

Australian Energy Markets Commission

Review of the Electricity Transmission

Revenue and Pricing Rules

Comments on the Revenue Requirements

Issues Paper

by

The Major Energy Users Inc

And

Major Employers Group Tasmania

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1. Introduction

The MEU and MEG

The Major Energy Users (MEU) and the Major Employers Group Tasmania (MEG) comprising some 30 major energy using companies in NSW, Victoria, SA, Tasmania and Queensland welcome the opportunity to provide comments on the Review of the Electricity Transmission Revenue. In particular, the submission represents the views of the Energy Markets Reform Forum (NSW), Energy Consumers Coalition of South Australia Energy Users Coalition of Victoria and Major Employers Group Tasmania.

The companies represented by the MEU and MEG (and their suppliers) have identified that they have an interest in the **cost** of the energy networks services as this comprise a large cost element in their electricity and gas bills.

Although electricity is an essential source of energy required by each member company in order to maintain operations, a failure in the supply of electricity or gas effectively will cause every business affected to cease production, and members' experiences are no different. Thus the **reliable supply** of electricity and gas is an essential element of each member's business operations.

With the introduction of highly sensitive equipment required to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly important with the focus on the performance of the distribution businesses because they control the quality of electricity and gas delivered. Variation of electricity voltage (especially voltage sags, momentary interruptions, and transients) and gas pressure by even small amounts now has the ability to shut down critical elements of many production processes. Thus member companies have become increasingly more dependent on the quality of electricity and gas services supplied.

Each of the businesses represented here has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy supplies is required. If sustainable supplies of energy are not available into the future these investments will have little value.

Accordingly, MEU and MEG are keen to address the issues that impact on the **cost, reliability, quality** and the long term **sustainability** of their gas and electricity supplies.

The members of MEU have been involved in nearly every economic regulatory review (both gas and electricity) since deregulation of the energy markets commenced in 1996, as well as participating in the drafting of the electricity and the gas access regulatory regimes. As a result, they have accumulated a wealth

of knowledge of the relevant regulatory and legislative processes, and in particular observed and experienced a number of perverse outcomes resulting from the application of the rules and regulations over the past decade.

A Brief Statement of the Current National Electricity Market and Consumers' Perspectives

It is apt to recall that the current regulatory processes have arisen from the Hilmer review, which pointed to the release of significant potential benefits to Australian national competitiveness by deregulating the energy supply sectors (gas and electricity) which were either held directly by State governments or were under their direct control, or in the case of gas, largely controlled by a few firms.

However, whilst the reform blueprint was sound (e.g. separation of the generation sector from the transmission and distribution sectors and competition in sectors that are contestable) the drafting of the legislative and regulatory rules was heavily influenced by some governments who were electricity and gas pipeline asset owners embarked on programmes of privatisation and corporatisation. One result was that a number of key elements of the National Electricity Code were skewed to reflect particular interests. For example, in the requirement for a regulator to use a specified asset valuation methodology; the use of derogations which constrained regulators from making independent assessments in some key areas; and in the allocation of costs for the use of the transmission networks.

Nevertheless, the deregulation process made great strides in the nineties, with major improvements in generation availability, reduced costs and new investments in electricity networks. However, the benefits initially seen as likely to flow from reforms have since been dispersed in a variety of ways (such as unrealistically high dividends to state government owners; introduction of government levies on electricity network services; increased litigation and appeals against regulatory determinations).

The following box contains MEU's highly summarised view of major aspects of the current National Electricity Market.

- Electricity users have now seen electricity prices return to levels prevailing prior to the commencement of energy reforms initiated by governments.
- The National Electricity Market is still a series of regional markets with weak inter-connections. Regional price differentials can be very wide.
- The electricity supply industry is now more concentrated. More and more energy suppliers are re-aggregating – both vertically and horizontally – and the potential for the exercise of market power is now greater than ever before.
- There is little depth in the wholesale electricity market, the use of financial instruments is limited and virtually no independent secondary market in such contracts exists. Forward wholesale electricity contracts are only for three years' duration and liquidity in the market is limited.
- Transmission companies essentially continue to operate as network providers on a point to point basis, and are yet to develop new services, such as risk management instruments.
- There has also been regulatory failure, which has stymied construction of inter-State interconnections.
- Economic and regulation of transmission networks continues to be effectively based on the building block approach. Incentive-based mechanisms to drive efficiency gains are limited in application and network locational signals for generators and major demand loads are non-existent.

The AEMC review of the regulation of transmission revenue is, therefore, very timely and has the potential to address and influence a wide range of issues, including the ones highlighted above. From the standpoint of MEU and MEG, this review's objective should be to deliver changes to the rules that will assist in achieving a **sustainable** and **competitive national electricity market**.

