia's firmly held view is that the AER should not be able to initiate a re-opening of its revenue determination unless it was based on misleading information or a material, manifest error. The re-opening should be limited to addressing the specific effect of the misleading information or error and should not provide an opportunity to the AER to redress all or any other elements of the revenue determination.

In relation to re-opening a revenue determination to address the financial impact of an unexpected event, EnergyAustralia's view is that this issue is best addressed through pass-through arrangements. Similar to IPART's approach, cost pass-through should be available for:

- Assumed forecasts being materially deficient in changed circumstances;
- Service standard events;
- Taxation events;
- Insurance events;
- Unanticipated events and initiatives; and
- Any event that is beyond the TNSP's control that has a material impact on the finances or service performance of the TNSP.

The final re-opener provision should only be triggered at the TNSP's request, in order to ensure that the company is insulated against events that could have a material impact on it. EnergyAustralia propose that the materiality threshold should be the lower of either 1% of revenue or $3m. The materiality threshold should also allow for an aggregation of events that may individually be below the threshold, but cumulatively exceed the threshold.

Currently the Rules allow for the revocation of determination following a change in ownership. EnergyAustralia believes that where there is a change in ownership the AER should only be able to revoke a determination in accordance with the Rules *with permission from the owners.*

6.5 Operating expenditure

52.	*Should the regulatory arrangements allow TNSPs to retain some share of operating expenditure reductions below target levels into the next regulatory period in order to provide and incentive to incur only efficient operating expenditure? If so, how should those arrangements operate? Is an efficiency carry over arrangement a better way to provide incentives for reducing operational expenditure than a glide-path or other approach?*
53.	*To what extent should the Rules provide guidance on the operational expenditure incentive arrangements to be adopted by the AER?*

Ideally, the incentive mechanisms for cost and service improvements should operate consistently. Currently this is not the case. For example, under the current framework, the benefits accruing to the TNSP as a result of cost cutting under a five year carry-forward period will outweigh a single-year service quality incentive reward. This presents a dysfunctional incentive to reduce expenditure at the expense of service levels.

The current framework essentially biases cost reductions over service improvements, potentially compromising service standards. EA believes that given the complex array of issues regarding the trade-off between capex, opex and service standards that carry-over mechanisms are not feasible incentive tools.

Furthermore, carry-forward programs tend to be overly complicated and difficult to administer, particular where they are subjected to a number of exceptions. The amendments to the carryover mechanism proposed by the ESC in Victoria in its 2001 Price Determination, for example, demonstrates the difficulties associated with effecting such an efficiency mechanism, given its operational intricacies[4]. IPART also recognised practical implementation concerns in its 2004 Determination for Electricity Distribution Pricing, earlier noting that "(i)t is not clear… that the benefits to be gained from such a measure outweigh the practical difficulties associated with its implementation"[5];

Notwithstanding our opposition to the introduction of a carry-over mechanism for opex, EA believes it should be at the discretion of the business to prepose its own incentive regime.

Should a carry-over mechanism be prescribed in the Rules, EnergyAustralia advocates an approach where a floor of zero must be placed on the carry-forward amount for any given year.

[4] The carry-over mechanism introduced by the ESC in its Price Review was subject to appeal and a subsequent re-Determination was issued when the Appeal Panel decided that the mechanism needed to take account of the differences between forecast and actual demand. ESC, *Electricity Distribution Price Review 2006 Final Framework and Approach: Volume 1, Guidance Paper,* June 2004, p. 70

[5] IPART, *Regulatory arrangements for the NSW Distribution Network Service Providers from 1 July 2004, Issues paper*, p. 39

Should an efficiency loss occur in a given year, the carry-forward amount is set to zero and the implied negative value will be used to offset any efficiency gain in the following year only[6].

EnergyAustralia believes that adopting this approach provides adequate incentive to pursue efficiency gains while at the same time avoids both the immediate concern for regulatory gaming (manipulating the timing of opex to take financial advantage of a perceived deficiency in the mechanism) and unduly punishing TNSPs who may legitimately overspend in light of unforseen costs.

54.	*Is the current institutional design of the NEM amenable to a broader service – or performance out-based incentive regime than those currently instituted by the AER? If so what particular outcomes should be targeted?*

The current design of the NEM is based on an energy only wholesale trading market. TNSPs do not trade capacity or energy. Therefore TNSP's are not able to hedge their performance against their potential impacts on the market.

55.	*How should consistency between service performance, capital expenditure and operating expenditure incentive regimes be achieved and maintained?*

Incentive regulation needs to take into consideration the following:

- Service standards
  - Should be set at the jurisdictional level, with the role of the economic regulator limited to incorporating the TNSP's costs of compliance within the regulatory framework.
  - The regulator should not attempt to "second guess" the appropriateness of the jurisdictional targets by duplicating incentive arrangements.
  - The option of applying a service performance incentive regime should be allowed in the Rules. However, it should not be compulsory and should only be introduced in agreement with the TNSP about the performance targets and penalties and rewards.

- Capital expenditures
  - Future expenditures – *ex ante* assessment, with regulatory funding provided in the revenue / price cap at the time of the regulatory review. The "contingent" project approach as outlined in the SRP is not supported.
  - An incentive mechanism such as the sliding scale approach provides an efficiency incentive throughout the period.
  - Past expenditures – rolled in at actual cost.

[6] Deferring a negative for one year only represents a departure from the decision of the ESC in its 2001 Electricity Distribution Price Review. In their decision, negatives will accumulate over the regulatory period (to the extent that they are not offset by positive gains), noting that a floor of zero applies in any given year.

The fact that actual costs may increase relative to regulatory forecasts does not in itself suggest inefficiency of the TNSP; rather, project costs are subject to many exogenous factors, many of which cannot be forecast with precision at the time of each regulatory reset.

- Operating Expenditure;
    - Attempting to devise a complicated incentive arrangement to address potential "gaming" opportunities (such as the incentive to pursue efficiency gains earlier rather than later in the period) should be secondary to establishing the efficient level of opex. Such arrangements have the potential to change a framework that is "approximately correct" to one that is "precisely wrong".

EnergyAustralia suggests that it would be worth investigating an options approach to the incentive regime model(s). For instance, the AER could develop guidelines for offering various incentive schemes for optional selection by the TNSP. Individual schemes could be designed to achieve different things such as the Ofgem sliding scale approach.

The TNSP would analyse and select the preferred incentive option. The options concept acknowledges the different investment cycle stages faced by TNSPs and so allows TNSPs to adopt or develop schemes that suit their circumstances. This is a form of information revelation.

56. To what extent should the service performance incentive regimes be prescribed in the Rules?

As indicated above, EnergyAustralia believes that the setting of service standards should rest with the jurisdiction. The option of applying a service performance incentive regime should be allowed in the Rules; however, it should not be compulsory and should only be introduced in agreement with the TNSP about the performance targets and penalties and rewards.

EnergyAustralia suggests that incentive regime model(s) or options could be provided in AER guidelines, but any such models or options must recognise the nature of the jurisdictional regime that may already be in place. The various options should be designed to achieve different outcomes (higher targets with higher rewards or lower targets with higher penalties). TNSP should have the ability to analyse and select the preferred, if any, incentive regime and to recommend this to the AER.

This approach will allow TNSP's to adopt or develop schemes that suit their particular circumstances.

