



Response to AEMC Issues Paper Electricity Transmission Revenue Requirements

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Executive Summary

- 1. The EUAA and EAG welcome the opportunity to respond to the AEMC's Issues Paper. Unfortunately, our contribution has been hampered by a number of limitations with the review process, which are outlined in section 2 of this submission. Most significant of these is the failure by the AEMC to provide factual quantified evidence on the effectiveness or otherwise of existing regulatory policies, or the impact of any changes to those policies. Despite these limitations, we have attempted to provide a detailed, sound and constructive response to the matters raised in the Issues Paper.
- 2. The *Issues Paper* describes in some detail the principles that are generally applied to economic regulation of electricity transmission in Australia. As the *Issues Paper* makes clear, these principles have been applied in electricity transmission, gas transmission, electricity distribution and gas distribution (and in the water sector in most Australian jurisdictions). Many of these methodologies and practices are similar to those adopted by regulators in other jurisdictions, particularly in the UK and to a lesser extent New Zealand.
- 3. Accordingly, our submission makes reference to and uses examples and outcomes from other industries, sectors and jurisdictions regulation most commonly from the electricity distribution sector. Focus is given to aspects of economic regulation that appear to produce outcomes that are consistent with achievement the single market objective (SMO) of the National Electricity Law (NEL), and are therefore likely to deliver outcomes that benefit end users. Particular attention is given to aspects that do not appear to produce such outcomes.
- 4. Above all else, our submission and its recommendations have been based on an application of the SMO of the NEL, which the AEMC is required to abide by and base its decisions on, including for this review.
- 5. Listed below are recommendations that the EUAA and EAG commend to the AEMC in respect of the review of transmission revenue.

INVOLVEMENT OF END USERS

6. Participation by end-users in the regulatory process would be facilitated if the Rules clearly stated the need for, and desirability of, end user involvement and this was linked to changes in the Rules provisions relating to advocacy.

FORM OF REGULATION

- 7. Key issues that the AEMC must address effectively in its review of Rules applying to specification of the form of regulation are:
 - the extent to which current arrangements are effective (or not) in facilitating achievement of the SMO;
 - the extent to which regulatory arrangements that apply to electricity transmission can be made consistent with regulation of other sectors in both the electricity and gas industries;

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- the extent that Rule changes are necessary to ensure that, in achieving the SMO, there is robust evidence to show that existing deficiencies can be addressed or overcome;
- the extent that robust quantitative evidence exists to show that Rule changes (that assist in achieving the SMO) deliver net economic benefits to energy users;
- 8. There is also a need to establish a robust, reliable, consistent and audited information disclosure regime that allows the AER to:
 - effectively regulate transmission revenues;
 - demonstrate that energy users are getting 'value for money' from both regulators and TNSPs and that there is a clear link back to achievement of the SMO; and
 - effectively use pressure that can be applied through 'competition by comparison' (and civil penalties) to bolster 'commercial incentives' to the maximum extent possible.
- 9. The AEMC must also recognise that it is important to develop a robust information base, and 'baseline condition' for any future implementation of a Productivity Index form of regulation. Otherwise it is inevitable that physical differences in network configuration and operating conditions will determine the need for detailed disclosure of cost and service performance information for each individual TNSP.

FORM OF PRICE CONTROL

- 10. Given the amount of 'regulatory energy' committed to debate and discussion on this issue, it would seem to be sensible for the AEMC to focus on how a 'tariff basket' price cap approach could be adapted for electricity transmission (and all distribution services). This would have the advantage of achieving far greater regulatory consistency.
- 11. The provisos that the AEMC will need to consider prior to adopting a 'tariff basket' form of price control for transmission services are that:
 - TNSPs' demonstrate they understand the link between the demands created by system users and cost and are capable of preparing reasonable forecasts of cost and service demands;
 - TNSPs have cost allocation practices and pricing policies that allocate cost fairly between users and clearly demonstrate that costs are linked to price;
 - the AEMC and AER are able to implement a 'tariff basket' approach in transmission that would align transmission and distribution pricing signals, which may require that the Rules constrain the creativity of jurisdictional regulators' 'tinkering' with distribution 'tariff basket' formulae; and
 - the AEMC and AER are able to deal with the fact that a number of regulators (notably the Victorian ESC, ESCoSA and IPART) have added jurisdictionalspecific 'incentive factors' in the distribution sector that are intended to 'bribe' the regulated utility to do something that is supposed to deliver an efficiency benefit.

- 12. Adding even more 'transmission specific' (or jurisdictionally specific) 'incentive factors' would greatly reduce the possible benefits from standardising the forms of price control.
- 13. A further issue that the AEMC will need to address, should it accept the challenge of promoting 'regulatory consistency', is that TNSPs clearly need incentives that focus on more than reducing their own direct costs. Given the impact of transmission operation, and transmission constraints, on the wholesale energy market, it is essential that the form of price control be inexorably linked to effective service incentives that focus on reducing overall costs to energy users (and generators) and improving overall operation of the energy market.

SERVICE STANDARDS INCENTIVES

- 14. The AEMC is urged to move forward as quickly as possible in developing a service standards incentive scheme. First steps towards achieving that outcome are to:
 - incorporate the principles for the scheme into the Rules; and
 - ensure the AER establishes a monitoring, public reporting and incentive regime for all TNSPs that focuses on quantifying TNSP market impacts as soon as practicable.
- 15. It will also be extremely important for the AEMC and AER to ensure that end users are effectively involved in establishing the value of any incentive for performance improvements and the mechanism by which that value is transferred to (or from) TNSPs.

EXPENDITURE INCENTIVES

- 16. The AEMC should explicitly consider the effect that different expenditure incentives might have on investment incentives. The outcomes from the ACCC's prudency assessment strongly suggest it is not desirable (from end-users' perspective) to apply the Victorian ESC's view, since this would allow 'inefficient costs' to be passed through to end-users. However, it is likely that broad application of the ACCC's view will increase 'regulatory dependency' and cause TNSPs to delay major investment decisions until they are satisfied the AER has endorsed the basis of the investment. This suggests neither approach is certain to ensure incentives are maintained that will deliver the optimum outcomes for end-users.
- 17. We understand that regulators face challenges in making judgements about the appropriate level of expenditure that should be allowed in regulated revenue benchmarks. However, the process provided for currently in the Rules, and existing regulatory practice, do not appear to be the best ways to create incentives for TNSPs to pursue ongoing efficiency that will benefit end-users.

CLARIFYING PERFORMANCE OBLIGATIONS AND INCENTIVES

- 18. The AER's proposals contained in the Statement fo Regulatory Principles (SRP) would be improved by including the following 'principles' in the Rules:
 - Acknowledge that there are (undesirable) incentives for TNSPs to exercise 'strategic behaviour' in forecasting of outputs and costs.

- Comment on and address the exercise of 'strategic' behaviour by TNSPs.
- Limit the role of 'expert' technical consultants to advising on technical issues related to TNSPs proposals, not exercising judgement that is appropriately the preserve of the regulator.
- Indicate 'in principle' support for price (as opposed to revenue) control. However, this support should be subject to the AEMC committing to address the exercise of 'strategic' behaviour by TNSPs. Any proposal put forward to alleviate such behaviour, for example, through application of a Total Factor Productivity measure, should be subject to a rigorous cost/ benefit analysis; and, consistent with achievement of the SMO, a clear net benefit to end users needs to be demonstrated prior to changing the current provisions.
- Develop regulatory arrangements to bring forward investment to remove interregional constraints and significantly improve competition between generators. TNSPs should be compelled to work together to ensure that investments that deliver value to end-users were undertaken efficiently and in a timely manner based on clear incentives (both commercial and civil).
- Develop service standards benchmarks that clearly show the impact of TNSPs' behaviour on the wholesale energy market and use these to develop an incentive scheme for TNSPs to minimise the impact of transmission on the efficient operation of the wholesale energy market.
- Implement a UK-styled econometric analysis of TNSPs' performance, using data and information from a nationally consistent, robust and audited performance reporting regime and consultants' reports as part of a range of inputs to that analysis.
- Use the output of the econometric analysis to validate and refine a rational monitoring and comparative reporting regime for TNSPs that will assist in better informing regulatory decisions.
- 19. We also recommend that the revised SRP be embedded into the Rules. This will ensure changes to the SRP will be subject to a rigorous and structured AEMC Rule change review including facilitating achievement of the SMO in the 'long-term interests of consumers of electricity'.

ASSET VALUES AND CAPITAL EFFICIENCY

- 20. Adopting the following 'principles' to be included in the Rules would improve regulatory treatment of asset valuations:
 - Acknowledge an intent to achieve valuations for sunk assets that are efficient, fair and practicable where -
 - an efficient valuation will be the lowest value that would allow the asset owner to recover efficient investment and would create the least distortion to efficient upstream and downstream investment.
 - a fair valuation will be one where end-users fully fund efficient capital costs, but only do so once and should focus on providing incentives for efficient future investment.

- a practicable asset valuation will be one that uses the most readily available information, with a methodology that is least likely to be subject to 'strategic' manipulation of information by asset owners.
- Explicitly aim to provide incentives for efficient future investment and efficient operation of networks.
- Explicitly prohibit change of easement asset values, and retain easement values at historic actual cost in nominal terms. Where such costs cannot be established with certainty, easement asset values should be explicitly set at zero.
- Tie the treatment of asset values to the SMO that the AEMC is required to abide by and develop Rule changes that are consistent with this.

RATE OF RETURN

- 21. Capital costs (comprising depreciation and return on capital) makes up approximately 60% of a TNSP's Maximum Allowable Revenue. Hence, we have historically taken an active position in the setting of WACC, as well as the development of the WACC component of the SRP.
- 22. Current regulatory practice associated with estimating the cost of capital is controversial and the outcomes are peppered with shortcomings that place additional (unjustified) cost burdens on energy users and 'over-reward' energy networks. Accordingly, we have responded to the specific questions listed in the *Issues Paper*.

Guidance to the AER

- 23. Given the substantial compromise, and the difficult judgements required in making estimates of WACC, and the controversy and uncertainty associated with the key parameter values, the Rules should not be more prescriptive than is currently the case. It is our view that further guidance through the Rules is justified for regulators in estimating the WACC.
- 24. We believe it is appropriate to include reference in the Rules to:
 - emphasise that the WACC should be no more than that generally available in financial markets – allowing for the relatively low risk offered by 'regulatory protection';
 - making use of all relevant and robust information in setting the WACC; and
 - recognising the inevitable final need for sound (but difficult) exercise of judgement in all elements of WACC estimation.

Prescription of the Form of WACC

- 25. Based on current practice and knowledge, the Rules should prescribe both the form of WACC and the model used to estimate its value, with the 'Vanilla', real, post-tax WACC being the prescribed form and application of the Capital Asset Pricing Model (CAPM) being the prescribed model.
- 26. The methods and approaches used to estimate values for the individual parameters should not be prescribed.

Benchmark Capital Structure

27. There is benefit in retaining a benchmark capital structure when estimating WACC as, properly constructed, this will provide an incentive for TNSPs to pursue efficient financing arrangement, the benefits of which should (eventually) be passed through to end-users. However, the Rules should also require the AER to provide a clear explanation of the basis for establishing the 'benchmark' arrangements that is capable of demonstrating to end-users (and TNSPs) the benefits that derive from the 'benchmark' structure.

Elevation of SRP principles to the Rules

28. The 'principles' contained in the SRP should not be accepted by the AEMC, and should not be elevated to the Rules in their current format. The ACCC 'jumped the gun' by suggesting it is possible to define values and 'lock them into the SRP' for key parameters, notably the Market Risk Premium and Equity Beta. We do not accept that sufficient information is available to support the values of 6.0% and 1.0 respectively adopted by the ACCC.

Process for review of WACC

29. The 'stability' of the WACC estimation process should be improved by amending the Rules to require all TNPS revenue reviews to be conducted concurrently and in a single regulatory process. This should preferably be at the same time that gas transmission access reviews are conducted (in addition, the AEMC should amend the Rules to bring all electricity and gas DNSP reviews together). This would reduce the frequency with which reviews of WACC were required from around 18 to 2 every five years and produce greater stability in the overall regulatory regime. Such an approach is consistent with arrangements in the UK, including the initiative taken by Ofgem in the UK to align reviews of gas and electricity transmission.

Re-opening review if conditions change

- 30. The Rules should not allow for the determination to be re-opened if market or economic conditions change.
- 31. Should any firm elect not to avail itself of the protection provided by prudent participation in active financial markets, regulators should allow the firm to face the full financial consequences of this decision as an element of good 'incentive' regulatory practice. This is the only way to construct effective incentives, which, on the whole, clearly deliver favourable outcomes to the firms' owners.

Regulatory Procedures

32. Given the issues that must be addressed in any revenue/price review, it is inevitable that the AER must be permitted some discretion. Further, sections 15, 35 and 36 of the NEL provide guidance to the AER on the manner in which they must perform or exercise their economic regulatory functions or powers in making TNSP decisions. We believe that this provides sufficient guidance to the AER.

- 33. However, we also believe that exercise of discretion cannot be permitted under any circumstance. Therefore, it is highly desirable that the AER be compelled to specify clearly, and as simply as possible, prior to commencing a review which areas will require exercise of discretion, and the criteria to be applied in each review that will be used to guide and/or determine this discretion. This can best be done by establishing high level guidance in the Rules and requiring the AER to specify more detailed conditions in initial guidance to TNSPs and all other stakeholders.
- 34. The current review process could be improved by incorporating the following as 'principles' in the Rules:
 - Aligning timing for regulatory review of all NEM TNSPs as soon as practicable.
 - Undertaking regulatory reviews for a single, multi-company, NEM-wide transmission system.
 - Fixing an end date for the review process so that TNSPs can publish revised tariffs well before, at least two months, prior to the start of new fiscal years and end-users can budget for changes in transmission charges.
 - Develop effective and relevant 'service standards' for the whole transmission system that include specific incentives for TNSPs to interact with the energy and ancillary services markets to optimise outcomes for end-users.
 - Achieve consistency in approaches and incentives for network service providers to optimise outcomes for end-users.
- 35. In addition, involvement of end users in the reviews would be facilitated by the AEMC incorporating the following additional 'principles' into the Rules:
 - Fixing the commencement of each consultation period and key milestones/consultation points (and indicative dates) in advance so that endusers have a better basis for planning participation (and seeking funding support from the NEM Advocacy Panel).
 - Concatenating periods for consultation on the TNSPs application and the AER's consultants' analysis of the application (and responses to each).
 - Allowing more time for end-users to consider issues raised in the TNSPs' applications and the AER's consultants' reports concurrently. In particular, we recommend that not less than 8 weeks is provided for comments to be made on TNSPs initial proposals and the AER's Draft Decision.
 - Fixing an end date for the review process so that TNSPs can publish revised tariffs well before (at least two months prior to) the start of new tariff years and end-users can budget for changes in transmission charges.
 - Including requirements for the TNSPs to improve the communication of their tariffs to customers, retailers, distributors and jurisdictional regulators and to require them to develop examples of the impact of tariffs on different classes of end users and 'tools' to assist end users with better understanding the cost impact of tariffs.

Disclosure of reasoning

- 36. The AER must be obliged to accurately, explicitly, thoroughly and transparently explain every aspect of its decisions, including releasing any modelling that underpins any transmission determination. In addition, the models should be 'fully active' so that analytical assumptions embedded in the models can be audited and tested by stakeholders.
- 37. The Rules should explicitly limit the conditions under which information provided to TNSPs is not disclosed to other stakeholders. It is our strong view that the only justification for restricting information is that the interests of a third party (not connected to the TNSP or its shareholders) would be compromised by release of the information. Even in that case, the AER should be obliged to provide a description of the restricted information and transparently explain the reasons for restricting its release.