A paramount objective of the review is to meet the objects clause contained in the NEL, viz.

"The national electricity market objective is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security

of supply of electricity and the reliability, safety and security of the national electricity system."

In undertaking its task, the review should also seek to streamline and improve the quality of economic regulation, to lower the cost and complexity of regulation, enhance regulatory certainty, and lower the barriers to competition, in order to deliver greater benefits to consumers.

As pointed out above, industrial consumers have a "four points" approach to electricity supplies. They are:-

1. low cost in order to maintain the viability of the enterprise
2. high quality to avoid outages caused by voltage spikes and dips
3. highly reliable in order to maintain continuity of the operation of the enterprise
4. sustainability of supply in order that the investments made by the enterprise can be recovered.

Consumers therefore require all four of these criteria to be achieved in order for the NEL requirement of "...the long term interests of consumers..." to be met. However, we note the view put by the AEMC that:-

"where there is a potential trade-off between the long term benefits to consumers, say arising from investment and innovation in network, metering or generation technologies, and the short term benefit of setting prices below their long run economic cost, the benefits of the longer term outcomes should receive due weight."¹

There is no simple trade-off and this assumption must be considered very carefully. After all it would be a pointless exercise if industrial consumers either went out of business or never invested due to the high costs of electricity transport. We stress, however, that price is not the only variable of concern to consumers. Non-price factors, such as reliability, security of supply etc. are just as important.

Consideration of the issues at hand from a consumer perspective is important as much of the current debate has centred on how the regulatory approach impacts on Market Participants, as they are (at first glance anyway) responsible for paying for the use of the transmission system. This approach seems to ignore the obvious point that it is ultimately consumers who pay for the provision of the network services, regardless as to whether this might be incurred through generator costs, retailer costs, and distribution costs or through lost factors. Economic regulation also involves costs and ultimately all such costs are picked up by consumers.

¹ AEMC issues paper page 14

The AEMC's review must therefore have sufficient regard to the impact of its rule changes based on a clear appreciation of consumers' perspectives.

The importance of this can be illustrated by reference to the ACCC approach to the regulatory test for new investment, particularly for interconnectors. The ACCC's view is that as generators and retailers pay for transmission costs, then "the transfer of wealth from generator to retailer or vice versa" should not be a consideration as to the feasibility of a new interconnector. However, when this issue is addressed from the standpoint of the consumer, the consumer sees that an interconnector has the potential to give it access to lower cost generation even accepting that there is a premium for the transport. The consumer could also view the resultant reduction in price volatility in its regional market, arising from the interconnector, as valuable. Thus, from a consumer viewpoint, the feasibility of a new interconnector is the difference between what it pays to a local generator compared to what it would pay to a remote generator plus the additional cost of transport net the externalities (such as reducing the market power of local generators and reducing price volatility). In other words, the regulatory test should contain wider criteria by reference to the perspectives of consumers.

Regulation of TNSPs

Transmission networks (and indeed distribution networks as well) have a powerful role to play in contributing to the efficient operation of the NEM and in facilitating competition between generators and regions.

The cost of electricity transport (transmission and distribution) can now comprise over 50% of the delivered cost of electricity, and some of the existing rules relating to the recovery of transmission use of system charges are quite perverse and can discriminate against consumers' interests.

TNSPs perform the following important functions:-

- deliver electricity to distributors and major industrial customers;
- facilitate competition between generators and between regions;
- facilitate lower generator reserve plant margins;
- provide voltage support;
- reduce ancillary services costs and
- provide a degree of competition for distribution networks by enabling by-pass.

Apart from the benefits arising from transmission networks, consumers also incurred costs from using the networks.

Perverse outcomes: Rate of Return

It has been noted by consumers (individual businesses and consumer groups) that the rates of return awarded to regulated businesses provide a better financial outcome than businesses operating in a competitive environment. This is a result of the regulator approaching the setting of WACC on a mechanistic basis without ever applying a reality test to demonstrate that the financial outcomes are consistent with competitive pressures.

This lack of a reality check by benchmarking the financial indicators which result from the WACC awarded to the regulated businesses has provided the regulated businesses with excessive rates of return not enjoyed by those operating in a competitive environment let alone similarly regulated businesses in overseas countries, such as those in the U.K. Excessive rewards to regulated businesses create their own problems: they encourage these businesses to devote resources to 'game' the regulators, by seeking higher levels of capex and opex. And if a light-handed regulatory approach is applied, based on statistical trend analysis to drive efficiency gains, it becomes clear that it will be inconsistent with the objective of "promoting efficient investment".