57.	*Should issues of consistency between the regulatory arrangements for electricity transmission and gas transmission or between electricity transmission and electricity distribution be a consideration in making Rules for the regulatory treatment of the RAB?*
58.	*Do issues of consistency between the regulatory arrangements for electricity transmission and gas transmission or between electricity transmission and electricity distribution affect the appropriate regulatory treatment of the return on and of capital expenditure?*

In EnergyAustralia's particular case the treatment of the regulatory asset base between the transmission and distribution should be consistent. Otherwise different risk factors apply to the different networks. In addition there is scope for certain electricity assets to be deemed either transmission or distribution. The key issue that is if there is to be different treatment for these types of assets that the principle of financial capital maintenance be in place.

59.	*If TNSP specific investment programmes should be subject to ex post assessment, should there be a mechanism for TNSPs to approach the regulator in advance of particular capital projects in order to get regulatory certainty as to the way in which the investment will be treated prior to undertaking it?*

EnergyAustralia does not support ex post assessment of capital programs if there has been an ex ante assessment.

Seeking regulatory approval ahead of the investment may provide greater certainty to TNSP, but it places the regulator in the shoes of the TNSP with the ensuing scope for micro-management and forensic investigation. This approach does not seem tenable given the scope of the AER's future workload.

EnergyAustralia's preference is that the AER should allow pass through of projects by relying on the endorsed TNSP planning and capital expenditure processes and the incentive framework.

60.	*Do alternative arrangements provide any guidance as to the appropriate form of operational expenditure incentives for transmission in the NEM?*

As indicated in responses to Question 55, EnergyAustralia does not support a carry-over mechanism for operating expenditure. As for "glide paths", the smoothing option adopted by IPART in the 2004 Distribution Determination did not conform to the acceptable regulatory principle of financial capital maintenance. Its decision effectively stranded $200 million of value from the NSW DNSPs.

EnergyAustralia does not believe that a "glide path" that is introduced after the establishment of "efficient level of revenues" is acceptable, and appears only to be used as a mechanism to smooth prices from one regulatory period to the next. To this end, the incentive properties of such an arrangement appear to be entirely a "random walk". EnergyAustralia considers that

any such revenue smoothing approaches should only be undertaken on an "NPV-neutral" basis.

7 Approach to Determining Cost Components

7.1 Asset Base

61.	*How prescriptive should the Rules be in relation to asset valuation? Is the relatively wide discretion in the current Rules appropriate? If not, are there approaches in other regulatory instruments that provide a useful guide?*
62.	*Should the lock in approach in the SRP be elevated to the Rules? Do the principles in the SRP provide sufficient certainty as to the method by which the lock in approach will be applied? If not, what additional guidance could be provided in the Rules?*
63.	*Should the Rules allow for revaluation of the asset base, or further consideration of issues such as the value of land and easements.? If so, under what circumstances and who should be able to initiate such a revaluation?*
64.	*Should the Rules cover the approach to be adopted by the AER in determining the opening asset base for an MNSP that converts to regulated status? If so, what principles should be adopted?*

EnergyAustralia supports the lock-in arrangements for asset valuation as described in the SRP. This method should be prescribed in the Rules. The existing Rules are inconsistent with the SRP and EnergyAustralia believes that to reduce uncertainty the Rules should be amended.

The SRP also provides the ability for the TNSP to propose a revaluation of the assets under certain circumstances. The approach in the SRP is reasonable and should be elevated to the Rules.

7.2 Efficient Investment

65.	*To what extent should the Rules provide guidance to the AER in relation to the determination of efficient capital expenditure?*

Currently there is a lack of criteria for the assessment of efficient investment. There is no guide about factors that will be taken into consideration when the regulator has to assess the efficiency/ prudence of investment in the regulatory period. It would be beneficial to have high level guidance in the Rules.

The AEMC should re-examine the contingent project arrangements described in the SRP and consider whether these arrangements are workable. In particular, the AEMC should consider whether the SRP arrangements in relation to contingent projects are likely to:

- minimise the cost of regulation, and deliver net benefits compared to alternative, less resource-intensive approaches. Alternative approaches to contingent projects may include:

        - relying on the existing incentives in relation to ex ante capital expenditure projects to ensure that TNSPs' business-wide processes will ensure that 'contingent projects' are also delivered efficiently; and
        - allowing the actual costs of contingent projects to be rolled into the asset base without an explicit, project-specific, financial incentive.
    - prove workable given the number of projects that may become subject to this regime over successive regulatory periods and across TNSPs (and possibly distributors); and
    - allow for the actual costs of contingent projects to be rolled into the asset base at the next regulatory reset.

66.	*What should be the role of the Regulatory Test in determining the efficiency of capital investments?*
67.	*Should the value adopted in the Regulatory Test be taken as the appropriate asset value to include in the asset base, regardless of outturn expenditure? If so, what implications does this have for the manner in which the Regulatory test is applied?*
68.	*Should there be a requirement for the TNSP to reapply the Regulatory Test if the expected capital expenditure is expected to materially change? If so, should this be mandated in the Rules?*

The regulatory test provides a means to evaluate identified alternative options to a network issue. The relative costs and benefits of these options are assessed. However, the regulatory test could be replaced by the AER endorsing the internal and joint planning and evaluation processes of a TNSP. These are processes that the TNSP has to undertake anyway. Any further regulatory requirements could be suggested by the AER to the TNSP to secure endorsement. For example, an audit process whereby the application of processes to particular projects may be considered.

The value in the Regulatory Test (or other alternative evaluation process) should not be adopted as the value in the asset base. The Regulatory Test, by definition, is undertaken at the early stages of development of options to address a particular need on the network. Due to the vast array of exogenous factors that can impact the out-turn costs of a project, it is not possible to accurately predict/forecast the final cost of a project years ahead of its completion. The benefit of the Regulatory Test, however, is that it is an assessment of the costs and benefits of options ahead of the construction with the best information available at that time communicated for the purposes of the ranking of options. While it is an important aspect of the development of a project, it should not be expected that it could be used for anything other than the ranking of options at the evaluation and decision-making process.

If the values in the regulatory test were to be taken as the appropriate asset value then the incentive would be to inflate the costs of all the options being assessed through the regulatory test process.

There would be a number of practical difficulties in having to reapply the regulatory test should there be material changes in the projected capital expenditure budget. In particular:

- A project may be part way through construction before the cost changes occur.
- In the re-assessment, the sunk costs of the partially completed project would then need to be factored into the analysis of stopping the project and re-assessing the costs of the alternative options.
- In many (but not necessarily all) cases, the cost increases would apply equally to the other options. Delaying the project on this basis would not be a practical outcome (ie. a general price increase would also affect other options and so not affect the relative cost of those options).

Due to reliability and security of supply considerations, it would generally not be practical to stop work on a project and reapply the Regulatory Test once a project is well advanced.

69.	*What operational issues arise under the ex ante approach set out in the SRP? Should there be different incentive rates applied to different asset categories, as implied by the ex ante approach? Does the ex ante approach affect TNSPs incentives to classify assets as long-lived?*
70.	*If an ex ante approach to capital investment assessment is adopted, should the approach set out in the SRP be elevated to the Rules?*

An operational issue under the ex ante approach is that it is difficult, if not impossible, to fully cost projects five years ahead. The logistics involved in obtaining sites conditions imposed by planning approvals, market prices and availability of resources, all make for uncertainty in the costing of projects. To improve certainty for TNSPs the Rules should clearly establish which approach is to apply to the assessment of capital expenditure.