Regulatory Information

- 38. We are firmly of the view that effective and enforceable rules that define, and precisely and clearly specify, the information that must be provided to the AER must be established and rigorously enforced. These Rules must provide reliable and verifiable information about the actual costs incurred in providing services, including for un-regulated activities, and the levels of service performance.
- 39. At a minimum, the AER should be given the same powers to obtain and enforce information provision by the TNSP as other Australian regulators, such as the Australian Securities and Investment Commission (ASIC), ACCC and the Australian Taxation Office (ATO).
- 40. Further, the Rules should limit discretion in allocation of costs and interpretation of performance information as tightly as possible. This would appear to be the only way of minimising the exercise of 'strategic behaviour', obfuscation and/or confusion over information disclosure.

1. Introduction

This submission contains a response to some of the issues related to regulation of transmission revenue that are raised by the Australian Energy Markets Commission's (AEMC) *Revenue Requirements: Issues Paper (Issues Paper).*¹ The submission has been prepared by Energy Users' Association of Australia (EUAA) and Energy Action Group (EAG) with assistance from Marsden Jacob Associates (MJA).

Preparation of the submission has also been supported by a grant from the National Electricity Consumers' Advocacy Panel and their assistance is gratefully acknowledged.

Both the EUAA and EAG are long-established consumer representative and advocacy organisations; and both have made preliminary submissions to the AEMC in relation to this review, since outcomes of the review potentially have significant long term financial impacts on energy users.

The EUAA was formed on 1 January 2001 by a merger of the Energy Users Group of Australia (EUGA) and the Australian Gas Users Group (AGUG). The EUAA is a nonprofit organisation funded by membership fees, internally generated revenue and external funds. Members determine policy, priorities and direction. The EUAA represents and advocates on behalf of business users with activities across all states and many sectors of the economy. The EUAA is focused entirely on energy issues, covering national and State issues dealing with electricity and gas, as well as greenhouse and energy efficiency. The EUAA has over 80 members, including many of Australia's largest energy users and transmission regulation is important to their interests. The EUAA has participated in nearly every transmission review undertaken since the beginning of the NEM.

The EUAA also encourages energy retailers and others with an interest in energy matters that affect end users to join as Supporting or Affiliate Members; and actively seeks cooperation with organisations representing small to medium business and disadvantaged consumers.

The EAG is a membership based, not for profit incorporated association formed in 1977, which advocates on behalf of less than 160 MWh electricity consumers across the NEM and less than 10 TJ gas consumers across the East Coast of Australia. The EAG has actively participated in electricity and gas transmission and distribution revenue/pricing reviews across the NEM since energy reforms actively started in 1996.

MJA has assisted both the EUAA and EAG (and other consumer groups) participate in virtually all regulatory reviews of electricity and gas distribution in Australia since the late 1990s. MJA has also assisted the consumer participation in reviews by the ACCC of gas and electricity transmission revenue/access and consultations on regulatory policy and electricity market rules issues.

¹ Review of the Electricity Transmission Revenue and Pricing Rules Consultation Program, Revenue Requirements: Issues Paper, AEMC, October 2005.

2. Assessment of review process

Independent economic regulation of electricity transmission (and electricity distribution) commenced in Australia with proclamation of the Victorian Electricity Supply Industry Tariff Order on 30 June 1995. As noted in the Introduction above, the EUAA, EAG and MJA have been involved in all aspects of this process since that time. This substantial experience has been used as a reference point in developing comments in this submission. In addition, reference is made to experience in other jurisdictions, particularly from the UK but also the US and New Zealand.

MJA has attempted to assist the EUAA and EAG to provide quantified examples from the regulation of electricity transmission in Australia to inform and support the views presented in this submission. However, the ability to do this is severely hindered by lack of comprehensive, or even useful (i.e. reliable and consistent), public domain information on performance of transmission entities or outcomes from regulatory review processes. The ACCC's Regulatory performance reports,² which are the only 'performance reports' in the public domain subject to regulatory oversight,³ are severely limited. Even after a decade of regulating TNSPs, these reports do not yet cover all regulated TNSPs and there appears to be little attention given to data quality or uniform presentation of quantified information.

The *Issues Paper* describes in some detail the principles that are generally applied to economic regulation of electricity transmission in Australia. As the *Issues Paper* makes clear, these principles have been applied across a range of industries and jurisdictions in Australia using more-or-less the same methodology and practices in electricity transmission, gas transmission, electricity distribution and gas distribution (and in the water sector in most Australian jurisdictions). Many of these methodologies and practices are very similar to those adopted by regulators in other jurisdictions, again particularly in the UK and to a lesser extent New Zealand.

Accordingly, this submission makes reference to and uses examples and outcomes from other industries, sectors and jurisdictions regulation – most commonly from the electricity distribution sector. Focus is given to aspects of economic regulation that appear to produce outcomes that are consistent with achievement the single market objective (SMO) of the National Electricity Law (NEL), and are therefore likely to deliver outcomes that benefit end users. Particular attention is given to aspects that do not appear to produce such outcomes.

2.1. Background

The National Electricity Law requires the AEMC to amend the National Electricity Rules (Rules) governing the regulation of transmission revenue and prices before 1 July 2006. The

² Electricity Network Service Providers Electricity Regulatory Report(s), ACCC.

³ The ESAA also publishes industry 'performance data'. However, participation in this reporting process is voluntary, performance data is not subject to audit, and the resulting reports have been shown to contain data that is substantially different to that contained in jurisdictional regulators' performance reports.

The ACCC's Determinations are also unsatisfactory sources of information. The ACCC made no concerted effort to (for example) compare forecast and actual expenditure in its Determinations until 2004. It may be possible to 'unearth' this information from the many documents prepared by TNSPs and the ACCC that are posted in the ACCC's Website, but end users do not have sufficient time or resources to undertake this task.

AEMC is conducting a review that includes broad consultation to develop a Rule change proposal and draft Rules. As part of this review, the AEMC has published a *Scoping Paper*⁴ and an *Issues Paper*. The *Issues Paper* says it identifies 'Key themes' for the review that were raised in submissions made in response to the AEMC's *Scoping Paper*, which include:

- the need for regulatory arrangements that achieve a better alignment between investments in and operation of transmission networks and the interests of market participants and electricity consumers; and
- the desire to provide greater clarity, certainty and consistency in the application of regulation.

The *Issues Paper* says the AEMC will have particular regard to the substantial experience in the practice of transmission revenue regulation since the commencement of the National Electricity Market (NEM), including the development and application of the Statement of Regulatory Principles (SRP) by the Australian Competition and Consumer Commission (ACCC). The *Issues Paper* also appears to leave all options open, and raises questions, alternatives and options in a wide range of areas to elicit views from stakeholders.

In addition to challenges created by the time-limited process imposed on the AEMC, there are shortcomings in the review process which are apparent upon examination of the *Issues Paper*. These flaws significantly hamper effective contributions by end users and are discussed further in the remainder of this section.

2.2. Overlap and conflict with other review processes

There is a significant degree of overlap in, and/or conflict between the review of transmission revenue and other review processes. For example:

• There is conflict with topics covered in the *Issues Paper* and current MCE consultations on the proposed framework schedule for transfer of distribution and retail functions.

The most important area of overlap/conflict is the MCE's apparent interest in achieving regulatory consistency across all sectors in both the gas and electricity industries;⁵ and the AEMC's limited focus on whether or not the existing Rules governing revenue regulation of TNSPs should be changed.

While the *Issues Paper* refers to precedents and options from regulation of the gas sector and the electricity distribution sector, there appears to be no emphasis on pursuing consistency in regulatory practices across all sectors in both industries. Increasing focus on maximising consistency of regulation could avoid, or reduce, the need to revisit some or all of the same issues again in the future.

⁴ *Review of the Electricity Transmission Revenue and Pricing Rules - Initial Consultation: Scoping Paper*, AEMC, July 2005

⁵ This is a stated goal attributed to the MCE's review in *Public Consultation on a National Framework for Energy Distribution and Retail Regulation* prepared for the MCE by NERA and Gilbert & Tobin in May 2005.

It is acknowledged that the focus of the NERA *et al* paper is distribution and retail, but the goal of achieving the maximum level of integration and consistency in regulation across all sectors of both the gas and electricity industries has considerable 'face value' appeal to energy users. If this goal can be achieved, it would significantly reduce the cost of regulation and better align values that influence consumer choices between gas and electricity uses with regulatory policy and practice. This would be more likely to assist in delivering the economic efficiency benefits intended for energy reform.

- There is overlap between the AEMC *Issues Paper* and the recent MCE initiative to establish an "Expert Panel" to advise on a model for a common approach to transmission and distribution revenue regulation, and network pricing across electricity and gas.
- There is overlap between the AEMC *Issues Paper* and the MCE initiative to review principles for the 'regulatory test'.⁶

This is an important issue to end users. The continued existence of inter-regional transmission constraints that clearly imposes significant costs on electricity users and distorts outcomes in the wholesale energy market is a function of the failure of the *regulatory test* to bring forward sensible investment.

• There is overlap in issues in the 'transmission revenue' *Issues Paper* and the AEMC and 'transmission pricing' issues paper.

One issue of importance to energy users is the status of the suspended NECA review of application of the 'beneficiary pays' principle, which is referred to very briefly (and in apparently dismissive terms) in the AEMC's transmission pricing issues paper:

On the other hand, the beneficiary pays approach has limited economic justification. This is because generators, particularly existing generators, have little influence on where, what type and how much transmission investment occurs. This differs from the provision of most private goods where the beneficiary is also the decision-maker (ie, the causer). Aside from the lack of theoretical backing for such an arrangement it is difficult to see how such a scheme could be put into practice. The calculation of benefit shares from a transmission investment would require a range of assumptions to be made, which would be likely to attract significant disputation.⁷

But the AEMC provides no evidence to support the assertion that the beneficiary pays principle has limited theoretical justification. Even that statement is correct, it is surely incorrect to suggest this is because ... generators ... have little influence on where, what type and how much transmission investment occurs. The only reason most transmission is located where it is, and has the capacity it has, is because this produced a lower cost outcome for investment in major generation assets due to the comparative costs of fuel and electricity transport.

It may be correct to assert that transfer of costs to generators through a beneficiary pays arrangement would, and could, do nothing to alter the decision (taken long ago) to invest in existing transmission assets that connect remote generators to the market. But current arrangements that transfer 100% of shared transmission costs to end users create economic distortions. For example, the Rules need to provide a complex negotiation framework to transfer avoided transmission costs to embedded generators; and there are distortions in locational decisions affecting gas fired generators that incur gas transmission costs but can avoid electricity transmission charges, which is clearly illogical. The transfer of a 'beneficial share' of transmission sunk asset costs to generators (and the associated losses) would remove these economic distortions

⁶ Letter from Hon Ian Macfarlane (as MCE Chair) to Dr John Tamblyn headed *National Electricity rules – Rule Change Application, Reform of the Regulatory Test Principles* (undated was but posted on AEMC Website on 28 October 2005).

⁷ p. 48, *Transmission Pricing: Issues Paper*, AEMC, November 2005.

and, most likely, improve the economic efficiency of future generator, and transmission, investment decisions.

Moreover, the situation where generators pay only "shallow" connection costs and customers pay all "deep" connection costs is not well founded in economic theory, nor is it logical. As a matter of record, it also results in certain "heroic" assumptions being made and is the subject of continuing challenge and dispute (e.g. by end users and distributed generation proponents).

It is acknowledged that this is essentially a 'pricing' issue that ought not affect consideration of revenue requirements. However, implementation of any reasonable (and rational) 'beneficiary pays' pricing arrangement would transfer, in the first instance, significant shared transmission cost from end users to generators. This would not only remove an obvious deficiency in the current arrangements (being the difficulty in 'negotiating' transfer of avoided transmission costs to embedded generators). It would also fundamentally change the response of generators to transmission charges and, most likely, lead to greater pressure to introduce effective incentives for operation of <u>a fully integrated</u> transmission network (with commensurate greater pressure on transmission costs) and strongly influence issues dealt with in the AEMC's transmission revenue *Issues Paper*.

2.3. Apparent 'fixed' view of AEMC on some issues

Despite a professed intention to leave 'all options open', the AEMC, through the *Issues Paper*, clearly displays a preference (even fixed views) in a number of areas.

The EUAA and EAG recognise that it is very important to establish the policy principles that are consistent with the Single Market Objective (SMO) of the new National Electricity Law (NEL). Further, the policy principles should be coherent, reasonable and underpinned by a theoretically sound economic framework. This appears to be (in effect) a primary objective of the *Issues Paper*.

However, achievement of this outcome is compromised to some extent because the *Issues Paper* relies almost entirely on theory rather than factual information and/or precedents. This results in the appearance that certain 'principles' are taken at face value to be desirable and effective, and others are taken at face value to be undesirable and/or less effective. But no empirical evidence is provided to support these 'face value' assumptions. Two such examples are illustrated in the Box below.

The first example is where '*Traditional cost of service regulation* (that) *remains the most common approach in the US for the regulation of electricity transmission services*^{'8} is put forward as a potential alternative form of regulation, but appears to be summarily dismissed on the basis that *the cost pass through regulatory approach provides little incentive for the regulated business to pursue cost efficiencies and involves a perverse incentive for excessive capital expenditure.*⁹

No evidence is presented in the *Issues Paper* to substantiate the assertion that cost of service regulation involves such 'perverse incentives'. Nor is any attempt made to explain the difference between such 'perverse incentives' and what might happen should the AEMC decide to implement Rule changes reflecting regulatory policies that address the Productivity Commission's conclusion

⁸ p. 25, AEMC *Issues Paper*.

⁹ p. 29, AEMC *Issues Paper*.

that the consequences of overinvestment as a result of a regulator setting a rate of return that overcompensated businesses would have less impact on the long term interests of infrastructure users than the cost of underinvestment from setting too low a rate of return.¹⁰

There would appear to be no material difference between the supposedly different forms of 'overinvestment'. It cannot be 'perverse' or undesirable in one case (as suggested in the *Issues Paper*) and 'desirable' in another (as suggested by the Productivity Commission).

Another example occurs in the introduction to Section 6. This outlines the 'basic incentive mechanisms' that are, have been, or could be implemented to 'assist' TNSPs meet performance standards that satisfy end-users' reasonable expectations at an efficient cost. The principle concern is that the *Issues Paper* focuses almost entirely on the commercial 'bribe/penalty' incentive mechanisms in an apparent belief that these are always going to be more effective, although it does refer to a role for civil penalties and publication of transparent performance information; and the possibility that *TNSPs may still seek to satisfy these jurisdictional licence obligations in order to remain lawful participants or maintain their reputations with stakeholders*.¹¹

There is clear evidence that regulated utilities will respond to all these forms of incentive; and regulation will be most effective if it attempts to integrate all of them in a holistic 'incentive regime'.

In addition, the *Issues Paper* makes only one reference to a quantified impact of a regulatory precedent, being the reference to the effectiveness of the incentive arrangements applying to NGC in the UK.¹² However, the *Issues Paper* then effectively dismisses the possibility that *similar incentive arrangements* ... may be possible because complete emulation of the arrangements in Britain would be likely to require large scale institutional change in the NEM, which is not being contemplated.¹³ As detailed below, the use of quantified examples that demonstrate the benefits (or not) of a particular regulatory approach would have substantially improved the quality and relevance of the discussion in the *Issues Paper*. But it is of no value whatsoever to stakeholders to present a quantified precedent that approach out of hand.

2.4. Lack of quantified and reliable information

The *Issues Paper* poses 123 very specific and detailed questions that the AEMC deems relevant to clarifying issues surrounding the regulatory policy options canvassed in the *Issues Paper*. It is clear that many of the policy options will have a significant, or possibly substantial, financial impact on TNSPs and energy users. It would, therefore, appear prudent for the AEMC to consider information that assists in quantifying the impact of the different policy options.