Perverse outcomes: Costs Recovery

For instance, the arrangement for recovering costs for use of the electricity network lies almost entirely with consumers (generators at best pay only shallow connection costs) and to simplify the NEM operation it is assumed that all electricity is generated at the regional node. Remote generators from the node pay a small premium to recover losses in transporting the electricity to the regional node, but no transmission costs. A remote consumer pays for losses from the node to its point of supply plus a cost for use of all the assets used in delivering electricity to its point of supply. This can present bizarre outcomes, for example in Mt Gambier, there is sufficient generation capacity in the region to supply most of the needs of the region. Yet Mt Gambier consumers pay for all the transmission assets used in delivering power as estimated by the TNSP. The effect means that Mt Gambier consumers actually pay a cost allocation that includes a share of the Pt Lincoln to Pt Augusta power line which is at the other end of the network. Anomalies, such as demonstrated in this example, abound.

Perverse outcomes: Derogations and the RAB

Currently, the electricity RAB assessment assumes that the depreciated optimised replacement cost (DORC) value is used for assessing the regulatory asset base, yet no assets so far have been optimised for redundancy or underutilisation, as the NEL permits (through derogations) the government owner to set the asset value for use in regulatory reviews. In the 2003 review of

Transend, the Tasmanian government set the RAB at some 35% above the Transend book value for its assets.

Perverse Outcomes: Interconnectors and the Regulatory Test

Inter-regional network augmentations are being constrained by the approach used by regulators as the inter-regional price reduction that will result from increased interconnection is excluded from the Regulatory Test on the basis that this is a “transfer of wealth” between generators and retailers, yet such an approach totally ignores the fact that it is consumers who pay for the network and not generators. The existing regulatory approach would only be acceptable if generators and consumers paid equally for the network.

Perverse Outcomes: Ancillary Charges

Charges for ancillary services have been increasing, and the transmission network can assist consumers reduce these charges. However, this potential is not recognised in the existing regulatory test for network interconnectors.

Perverse Outcomes: Locational Signals

The current allocation of costs for transport services works to the advantage of generators but does not reduce the burden carried by consumers. Currently 50% of transport charges are allocated on a postage stamp basis with the balance being allocated on an asset cost allocation. As generators pay little for use of the assets, locational benefits from the optimum siting of generators and industry are lost.

Perverse outcomes: Demand side responsiveness

Direct experience of consumers attempting to provide a demand side response in addition to reducing their costs of power have consistently been marginalised by the processes used by TNSPs and DNSPs to grant a consumer the full benefit of self generation, by reducing the costs of transport. The energy transport companies take the view that if a demand is placed on the system only once a year then the consumer must pay full value for the network as if the consumer takes power consistently. Whilst such an approach can be justified at an economic level it deters the development of demand side responsiveness in the NEM, and attempts to reduce the loads placed on the generation and networks by reducing demand at critical times. MEU would welcome the opportunity to share the actual experiences of consumers in this aspect of attempting to support the processes envisaged by the NEM architects, but which are being prevented by the pricing approaches used by the NSPs.

The above are only examples of some of the perverse outcomes in the NEM that have arisen from the current rules on the regulation of TNSPs. They illustrate the key priority issues that MEU and MEG consider should be addressed by the AEMC in this review.

The approach by MEU and MEG to this issues paper

The AEMC has raised a series of questions under a number of headings – **form of regulation, scope of regulation, performance obligations and incentives, approach to determining cost components, extent of discretion and design of the rules, and regulatory procedures.**

The following sections provide our response based on each of the main headings used by the AEMC to maintain consistency with the Issues paper

2. Form of Regulation

2.1 Introduction

In a world of the second best, economic regulation of natural monopolies – “essential facilities” such as electricity transmission networks – seeks to replicate what might be the outcomes (price and revenues) pertaining as if the businesses were operating in a competitive market environment. However, ‘difficulties’ arise and they have been recognised right at the outset by the Hilmer Committee²

“Neither the application of economic theory nor general notions of fairness provide a clear answer as to the appropriate access fee in all circumstances. Policy judgements are involved as to where to strike the balance between the owners’ interest in receiving a high price, including monopoly rents that might otherwise be obtainable, and the users’ interest in paying a low price, perhaps limited to the marginal costs associated with providing access”.

In MEU’s experience, it has been the appropriate access price which has been the centre of contention in all network regulatory reviews, with the debate focused on the regulatory rate of return, the allowed RAB, and the level of new capex and opex sought.