7.3 Operating Expenditure

71.	*To what extent should the Rules provide guidance on the approach to be taken by the AER in determining an efficient level of operating expenditure? What benefits could be expected in relation to transparency and predictability? What disadvantages may there be in terms of loss of flexibility?*
72.	*To the extent that guidance should be provided in the Rules, what are the relevant characteristics of electricity transmission to consider in determining the form of this guidance?*

It is very important that the Rules specify the approach to be applied for determining efficiency. EnergyAustralia supports approach that is based on historic and forecast operating expenditure. EnergyAustralia also supports the pass through of operating costs for specific unforseen circumstances such as changes in regulatory obligations.

73.	*Should the Rules provide for the application of benchmarking by the AER in determining an efficient level of operating costs?*
74.	*Should the approach set out in the SRP be elevated to the Rules? Should the Rules provide for the future adoption of benchmarking approaches?*

As outlined in our response to Question 11, EnergyAustralia does not support benchmarking to determine the efficient level of operating costs. The best that benchmarking can hope to achieve is as a "sanity check" as to the reasonableness of proposed expenditures. Prima-facie, high level benchmarking can expose issues to be address by further analysis.

7.4 Depreciation

75.	*What issues (if any) arise from the current treatment of regulatory depreciation?*
76.	*Is there a need to include specific guidance in the Rules in relation to regulatory depreciation? If so, in what areas?*

The Rules should properly specify the arrangements in relation to depreciation. At present, the SRP states that TNSPs have an incentive in relation to depreciation, but these arrangements are not clearly specified or explained. The Rules should remove this ambiguity.

The Rules should specify that the default form of depreciation is the straight line method. In addition there should be the flexibility to allow for alternative depreciation methods in the future proposed by a TNSP, provided they meet the efficiency criteria.

The ACCC has previously conducted research on different depreciation methods for TNSPs.

For the purposes of calculating the roll forward value of the asset base for the commencement of the subsequent regulatory period, EnergyAustralia considers that "regulatory depreciation" (ie. the total "return of capital" as specified in the previous determination) be specified in the Rules.

77.	*Should the Rules require an explicit link between the appropriate rate of depreciation and the threat (or not) of regulatory stranding?*
78.	*Should the Rules require explicit link between the appropriate rate of depreciation and the threat (or not) of market stranding?*

The Rules for depreciation and the treatment of stranded assets should be based on financial maintenance of capital. There should be a clear recognition that a TNSP is entitled to recover the costs of those assets it has invested under a regulatory regime that requires adherence to regulatory processes.

Under the current NEL, TNSP expenditure is targeted at meeting regulatory obligations. Assets that have been sanctioned through regulatory "approval" processes should be guaranteed a return on recovery.

7.5 Rate of Return

79.	*What guidance should be provided in the Rules in relation to the calculation of an appropriate rate of return? Should the Rules be more prescriptive than currently?*
80.	*Should the form of WACC (eg. nominal, vanilla post-tax), the WACC model (eg. CAPM) or any of its components (eg, approach to risk free rate, debt premium, beta, credit rating) be prescribed in the Rules?*
81.	*To what extent should the WACC continue to be based on assumption of a benchmark capital structure?*
82.	*Should the principles in the SRP be elevated to the Rules?*
83.	*Should the Rules prescribe a process for the periodic review of relevant WACC parameters? If so, how frequently should a review be undertaken: for every determination or less frequently? Who should undertake such a review?*
84.	*Should the Rules for the determination be reopened if market conditions change?*

EnergyAustralia believes that the Rules should provide guidance to the AER on the appropriate return on capital. As a high level principle, the Rules should state that return on capital should be set so as to encourage more rather than less investment, given the asymmetric negative consequences of under-investment in transmission infrastructure. (This principle is reflected the recent Productivity Commission Reports on the national and gas access regimes).

In terms of certainty for investment and in minimising the costs of regulation, there is some attraction in having the Rules specify how the WACC is to be calculated, rather than relying on the AER to set the WACC at each regulatory reset. EnergyAustralia considers that the SRP as finalised by the ACCC in December 2004 likely represents the regulatory "middle ground" on where the debate on WACC parameters in Australia has landed. While network businesses clearly believe the resultant level is considerably too low, customer groups would no doubt argue that the level is too high. EnergyAustralia is concerned that the SRP, however, is not binding and can be altered by the AER at any time. Therefore, EnergyAustralia believes that it is appropriate for the WACC aspects of the SRP to be incorporated in the Rules.

Enshrining the WACC parameters that currently exist in the SRP into the Rules may be a reasonable balance. However, EnergyAustralia would only consider supporting such a move if the WACC parameters included in the SRP "as a package" were included in the Rules (ie. no "cherrypicking" of individual parameters or parameter values). Should any changes to the parameters as currently outlined in the SRP be contemplated, however, EnergyAustralia suggests that a formal "generic cost of capital" review be instituted.

EnergyAustralia supports the concept of a generic periodic review of the return on capital being prescribed into the Rules. This approach offers scope for improving the efficiency of regulatory processes for both the AER and the TNSPs and greater certainty to the TNSPs. Each regulatory review involves spending vast sums of money on expert advice that essentially traverses the same arguments. Overall, the "tinkering" of certain parameters at each subsequent review has not been conducive to providing the investment certainty necessary to attract long term investment.

As outlined below, the use of a generic review to establish (or modify) key WACC approaches and parameters has been adopted by economic regulators in other countries. Having accepted that the weighted average cost of capital and the capital asset pricing model are appropriate, a periodic review of the parameters would be a more efficient process.

The periodic review approach is adopted in other countries. Canada's National Energy Board and the Alberta Energy and Utilities Board have both conducted generic cost of capital proceedings applicable to a number of businesses under their respective jurisdictions. The goal of these proceedings was to reduce the burden of the review process, and provide additional certainty to both the Regulator and the businesses[7].

EnergyAustralia notes that the National Energy Board of Canada's decision relating to the rate of return on equity for pipeline companies in 2005 was a one page decision that applied the framework and parameters as established in its "Multi-Pipeline Cost of Capital Decision (RH-2-94)". Clearly there is some attraction to this approach.

One of the considerations, however, would be to clearly establish "what's in" and "what's out" of the WACC calculation. As an example, there would need to be clear articulation of how "asymmetric risks" were treated in the framework (ie. as a premium on the WACC or in the cash flows).

In addition, and as allowed for in the Canadian examples, utility-specific adjustments can also be (and need to be) accommodated.

Therefore, if the SRP WACC parameters are not adopted in the Rules as a package, EnergyAustralia supports the adoption of a generic proceeding to set the framework, parameters and parameter values in order to provide guidance to all interested parties in the future calculation of the cost of capital.

To some extent, the consultation process undertaken by the ACCC for the SRP represents a form of periodic review whereby key generic parameters for the WACC have been established following a consultation process. The problem with the SRP is that it is not binding and can be altered by the regulator at any time.

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[7] The National Energy Board's motivation was expressed as follows 7

The Board began setting the cost of capital for the pipelines under its jurisdiction in 1973. Since that time, some pipelines have had their cost of capital reviewed regularly in the context of pipeline specific toll proceedings. Other pipelines have only occasionally appeared before the Board for a cost of capital examination. This process has given rise to two concerns. Firstly, the Board has noted that evidence submitted by expert financial witnesses has tended to be much the same from one proceeding to the next. While the financial parameters change from year to year, the techniques and interpretations used in making rate of return on common equity recommendations typically do not. This led the Board to consider what potential economies could be realized from the implementation of a formulaic adjustment mechanism for rate of return on common equity.