This would inform the AEMC's judgement on which options are most likely to facilitate achievement of the SMO in the new NEL (which the AEMC is required to do). It also appears essential that the AEMC consider quantitative outcomes from current regulatory policies and practices – in a formal 'regulatory policy audit' – before any decision is made to propose an alternative arrangement, or endorse any current arrangement in the Rules. As a

¹⁰ p. 86, AEMC Issues Paper.

¹¹ p. 43, AEMC Issues Paper.

¹² p. 53, AEMC Issues Paper

¹³ Ibid

matter of principle, changes to the Rules should only be pursued where the AEMC can clearly demonstrate that:

- existing arrangements do not assist in meeting the SMO, or different arrangements would do so better than the existing arrangements; and
- Rules changes will facilitate achievement of the SMO in a manner that delivers longterm economic benefits to energy users (and the overall economy).

Lack of access to information that quantifies the potential impact of changes in regulatory policy (or continuation of existing policy approaches) is a major obstacle to effective participation by end-users (in particular) in this entire review process.

TNSPs understand the material impact of the policy options and would be able to use that information to bolster arguments for or against each option. But end users can only access such information that is in the public domain. Presenting this information in a clear and unbiased manner should be a key role for regulators; and it should have been undertaken during preparation of, and included in, the *Issues Paper*.

It is extremely disappointing that there is very little reliable quantified information in the public domain, which, in itself, demonstrates a substantial failure of current regulatory arrangements. It is also disappointing that this circumstance puts end users at a distinct disadvantage to supply-side stakeholders in the AEMC (and MCE) consultations.

As noted at the beginning of this section of the submission, Australian jurisdictional regulators and/or the ACCC have had responsibility for overseeing regulation of transmission services for up to 10 years. The ACCC, in particular, has produced many detailed reports on transmission regulation (accompanied by a plethora of submissions and consultants' reports). Yet the *Issues Paper* contains no references to quantified examples (for any Australian precedent) that demonstrate how effective existing polices and practices have been. Instead, the *Issues Paper* refers to conceptual and theoretical differences in regulatory policy and practice without making any quantified comment on the effectiveness of these alternatives or providing any indication of their relative material impacts on energy users.

3. Comment on Key Issues raised by AEMC

Despite the limitations in the review process and *Issues Paper* detailed in Section 2 above, the EUAA and EAG have made every effort to offer considered and meaningful contributions to areas covered by the AEMC's review. However, rather than attempt answers to each of the 123 detailed questions in the *Issues Paper*, our response relates to the range of matters that are critically important to end users.

3.1. Form of Regulation

The *Issues Paper* notes that the Rules currently require that transmission revenue regulation be undertaken by means of a CPI-X building block approach. The *Issues Paper* briefly outlines four alternative 'forms of regulation', *viz*:

• *Cost of Service*, which the *Issues Paper* acknowledges is still widely practiced in the US for regulating transmission services. The key attributes being that prices (or revenues) are determined in nominal terms and not for any pre-determined period. Prices are then only adjusted following a further regulatory review, against the principal criteria of the sufficiency of returns and the prudence of investment in assets.

The EUAA and EAG understand that 'cost of service' regulation has been criticised on the basis that it created incentives for asset owners to 'gold plate' investments in nuclear power plants in the US. However, no information has been presented in the *Issues Paper* to demonstrate that the same criticism applies to transmission regulation.

• *Total Cost Efficiency*, which the *Issues Paper* says estimates the efficiency of an individual firm using econometric techniques that may be used in place of forward looking cost estimates to determine benchmark efficient revenue or price levels.

As noted elsewhere in this submission, similar approaches have been adopted by UK regulators to inform their judgements in the CPI-X building block form of regulation. It is not at all clear why the *Issues Paper* makes no reference to this practice.

 Productivity Indices, which are claimed to have potential to be less reliant on firm specific data and use estimates of the industry-wide long term average rate of total factor productivity growth, which can be used to estimate the value of X in a CPI-X form of regulation.

Application of this approach was championed by Victorian distributors in the lead-up to the 2001 electricity distribution price review, and is being further investigated by the ESC and the Utility Regulators' Forum. The EUAA and EAG accept that there may be benefits from implementing this approach, but only if:

- a robust 'efficient cost' baseline could be establish that does not retain benefits arising from exercise of 'strategic behaviour' by utilities (end-users have a strong view that this could not presently be said of any energy utility in Australia, despite 10 years of regulation in some cases. This is partly because all Australian regulators have acknowledged that the cost estimates they accept are 'conservative' or 'cautious' – even when it is clear the utilities have inflated and strategically manipulate their costs);

- robust 'productivity indices' could be established that realistically described economic efficiency gains and also create direct incentives for utilities to improve cost and service performance (again no such indices currently exist in the Australian utility sector); and
- a means was found to accommodate the impacts of technological change that might fundamentally alter cost drivers in utility industries (again no such means presently exists).¹⁴
- Price Monitoring, which is a form of regulation implemented in New Zealand that allows regulated firms to set their own prices (and service standards) and involves periodic 'testing' of firms' performance relative to 'profit thresholds' and 'service thresholds' developed by the NZ Commerce Commission (NZCC).

Experience shows that some regulated firms repeatedly breach the thresholds in sequential periodic 'tests'. This condition (repeated, sequential breaches) is required before the NZCC is permitted to commence a regulatory review process that has many of the attributes of the existing CPI-X building block approach currently (and routinely) in use in Australia.

There are some interesting comparisons to be made between the NZ and Australian approaches. The NZCC has, like Australian and UK regulators, adopted the Capital Asset Pricing Model (CAPM) to estimate the cost of capital, typically by application of formulae referred to as the Brennan-Lally model. While the NZCC's application of the CAPM appears to be influenced more heavily by academic assessment of parameter values than is the case in Australia or the UK, the applications of the CAPM and outcomes are not substantially different.

Breaching of the 'profit threshold' is deemed to occur if a firm achieves a rate of return higher than a 'threshold' cost of capital estimated by the NZCC using the CAPM. If the breach occurs in 2 consecutive reviews, the NZCC can commence a further review with the intention of declaring 'control' of the firm's pricing, in an arrangement that appears to be little different to a fixed-term, CPI-X 'form of regulation' practiced in Australia.

The most interesting aspect of the NZ approach, apart from the apparent duplication of effort required to set the 'threshold', review the possibility of breach and implement 'control', is that Australian firms in some jurisdictions (such as the Victorian electricity and gas distributors) are expected by the regulator to achieve 'outturn rates of return' that routinely exceed the 'benchmark WACC'. In Victoria, every distributor has achieved an 'out-turn rate of return' significantly above the ESC's 'benchmark WACC' in every year since regulation commenced in 1995. Under the NZ arrangements, every Victoria distributor would be deemed to be in breach of the 'profit threshold'. Yet, the ESC has argued that exceedance of the 'benchmark WACC' is an outcome that is both expected and desirable, possibly even essential to achieving economically efficient outcomes, and provides a clear incentive for continuing voluntary commitment of financial resources by (private) utility owners.

End users in Australia are clearly justified in being sceptical about regulators' repeatedly expressed concern that achievement of 'above benchmark WACC' is a pre-requisite for investment in utility service delivery. There is no sign that NZ utility owners are any less, or more, reluctant to continue investment in providing services than Australian utilities – even though their 'blue sky' opportunities appear more limited and most utilities stay within the thresholds (i.e. their rates or return are at or below the NZCC's CAPM thresholds)

A further relevant example relates to regulation of Sydney Airport by price monitoring and the

¹⁴ If the 'productivity indices' did not accommodate the impacts of technological change, and this occurred, the utilities would either retain a 'windfall gain' (if the changes lowered costs not reflected in the indices) or they would (no doubt) insist on changes to the indices to ensure rising costs (or stranded asset costs) were passed onto consumers. Such an outcome would appear to present exactly the same information asymmetry challenges, and the same opportunities for exercise of 'strategic behaviour', present in the CPI-X building block form of regulation.

persistent complaints of airport users, including airlines, about being consistently overcharged. Virgin recently took a case to the Australian Competition Tribunal (ACT) about certain airport charges and "won". The ACT, possibly in a landmark decision, decided to subject the airport of regulated prices for these charges.

The *Issues Paper* identifies other (presumably) key areas that do, or may, impact on consideration of whether the current arrangements should be modified. These are:

- the extent of market power that exists in the different services provided by TNSPs;
- the existence of information asymmetry and its effect on the current building block approach; and
- the level of scrutiny of individual TNSPs' costs that might assist in achieving effective comparison across businesses and over time.

A feature of each of these options is that they all rely on robust information that transparently discloses the performance of TNSPs and/or the impact this has on energy users (or the economy generally). The details of the information required for disclosure may differ, but the information must be clearly defined, precisely specified and subject to an auditable collection, reporting and publication framework.

The EUAA's and EAG's involvement in Australian regulatory processes has confirmed that the current form of regulation (CPI-X building block) is far from perfect, or even satisfactory, in some aspects. This conclusion applies no matter which form of price control (price cap, revenue cap or hybrid) is applied with the form of regulation. Clear deficiencies being:

• The frequently demonstrated ability of regulated firms to exercise 'strategic behaviour' by manipulating, or even withholding information that may be to their advantage.

Two specific examples include:

- 1. The refusal of EnergyAustralia to provide performance information to the ACCC; and
- 2. The refusal by United Energy to provide information to the ESC on the actual cost incurred in providing all of the services required for United to own, operate and maintain the assets used to deliver regulated distribution services.

A further, and even more unsatisfactory example that is manifest in all regulated industry sectors and all jurisdictions, is the extent to which 'strategic behaviour' is clearly exercised in preparation of sales and expenditure forecasts by regulated utilities. There is clear evidence that all regulated firms in the energy sectors have learned the benefits of such behaviour, with all firms routinely forecasting substantial increases in cost as part of their proposals submitted in the most recent rounds of regulatory review and supporting this with all sorts of "creative" justifications.¹⁵

¹⁵ It is noted, however, that it took government-owned utilities in NSW and Queensland one regulatory cycle to 'learn' how to effectively exercise 'strategic behaviour' in their forecasts. The management teams (and their consultants) in pre-privatised firms clearly understood the opportunities presented by information asymmetry prior to the beginning of the first regulatory period.

From a users point of view, the final outcome may be little different to 'rate of return' regulation and makes a nonsense of the promises made about so-called 'incentive regulation, which is meant to mimic competitive market outcomes but clearly does not.

Our experience in over 20 regulatory reviews during the last decade and with numerous regulators is that 'incentive regulation' has a mixed record of achievements on its promise. It is clear that its performance has deteriorated over time with regulators becoming rather accommodating to exaggerated demands of regulated businesses and being more loath to put them under pressure. This has resulted in deterioration in the quality of regulatory decisions and diminished regulatory independence. Also of concern has been the clear political influence that has been placed on regulators in virtually all jurisdictions during reviews. Although this has been manifestly worse in jurisdictions where network businesses remain government owned (e.g. both NSW and Qld) it has also been evident in Victoria (e.g. during the 1998 gas distribution determination by the ORG at the time the gas industry was being privatised and even during the most recent electricity distribution price review).

It is even more unsatisfactory that regulated firms have gone back to regulators with their 'cap in the hand' during a regulatory period requesting extra funds as a consequence of their poor forecasts. Mercifully for end users so far, these pleas have generally been ineffective within a regulatory period.¹⁶ However, there is evidence from the most recent IPART and QCA decisions that 'poor' forecasting outcomes inhibit regulators taking a 'tough, but fair' and even handed approach, which protects regulated entities from the consequences of lack of forecasting competence.

Two other specific examples of this are the ACCC's acceptance of substantially higher cost forecast from Transgrid and EnergyAustralia following the decision to apply an *ex ante* evaluation of capital expenditure rather than undertake an *ex post* assessment at the next review; and IPART's acceptance of what were clearly excessive cost forecasts by NSW electricity distributors following their very poor forecasting performance in the 1999 review.

The limitations that effectively inhibit the ability of end users to participate in regulatory reviews on anything like an equal basis to regulated entities. The EUAA and EAG accept that this problem is aggravated by lack of understanding and focus by the National Electricity Consumers Advocacy Panel of the importance and relevance of effective participation in the multitudinous regulatory reviews across Australia. However, the AEMC could assist in addressing this problem by also reviewing how Rule changes could be implemented to clarify the important role that end users should play in these reviews.

It would be most helpful if the NER Rules clearly stated the need for, and desirability of, end user involvement and this was linked to changes in the Rules provisions relating to advocacy.

3.1.1. Key Issues for the AEMC

The key issues that the AEMC must address effectively in its review of Rules applying to specification of the form of regulation are:

¹⁶ Except that IPART 'buckled under the pressure' and allowed EnergyAustralia a one-off increase in distribution charges above the hybrid revenue cap threshold in 2003.

- the extent to which current arrangements are effective (or not) in facilitating achievement of the SMO;
- the extent to which regulatory arrangements that apply to electricity transmission can be made consistent with regulation of other sectors in both the electricity and gas industries;
- the extent that Rule changes are necessary to ensure that, in achieving the SMO, there is
 robust evidence to show that existing deficiencies can be addressed or overcome;
- the extent that robust quantitative evidence exists to show that Rule changes (that assist in achieving the SMO) deliver net economic benefits to energy users;
- irrespective of the form of regulation, there is also a need to establish a robust, reliable, consistent and audited information disclosure regime that allows the AER to:
 - effectively regulate transmission revenues;
 - show energy users they are getting 'value for money' from both regulators and TNSPs and that there is a clear link back to achievement of the SMO; and
 - effectively use pressure that can be applied through 'competition by comparison' (and civil penalties) to bolster 'commercial incentives' to the maximum extent possible.
- the right and desirability of end users being involved in regulatory reviews should be clearly specified and this linked back to the future model for end user advocacy funding.

The AEMC must also recognise that it is important to develop a robust information base, and 'baseline condition' for any future implementation of a Productivity Index form of regulation. Otherwise it is inevitable that physical differences in network configuration and operating conditions will determine the need for detailed disclosure of cost and service performance information for each individual TNSP.

In addition, to the extent that better specification of an information disclosure regime involves 'tightening of the regulatory screw', the AEMC and AER should acknowledge that this is required to address information asymmetries, which operate in favour of utilities and their shareholders, and delivers 'effective' regulation of what are, after all, still monopolies. Any regulatory actions taken to address these asymmetries are merely redressing the balance and not adding further to risk faced by TNSPs.

Finally, to the maximum extent possible, TNSPs should be exposed to competitive market forces. However, any area where the AEMC is considering reduction of 'regulatory constraints' should be subject to realistic assessment of the level of actual economic power that it likely to be exhibited by energy users. It will be counterproductive to implement changes to Rules that rely on 'regulation by competitive market forces' if such forces cannot be effectively applied.¹⁷

¹⁷ As noted earlier in this submission, regulatory incentives may be changed significantly by implementing a 'beneficiary pays' pricing principle that results in transfer of cost for shared transmission services to the large, remote generators. The 'negotiating power' of large generators would certainly be different to that available to the larger number of smaller and more dispersed end users (or even the very largest end user). The change in 'incentives' may be sufficient to allow a different form of regulation to be implemented that could place greater emphasis on 'negotiated outcomes'.

3.2. Form of Price Control

The *Issues Paper* notes that the current Rules require that the AER set a revenue cap to apply to each TNSP. The prices that may apply in any given year of a regulatory period are required to be set so that total revenue is linked to maximum allowable revenue (MAR), which it varied by CPI-X each year. This is, as the AEMC notes, an 'indirect' form of price control. Effective implementation of a revenue cap requires operation of an 'overs and unders' account in parallel with the annual price approval process so that *any revenue earned in one year in excess of (that falls short of) the MAR is subtracted from (added) to) the MAR applied to prices in the following year.*¹⁸

Again, the *Issues Paper* provides no information that quantifies the long-term benefits of end users from the operation of the existing arrangements. For example, there is no demonstration of how the amount held in the 'overs and unders' accounts vary from year to year or how actual costs and revenues compare to forecasts and the flow on impact to end users. Nor is any such information included in the inadequate 'performance reports' prepared by the ACCC.

The Issues Paper also asserts that revenue caps are common in regulating transmission businesses around the world¹⁹ but makes reference to only three (non-Australian) jurisdictions, the UK, Norway and Sweden, which are only 1/3rd of the examples listed in Attachment 4. The Issues Paper then briefly describes general attributes of different versions of 'price caps' that are applied to electricity transmission in Singapore and, effectively, in New Zealand (which) are also common for electricity distribution in Australia and refers to hybrid forms of price control, which combine elements of 'straight' revenue caps and price caps.²⁰

The *Issues Paper* (correctly) notes that *this type of price control* (a hybrid revenue cap) *was previously adopted in IPART in regulating electricity distribution businesses in NSW*, with a Footnote (again correctly) noting that *IPART applies a tariff basket form of price control to electricity distribution under its latest determination.*²¹ What the *Issues Paper* does not say is that IPART's hybrid revenue cap (applied from 1999 through 2004) was, from any reasonable perspective:

- an administrative failure;
- (most likely) a failure in terms of developing desirable incentives for distributors; and
- it also resulted in the imposition of large price rises for end users in the subsequent regulatory period.

The NSW distributors substantially under-forecast both costs and energy sales (and more importantly peak demand growth) from 1999 through 2004 as part of IPART's 1999 review

¹⁸ p. 31, AEMC *Issues Paper*.

¹⁹ p. 32, *Op Cit*.

²⁰ p. 32, *Op Cit*.

Price caps apply currently also in the UK electricity (and gas) distribution sectors, and apply only in Victoria, SA and NSW. Other Australian jurisdictions with independent regulation of the electricity sector (ACT, Queensland and Tasmania) apply different versions of revenue caps that include varying degrees of 'regulatory refinenment/tinkering'.

²¹ p. 32, *Op Cit*.

process. IPART accepted these forecasts (with only minor modification) on advice from its 'expert consultants'. The impact of the distributors' forecast errors were compounded when IPART selected inappropriate parameters as primary cost drivers to be included into the 'hybrid revenue cap' formulae, again on advice from 'expert consultants' (and with acquiescence of the distributors). As a result of poor forecasting, possibly regulatory failure, and certainly completely inadequate understanding of consumers behaviour by the distributors, IPART and their consultants, the distributors faced substantially higher than forecast costs that could not be compensated through the 'hybrid revenue cap' price control mechanism.

Further, the amounts accumulated in the distributors' 'over and under accounts' reached several hundred million dollars – and took years to return to consumers. IPART responded to this situation in its 2004 Determination process by implementing a (more effectively self-compensating) 'weighted average tariff basket' price cap regime and allowed for very much higher expenditure than indicated by the 1999-2004 trends for each distributor. The EUAA and EAG strongly believed at the time that IPART erred badly in its decisions in this area and retain that view.

From an end user perspective, the NSW 'experiment' with hybrid revenue caps could only be described as a failure. There is also some doubt that it succeeded in delivering overall benefits to end users because IPART's performance reports show that system reliability performance (measured by average minutes off supply) declined for all distributors during the regulatory period.

The experience with distribution revenue caps in other jurisdictions has been only slightly more successful. The ACT and Queensland retain revenue caps, although the arrangement in Queensland includes a high degree of 'regulatory tinkering', including *an 'unders and overs account', review triggers based on maximum demand and customer numbers and cost pass-through for major unexpected changes and certain additional capex.*²² The Tasmanian energy regulator (OTER) set final retail prices in its 2003 review, which included distribution prices based on a simple revenue cap because *Aurora is not in a position where a tariff basket approach or a revenue formula, which specifically accounts for load growth, could be adopted, and is thus satisfied with the current modified revenue cap.*²³

These experiences, combined with the requirement identified in the *Issues Paper* for *retrospective adjustment of contingent capital expenditure made at the end of the following regulatory period* are hardly strong recommendations in favour of any form of revenue cap.

By contrast, the application of the 'tariff basket' form of price control to distribution services, first implemented in Victoria by the Office of the Regulator-General in 2001, appears to have been more successful (although it has not assisted in reducing exercise of strategic behaviour by distributors). Similar, but slightly different versions of the same

²² p. (i), Final Determination - Regulation of Electricity Distribution, Queensland Competition Authority, April 2005

²³ p. 100, Investigation of Prices for Electricity Distribution Services and Retail Tariffs on Mainland Tasmania - Final Report and Proposed Maximum Prices, Office of the Tasmanian Energy Regulator, September 2003.

It is also noted that OTER concluded that 'a tariff basket would be the preferred means, but, in the absence of distribution tariffs, a revenue formula control is preferable to a revenue cap. However, the Regulator recognises a number of practical issues that would need to be addressed in developing a revenue formula.' (see p. 97)

approach have been implemented for electricity distribution in the NSW (in 2004),²⁴ and South Australia;²⁵ and in the Victorian and NSW gas distribution sectors. The 'tariff basket' approach is also used in the UK for electricity and gas distribution and water services.

3.2.1. Key Issues for the AEMC

Given the amount of 'regulatory energy' committed to debate and discussion on this issue, it would seem to be sensible for the AEMC to focus on how a 'tariff basket' price cap approach could be adapted for electricity transmission (and all distribution services). This would have the advantage of achieving far greater regulatory consistency.

The benefits attributed to the 'tariff basket' form of price control are, essentially, that it provides:

- a direct commercial incentive for regulated entities to reasonably forecast business conditions (including their costs and consumer demand for services);
- a direct commercial incentive for regulated entities to link unit prices for each regulated tariff component to underlying costs; and
- a 'self-compensating' mechanism that adjusts for the financial effects on the regulated entity from differences between forecast and actual demand for services within a regulatory period.

As experience showed in the NSW electricity distribution sector in the period between 1999-2004, these are not attributes of a (hybrid) revenue cap arrangement; nor are they clearly attributes of the current revenue cap applying to TNSPs and other distributors.

A potential additional benefit from implementing a 'tariff basket' price cap in the transmission sector is that it would assist in addressing the basic conflict between the way regulation is implemented for transmission (through revenue caps) and distribution services (mainly price caps). It may also assist in aligning pricing methodologies in the transmission and distribution sectors in a way that reinforces pricing signals in each sector that currently conflict with each other.²⁶

However, the 'tariff basket' approach is no guarantee that regulation will be effective or protect/promote the long term interests of consumers (i.e. assist in achieving the SMO). Poorly constructed forecasts will still create challenges for regulated entities and regulators. A forecast of system demand and/or costs that is not robustly based could still result in a (presumably unexpected) shortfall in revenue for the regulated utility. Or (more likely) a poorly constructed forecast will present the AER with a serious challenge in appropriately

²⁴ The Independent Competition and Regulatory Commission decided in 2004 to continue to apply a revenue cap to ActewAGL's prescribed electricity distribution services. (see p19, *Final decision, Investigation into prices for electricity distribution services in the ACT*, ICRC, March 2004).

²⁵ See: p. (iii), 2005 - 2010 Electricity Distribution Price Determination, Part A - Statement of Reasons, Essential Services Commission of South Australia, April 2005.

²⁶ The EUAA/EAG separate submission in response to the AEMC's transmission pricing issues paper presents evidence to show there is no clear link between the structure and incentives in existing transmission and distribution pricing. Indeed, the submission shows conclusively that any signals in transmission pricing are obliterated by distributors because the distributors aggregate transmission costs and re-allocate them in ways that are entirely consistent with signals in transmission prices. This submission also suggests that such an outcome suggests that there is no evidence that signals in transmission prices can possibly create incentives for 'economically efficient' response by end- users.

separating 'strategic behaviour' from reasonable demand/cost trends under the revenue building block approach.²⁷

The provisos that the AEMC will need to consider prior to adopting a 'tariff basket' form of price control for transmission services are that:

- the TNSPs' are capable of preparing reasonable forecasts of cost and service demands (i.e. TNSPs understand the link between the demands created by system users and cost):
- the TNSPs have cost allocation practices and pricing policies that are up to the task of ensuring end users benefit from the change (i.e. costs are allocated fairly between users and it is clearly demonstrated that costs are linked to price);
- the AEMC and AER are able to implement a 'tariff basket' approach in transmission that would align transmission and distribution pricing signals, which may require that the Rules constrain the creativity of jurisdictional regulators' 'tinkering' with distribution 'tariff basket' formulae and 'side constraints' (that rate at which individual tariff prices may be adjusted) to optimise delivery of pricing signals; and
- the AEMC and AER are able to deal with the fact that a number of regulators (notably the Victorian ESC, ESCoSA and IPART) have added jurisdictional-specific 'incentive factors' in the distribution sector that are intended to 'bribe' the regulated utility to do something that is supposed to deliver an efficiency benefit.²⁸

Adding even more 'transmission specific' (or jurisdictionally specific) 'incentive factors' would greatly reduce the possible benefits from standardising the forms of price control.

A further issue that the AEMC will need to address, should it accept the challenge of promoting 'regulatory consistency', is that TNSPs clearly need incentives that focus on more than reducing their own direct costs. Given the impact of transmission operation, and transmission constraints, on the wholesale energy market, it is essential that the form of price control be inexorably linked to effective service incentives that focus on reducing overall costs to energy users (and generators) – and improving overall operation of the energy market - than is the case in the distribution sector.

3.3. Scope of Regulation

This section of the *Issues Paper* discusses which types of transmission service may be suitable for 'less intrusive' (or multi-layered) regulatory treatment. This is important aspect of attention for the regulatory regime, even though the ACCC's (limited) performance reports show that non-core (or non-Prescribed Service) revenue accounted for 5% of total aggregate revenue for all TNSPs (that provided reporting information) in 2002/03.²⁹

²⁷ The ESC confirmed the challenge that 'strategic behaviour' presented during the recently completed review of electricity distribution services. Neither the EUAA nor the EAG is any doubt that the ESC's Final Determination failed to adequately address this challenge and even resiled from it.

²⁸ For example, the ESC has an 'S-Factor' and an 'M-Factor'; ESCoSA has a 'P-Factor'; and IPART has a 'D-Factor' – and differing approaches to addressing 'efficiency carryover'. Despite the valiant defences presented by the regulators, it is not at all certain that this 'regulatory tinkering' is effective in improving cost-service performance for end-users.

²⁹ p. 9, Transmission Network Service Providers Electricity Regulatory Report for 2002/03, ACCC, Undated.

As noted above, to the maximum extent possible, TNSPs should be exposed to competitive market forces. However, any area where the AEMC is considering reduction of 'regulatory constraints' should be subject to realistic assessment of the level of actual countervailing economic power that it likely to be exhibited by energy users. It will be counterproductive to implement changes to Rules that rely on 'regulation by competitive market forces' if such forces cannot be effectively applied.

3.4. Performance Obligations and Incentives

As the *Issues Paper* explains in some detail, 'incentives' in the regulatory regime are crucial to successfully stimulating efficient behaviour by TNSPs and delivering net economic benefits to end users.

3.4.1. Network Performance

It is with considerable relief to the EUAA and EAG that the *Issues Paper* pays particular attention to the important issue of transmission service standards, and the incentives for TNSPs to deliver services that add value to end-users' activities. This is an area where the ACCC has failed to address a key issue in regulation of TNSPs that is important to end users, retailers and generators. As the *Issues Paper* notes, *the network performance standards adopted by the ACCC are general in nature, rather than being targeted as particularly categories of users, such as retailers/consumers and generators.*³⁰

It has been a long held, and often expressed, view of the EUAA (that the EAG fully endorses) that development of meaningful service standards and incentives to optimise overall benefits to end-users should be fundamental principles incorporated into the transmission regulatory arrangements. The EUAA also notes that there has been broad support amongst industry and end-user stakeholders for moving towards service standard incentives for all TNSPs that would relate more to market outcomes.

The EUAA and EAG strongly urge the AEMC to incorporate such arrangements into the Rules. However, in doing so, the AEMC should ensure that focus is kept on:

- ensuring benefits and accountability flow to those who pay for shared transmission services – that is, end users who currently pay 100% of the cost of the shared network;
- developing a consistent set of service standards that would apply uniformly to all TNSPs;
- ensuring that commercial incentives for TNSPs are focussed on optimising benefits to end-users, are meaningful and are sufficient to motivate the required change in behaviour and performance; and
- integrating commercial incentives with other forms of incentive including robust public performance reporting and civil penalties.

The ACCC's 2003/04 report does not quote a figure for non-Prescribed Service revenue, simply stating that: *Prescribed services revenue typically makes up about 95% of a TNSP's total revenue.* (see: p. 15, ACCC 2003/04 report).

³⁰ p. 44, AEMC *Issues Paper*.

This would be a significant advance on the limited service standard incentives currently set by the ACCC. The AEMC is urged to move forward as quickly as possible in developing such a scheme. First steps towards achieving that outcome are to:

- incorporate the principles for the scheme into the Rules; and
- ensure the AER establishes a monitoring, public reporting and incentive regime for all TNSPs that focuses on quantifying TNSP market impacts as soon as practicable.

It will also be extremely important for the AEMC and AER to ensure that end users are effectively involved in establishing the value of any incentive for performance improvements and the mechanism by which that value is transferred to (or from) TNSPs.³¹

The regulatory precedents for this have not been at all satisfactory in Australia. For example, the Victorian ORG implemented a service incentive mechanism in 2001 through a so-called *'S-Factor'* incentive that incorporated the 'reward/penalty' mechanism as a parameter in one of the 'tariff basket' formulae.³² This proved to be totally opaque to consumers, with the ESC unable to provide any estimates of the annual or total value paid to or by distributors during the recent electricity distribution price review.

The ESC has refined, and improved the transparency of the Victorian distribution '*S*-Factor' scheme applying for the five years from 2006. However, the scheme remains highly complex and is now based partly on very high values attributed to '*Value of Customer Reliability*' in a poorly crafted survey undertaken by CRA for VENCORP in 2002.³³ The EUAA and EAG note that there was no direct, or effective, involvement of consumers in design or interpretation of the CRA survey. Nor did the ESC show any inclination to take note of the criticisms offered by consumer groups to the CRA survey or the ESC's own unquestioning acceptance of the values it produced.

³¹ The EUAA is a member of the ACCC (AER) Service Standards Working Group, which assists the AER in developing appropriate performance measures. The EUAA will continue to work within this group and the AER in ensuring that the performance measures are underpinned by a robust incentive regime for TNSPs to minimise their impact on the wholesale energy market.

³² The Victorian regime has four forms of 'service incentive'; the 'S-Factor' (for reliability and interruptions); a Guaranteed Service Level (GSL) payment scheme (for appalling bad service); an 'appliance surge damage' compensation scheme (where uninsured small consumers are compensated for damage caused by voltage fluctuations); and a 'competition by comparison' performance reporting scheme. It is not at all clear how each of these schemes contribute to service performance enhancement, but there is evidence to suggest that the performance of Victorian distributors has generally improved (or got no worse), while some service performance attributes have declined in NSW and Queensland.

³³ The ESC notes (p 87 of the Final Decision) that 'the study was undertaken by Charles River Associates (CRA) for VENCorp and indicates that the value that Victorian customers place on reliability is the state-wide VCR of \$29 600 per MWh (CRA 2002). Its results remain current, and they are similar to a Monash study conducted in 1997 at a state-wide level.'