Secondly, fluctuations in financial markets continue during and between hearings. Rates of return for one toll-making period, which rely on financial market data, can therefore vary across companies simply because different companies' rates of return are set at different times. In order to address this concern, the Board was attracted by the concept of a generic hearing where all pipeline companies would make their cases simultaneously using a consistent set of financial parameters

EnergyAustralia believes that the WACC parameters embodied in the SRP should be lifted into the Rules. These parameters would then be changed following a periodic review or rule change process conducted by the AEMC.

Overall, EnergyAustralia supports the WACC parameters in the SRP and supports making them binding until further review. A review could be triggered every five years or sooner if there is a material event that changes market conditions.

7.6 Tax

85.	*Is a post-tax or a pre-tax approach appropriate for electricity transmission? What proportions of a TNSP's assets have been subject to accelerated depreciation for tax purposes?*

The crux of this question is whether it is appropriate to model the individual firm's effective income tax rate for regulatory purposes or whether the statutory income tax rate should be used in the financial modelling for the respective determinations.

EnergyAustralia believes that a post tax approach based on the effective income tax rate is the most appropriate view of income tax for transmission regulation.

- Incentives to minimise income tax (which in relation to accelerated depreciation is merely a function of timing) can lead to perverse investment outcomes driven by short-term cost savings at the expense of the most efficient long term investment.
- The Ralph review tax changes that were passed in 2000 have removed the capacity for further use of accelerated depreciation, aligning the income tax depreciation rates to the expected useful lives of the assets, which generally mirrors the approach to accounting depreciation. There are several implications of this change in policy. However the most relevant for this discussion is that infrastructure businesses now face a significantly different cash flow profile both in the medium term with significantly higher rates of effective tax being faced, and in the longer term with the effective rates approaching if not mirroring the statutory rate. The Ralph Review changes are such that the businesses no longer have the control over their income tax position that they once had and that renewal expenditures are no longer able to offset the higher rates of income tax on middle aged assets that they once were.
- The networks will generally be unable to address the income profile issue due to the nature of accelerated depreciation, and the age profiles of the networks assets.
- The application of the effective income tax positions of the networks under the ACCC's post-tax approach will have captured the cost savings for the benefit of consumers and therefore it is important to ensure that the approach is continued to be applied to ensure that the networks are not subject to a double dipping of income tax from the regulatory regime.

Recognising that accelerated depreciation offered significant cash flow benefits shortly after large network investments, it is reasonable to expect that most, if not all, pre-Ralph network assets would have had accelerated depreciation applied to them. However, this may have been limited for assets acquired close to the Ralph review changes taking effect as the

legislation did allow a once of opportunity to adopt the straight line approach moving forward for existing assets. That would generally only be applicable to assets acquired after 1985, if not later.

86.	*Are there transparency benefits associated with a pre-tax approach? To what extent are these outweighed by the accuracy and complexity of the associated WACC conversion formula?*

The transparency benefit of the traditional pre-tax approach is the simplicity of assuming the statutory income tax rate as opposed to the modelling of the income tax cash flows. However, as stated above EnergyAustralia does not believe that the statutory income tax rate should be assumed for determining the income tax costs faced by the TNSPs.

The simplicity of assuming the statutory income tax rate is outweighed by the potential for perverse investment incentives, and the absence of academic agreement as to how to undertake the conversion into pre-tax terms, especially under higher inflation scenarios as demonstrated by the debate regarding forward and reverse transformations.

87.	*Is a convergence of modelling approaches likely to be desirable as the scope of AER energy network regulation widens? That is, are there benefits in the Rules requiring either a post-tax or a pre-tax modelling approach across all sectors?*

Consistency in the treatment of income tax costs across industries is desirable at a high level, and as stated above EnergyAustralia supports the adoption of effective income tax rates for transmission.

However, recognising that regimes historically adopted by other jurisdictions may differ, there needs to be care taken to ensure that the networks that will be newly regulated by the AER under the Rules are not disadvantaged by moves to a more common approach.

Therefore EnergyAustralia does not believe that the Rules should be specify a standard approach to this issue but rather identify a policy direction such that the AER will transition the networks to a common approach, without disadvantaging them.

88.	*What guidance (if any) should be provided in the Rules on the derivation of the cost of tax, ie, synthetic or actual information on tax values of assets (and so depreciation), financial structure, capitalisation policies?*

There should be a specific allowance for the business value costs imposed on networks from the income tax regime relating to capital contributions. EnergyAustralia believes that the economic efficiencies that can be achieved from a judicious application of capital contribution policies sufficiently outweighs the administrative and modelling burden of including these costs in the income tax cash flows. The capital contributions issue is more significant for distribution businesses, with their multitude of customer connections.

89. Is it appropriate for the TNSP to face incentives in relation to its tax costs?

As a general principle incentives should be established to encourage the regulated businesses to achieve efficient outcomes as a matter of self interest, thus revealing the efficient costs.

However, there are instances where the imposition of incentives can lead to perverse outcomes. Incentives to minimise one area of costs can result in increases in other costs that may outweigh the savings achieved in the original cost (in this case tax costs).

A case in point is that of capital contributions policies. Such policies have been implemented to allow networks to require that customers requiring specific connection works pay for them up front, such as for new housing developments. This approach ensures that general customers are not required to pay for assets that do not form part of the common network, and has the commercial benefit of reducing cash flow requirements of the networks.

However, any development paid for by a party other than the network, which is then handed to the network to operate and manage, is subject to income tax on the fair value of the assets transferred. It should be noted however that such assets do not attract any regulated revenues other than their operating costs in any regulatory framework is Australia.

As a result, any network that uses capital contribution policies to signal the costs of network enhancements to developers, and thus ensuring that the ultimate beneficiaries pay for their network costs, will suffer value destruction. This is because of the impact of the timing of deductions that can be claimed under the income tax law, combined with the fact that the prudent and efficient use of capital contributions has been generally overlooked to date under economic regulation, particularly where benchmark tax rates have been applied.

Therefore if further incentives are placed on network's tax costs, options that signal enhancement costs to their originator would be lost and would instead need to be paid for by all customers resulting in higher general network charges than would otherwise be the case. The cost impacts of the network not utilising capital contributions and undertaking and funding the work themselves, would clearly outweigh the savings in income tax paid in this case.

7.7 Ratio Analysis

90. What is the role for assessment of Financial ratios? What value (if any) does it add?

Financial ratios act as a reasonableness check to ensure that, despite the best efforts of a regulator to provide a sustainable commercial revenue stream, the revenue Decision is not one that renders undue financial hardship upon the business.

When used to measure the effect on the TNSP's credit position, financial ratios may also assist in determining an appropriate level of debt margin to be included in the calculation of the WACC (EnergyAustralia recognises the cyclical nature of such an approach).

91.	*Is there any benefit in continuing to calculate financial ratios on the basis of cost set out in the revenue decision? Are there alternative approaches that would be more meaningful?*

On the basis of arguments presented by EnergyAustralia in response to Question 90, we believe there is merit in continuing to calculate financial ratios. These ratios should be based on costs and other relevant information set out in and specific to the revenue Decision. EnergyAustralia appreciates that elements of a revenue decision such as the calculation of the WACC are developed in a forward looking framework and the financial ratios should reflect this. These ratios should not be based on an extrapolation of historical information, but can be compared to historical information from which a trend can be established to further aid in determining the effect of the revenue decision.

EnergyAustralia also believes that drawing on a wide range of financial indicators will help mitigate the possibility of any bias in the resulting conclusions drawn from the financial analysis.

8 Extent of Discretion and Design of the Rules

8.1 Key Principles

92.	*What should be taken into account in determining the appropriate degree of regulatory discretion? What are the advantages and disadvantages in leaving a wide degree of discretion for the AER? What are the arguments for and against a more prescriptive approach? Alternatively, should the Rules prescribe / confer discretion in a way that is more tailored to the specific decision that must be made?*

The regulatory framework in the Rules should minimise the opportunity for poor decision-making by the AER. The AEMC needs to keep in mind that the AER will be conducting reviews for about 40 network service providers. This huge workload will require a change in the way economic regulation is administered. The AEMC no doubt recognises that the framework needs to be more efficient by streamlining regulatory process without lessening effective incentives.

EnergyAustralia's view is that the extent of regulatory discretion afforded to the AER should be substantially more limited than is presently the case. The National Electricity Code afforded the ACCC too much discretion, which the ACCC did not exercise judiciously. Discretion is most likely to be exercised judiciously if there are clear objectives; firm Rules on the cost components and incentive mechanisms and reasonable avenues for judicial and merits review of regulatory decisions.

Against this background, it is legitimate to consider the extent of regulatory discretion afforded to the AER under the Rules, and the manner in which this discretion is likely to be exercised. In particular, EnergyAustralia notes clause 6.2 of the Rules states that:

> "The *Rules* do not limit the methodologies that may be applied by the *AER* in exercising its regulatory powers under them, except that those methodologies must be consistent with the requirements of the *National Electricity Law* and with the objectives, principles, and broad forms and mechanisms described in clauses 6.2.2 to 6.2.4 inclusive."

In EnergyAustralia's view, this rule provides the AER with too much discretion in the methodologies that it may employ in exercising its regulatory powers. A similar concern is evident in the latest Statement of Regulatory Principles (SRP), which explains that the statement does not bind the regulator:

> "The SRP does not form part of the code and is not an instrument made pursuant to the code. Accordingly, the application of the SRP to a particular TNSP will depend on the individual circumstances of the case. The ACCC will depart from the SRP where required or justified by the code provisions.
>
> The approach set out in the SRP will continue to evolve in response to factors such as code amendments, changes in the industry, and improvements in regulatory models and best practice worldwide."[8]

The SRP therefore provides little comfort to regulated entities that the regulator will continue to adopt these policies in future regulatory periods. In the absence of appropriate levels of certainty and predictability, the regulatory regime is unlikely to encourage investment for the long-term benefit of customers. In EnergyAustralia's view appropriate arrangements in the Rules regarding regulatory conduct and governance are prerequisites to the achievement of the national electricity market objective.

93. Are the principles listed above the appropriate ones to guide consideration of the appropriate balance between prescription and discretion in the Rules? Are there additional factors that should be taken into account?

EnergyAustralia's view is that the following aspects of the regulatory framework should be specified in the Rules:

- guiding objectives and principles for revenue regulation;
- the form of regulation (i.e. CPI-X , TFP or some other variant);
- guide for setting the X factor;
- the form of control (price cap, revenue cap or some type of hybrid control);
- asset valuation, depreciation and roll-forward methodology;
- the cost of capital;
- regulation of capital expenditure;
- treatment of taxation;
- incentive mechanisms for operating and capital expenditure efficiencies;
- incentives for the development of non-network solutions to manage demand growth; and
- service incentive mechanisms.

[8] ACCC, Statement of Regulatory Principles, December 2004, page 1.

94.	*Given the regulatory practice and methodology will evolve over time, to what extent should the Rules accommodate future change without the need for progressive amendments? Alternatively, is it preferable that future changes in approach be implemented via a future Rule change process?*

This Review presents to opportunity to amend problems with the Rules covering revenue and pricing. In the time available the AEMC should aim to amend issues that can be achieved by the legislated deadline but to also prepare a longer term work program for issues that require further consideration and consultation.

The regulatory framework must be well-defined, stable and predictable if efficient behaviour is to be encouraged. Form of regulation, price control, cost components and incentive frameworks should be mandated through the Rules so that any change would proceed through a Rules change process.

95.	*Are there other approaches that provide useful guidance on the balance between discretion and prescription in preparing the revised Rules for electricity transmission?*

One design framework that EnergyAustralia believes could requires greater examination for greater balancing the issues between discretion and prescription is the possibility of having a regulatory framework based on an options approach.

As summarised in the Attachment 4 of the AEMC's consultation paper, the Ofgem approach offers options to the TNSPs about features of regulation and the extent of rewards and penalties. This is a design feature that warrants further investigation.

96.	*Is there a role for further objectives in the Rules given the single NEM objective? To what extent should the general objectives currently included in the Rules be removed, reduced or rationalised?*

The revenue and pricing objectives and principles in the Rules need to be streamlined and aligned with the national electricity market objective. At present, the Rules provide an unhelpful mix of objectives and principles. In particular, clauses 6.2.2 and 6.2.3 refer to 'Objectives of the transmission revenue regulatory regime to be administered by the AER' and 'Principles for regulation of transmission aggregate revenue' respectively.

The objectives should be framed to reflect the national electricity market including the definitions for efficiency. The AEMC paper already provides a good description of the meanings of "allocative", "productive" and "dynamic efficiency". In addition, the AEMC should refer to the Productivity Commission's recommended pricing principles which have been accepted by the Government for inclusion into the National Access Regime Bill.

97.	*What are the relative advantages and disadvantages of an approach that specifies outcomes and principles as decision making criteria in the Rules, versus Rules with greater prescription and detail?*

The disadvantage of having a principles based approach is the scope for discretion by the regulator. To date, this discretion has achieved poor levels of certainty and lack of certain processes in electricity regulation. The industry requires greater firmness in the decisions for current of future revenue and capital investment decisions.

EnergyAustralia's key objective is for the regulatory framework to provide greater certainty for the business. One way to achieve this is to allow the TNSP to prepare proposal based on achieving the NEM objective and applying prescribed Rules for building block cost components for prescribed services and incentive mechanisms. Greater prescription on issues such as the policies for building block cost components for prescribed services, incentive mechanisms would provide greater certainty to the TNSPs.

EnergyAustralia believes that placing the onus on the TNSP to develop a proposal in line with the prescribed building block components and incentive mechanisms will streamline the regulatory process and provide greater certainty to businesses, investors and customers alike.

8.2 Procedures and decision-making

98.	*What is the appropriate balance between fixed procedures and leaving procedural requirement open to discretion in relation to setting revenue determination, and for related regulatory functions eg assessing compliance with price controls?*

As a general principle, EnergyAustralia is of the view that the high volume of regulatory reviews will require the AER to develop a standardised process for the conduct of investigations.

While this standardised approach to the conduct of investigations will enable the AER to cope with the workload, it will also allow greater consistency in the conduct of the investigations and greater consistency in the application of regulatory judgement.

Moreover, a standardised approach would also serve to add structure to the investigation process, which will also drive the information and reporting requirements.

Where the regulatory oversight process covered a small number of service providers, there was little incentive for the Regulators to invest in process development. However, where the AER will have a critical mass of regulatory investigations, there is value in investing in the procedural aspects of the regulatory review process.

EnergyAustralia is of the view that the rigour of regulatory oversight in Australia would be greatly enhanced by an investment in the procedural aspects of the conduct of regulatory investigations.

To achieve greater standardisation, the amended Rules should be drafted in the form of a propose-respond model, which places the onus on the TNSP to submit a price-service proposal that complies with the obligations set out in the Rules. Where the TNSP submits a compliant proposal, the regulator must accept that proposal.