However, the AEMC should note that segmented results obtained by CRA differed dramatically to the VPX-Monash survey. For example, the value of VCR attributed to the Residential sector was 15 times higher in the CRA study than the Monash study (see Tables 3 and 4, pp 5-6, *Assessment of the Value of Customer Reliability* (VCR), Charles River Associates (Asia Pacific) Pty Ltd, December 2002.

It is inconceivable that Residential consumers' perceptions of value would be so volatile, which is in itself reason to question to robustness of the CRA/VENCorp report (and the general methodology).

3.4.2. Expenditure

The *Issues Paper* emphasises the link between network performance and TNSP investment in their networks and notes that *to the extent TNSPs are entitled to recover such expenditure from network users, TNSPs may have incentives to over-invest or otherwise make poor investment decisions at the expense of the NEM objective. This means it may be appropriate for the regulatory arrangements to consider incentives for efficient capital expenditure (and operating expenditure – see below) alongside incentives for meeting and exceeding network performance obligations.*³⁴

The *Issues Paper* then goes on to discuss the current rules and refers to a few examples where current incentives may not work *to ensure that only efficient investments in transmission networks are undertaken.*³⁵ These examples include:

- how well funding for generation options for augmentation operates;
- imposition of few pre-investment checks on TNSPs to ensure they plan and invest efficiently and consider the widest range of alternatives to meet the desired outcomes;
- lack of a mechanism that oblige TNSPs to carry out investments that may be efficient from a customer's perspective, and which customers may be willing to fund;
- absence of rights for other parties to develop transmission investments within a TNSP's network;
- lack of a clear link between the value of prescribed penalties (that apply for a breach of some conditions in the Rules) and the value to users of compliant performance.

There is no doubt that each of the examples referred to by the AEMC is relevant and should be addressed in the Rules. However, it is disconcerting that no direct mention is made of the two most notable 'failures' in transmission regulation so far.

The first being the failure of the current regulatory arrangements to bring forward investment in removal of inter-regional constraints that would significantly improve competition between generators, eventually allow for optimal investment in generation capacity and reduce the price differentials in the wholesale energy market that have, so far, amounted to some \$10 billion since the NEM commenced operating in December 1998, as illustrated in Chart 1 below.³⁶

There is little doubt that end-users would benefit (in both the short and long term) from removal of inter-regional transmission constraints. It is also possible that they would be willing to fund the necessary investment, if they were given an opportunity to understand how the benefits could be derived, what it might cost – and, most importantly:

end-users were given the means and opportunity to make their views known; and

³⁴ p. 45, AEMC *Issues paper*.

³⁵ p. 46. *Op Cit*.

³⁶ The estimate of \$10 billion is based on the assumption that removal of all transmission constraints would eliminate opportunities for generators to use the constraints to exercise transitory market power. It has also been assumed this would produce consistent spot price and average price outcomes across the NEM equal to the lowest Regional Reference Price for all regions (adjusted upwards by an arbitrary amount of 10% to account for interregional system losses).

 TNSPs were compelled to work together to ensure that investments that deliver value to end-users were undertaken efficiently, in a timely manner and in the interests of a truly national electricity market.

This failure could be addressed by ensuring that TNSPs have clear incentives (commercial, comparative performance reporting and through imposition of civil penalties) to deliver investments that optimise outcomes for end-users. It could also be addressed through greater co-ordination of the 'national grid' through national planning and approvals of the NEM transmission system.



CHART 1 : ILLUSTRATION OF THE IMPACT OF INTER-REGIONAL TRANSMISSION CONSTRAINTS

The second area where the current regulatory arrangements fail is in addressing the challenges created by virtually all regulated utilities presenting forecasts of cost (and sales volumes) that are clearly prone to error. On the one hand, the forecasts can be biased in favour of the utilities, which is a clear demonstration that 'strategic behaviour' is being exercised. As noted earlier in this submission, this is a problem that Australian regulators have failed to address in any meaningful way. One the other hand (and also noted earlier in this submission), some utilities have demonstrated that their forecasting skills are quite poor. Particular examples of this occurred in NSW and Queensland, with both distributors and transmission operators forecasting lower demand than actually occurred.

Only the ESC has explicitly referred to the problem of 'biased' forecasts, and even then only as an 'undesirable incentive' in the regulatory regime. The ESC made an initial attempt to deal with this issue in its recent electricity distribution price review Draft Decision. The ESC projected significant reductions in the expenditure proposed for all five of the Victorian distributors based on comparisons with actual expenditure during the previous two regulatory periods. However, the ESC stumbled at the final hurdle in response to 'further information' provided by most distributors and increased allowed expenditure to well above the previous trends (even after allowing for 'step changes' in responsibilities/service demands).³⁷

By comparison with the ESC's recent efforts, it is noticeable that the ACCC made no mention of the observed Capex 'spending habits' of TNSPs in the first round of transmission regulatory reviews it conducted. An examination of the 2000 NSW Decision and the 2002 Victorian Decision shows that the ACCC did not explicitly present comparative analysis of forecast and actual Capex for the initial regulatory period, notwithstanding the importance of this in terms of assessing past and future Capex.

Another feature of current regulatory practice that the AEMC will need to consider is the impact on incentives involved in the different approaches regulators have adopted in respect of 'prudency/efficiency assessments' of actual expenditure. The differences are (again) most marked between the ORG/ESC and ACCC. In each of its reviews of distribution services in the electricity and gas sectors, the ORG/ESC declined to undertaken any 'prudency assessment' of either actual capital expenditure or operations and maintenance expenditure. The ESC has gone further than any other Australian regulator³⁸ by saying:

the Commission has not sought to judge the prudence or efficiency of capital or operating expenditure, but rather has inferred that well-designed incentives will deliver this result. That is, it has not exercised the power to disallow capital expenditures, and has put in place a framework of incentive regulation that should obviate the need to consider disallowances in the future;³⁹

Again, by contrast, the ACCC commissioned Mountain Associates to specifically undertake a Capex prudency analysis during the recent NSW transmission revenue review.⁴⁰ This is presented in the ACCC's Decision as a comparatively detailed 'line item' analysis of major projects (or areas of expenditure) that resulted in a significant reduction (of some \$72.9 million or 7% of total capital expenditure in the regulatory period) in the value of Capex rolled into Transgrid's regulatory asset base for the third regulatory period.⁴¹

³⁷ Despite the benefits delivered to the distributors through the ESC's concessions, 4 of the 5 still lodged an appeal against the ESC's Final Decision; and one has lodged a challenge in the Victorian Supreme Court. As the Victorian Minister for Energy suggests in *The Age* on 28 November 2005, the distributors learnt at the previous review that the appeal was a (relatively) simple, low-cost way for them to gain a substantial additional commercial benefit.

In the 2001 appeal, the five distributors gained benefits in excess of \$180 million for an outlay that is likely to have been less than \$1 million, and which was (probably) recovered from consumers because the ESC did not subject any of the distributors' costs to any form of 'prudency review'. This is another form of 'strategic behaviour' that undermines the objectives for regulation.

³⁸ Most Australian regulators have left open the question as to whether or not they would allow 'roll-in' of capital expenditure to the regulatory asset base if the investment was judged *ex-post* to be 'imprudent' or inefficient, although IPART and QCA have attempted to adopt this approach in the water sector.

³⁹ p. 148, *Review of Gas Access Arrangements Final Decision*, Essential Services Commission, October 2002.

The ESC also confirmed that these two issues had been considered (with a number of others) in coming to a decision that no 'additional allowance' to the WACC was warranted to allow for the possibility that this approach created asymmetric regulatory risk (see: pp. 420-421, *Op Cit*).

⁴⁰ Similar reviews have been commissioned by IPART and QCA in their reviews of electricity distribution, but no recommendations were made for any expenditure to be disallowed.

⁴¹ p. 12, *NSW and ACT Transmission Network Revenue Cap - TransGrid 2004/5 to 2008/9: Decision*, ACCC, 27 April 2005.

It is interesting to speculate on the significance of this marked difference in approach on a single, critical regulatory issue. It could signify that regulatory outcomes are heavily dependent on a regulators' personal view of a particular issue, which would be highly undesirable. Or it could signify that there are fundamental differences between physical or technical characteristics of distribution and transmission services that justify different approaches, although it is not clear this is relevant in this issue. Alternatively, it could be that the ESC believes (profit motivated) privately owned utilities have a clear commercial incentive to never commit to imprudent expenditure, while the ACCC has doubts about the commercial focus (or management competence) of government owned utilities.

Irrespective of the motivation for adopting these markedly different positions, it is relevant that the AEMC explicitly considers the effect these different approaches might have on investment incentives. The outcomes from the ACCC's prudency assessment strongly suggest it is not desirable (from end-users' perspective) to apply the ESC's view, since this would allow 'inefficient costs' to be passed through to end-users. However, it is likely that broad application of the ACCC's view will increase 'regulatory dependency' and cause TNSPs to delay major investment decisions until they are satisfied the AER has endorsed the basis of the investment.⁴² This suggests neither approach is certain to ensure incentives are maintained that will deliver the optimum outcomes for end-users.

The EUAA and EAG understand that regulators face challenges in making judgements about the appropriate level of expenditure that should be allowed in regulated revenue benchmarks. However, the process provided for currently in the Rules, and existing regulatory practice, do not appear to be the best ways to create incentives for TNSPs to pursue ongoing efficiency that will benefit end-users.

The EUAA and EAG believe that regulatory practice in Australia would benefit by closer emulation of practices implemented in the UK. A key difference in focus of UK and Australian regulators on the 'strategic behaviour' of NSPs appears to be influenced by the relative reliance that different regulators place on 'evidence' provided by the regulators' consultants. Both UK and Australian regulators employ technical consultants to review proposals made by NSPs. Generally speaking, the scope of work assigned to the consultants appears similar, with consultants asked to review actual and forecast expenditure (and sales volume) for prudency, efficiency and reasonableness. There are sound reasons for regulators to adopt this approach, not least because few regulators directly employ experienced staff that are technically competent to make judgements on such issues.

However, the UK regulators generally use econometric techniques to analyse NSPs' proposals much more so than do Australian regulators.⁴³ The UK regulators also appear to place less reliance on information and judgement provided by consultants, preferring to use the analysis and information provided by the consultants as one input into the regulators'

⁴² This same problem of regulatory dependency is almost certain to manifest itself if the practice of allowing 'in period' assessment of 'contingent capex' is implemented by the AER.

The EUAA and EAG note that it is likely that 'regulatory dependency' is a 'two way street'. Both the regulator and regulated entity become equally implicated in the outcomes of the transaction, even though the information asymmetry problem suggests the regulator can never expect to know as much about the investment condition as the utility.

⁴³ This process is described in some detail in documents posted on the OFGEM website and referred to in a later section of this submission.

own econometric analysis.⁴⁴ This has a number of advantages for both the regulators and end-users:

- regulators clearly retain responsibility for judgements inevitably involved in regulatory decision making, including judgements about exercise of 'strategic' behaviour; and
- the potential for conflict of interest for consultants who advise regulators and NSPs is lessened allowing consultants to focus on technical issues and analysis in their reports.⁴⁵

3.4.3. OFGEM's Approach

The EUAA and EAG commends to the AEMC a relatively recent publication by the UK energy regulator (OFGEM), which sets out in considerable detail the approach that was adopted for assessing 'prudency' and 'efficiency' of expenditure during the recent electricity distribution review.⁴⁶ The OFGEM approach involves using a range of techniques for assessing efficiency and projecting future costs. OFGEM acknowledges that a degree of pragmatism is needed in the final assessment of projected costs. However, it also recognises that it is important to explain, in a transparent way, how efficiency and future costs have been assessed, and how they have been used to derive the allowed level of revenue.

3.5. 'Principles' for inclusion into the Rules

The AER's proposals contained in the SRP would be improved by including the following 'principles' in the Rules:

- Acknowledge that there are (undesirable) incentives for TNSPs to exercise 'strategic' behaviour in forecasting of outputs and costs. The exercise of strategic behaviour by regulated energy networks should be openly acknowledged by regulators (as was done by the ESC during the recent Victorian electricity distribution price review) rather than being ignored, as appears to be the case now.
- Comment on and address the exercise of 'strategic' behaviour by TNSPs.
- Limit the role of 'expert' technical consultants to advising on technical issues related to TNSPs proposals, not exercising judgement that is appropriately the preserve of the regulator.
- Indicate 'in principle' support for price (as opposed to revenue) control. However, this support should be subject to the AEMC committing to address the exercise of 'strategic' behaviour by TNSPs. Any proposal put forward to alleviate such behaviour, for example, Total Factor Productivity, should be subject to a rigorous cost/ benefit analysis; and, consistent with achievement of the SMO, a clear net benefit to end users needs to be demonstrated prior to changing the current provisions.

⁴⁴ The output from the regulators' econometric analysis can be used as a form of generic 'benchmarking' of NSP performance that informs and improves the regulators' judgements on key issues.

⁴⁵ The UK 'regulatory' consultancy market is also much more diverse and broader than is the case in Australia. This also allows consultants to deal with regulators and NSPs in a way that minimises actual or potential conflicts of interest more than is the case in Australia.

⁴⁶ The approach implemented by OFGEM for the current review of UK electricity distribution charges is described in pp 65-80, *Electricity Distribution Price Control Review - Initial Consultation*, Office Of Gas And Electricity Markets (OFGEM), July 2003

- Develop regulatory arrangements to bring forward investment to remove inter-regional constraints and significantly improve competition between generators. TNSPs should be compelled to work together to ensure that investments that deliver value to end-users were undertaken efficiently and in a timely manner based on clear incentives (both commercial and civil).
- Develop service standards benchmarks that clearly show the impact of TNSPs' behaviour on the wholesale energy market. Use the service standards benchmarks as the basis for developing an incentive scheme for TNSPs to minimise the impact of transmission on the efficient operation of the wholesale energy market.
- Implement a UK-styled econometric analysis of TNSPs' performance, using data and information from a nationally consistent, robust and audited performance reporting regime and consultants' reports as part of a range of inputs to that analysis.
- Use the output of the econometric analysis to validate and refine a rational monitoring and comparative reporting regime for TNSPs that will assist in better informing regulatory decisions.

The EUAA and EAG also recommend that the revised SRP should be embedded into the Rules. This is based on the fact that any proposed changes to the Rules will be subject to a rigorous and structured AEMC Rule change review. Further, any Rule change proposals relating to the SRP's will be subject to facilitating achievement of the SMO. Therefore, market participants and/or other stakeholders that put forward a Rule change to the SRP will have to clearly show how the Rule change is in the 'long-term interests of consumers of electricity'.

4. Comment on other AEMC Issues

Section 3 above makes comment on some of the fundamental issues that affect outcomes from economic regulation as currently practiced in Australia. The balance of this submission provides comments on other issues raised by the AEMC in the *Issues Paper*.

4.1. Opening Asset Base

The *Issues Paper* highlights the shift in approach by the ACCC on how the regulatory asset value has been established at the beginning of each regulatory period.

The initial position adopted by the ACCC, which allowed re-opening of initial jurisdictional asset values, delivered no benefit whatsoever to end-users. All TNSPs except Powerlink, used this as an opportunity to argue (in the most part) successfully that jurisdictional asset values should be increased supposedly to reflect asset values optimised out of the asset base initially. This delivered a commercial benefit to the TNSPs, but imposed additional costs on end-users without delivering any benefit whatsoever to end users or to efficient operation of the market. It is not at all clear to end users how 'rewarding' TNSPs for initially poor investment decisions made years before they were subject to regulation does anything to improve incentives for future investment.