The principal benefit of the propose-respond model is that it allows the TNSP to fine-tune the details of a price-service offering. In EnergyAustralia's case, the benefits may include the increased likelihood that:

- the setting of transmission and distribution prices will be co-ordinated;
- the existing jurisdictional service obligations will be taken into account in setting standards for approval by the AER;
- there will be more innovation in designing the form of the control. This may include taking appropriate account of the relationship between demand growth and capital expenditure, or developing a hybrid form of revenue and price cap; and
- the costs of administering the regulatory arrangements will be minimised. It is noted that the AER will eventually have responsibility for regulating approximately 40 transmission and distribution businesses. It is important, therefore, that arrangements are put in place to minimise the costs of regulation, whilst maintaining the quality of regulatory decisions.

99.	*Are there existing procedural regimes in other jurisdiction that reflect a suitable balance between flexibility and certainty?*

Throughout the MCE reform process, EnergyAustralia has consistently advocated a model with three key features:

- a clear legislative framework, including a clear market objective;
- a propose-respond model; and
- scope for independent merits review of regulatory decisions.

Perhaps the best practice model in this case is the Western Australia Electricity Access Regime. This model features:

- a clear legislative framework, in the Western Australia Electricity Networks Access Code, the WA Electricity Industry Act 2004, the WA Economic Regulation Authority Act 2003, and the Gas Pipelines Access (Western Australia) Act 1998;
- a propose-respond model;
- clear time frames for decision-making;
- model documents for key components of the business's proposal, with pre-approval for those components adopting the model documents;
- an obligation on the regulator to accept a compliant proposal; and
- clear avenues for merits review to an independent body.

EnergyAustralia commends the AEMC to a detailed review of the WA Electricity Access Regime.

It is interesting to note that the UK regime offers a choice of different options. This type of model offers flexibility within a certain framework. This type of approach offers scope for the TNSP to select an option best suited to its circumstances.

100. Are there other jurisdictions that reflect a poor balance between flexibility and certainty?

EnergyAustralia considers that the current regime reflects a poor balance between flexibility and certainty. There are two major areas in which the current regime fails:

- The review being undertaken through a "regulator-determine" model, where the business files a submission which may, or may not (and certainly need not) form the foundation of the Regulator's Determination.
- The current approach whereby every review is conducted as an ad hoc review, with little regard to continuity or certainty of procedure.

Part of the impact of this is that the regulators have no corporate memory. In EnergyAustralia and TransGrid's case, the entire team that was involved in conducting the last transmission revenue determination had departed the ACCC, and a completely new team was in place. This meant there was no corporate history and no consistency of approach.

101. Are there benefits in requiring the AER to issue an initial framework document for each transmission review setting out specific information requirements?

EnergyAustralia believes there would be significant benefits in requiring the AER to release an initial framework document establishing specific information requirements. In addition, it would be beneficial for the regulator to indicate to what purpose the information will be used – this will give greater clarity to the TNSP in preparing the information request.

Setting a standardised set of information requirements would expedite the review and analysis of the TNSP's price and service proposal. This process would result in greater certainty by allowing adequate time for preparation of information and clarifying regulatory expectations. This should assist adherence to the review schedule set by the Regulator. The National Gas Code currently includes the matters that must be addressed in an access arrangement. This requirement could be adopted in the Rules.

While, no doubt, ad hoc analysis will often be required, certainty will be improved to the extent that the regulatory develops standardised procedures.

102. Are there advantages in adopting an alternative process where the initial step of submitting an application is left to the TNSP?

EnergyAustralia is a strong advocate of placing the onus on the proponent to recommend a price-service arrangement for approval by the regulator. The TNSP proposed price and service

arrangement would be consistent with the Rules and aim the meet the national electricity market objective.

The TNSP is in the best position to propose a price and service arrangement that meets its regulatory obligations and provides adequate revenue to cover costs and returns to the shareholder. The role of the AER would be to ensure that the proposal complied with the Rules and met the national electricity market objective.

This approach is less onerous and less resource-intensive in terms of its impact on the AER and would result in a more streamlined regulatory procedure.

103. Should the Rules prescribe a timeframe for transmission determination? If so, should that timeframe be capable of extension, by whom and in what circumstances?

EnergyAustralia prefers correct, well-reasoned decisions in a reasonable time frame over poor quality, poorly-reasoned decisions delivered quickly. EnergyAustralia considers that a codified time frame for decision making will send clear signals to the regulator on resource requirements to ensure it can deliver quality decisions in reasonable time frames.

However, EnergyAustralia recognises that there will be occasions when the issues are complex and require additional time for adequate consideration and reasoning. Therefore, there should be scope to extend the time frame under these circumstances.

EnergyAustralia would be very disappointed if this ability were to be abused to extend time frames where resourcing has been the constraint.

104. If there are limited extension provisions, what stop-the-clock provision would be appropriate? What incentives should be provided for the regulated business and the AER to meet the required timeframes?

105. What provisions should be included in the Rules to create incentives and / or sanctions for both the AER and the TNSP to meet timelines for revenue reset processes?

EnergyAustralia is comfortable with the stop-the-clock provisions for policy, structural and framework related issues. However, as a general principle, EnergyAustralia does not support stop-the-clock provisions where the Regulator's resourcing or administration is the cause of the delay.

Price reviews must be conducted under rules and procedures in place at the date the price review was commenced with clear timelines. This would allow greater scope for planning of adequate resourcing by the regulator.

106. How should the Rules cover a situation in which there is no operational transmission determination?

EnergyAustralia considers that the Rules should be amended to accommodate delays to the review process.[9] However, the existing structure of the Rules places significant constraints on the scope of possible amendments.

In this respect, EnergyAustralia considers that the existing price Determination, which has been subject to a review process, should remain in force until the next price change date after the Regulator has completed its review. In this case, existing prices should be retained in real terms; that is, prices should be escalated by CPI until the next price change date following the completion of the price review.

As a precedent, Ofgem is conducting a transmission price control review for all of the electricity and gas licensees concurrently. To achieve consistency in the timing it has extending the timeframe for the existing determinations. This is one avenue that could be made available in the Rules in certain circumstances.

107. Does a mechanism that involves some form have "backdating" have value?

Recognising that backdating is one of the potential consequences of a regime that allows time to be extended, backdating is a very difficult concept to deploy in practice. However, this may require changes to the price other than mid-year (as currently allowed under the Rules). Therefore backdating would require Rules to be amended to allow prices to change other than at the current date specified in the Rules.

EnergyAustralia considers that it is important for the financial effect of an appeal body's decision to be given effect in NPV neutral terms. This does not require backdating, but rather incorporating any NPV losses into forward pricing processes.

108. What benefits or costs may be expected in requiring all electricity transmission determinations to be undertaken simultaneously?

EnergyAustralia considers that it would not be reasonable to undertake all electricity transmission determinations simultaneously.

The primary reason is that there would be a resourcing constraint for the AER and businesses in terms of staff and consultants. Another reason is that by conducting a series of reviews simultaneously, there is a risk of the reviews being conducted by a process of comparing proposals against each other rather than on their own merits.

Further, clause 6.2.4(b) of the Rules currently requires a transmission price Determination to run for a minimum of five years. In order to align the timing of these determinations, it would be

[9] Consistent with the comments above on timeliness of reviews, this should not be taken as an acceptance of delays, but rather preparation in the event that unavoidable delays occur.

necessary to allow longer regulatory periods for companies early in the cycle in order to target a year as the earliest year in which they could be aligned.

109. What information should the AER be obliged to include in a statement of the Reasons for a determination?

EnergyAustralia considers that a full articulation of the Regulator's Statement of Reasons is critical in order to communicate the Regulator's decision making and thought process, and the application of its judgement. In the absence of such a full disclosure, the regulatory process loses transparency and regulatory decisions take on a degree of arbitrariness.

EnergyAustralia considers that the Statement of Reasons will be the foundation of any merits review. In the absence of these Reasons, it would be difficult for an aggrieved business to argue that the application of the Regulator's judgement was misdirected or unreasonable under the circumstances. Perhaps more importantly, it would be equally difficult for a regulator to defend itself from such an argument.

Equally, it is important for a business to understand its market or surrogate in the case of a regulated business. Regulatory decisions should be capable of being replicated in similar circumstances and the behavioural effects of transparent decisions should not be under estimated.

110. What are the arguments for and against a requirement in the Rules for the AER to provide details (either publicly or to affected TNSP) of the modelling that underpins specific transmission determination?

EnergyAustralia considers that, inasmuch as it is important for the Regulator to articulate its reasons for decision in a public document, it is critical that the underlying modelling be provided to the affected business. This financial modelling is the foundation for price determination, and for regulatory accounting.

However, this information is too detailed to be released publicly and may include information that was provided to the regulator on a commercial in confidence basis.

EnergyAustralia believes that the greater the amount of quality information that is disclosed in a Decision, the less uncertainty there will be at the next review. Effort would be (better) directed towards debating regulatory framework and policy issues rather than the historical information that formed the basis of the pertinent decision.

111. Are there any perceived problems with the current Rules in relation to the provision of information, and if so, what are they?

The AER has wide powers to request information from TNSPs.

EnergyAustralia has previously submitted that the regime under clauses 6.2.5 and 6.2.6 of the Rules should apply to information gathering and disclosure for the purpose of the AER's

economic regulatory functions, rather than the more coercive powers contained in section 28 of the NEL. These provisions under the Rules are a more appropriate safeguard against the release of information that would be considered commercial-in-confidence.

112.	*Should the Rules set out high level qualitative principles in relation to the AER's information gathering powers, or should they seek to prescribe what information is to be provided, both routinely, and / or on an occasional basis?*
113.	*Should the Rules set out the minium relevant requirements in relation to the content of regulatory accounts?*
114.	*Is there a need to make specific provision in the Rules in relation to information requirements for third party contracts?*
115.	*Are the current requirements in the Rules about the content of the Regulatory Accounts satisfactory? Should the Rules be more prescriptive on any specific matters relating to regulatory accounts?*

The AER will require information for review processes, annual accounts to check compliance to ring-fencing issues and pricing requirements.

The AER should provide details of its information requirements, substantially in advance of each revenue determination and establish standardised information templates for compliance checking. It is acknowledged that there will be need for ad hoc requests, but the Rules should specify that the information request must be relevant and reasonable.

In exercising all regulatory functions (including making requests for further information), the Rules should require the AER to have regard to the costs and benefits of taking alternative courses of action.

116.	*Would there be any advantages in adopting the model used for gas pipelines which requires the regulated business to develop its own regulatory accounting manual, consistent with guidelines produced by the AER?*

The ACCC attempted to develop a Draft Gas regulatory reporting guideline (May 2004) Regulatory Accounting Manual for gas. The gas pipelines industry objected on the grounds that the ACCC did not have powers to develop such a manual. As a result, it remains in draft.

It should be noted that the gas industry's man objections were 1) the requirement to have a non-executive director sign off the accounts, and 2) the requirement for the business to engage an auditor to report to the ACCC.

Importantly, EnergyAustralia considers that any information requirement guidelines must be responsive to the process and analysis conducted.

117.	*Is requiring the AER to accept a TNSPs' proposasl if they lie within a plausible range an appropriate way to deal with the potential for regulatory error? What other approaches may be relevant?*

As discussed above, EnergyAustralia is a strong proponent of the propose-respond model. Under the approach currently embodied in the Rules (the "Regulator Determine" model), the business files a submission, as do many other interested parties. However, there is currently no clear requirement for the Regulator to have any particular regard to the business' submission. This is clearly an unacceptable granting of powers to the Regulator.

EnergyAustralia considers that the TNSP is uniquely in the position of understanding its business and the ways in which various aspects of its submission interact. For example, it is unlikely that a Regulator would ever be able to fully understand the intricacies of the spatially-determined capital expenditure forecast,[10] the risk management approach to any applicable service standards, and the impact on the operating expenditure budget.

EnergyAustralia considers that an obligation on the Regulator to accept the business' Rule-compliant price and service offering will retain the internal consistency of that offering. For the Regulator to make (seemingly arbitrary) changes to the integrated submission developed by the business risks undermining the cohesiveness of the price and service offering.

This "obligation to accept" is a key component of the propose-respond model. EnergyAustralia considers that the concept was best articulated by the Australian Competition Tribunal in the context of the GasNet appeal of the ACCC's decision on its Access Arrangement:[11]

> *… where there are no conflicts or tensions in the application of the Reference Tariff Principles, and where the AA proposed by the Service Provider falls within the range of choice reasonably open and consistent with Reference Tariff Principles, it is beyond the power of the Relevant Regulator not to approve the proposed AA simply because it prefers a different AA which it believes would better achieve the Relevant Regulator's understanding of the statutory objectives of the Law.*

The Productivity Commission has also supported the "plausible range" approach:[12]

> *Nevertheless, it is important to recognise the difficult task given to regulators under the Gas Access Regime. As noted above, a range of plausible values could exist for target revenue, given the uncertainty about the many technical economic issues involved. To ensure that regulators understand this and that target revenue is calculated in a way that is consistent with the overall objectives and new pricing principles recommended by the Commission, it is necessary to revise s.8.6. In particular, the current term 'appropriate value' could be misinterpreted as implying that there is an optimal value for the rate of return, capital base, depreciation and non-capital costs. The Commission recommends that it be made more explicit that service providers propose the relevant values and regulators assess whether those values are within a plausible range.*

EnergyAustralia recognises that the "reasonable range" for the total revenue requirement is a function of a number of subsidiary decisions, including those on the roll -forward of the capital

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[10] For transmission businesses in particular, the capital expenditure forecast is based on the aggregation of particular projects to address particular identified needs rather than an arbitrary escalation of prior years' actual expenditures.

[11] *Application by GasNet Australia (Operations) Pty Ltd [2003]* ACompT 6 (23 December 2003), para 29.

[12] Productivity Commission, *Review of the National Gas Access Regime*, Inquiry Report No. 31, 11 June 2004, p270. As discussed above, the Productivity Commission also supports the "plausible rage" concept for cost of capital parameters.

base, depreciation, the cost of capital, a reasonable level of operating expenses, and a host of other considerations. While it is not reasonable to expect a "reasonable range" for such a measure to be determined in advance, it may be possible to add some additional structure to the revenue determination process so that the business can propose a total revenue measure that is more likely to fall within a reasonable assessment of the "reasonable range" on total revenue.

118. What is the likely impact of such an approach on the extent of regulatory certainty? Are regulatory outcomes more or less easy to predict if the decision criterion is within a plausible range, rather than the best or central estimate?

As discussed in this section, EnergyAustralia considers that the plausible range approach is critical to supporting the propose-respond model. Accordingly, adopting this approach would result in a considerable improvement in regulatory certainty. Over time (or through generic proceedings discussed above), the regulator will establish its approach to determining the plausible range for key measures (WACC, etc) and the businesses will be able to propose reasonable parameters within that plausible range.