The EUAA has made numerous submissions to the ACCC and other regulators detailing concerns with the approach to asset valuations adopted by jurisdictional governments and regulators. These concerns were detailed initially in a paper prepared in July 1998,⁴⁷ [RD1] which has been provided to the ACCC previously and will be provided to the AEMC with this submission.⁴⁸

In general terms, the key issue of concern is that end-users are being forced to pay higher than efficient costs for energy because asset values have been set at levels that are neither efficient nor fair, nor based on the most practicable asset valuation methodology. This is one of a number of ways that regulated businesses currently receive very generous treatment from regulators in Australia, the costs of which are borne by end users through inflated network charges.⁴⁹

The EUAA has long argued that the use of Depreciated Optimised Replacement Cost (DORC) is unfair to end-users because:

- DORC valuations are generally higher than Depreciated Actual Cost or Deprival Value;
- no account is taken in DORC methodology for payments already made by end-users for the costs of sunk assets, meaning end-users are forced to pay twice for some assets; and

⁴⁷ *Energy Network Asset Valuation – Impact on Users*, Prepared for the Australian Cogeneration Association, the Australian Gas Users Group and the Energy Users Group, SA Centre for Economic Studies, July 1998.

⁴⁸ The EUAA has also previously provided submissions to the ACCC, which dealt with many of the issues covered in the AEMC *Issues Paper*. Copies of these submissions are available on the EUAA web-site or can be made available to the AEMC upon request.

⁴⁹ Several other ways in which this happens are covered elsewhere in this submission and include the setting of rates of return that always favour network businesses (relative to their low risk) and the susceptibility of regulators to strategic gaming of expenditure and demand forecasts by the businesses.

 the flow-on impacts of higher than efficient asset valuations disadvantage end-users subject to the pressures of internationally competitive markets.

It is noteworthy that these regulatory practices are contrary to the stated intend to so-called 'incentive regulation' in Australia, which is to 'mimic' the outcomes expected in a competitive market (generally, competitive firms in Australia are not able to apply a DORC asset valuation) and to balance the interests of consumers with those of the industry being regulated. These practices are also contrary to achievement of the SMO which the AEMC is required to abide by. We will be interested in, and will watch carefully, how the AEMC responds to this matter.

These outcomes are compounded by adopting values for Weighted Average Cost of Capital (WACC) that are demonstrably higher than relevant international comparators – a matter on which the EUAA (and EAG) has also made numerous submissions to the ACCC and other regulators. The EUAA continues to support the views expressed in the July 1998 paper and the comments below are consistent with those views.

Other problems with the position adopted by the ACCC to date are:

- A key objective of the network pricing provisions of the Rules *is to regulate the noncompetitive market for network services in a way which seeks the same outcomes as those achieved in competitive markets.*⁵⁰ A competitive market would de-value inefficient assets, but removing the threat of downward re-valuation of inefficient investments is hardly seeking *the same outcomes as those achieved in competitive markets.*
- The majority of TNSPs have already taken advantage of the 'option' to increase asset values without having to make any actual new investment.⁵¹ For example, the ACCC:
 - increased the value of Transgrid's assets by \$90 million in 2000, or 4.6% above that suggested by IPART as appropriate based on IPART's 1996 determination;⁵²
 - approved an increase in asset values for SPI PowerNet of \$249.9 million, or 16.4%, in 2002;
 - approved an increase in asset values for ElectraNet SA by \$17.5 million, or 2.2%, in 2002;
 - accepted an increase in Transend's asset values by the Tasmanian Government of \$72 million, or 15.9% (while commenting that the approach adopted by the Tasmanian government was not consistent with the ACCC's previous decisions⁵³).

⁵⁰ Clause 6.1.1 (b) (3).

⁵¹ Only Powerlink failed to benefit from the ability to revalue its assets (in 2001), but in that case the ACCC accepted the Queensland Government's roll-forward of depreciated optimised replacement cost (DORC) valuation.

⁵² It is noteworthy, primarily because it indicates a degree of arbitrariness in one regulator's position, that the ACCC declined to re-optimise the value of Transgrid's Bayswater-Marulan 500kV line. Instead it retained \$70 million in its RAB from the 1999 Decision, even though this value was included in 1999 RAB value *mistakenly anticipating that the Bayswater line would operate at 500 kV during the past regulatory period.* (see: p. 12, *NSW and ACT Transmission Network Revenue Cap TransGrid 2004/5 to 2008/9*: Decision, ACCC, 27 April 2005).

⁵³ This tacit acceptance of a 'grab for gold' by the Tasmanian government appears inconsistent with the ACCC obligations under clause 6.2.3(4)(iii) to ensure the *value of these existing assets must not exceed the deprival value of the assets.*

- The move to 'lock in' asset values does not provide appropriate 'incentives' for TNSPs (or DNSPs) to accommodate emerging technologies in the most efficient manner, such that NSPs minimise asset-stranding risk.
- Relying on application of the *regulatory test* to ensure economically efficient investment is not sufficient. As detailed in a previous submission (to the ACCC) by the EUAA and EAG,⁵⁴ the regulatory test is far from optimal as far as its impact on end-users is concerned (even in its present modified form). In addition, the test is applied to discrete (but large) investments, which would not necessarily result in overall investment efficiency by a TNSP.
- The ACCC has, in effect, implemented use of 'benchmarking' of Capex,⁵⁵ which could have the same effect on asset 'roll-ins' as would formal revaluation of assets by excluding asset values above a 'benchmark threshold'.
- Retaining the opportunity for periodic re-valuation of assets must still address the challenge of information asymmetry that means TNSPs have a clear incentive to exercise 'strategic behaviour' and:
 - only identify circumstances where assets would be re-valued upwards;⁵⁶
 - massage information required by the AER (or its consultants) to conduct an effective asset value review; and
 - claim that the 'threat' of downward re-valuation increases business risk, thereby placing pressure on the regulator to lock-in (inflated) past asset values or assign a higher value to the WACC.

The EUAA and EAG do not have sufficient information on the success or otherwise of the alternatives. Nor do the EUAA and EAG see how the practical difficulties with valuation methodologies and information asymmetry can be effectively addressed with periodic revaluation.

The AEMC should note that the EUAA has previously taken a different position on this issue. In response to consultation on the ACCC's Draft SRP, the EUAA supported lock-in of asset values. This was because, at that time, the EUAA decided that the risks and costs associated with continual re-valuations were far greater to end users than having the asset base locked in.⁵⁷ Further, under the new SMO, locking in the asset values in the Rules

⁵⁴ ACCC Regulatory Test, Report to the National Electricity Market Advocacy Panel from Energy Users' Association of Australia and Energy Action Group, December 2003 (and submitted to the ACCC).

⁵⁵ The EUAA fully supports moves to "benchmark" CAPEX for NSPs. This is an area where UK regulators are far ahead of their Australian counterparts.

⁵⁶ The ACCC has acknowledged that TNSPs would not voluntarily identify circumstances where they had made sub-optimal investments and refers to other impacts of information asymmetry. It is also noteworthy that the ACCC acknowledged, in its January 2000 Transgrid Decision, the practical issues that prevented Transgrid from establishing a Depreciated Actual Cost valuation and SKM from establishing an Optimised Deprival Value valuation for Transgrid's assets. The Productivity Commission also identified practical difficulties with DORC valuation methodologies in its September 2001 Inquiry Report *Review of the National Access Regime* the most important difficulty from the perspective of end-users being the substantial difference in value reported by different valuers of the same assets. Each of these cases confirm difficulties for most commonly accepted valuation methodologies. Such difficulties would have to be addressed if the Rules retains the option to re-value assets.

⁵⁷ The EUAA is also aware that UK regulators in the electricity and water sectors 'locked-in' initial regulatory asset values at levels well below DORC without this having any discernable impact on incentives for the further massive investments that occurred after 1989.

would mean TNSPs would have to go through the formal AEMC Review process and outline the long-term interests to consumers. If anything, this would make the TNSPs work harder to get their asset values re-valued upwards.

However, it is far from clear that any of the current approaches adopted in Australia are certain to facilitate achievement of the SMO.

One the one hand, it appears likely that the ESC, which is obliged by law to accept 'lockedin' initial regulatory asset values, has selected a position that is practicable in Victoria. The ESC has formally focusing on creation of 'profit motivated' incentives to minimise risk of inefficient investment and has declined to undertake an ACCC-like detailed forensic ex-post analysis of 'prudency' on a regular basis. The evidence so far suggests that the privatelyowned utilities in Victoria (who clearly have an unequivocal profit motive) will continue to respond to this policy in the way anticipated by the ESC. Each of the electricity and gas distributors has generally managed to stay well within their projected Capex allowances; or go to considerable length to explain why these allowances have (on occasion) been exceeded.

There is also a case to argue that the ACCC's treatment of easement valuations (to lock in values at historical actual cost) is sensible and pragmatic because it limits the ability of TNSPs to manipulate 'land values' in a way that has potential to protect the interests of end users.

However, there is no compelling evidence to show that government-owned utilities respond in exactly the same way as profit-motivated private utilities.⁵⁸ It is also clear that poorlymanaged private firms can and do make inappropriate investment decisions from time to time. In both these cases, there may be benefit to end users in leaving open the option to undertake 'prudency' reviews of capital expenditure and/or revisit asset values - despite the uncertainty it may create.

That is, overall, and in the Australian context with significant government ownership of assets – and with a possibility that either government-owned or privately-owned firms could make 'imprudent' investment decisions, the EUAA and AEG are inclined to the view that there may be benefit to end users in leaving open the option to re-visit asset valuations if any evidence arises that a TNSP has made an inappropriate investment decision.

Given the uncertainty in this area, the EUAA and EAG would prefer that the AEMC further explore means to develop transparently effective incentives for TNSPs to achieve efficient outcomes for all their activities. The key to this is to ensure that appropriate incentives focus of delivering future benefits to end-users, not just rewarding TNSPs for past performance.

4.1.1. 'Principles' for inclusion into the Rules

Adopting the following 'principles' to be included in the Rules would improve regulatory treatment of asset valuations:

⁵⁸ Apparent concern about incentives for efficient investment led the ESC to take a for more interventionist approach in the Victorian urban water sector. The ESC not only recommended initial regulatory asset values well below DORC, but also indicated it would conduct *ex-post* reviews of capital expenditure prior to the commencement of the second regulatory period (in 2008).

- Acknowledge an intent to achieve valuations for sunk assets that are efficient, fair and practicable where -
 - an efficient valuation will be the lowest value that would allow the asset owner to recover efficient investment and would create the least distortion to efficient upstream and downstream investment. That is, the asset valuation methodology should explicitly consider the impact on investment in upstream and downstream activities.
 - a fair valuation will be one where end-users fully fund efficient capital costs, but only do so once. That is, a fair valuation of sunk assets should pay attention to past depreciation schedules already paid by end-users on sunk asset investments and should focus on providing incentives for efficient future investment.
 - a practicable asset valuation will be one that uses the most readily available information, with a methodology that is least likely to be subject to 'strategic' manipulation of information by asset owners.
- Explicitly aim to provide incentives for efficient future investment and efficient operation of networks.
- Explicitly prohibit change of easement asset values, and retain easement values at historic actual cost in nominal terms. Where such costs cannot be established with certainty, easement asset values should be explicitly set at zero.
- Tie the treatment of asset values to the SMO that the AEMC is required to abide by and develop Rule changes that are consistent with this.

4.2. Rate of Return

Capital costs (comprising depreciation and return on capital) makes up approximately 60% of a TNSP's Maximum Allowable Revenue. Hence, the EUAA and EAG have historically taken an active position in the setting of WACC in any given TNSP Revenue Determination, as well as the development of the WACC component of the SRP.

Current regulatory practice associated with estimating the cost of capital is controversial and the outcomes are peppered with shortcomings that place additional (unjustified) cost burdens on energy users and 'over-reward' energy networks.

Given the significance of this matter, the EUAA and EAG have responded to the specific questions listed in the *Issues Paper*.

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?

Given the substantial compromise, and the difficult judgements required in making estimates of WACC, and the controversy and uncertainty associated with the key parameter values, the Rules should not be more prescriptive than is currently the case.⁵⁹ It is our view that further guidance through the Rules is justified for regulators in estimating the WACC.

⁵⁹ Compromise is involved in estimating WACC because regulators are seeking to establish a prospective (forward looking) value for the cost of capital that is consistent with the expectations of reasonable, adequately informed financial markets. However, not one of the parameters required to estimate WACC is capable of being

One aspect that is of particular relevance, given the intensity of the debate on all issues associated with estimating WACC, is that there was no mention in any Australian regulatory document to *Cost of Capital, A Consultation Paper*, released by the Office of Water Services (Ofwat) in July 1991.⁶⁰ The Ofwat Director-General made two crucial points in the 1991 *Cost of Capital* paper that are equally relevant today in Australia – in all regulated utility sectors. The first is contained in the following statement:

Ofwat, and its financial advisors, have made an assessment of the evidence (relating to the key parameters used in the estimation of WACC), which is presented in the form of ranges rather than point estimates. Absolute precision is not possible in this area. In deciding on individual price limits, I will have to exercise difficult judgements, taking account of interpretations of the evidence as well as the evidence itself. When making these judgements, I will explain my reasons and relate them to the evidence in this consultation document and to further evidence which may be submitted in response to it.⁶¹

The second statement, made in the context of arguments that returns to investors and creditors should be lowered substantially (from around 12% to 5%), is contained in the following:

There is no reason why investors in the water industry should be rewarded with returns in excess of those generally available in the financial markets. On the contrary, there are reasons why they be content with less.⁶²

In summary, the two key issues are:

- that difficult judgements are essential and inevitable in estimating the WACC; and
- returns should be no more than those generally available in financial markets allowing for the relatively low risk offered by 'regulatory protection'.⁶³

The EUAA and EAG believe it is appropriate to include reference in the Rules to:

- emphasise that the WACC should be no more than that generally available in financial markets – allowing for the relatively low risk offered by 'regulatory protection';
- making use of all relevant and robust information in setting the WACC; and

- ⁶¹ p. i, *Cost of Capital, A Consultation Paper*, Office of Water Services, July 1991.
- ⁶² p. vi, *Op Cit*.

measured. The first compromise that is essential is to select a 'proxy' parameter, for which some data is available and which has some attributes that are similar to the un-measurable theoretical ideal. Further compromise is required because there is generally no data source that is directly comparable to, or relates directly to, the regulated entities' activities. This requires identification of 'look alike' data sources that sometimes must also be substantially manipulated before the data can be used.

⁶⁰ A copy of this paper was converted to digital format by Ofwat in 2004. This is now posted on the Ofwat Website (see: http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/navigation-publications-a-e)

⁶³ It should be noted, however, that the Ofwat Director General's position implies an assumption that the managers and owners of the regulated utility are prudent, competent and able to organise, resource and maintain efficient operation of efficiently constructed assets in a way that satisfies the reasonable expectations of consumers (and technical regulators). Ofwat specifically and explicitly imposed 'tighter' price limits of companies judged to be less efficient than comparators in both the 1994 and 1999 Determinations, and either specifically encouraged or tacitly supported mergers of less efficient companies by more efficient ones.

• recognising the inevitable final need for sound (but difficult) exercise of judgement in all elements of WACC estimation.

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?

The Rules should prescribe both the form of WACC and the model used to estimate its value, with the '*Vanilla'*, *real*, *post-tax WACC* being the prescribed form and application of the Capital Asset Pricing Model (CAPM) being the prescribed model.

The benefits of this to end-users are clear.

The formulae are less complex, and this version of CAPM allows the complex issues associated with the impact of taxation to be separated from the equally complex issues associated with estimation of WACC. Both attributes improve transparency and allow regulators to develop separate, and most likely more effective, incentives for regulated entities to pursue efficient financing and tax arrangements, the benefits of which should ultimately be passed through the end-users.⁶⁴

However, there is value in making provision for the AER to regularly review alternative models, and to periodically undertake comparative analysis using the different models to 'cross-correlate' the outcomes in much the same way as Ofwat did in the 1991 *Cost of Capital* paper. This review could occur every five years prior to a revenue re-set for all TNSPs (see section below on EUAA and EAG recommendation that the AER should conduct one NEM-wide transmission re-set every five years).