Where the regulator arbitrarily changes its approach to determining the plausible range, there will be a reduction in regulatory certainty. To this extent, EnergyAustralia favours codifying the process for determining key parameters in the Rules to reduce the scope for uncertainty. An example of the items to codify might include the number of trading days used to calculate government bond yields for determining the risk free rate.

119. What would be the basis on which the AER is to determine that an outcome is within a plausible range? To what extent could this be by reference to objective criteria or would it by need to be at the AER's discretion?

It is difficult to reconcile the notion of a "plausible range" with "objective criteria". The notion of the "plausible range" recognises that there is a degree of measurement and estimation error involved. To this extent, there is an implicit recognition that the "plausible range" must be measured with some degree of regulatory judgement.

As a general principle, EnergyAustralia is uncomfortable with the notion of the unguided exercise of regulatory discretion. In the absence of adequate guidance or boundaries, there is a risk or arbitrariness in the application of discretion.

However, as discussed above in the context of the generic cost of capital proceedings, EnergyAustralia sees considerable value in a more formal process for determining key parameters to provide guidance to the regulator and the business alike as to the boundaries of the "plausible range".

120. Would such an approach represent an erring towards the interest of investors?

It is not obvious to EnergyAustralia that this approach would result in an erring in favour of the service provider. Rather, it may remove a downward bias introduced by the regulatory process.

EnergyAustralia is unaware of any Australian regulatory decision that has approved a WACC equal to or higher than that requested by the service provider. Rather than assuming there is an endemic anti-business bias on the part of the regulators, EnergyAustralia considers that this is a result of a procedural bias.

Recognising the estimation error inherent in cost of capital calculations, Regulators tend to calculate a reasonable range and then base prices on the midpoint of the range. If the range includes the business' proposal, we could say that the business' proposal was reasonable (being in the range), but it is the Regulator's choice of the midpoint that introduces the downward bias.

EnergyAustralia considers that a framework which provides some certainty on the boundaries of the reasonable range will provide much greater form and certainty to the process of determining cost of capital.

121.	*If so, is that an appropriate objective given the value apparently placed by customers on reliability and security in the long run? Are the consequences of underinvestment in electricity transmission of more detriment to achieving the market objective than the consequences of overinvestment?*
122.	*If such an objective is appropriate, are there alternative ways of achieving it? Would such alternatives better achieve the market objective?*

There have been many recent regulatory reports that have highlighted the asymmetric nature of regulatory risk. That is, the consequences of underinvestment from an over zealous regulatory regime dwarf the short term benefits from lower prices for access seekers.

For instance, in its review of the National Access Regime, the Productivity Commission noted that:

> "The potential 'chilling' effect of access regulation on investment in essential infrastructure services is the main concern. Investment may be deterred for two reasons.
>
> Potential exposure to access regulation is likely to increase the general level of risk attaching to investment in essential facilities. The inevitable regulatory discretion involved in the implementation of such regulation, and perceptions that regulatory decisions are likely to be biased in favour of service users, are among the factors that contribute to regulatory risk. These sorts of risks attach to investment in any regulated activity. However, the scale of investment in essential infrastructure, and the fact that, once in place, the assets are 'sunk' with few alternative uses, mean that regulatory risk can be a more critical factor in the investment decision and may sometimes deter projects.
>
> Investments in essential infrastructure will also be deterred if regulated terms and conditions are not expected to provide a sufficient return. A particular problem here is that the possibility of earning higher than normal profits if a project proves to be very successful may be required to balance the possibility that the project will fail. However, once a facility is operating, it will generally be impossible for regulators to delineate any upside returns from genuine monopoly rent — that is, returns in excess of those necessary to justify the investment.

> Regulatory pricing arrangements that (inadvertently) appropriate upside returns (so called 'regulatory truncation') can be a significant source of inefficiency arising from access regulation.
>
> Third party access and the resulting benefits to service users are only possible over the longer term if there is continuing investment in the essential infrastructure services themselves. On the other hand, while denial or monopoly pricing of access imposes costs on the community, such behaviour cannot threaten the continued availability of the services concerned. This asymmetry in potential outcomes highlights the priority that access regulation must give to ensuring that there are appropriate incentives for efficient investment."

Productivity Commission 2001, *Review of the National Access Regime*, Report no. 17, AusInfo, Canberra. P.xix

In its submission to the Productivity Commission Review of the National Access regime, economic consultants NECG commented that:

> "In using their discretion, regulators effectively face a choice between (i) erring on the side of lower access prices and seeking to ensure they remove any potential for monopoly rents and the consequent allocative inefficiencies from the system; or (ii) allowing higher access prices so as to ensure that sufficient incentives for efficient investment are retained, with the consequent productive and dynamic efficiencies such investment engenders.
>
> There are strong economic reasons in many regulated industries to place particular emphasis on ensuring the incentives are maintained for efficient investment and for continued productivity increases. The dynamic and productive efficiency costs associated with distorted investment incentives and with slower growth in productivity are almost always likely to outweigh any allocative efficiency losses associated with above-cost pricing. (sub. 39, p. 16)."

8.3 Saving and Transition

123.	*What issues need to be supported or provided for in savings and transitional Rules? What is the best approach to the management of these issues?*

As noted in paragraph 9.4 of the Issues Paper, Schedule 3 of the NEL and Schedule 2 of the National Electricity Regulation contain a range of transitional and savings provisions. However, these provisions were designed "to ensure a smooth, efficient and equitable transition to the new NEL and Rules" and will not automatically apply to any changes made to Chapter 6 as a result of the AEMC Review.

Transitional issues relate to existing regulatory decisions or approaches that should be preserved and/or specifically addressed in the amended Rules. EnergyAustralia's position is that where the TNSP or transmission customers have made long-term commitments based on the existing regulatory arrangements, these commitments should not be frustrated by subsequent amendments to the Rules, unless an obvious conflict becomes apparent.

Accordingly, EA generally supports the proposition that "for certain purposes (such as variation, review or appeal) in relation to a continued revenue determination, the transitional Rules may specify that the old Rules...apply in those circumstances".

Clause 13.1(b) of Schedule 2 of the Regulations provides that a revenue determination that was made prior to 1 July 2005 may be revoked, varied or amended by the AER in accordance

with the new NEL and Chapter 6 of the Rules. As clause 6.2.4(d) of the Rules does not differ substantially from the equivalent provision under the Code, the status quo was maintained but if changes are now made to clause 6.2.4(d), then the impact on existing determinations needs to be addressed.

In addition, EnergyAustralia identified a number of specific transitional issues that would need to be captured in the AEMC's review. These transition issues are:

- Existing negotiated contracts (including in relation to prudent discounts) between the transmission network service provider and network customers should be recognised;
- The AEMC should ensure that the financial incentives arising from the ACCC's approach to contingent projects should be honoured at the next revenue reset.
- EnergyAustralia sought and received a waiver from the ACCC's transmission ring fencing guidelines – this decision should be accommodated in the amended Rules.

Where the regulator has established an incentive mechanism which spans regulatory periods, this commitment should be recognised in future regulatory periods. For example, demand management and service performance schemes should be honoured, even if the service incentive mechanism is discontinued or amended in the next regulatory period.

The application of a new incentive mechanism in future regulatory periods (or the discontinuation of an existing arrangement) should only be possible with the explicit agreement of the regulated company.

Transitional issues relate to existing regulatory decisions or approaches that should be preserved and/or specifically addressed in the amended Rules. The intention is that where the TNSP or transmission customers have made long-term commitments based on the existing regulatory arrangements, these commitments should not be frustrated by subsequent amendments to the Rules, unless an obvious conflict becomes apparent.

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