The methods and approaches used to estimate values for the individual parameters should not be prescribed.

The EUAA and EAG do not accept that the current approaches adopted by Australian regulators adequately reflect the marked difference in views between academics and consultants (who tend to focus on complex statistical analysis of long-term historical market data) and the views of financial market analysts and practitioners (who tend to focus on forward-looking expectations in the financial markets). This is one important area where the existing regulatory practice needs to be given scope to improve and develop.

⁶⁴ That is a theory that has been put into practice in respect of tax benefits, at least in Victoria. However, it is not at all clear that any efficiency benefits associated with capital financing have been passed through to consumers. The ACCC, along with the ESC, has so far refused to adjust any of the key parameters apart from the Risk Free Rate in response to continuing evidence that the values for other parameters are well above the expectations of independent financial market analysts.

The EUAA and EAG are also aware that consistent implementation of 'Vanilla' form of WACC may not ensure delivery of efficient tax benefits to end users in all cases. There is little doubt that government-owned utilities would find it difficult to implement the same 'efficient' tax arrangements as privately-owned utilities. Under the CoAG reform agreements, jurisdictional government business enterprises are required to make 'tax equivalent payments' to the relevant State Treasury. This provides a very clear incentive for the shareholder (Treasurer) to ensure the maximum 'tax equivalent' payment is made.

For example, it is notable that the NSW Auditor General referred to the combined payment of Dividends and Tax Equivalent payments as benefits derived by the State from ownership of the electricity sector in the recent report to NSW Parliament on this matter.

81. To what extent should the WACC continue to be based on assumptions of a benchmark capital structure?

There is benefit in retaining a benchmark capital structure when estimating WACC as, properly constructed, this will provide an incentive for TNSPs to pursue efficient financing arrangement, the benefits of which should (eventually) be passed through to end-users. However, the Rules should also require the AER to provide a clear explanation of the basis for establishing the 'benchmark' arrangements that is capable of demonstrating to end-users (and TNSPs) the benefits that derive from the 'benchmark' structure.

For example, no Australian regulator has ever clearly explained why the 'preferred gearing ratio' of 60% has been selected, when literal application of the CAPM suggests that lower gearing would produce (slightly) lower estimates of WACC, which would in turn lower costs borne by end-users.

82. Should the principles in the SRP be elevated to the Rules?

The 'principles' contained in the SRP should not be accepted by the AEMC, and should not be elevated to the Rules in their current format. The ACCC 'jumped the gun' by suggesting it is possible to define values and 'lock them into the SRP' for key parameters, notably the Market Risk Premium and Equity Beta. The EUAA and EAG do not accept that sufficient information is available to support the values of 6.0% and 1.0 respectively adopted by the ACCC.

In fact, our firm view is that not only are the present parameters impossible to justify they are set far too high and are contrary to the SMO.

83. Should the Rules prescribe a process for the periodic review of relevant WACC parameters? If so, how frequently should such a review be undertaken: for every determination or less frequently? Who should undertake such a review?

It is, indeed, overly complex, onerous and costly for Australian regulators to undertake a comprehensive review of WACC parameters for each NSP review under the current arrangements. It also creates inconsistencies between regulatory determinations as illustrated in Chart 2 below.



CHART 2: WACC VALUES DERIVED FROM AUSTRALIAN REGULATORY DECISIONS

Notes:

1. "Vanilla', real, post-tax WACC estimates derived using parameter values selected by each regulator, applied using ESC WACC formulae.

2. Value indicated uses mid-range estimates where point value not quoted by regulator.

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Despite using generally similar approaches to estimate parameter values, generally similar data sources and generally similar rationale to support their judgements, Australia's regulators have managed to derive substantially different estimates for WACC. While the apparent downward trend reflects the progressive reduction in Commonwealth Treasury Bond rates (universally used to estimate a value for the Risk Free Rate), the variations in each year greatly exceed the level of volatility of the 20 day average Bond Rate. There is no evidence to support the notion that the cost of capital for energy utilities is so volatile over such short time frames.

The EUAA and EAG support improving the 'stability' of the WACC estimation process by amending the Rules to require all TNPS revenue reviews to be conducted concurrently and in a single regulatory process. This should preferably be at the same time that gas transmission access reviews are conducted (in addition, the AEMC should amend the Rules to bring all electricity and gas DNSP reviews together). This would reduce the frequency with which reviews of WACC were required from around 18 to 2 (one for the transmission sectors and one for the distribution sectors or, at most, 4 if gas a electricity sector reviews remain separate) every five years and produce greater stability in the overall regulatory regime. Such an approach is consistent with arrangements in the UK, including the initiative taken by Ofgem in the UK to align reviews of gas and electricity transmission.⁶⁵

Given the level of 'difficult judgement' involved in estimating WACC, it is inevitable that this must be undertaken by the AER in a demonstrably independent process under arrangements that clearly focus on the SMO. It would not be acceptable to the EUAA or EAG for a review of WACC to be undertaken by agents representing the interests of either private or government utility owners. Nor would it be acceptable to end users to permit regulated entities to implement – without regulatory oversight - a 'propose and review' model (as permitted in the Gas Code), where the entities are permitted to propose a value for WACC within 'plausable range'. It is unambiguously clear that regulated entities always propose values at the high end of any 'plausable range', which unless challenged by end users or competent, independent regulators, would simply institutionalise a form of monopoly rent.

84. Should the Rules allow for the determination to be re-opened if market conditions change?

The Rules should not allow for the determination to be re-opened if market or economic conditions change.

The EUAA and EAG recognise there is likely to be some volatility in financial markets over a 5-year time frame. However, NSPs have adequate opportunities to insulate themselves from these effects by active participation in debt, bond and equity markets, which justifies the AER adopting a 'benchmark financial structure'. There is never likely to be any benefit conferred on end-users by allowing re-opening of a determination process; and no need to do

⁶⁵ The AEMC refers to possible resourcing constraints within the AER if regulation of electricity distribution is transferred from jurisdictions. However the EUAA and EAG note that there are 13 separate electricity distributors in the UK in a far bigger economy than Australia's, all of whom are subject to a single concurrent review by Ofgem (and 22 water companies, several larger that entire utility industry sectors in Australia, that are subject to a single concurrent review by Ofwat). It should clearly be within the capability of the AER to emulate this effort.

so where prudent, well-managed firms have access to adequate 'hedge arrangements' to protect against expected volatility.

It is also possible that economic conditions could change significantly within a regulatory period. However, we do not see this as justification for re-opening a determination. In the first place, this would be inconsistent with 'incentive regulation', which requires a regulated business to manage both upside and downside risks between regulation reviews and take the good with the bad. In the second place, there would need to be symmetry about the procedure with users (and the regulator) also being allowed to seek a re-opening. However, it is difficult to see how perfect symmetry could be obtained given the information advantage of businesses over both users and the regulator. Thirdly, as pointed out elsewhere, energy networks are already receiving generous treatment from regulators and it would be unfair to provide them with even more advantage than they already get.

Should any firm elect not to avail itself of the protection provided by prudent participation in active financial markets, regulators should allow the firm to face the full financial consequences of this decision as an element of good 'incentive' regulatory practice. This is the only way to construct effective incentives, which, on the whole, clearly deliver favourable outcomes to the firms' owners.

4.3. Regulatory Procedures

The Issues Paper covers a number of areas relating to regulatory procedure including:

- Fixed versus flexible procedural steps in the Rules
- Initial guidance to TNSPs on Regulatory Submissions
- Timing: the general timeframe for transmission determinations
- Timing: managing time over-runs

The first two can be dealt with easily from the perspective of end users.

Given the issues that must be addressed in any revenue/price review, it is inevitable that the AER must be permitted some discretion. Further, sections 15, 35 and 36 of the NEL provide guidance to the AER on the manner in which they must perform or exercise their economic regulatory functions or powers in making TNSP decisions. The EUAA and EAG believe that this provides sufficient guidance to the AER.

However, the EUAA and EAG also believe that exercise of discretion cannot be permitted under any circumstance. Therefore, it is highly desirable that the AER be compelled to specify clearly, and as simply as possible, prior to commencing a review which areas will require exercise of discretion, and the criteria to be applied in each review that will be used to guide and/or determine this discretion. This can best be done by establishing high level guidance in the Rules and requiring the AER to specify more detailed conditions in initial guidance to TNSPs and all other stakeholders.

Discussion in the Issues Paper related to timing covers:

 the general timeframe for transmission determinations, with focus on whether the Rules require a TNSP revenue review be completed before the end of the current regulatory control period. managing time over-runs.

It is clearly desirable for the review outcome to be finalised before the end of a current period. Without this, end-users have no way of confirming what charges are to be applied at the beginning of the next period.

However, the EUAA and EAG recognise that administrative law processes limit the ability of the AEMC to prescribe a fixed time frame. There have been occasions where utilities have sought to use every possible avenue to protect their own self-interest in a review process, which could impact on the timing for execution of a review or the time available for decision-making by the regulator or consultation with users.

It is also possible to contemplate *force majeure* (or 'ship wreck') conditions that could make even a well-planned review process more difficult and time consuming.

However, in this instance, the EUAA and EAG are inclined to agree with the Productivity Commission that strict limitations be placed on conditions under which a TNSP could seek to delay or extend a review. In addition, where delay occurs, the Rules must prescribe that the delay is reasonable, could not have been foreseen and delivers net economic benefits and satisfies the SMO.

The EUAA and EAG also note that the ACCC's decision to extend the duration of the review process to 12 months had potential to assist in addressing some of the challenges facing end-users, but only if the timing of 'consultation' processes is firm. The process arrangements specified currently in the SRP focuses too heavily on problems faced by the ACCC and TNSPs and do not adequately consider the requirements and resource constraints of end-users.

Accordingly, the ACCC proposals could be improved by incorporating the following as 'principles' in the Rules:

- fixing the commencement of each consultation period and key milestones/consultation points (and indicative dates) in advance so that end-users have a better basis for planning participation (and seeking funding support from the NEM Advocacy Panel);
- concatenating periods for consultation on the TNSPs application and the AER's consultants' analysis of the application (and responses to each);
- allowing more time for end-users to consider issues raised in the TNSPs' applications and the AER's consultants' reports concurrently. In particular, the EUAA and EAG recommend that not less than 8 weeks is provided for comments to be made on TNSPs initial proposals and the AER's Draft Decision;
- fixing an end date for the review process so that TNSPs can publish revised tariffs well before (at least two months prior to) the start of new tariff years and end-users can budget for changes in transmission charges; and
- including requirements for the TNSPs to improve the communication of their tariffs to customers, retailers, distributors and jurisdictional regulators and to require them to develop examples of the impact of tariffs on different classes of end users and 'tools' to assist end users with better understanding the cost impact of tariffs.⁶⁶

⁶⁶ A further matter addressed in the EUAA/EAG submission in response to the AEMC's transmission pricing issues paper is that TNSPs should be compelled (by changes to the Rules) to publicly disclose price information

4.3.1. Sequential versus concurrent reviews

A major improvement in regulatory process and efficiency would be gained by aligning the regulatory review periods for all TNSPs.⁶⁷ Current timing of the reviews is determined by the date in which each jurisdiction applied the Code (Rules) to their TNSP, with slight modifications to the duration of regulatory periods requested by TNSPs. As shown in Chart 3, this produces significantly different timing for the conduct of reviews for TNSPs (except for Tasmania and NSW in 2009). The EUAA and EAG cannot see justification in continuing with this misalignment

The current arrangements are clearly inefficient and will make it virtually impossible for the AER to produce outcomes consistent with 'best practice regulation' or to deliver optimum benefits to end-users.

Aligning the regulatory periods and review processes would satisfy the SMO and has the potential to deliver substantial benefits to all stakeholders, including:

- substantially reducing the resources required to participate in multiple reviews, thereby reducing the cost of regulation;
- allowing the ACCC to deal with issues common to all TNSPs, such as
 - analysis and judgement on the value of parameters for estimating the WACC in exactly the same way for all TNPS;
 - assessing the prudency and efficiency of expenditure, and application of comparative performance assessment (or benchmarking) using consistent data;
 - creating comprehensive 'service standards' for the whole transmission system that could include specific incentives for TNSPs to interact with the energy and ancillary services markets to optimise outcomes for end-users;
 - creating better targeted incentives for all TNSPs to operate efficiently, including through 'competition by comparison';
 - greater consistency in the approval and consistency of tariff changes; and
 - providing for greater consistency with the regulation of distribution networks and the pass through of transmission charges.

for all connection points where costs are borne by end users; and publish clear explanations of cost allocation methodologies and their pricing policies, practices and procedures. This is the only way of adequately demonstrating public interest benefits in TNSP pricing practices.

⁶⁷ As noted elsewhere in this submission, there would also be benefit in aligning the timing for all DNSP reviews, in both electricity and gas (into two separate processes); and aligning reviews of electricity and gas transmission as proposed in the UK.



CHART 3: TIMING OF TNSP REGULATORY REVIEWS 1999-2010

Source: Documents on ACCC website.

The benefits listed above justify the AEMC incorporating the following additional 'principles' into the Rules:

- Aligning timing for regulatory review of all NEM TNSPs as soon as practicable.
- Undertaking regulatory reviews for a single, multi-company, NEM-wide transmission system.
- Fixing an end date for the review process so that TNSPs can publish revised tariffs well before, at least two months, prior to the start of new fiscal years and end-users can budget for changes in transmission charges.
- Develop effective and relevant 'service standards' for the whole transmission system that include specific incentives for TNSPs to interact with the energy and ancillary services markets to optimise outcomes for end-users.
- Achieve consistency in approaches and incentives for network service providers to optimise outcomes for end-users.

Improving the efficiency of regulatory reviews is a critical issue for end-users, for two reasons.

The first is that end-users experience difficulty in resourcing participation in the reviews. To date, end-users have not been able to access sufficient resources to fully and effectively participate in regulatory reviews undertaken by the ACCC, or any jurisdictional regulator. As detailed below, establishing the NEM Advocacy Panel has seen some improvements in this situation, but has not negated the problem and created some new problems.

The second is that it is inevitable that the regulatory process 'suffers' from information asymmetry that favours TNSPs. Despite the fact that the Rules requires the AER to balance the interests of owners and users, ACCC documents have emphasised issues raised by TNSPs in their revenue applications and focus on the importance of decisions to the TNSPs' financial interests. On the other hand, ACCC decisions have tended to ignore, neglect or minimise issues and financial impacts on end-users. This translates into decisions that are inevitably biased in favour of TNSPs. This outcome has been acknowledged by the ACCC in its determinations (and also in the decisions of some jurisdictional regulators).

A credible way that information asymmetry can be re-balanced is for end-users to be adequately resourced to present sound and well-reasoned submissions to regulators.

An issue of fundamental relevance to discussion of regulatory process is that end-users require time to organise for participation in the reviews and make meaningful submissions.⁶⁸ This needs to be allowed in the planning for, and execution of, regulatory reviews. The lack of specific detail on the timing and length (generally four weeks) of the consultation periods proposed by the ACCC acts as a major inhibitor for end-users participating in regulatory reviews.⁶⁹

⁶⁸ The EUAA and EAG acknowledge the flexibility of the ACCC's and other regulators in responding to requests for this to be taken into account.

⁶⁹ As noted elsewhere in this submission, the challenges facing end users has not be resolved by funding criteria adopted by the NEM Advocacy Panel. This has inevitably meant delays in a decision to offer funding support and/or substantial modification to funding proposals that have not been adequately justified or explained by the Panel. This has effectively prevented end user groups from 'marshalling resources' in the most effective way.

Clause 6.2.4(b) of the Rules specifies that a key requirement for the review process is to provide all affected parties with (both adequate notice and) a reasonable opportunity to prepare for, participate in, and respond to that process. Without adequate notice and reasonable opportunity, end-user views cannot be adequately prepared, presented or represented in regulatory reviews.

4.3.2. Requirements on the AER to disclose its reasoning

The Issues Paper also raises the questions of:

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

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

The AER must be obliged to accurately, explicitly, thoroughly and transparently explain every aspect of its decisions, including releasing any modelling that underpins any transmission determination. In addition, the models should be 'fully active' so that analytical assumptions embedded in the models can be audited and tested by stakeholders.

The Rules should explicitly limit the conditions under which information provided to TNSPs is not disclosed to other stakeholders. It is the strong view of the EUAA and EAG that the only justification for restricting information is that the interests of a third party (not connected to the TNSP or its shareholders) would be compromised by release of the information. Even in that case, the AER should be obliged to provide a description of the restricted information and transparently explain the reasons for restricting its release.

4.4. Regulatory Information

The EUAA and EAG are firmly of the view that effective and enforceable rules that define, and precisely and clearly specify, the information that must be provided to the AER must be established and rigorously enforced. These rules must provide reliable and verifiable information about the actual costs incurred in providing services, including for un-regulated activities, and the levels of service performance. At a minimum, the AER should be given the same powers to obtain and enforce information provision by the TNSP as other Australian regulators, such as the Australian Securities and Investment Commission (ASIC), ACCC and the Australian Taxation Office (ATO).

Further, the rules should limit discretion in allocation of costs and interpretation of performance information as tightly as possible. This would appear to be the only way of minimising the exercise of 'strategic behaviour', obfuscation and/or confusion over information disclosure. Two examples are offered in support of this suggestion.

• The first relates to the use made by Victorian electricity distributors of 'related parties' to limit disclosure of efficiently incurred cost that is covered in detail in a recent

decision by the Victorian ESC Appeal Panel⁷⁰ and the ESC's own final decision (and is included in a further appeal against the ESC's final decision that is still to be resolved).

The second example relates to IPART's use of system reliability performance data to assess the performance of NSW distributors during the NSW electricity distribution price review. In this case, IPART used information sourced from the Electricity Supply Association of Australia to compare system reliability performance of NSW and Victorian distributors that led IPART to conclude that "(g)enerally, NSW customers experienced smaller number of outages (SAIFI) and shorter duration (SAIDI) per annum than the customers in Victoria. However, on average each outage experienced by a NSW customer was longer than Victoria over the period as reflected in CAIDI." ⁷¹ However, the data from the ESAA was not consistent with data in the Victorian ESC Performance Reports or data in IPART's own Price and Service reports.

Both examples emphasise the need for regulators to be very specific about information and to be diligent in ensuring it is provided in a form that suits the purpose intended. In addition, these examples raise questions about how penalties for non-compliance are to be addressed.

⁷⁰ Statement of Reasons for Decision, Essential Services Commission Appeal Panel, Reference E2/2005. 12 September 2005.

⁽See: 'ESC Appeal Panel Decisions', A-Z Index at http://www.legalonline.vic.gov.au/CA2569020010C266/Homepage).

⁷¹ p. 187, IPART Draft Report

5. Conclusions

The EUAA and EAG welcome the opportunity to respond to the AEMC's *Issues Paper*. Unfortunately, our contribution has been hampered by a number of limitations with the review process, which are outlined in section 2 of this submission. Most significant of these is the failure by the AEMC to provide factual quantified evidence on the effectiveness or otherwise of existing regulatory policies, or the impact of any changes to those policies.

Despite these limitations, we have attempted to provide a detailed, sound and constructive response to the matters raised in the *Issues Paper*. Above all else, our submission and its recommendations have been based on an application of the Single Market Objective of the NEL, which the AEMC is required to abide by and base its decisions on, including for this review.

This section of the submission provides a brief overview of our conclusions. Detailed recommendations for action by the AEMC are presented throughout the submission; and a comprehensive summary of those recommendations is presented in the Executive Summary.

5.1. Form of regulation

Issues that the AEMC must address in its review of Rules applying to specification of the form of regulation for transmission revenue are summarised below.

- The extent to which current arrangements are effective (or not) in facilitating achievement of the SMO of the new NEL, that is the AEMC should ensure there are changes to the Rules where current rules do not facilitate achievement of the objective and should exercise caution in proposing Rule changes where existing Rules demonstrably facilitate achievement of the objective.
- The extent to which regulatory arrangements that apply to electricity transmission can be made consistent with regulation of other sectors in both the electricity and gas industries and maintain consistency with achievement of the SMO.
- The extent to which Rule changes are necessary to ensure that, in achieving the SMO, there is robust evidence to show that existing deficiencies can be addressed or overcome. For example, a change to a form of regulation using 'productivity indices' should only be proposed if:
 - a robust 'efficient cost' baseline can be established, free of any effects from exercise of 'strategic behaviour by TNSPs;
 - robust 'productivity indices' could be established that realistically describe economic efficiency gains that create direct incentives for utilities to improve cost and service performance; and
 - a means was found to accommodate the impacts of technological change that might fundamentally alter cost drivers in utility industries.
- The extent to which robust quantitative evidence exists to show that Rule changes (that assist in achieving the SMO) deliver net economic benefits to energy users.

Irrespective of the form of regulation, there is a need to establish a robust, reliable, consistent and audited information disclosure regime that allows the AER to:

- effectively regulate transmission revenues;
- effectively deal with exercise of 'strategic behaviour' by TNSPs through manipulation of information that could disclose actual efficient costs or mis-forecast costs or demands for service;
- show energy users they are getting 'value for money' from both regulators and TNSPs;
- implement the use of econometric techniques similar to those adopted in the UK to assist in informing key judgements in the CPI-X building block form of regulation; and
- effectively use pressure that can be applied through 'competition by comparison' (and civil penalties) to bolster 'commercial incentives' on TNSPs to the maximum extent possible.

5.2. Form of price control

The EUAA and EAG accept that there may be benefits from implementing TFP approach to regulation, but only if:

- a robust 'efficient cost' baseline could be establish that does not retain benefits arising from exercise of 'strategic behaviour' by utilities;
- robust 'productivity indices' could be established that realistically described economic efficiency gains and also create direct incentives for utilities to improve cost and service performance; and
- a means was found to accommodate the impacts of technological change that might fundamentally alter cost drivers in utility industries (again no such means presently exists).

The AEMC should focus on how a 'tariff basket' price cap approach could be adapted for electricity transmission (and all distribution services). This would have the advantage of achieving far greater regulatory consistency that the current diverse practices in the transmission and distribution sectors and may assist in aligning price signals in both sectors.

The provisos that the AEMC will need to consider prior to adopting a 'tariff basket' form of price control for transmission services are that:

- TNSPs' are capable of preparing reasonable forecasts of cost and service demands (i.e. do TNSPs understand the link between the demands created by system users and cost):
- the TNSPs have cost allocation practices and pricing policies that are up to the task of ensuring end users benefit from the change;
- the AEMC and AER are able to deal with the fact that a number of regulators (notably the Victorian ESC, ESCoSA and IPART) have added jurisdictional-specific 'incentive factors' in the distribution sector that are intended to 'bribe' the regulated utility to do something that is supposed to deliver an efficiency benefit;
- adding even more 'transmission specific' (or jurisdictionally specific) 'incentive factors' would greatly reduce the possible benefits from standardising the forms of price control.

TNSPs need incentives that focus on more than reducing their own direct costs. Given the impact of transmission operation, and transmission constraints, on the wholesale energy market, it is essential that the form of price control be inexorably linked to effective service incentives. These incentives should focus on reducing overall costs to energy users (and generators) – and improving overall operation of the energy market - than is the case in the distribution sector.

5.3. Scope of regulation

To the maximum extent possible, TNSPs should be exposed to competitive market forces. However, any area where the AEMC is considering reduction of 'regulatory constraints' should be subject to realistic assessment of the level of actual countervailing economic power that it likely to be exhibited by energy users.

5.4. Performance obligations and incentives

5.4.1. Network performance

The AEMC should move as quickly as possible to ensure the AER develops a comprehensive 'service standards' for the whole transmission system that includes specific incentives for TNSPs to interact with the energy and ancillary services markets to optimise outcomes for end-users.

The AEMC should achieve consistency in approaches and incentives for network service providers to optimise outcomes for end-users.

The AEMC should ensure that end users are effectively involved in establishing the value of any incentive for performance improvements and the mechanism by which that value is applied to TNSPs.

However, in doing so, the AEMC should ensure that focus is kept on:

- ensuring benefits and accountability flow to those who pay for shared transmission services – that is, end users who currently pay 100% of the cost of the shared network;
- developing a consistent set of service standards that would apply uniformly to all TNSPs;
- ensuring that commercial incentives for TNSPs are focussed on optimising benefits to end-users, are meaningful and are sufficient to motivate the required change in behaviour and performance; and
- integrating commercial incentives with other forms of incentive including robust public performance reporting and civil penalties.

5.4.2. Expenditure

Inter-regional transmission constraints have cost end users over \$10 billion since the NEM commenced in December 1998 and should be removed by ensuring that TNSPs have clear

incentives (both commercial and civil) to deliver investments that optimise outcomes for end-users.

The process provided for currently in the Rules, and existing regulatory practice, do not appear to be the best ways to create incentives for TNSPs to pursue ongoing efficiency that will benefit end-users (and would therefore be inconsistent with the SMO). The AEMC should closely examine current practices for setting transmission revenue and compare these, in detail, with similar practices of the UK regulators.

5.5. Opening Asset Base

There have been very substantial differences between the ACCC and some jurisdictional regulators (particularly the Victorian ESC) on this issue and the related issue of 'roll in' of capital expenditure. However, it is far from clear that any of the current approaches adopted in Australia are certain to facilitate achievement of the SMO. For example:

- The use of DORC produces initial asset valuations that are generally higher than Depreciated Actual Cost or Deprival Value (or valuations available to competitive market firms), makes no allowance for past payments made by end users for sunk assets and creates flow-on impacts of higher than efficient asset valuations that disadvantage end users subject to the pressures of internationally competitive markets.
- The majority of TNSPs have already taken advantage of the 'option' to increase jurisdictional asset values in the ACCC's initial regulatory reviews, without having to make any actual new investments, which delivers no benefit to end-users and does nothing to improve operation of the electricity market.
- There is no direct evidence that either 'locking in' asset values (and accepting at face value that all capital expenditure is prudent as practiced by the Victorian ESC in the distribution sectors) or periodic re-valuation (and ex-post scrutiny of actual capital expenditure as practiced by the ACCC and several jurisdictional regulators) will always produce economically efficient outcomes or desirable incentives.

Given the uncertainty in this area, the EUAA and EAG would prefer that the AEMC further explore means to develop transparently effective incentives for TNSPs to achieve efficient outcomes for all their activities. The key to this is to ensure that appropriate incentives focus of delivering future benefits to end-users, not just rewarding TNSPs for past performance.

5.6. Rate of Return

Current regulatory practice associated with estimating the cost of capital is controversial and the outcomes are peppered with shortcomings that place additional (unjustified) cost burdens on energy users and 'over-reward' energy networks.

Given the substantial compromise, and the difficult judgements required in making estimates of WACC, and the controversy and uncertainty associated with the key parameter values, the Rules should not be more prescriptive than is currently the case. It is our view that further guidance through the Rules is justified for regulators in estimating the WACC.

The EUAA and EAG believe it is appropriate to include reference in the Rules to:

- emphasise that the WACC should be no more than that generally available in financial markets – allowing for the relatively low risk offered by 'regulatory protection';
- making use of all relevant and robust information in setting the WACC; and
- recognising the inevitable final need for sound (but difficult) exercise of judgement in all elements of WACC estimation.

The Rules should prescribe both the form of WACC and the model used to estimate its value, with the '*Vanilla', real, post-tax WACC* being the prescribed form and application of the Capital Asset Pricing Model (CAPM) being the prescribed model.

The EUAA and EAG do not accept that the current approaches adopted by Australian regulators adequately reflect the marked difference in views between academics and consultants (who tend to focus on complex statistical analysis of long-term historical market data) and the views of financial market analysts and practitioners (who tend to focus on forward-looking expectations in the financial markets). This is one important area where the existing regulatory practice needs to be given scope to improve and develop.

There is benefit in retaining a benchmark capital structure when estimating WACC as, properly constructed, this will provide an incentive for TNSPs to pursue efficient financing arrangement, the benefits of which should (eventually) be passed through to end-users. However, the Rules should also require the AER to provide a clear explanation of the basis for establishing the 'benchmark' arrangements that is capable of demonstrating to end-users (and TNSPs) the benefits that derive from the 'benchmark' structure.

The 'principles' contained in the SRP should not be accepted by the AEMC, and should not be elevated to the Rules in their current format. The ACCC 'jumped the gun' by suggesting it is possible to define values and 'lock them into the SRP' for key parameters, notably the Market Risk Premium and Equity Beta. The EUAA and EAG do not accept that sufficient information is available to support the values of 6.0% and 1.0 respectively adopted by the ACCC. In fact, our firm view is that not only are the present parameters impossible to justify they are set far too high and are contrary to the SMO.

It is overly complex, onerous and costly for Australian regulators to undertake a comprehensive review of WACC parameters for each NSP review under the current arrangements. As noted below, the reviews for all TNSPs should be aligned with all aspects relating to the TNSPs' cost of capital reviewed only once every 5 years.

The Rules should not allow for the determination to be re-opened if market or economic conditions change. NSPs have adequate opportunities to insulate themselves from these effects by active participation in debt, bond and equity markets, which justifies the AER adopting a 'benchmark financial structure'. There is never likely to be any benefit conferred on end-users by allowing re-opening of a determination process; and no need to do so where prudent, well-managed firms have access to adequate 'hedge arrangements' to protect against expected volatility.

5.7. Regulatory Procedures

The review process progressively adapted by the ACCC would be improved by incorporating the following additional 'principles' into the Rules:

- Aligning the timing for regulatory review of all NEM TNSPs as soon as practicable.
- Undertaking regulatory reviews for a single, multi-firm, NEM-wide transmission system (this would desirably include transmission gas as well as has been implemented in the UK).
- Fixing an end date for the review process so that TNSPs can publish revised tariffs well before, at least two months, prior to the start of new fiscal years and end-users can budget for changes in transmission charges.
- Develop effective and relevant 'service standards' for the whole transmission system that include specific incentives for TNSPs to interact with the energy and ancillary services markets to optimise outcomes for end-users.
- Achieve consistency in approaches and incentives for network service providers to optimise outcomes for end-users.

The AER must be obliged to accurately, explicitly, thoroughly and transparently explain every aspect of its decisions, including releasing any modelling that underpins any transmission determination. In addition, the models should be 'fully active' so that analytical assumptions embedded in the models can be audited and tested by stakeholders.

5.8. Regulatory Information

The EUAA and EAG are firmly of the view that effective and enforceable rules that define, and precisely and clearly specify, the information that must be provided to the AER must be established and rigorously enforced. These rules must provide reliable and verifiable information about the actual costs incurred in providing services, including for un-regulated activities, and the levels of service performance. At a minimum, the AER should be given the same powers to obtain and enforce information provision by the TNSP as other Australian regulators, such as the Australian Securities and Investment Commission (ASIC), ACCC and the Australian Taxation Office (ATO).

Further, the rules should limit discretion in allocation of costs and interpretation of performance information as tightly as possible. This would appear to be the only way of minimising the exercise of 'strategic behaviour', obfuscation and/or confusion over information disclosure.

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