Experience also demonstrates the inherent contradiction between light-handed regulation and the ‘building block’ form of regulation. The former is necessarily less detailed and perhaps based on statistical techniques, infrastructure-intensive and given the information (and resource) asymmetry problems faced by regulators, it is difficult to imagine how a light-handed regulatory approach could be consistent with the building block form of regulation.

In addition, with the building block approach, based essentially on the Capital Asset Pricing Model (to arrive at a regulated rate of return) and the application of a WACC to the RAB, a wide range of possible values could apply, which requires regulators to apply judgements, which in turn exposes them to merits appeals.

This very issue is the basis for the current MCE Discussion Paper on Decision-Making in the Gas and Electricity Regulatory Frameworks released recently. In its response to the Discussion Paper, the MEU offers the view that

“...because the specific requirements set out under the NEL and the proposed NGL to guide regulatory decisions, may open the door

² National Competition Policy, Report by the Independent Committee of Inquiry, August 1993, page 253

needlessly to excessive reviews, the MEU suggests that consideration be given to inserting an additional requirement that explicitly enables the regulator to exercise judgment and to balance the interests of network providers and consumers in regulatory decisions, thereby limiting the grounds for needless appeals.”

There has been a continuing thrust by regulators and governments to provide “lighter handed” regulation as if in this way monopoly asset owners will reduce their demands for higher profitability and greater investment. It has become apparent that asset owners consistently use the “light handed” approach and regulatory discretion to maximise profitability. This in itself is not considered inappropriate as every enterprise has the responsibility to maximise returns for shareholders. But if the rules for controlling monopoly enterprises do not require rigorous assessments then there must be an expectation that asset owners will continue to use whatever means are permitted to achieve the maximum return for their shareholders.

Thus in one way the more the prescriptive the rules of regulation are, there is assumed to be less ability of the monopoly asset owner to use regulatory discretion to its benefit (bearing in mind the need to take a cost benefit approach as a prescriptive form of regulation is not without its own costs).

What is required is an approach (especially in the debate on the WACC) which clearly recognises that a regulatory decision must be seen as a whole and not a collection of parts. For example in the submission of the Treasurer of South Australia’s Review of the Essential Services Commission of SA electricity distribution price determination (which ruled on the review application by ETSA Utilities) in 2005, the Treasurer said:-

“It is important to note that ESCOSA has made a Final Determination with respect to the electricity distribution network pricing for ETSA Utilities as a holistic and integrated determination.

In effect, the Final Determination is made “on-balance” after considering a range of input components. Probably, the best example of this is the Weighted Average Cost of Capital (WACC), where a range of components come together to determine an appropriate single rate of return.

ETSA Utilities has sought a review of only the equity beta component of the WACC, whilst leaving other components unchallenged. I note, however, that decisions on the components of the Final Determination are not taken in isolation, but rather taken together to form a collective view on a reasonable price, that is consistent with ESCOSA’s statutory guidance, in particular, protecting the long-term interests of consumers.

The Government notes that the inclusion of a “Q” factor correction, which effectively ameliorates the volume risk faced by ETSA Utilities, must systematically lead to a lower equity beta.

The approach of ETSA Utilities in what is effectively “cherry picking” perceived unfavourable components, is likely to be contrary to the long-term interests of consumers which, in the Government’s view, were met by the Final Determination.

It is the Government’s view that regulatory decisions are made “on-balance.” It is considered opportunistic to attempt to cherrypick components of an overall WACC, which sits towards the upper end of the range of the most recent regulatory decisions for Australian utilities (apart from the QCA Final Determination which is expressed in post-tax nominal terms and is discussed elsewhere), as shown in the table below.....”

Thus if the regulator is to be permitted discretion, then there must be a requirement that prevents an Interested Party from seeking to use this discretion as the basis of a focused appeal (ie cherry picking), and to recognise that all of the regulatory decision is a balance, with each element having an inter-relationship with other parts of the decision.

Overall, the MEU and MEG agree with the building block form of regulation, provided that there are clear reality checks or benchmarking of proposed regulatory determinations, especially of the WACC. It is inevitable that a balance is necessary between a prescriptive, intrusive, information laden regulatory approach, and a light-handed, relatively hands-off and timely approach. Regulation is not costless and transaction costs can rise substantially if there is excessive intrusion. On the other hand a light touch approach can compromise consumers’ interests. A light-handed approach based solely on statistical trends analysis or indices is considered inadequate.

Existing arrangements

1. Should the Rules specify the form of regulation for prescribed transmission services (as currently) or leave this open for the AER to determine?

Either the Rules should be specific and prescribe the approach to be used by the regulator, or the Rules should recognise that there are a number of methods the regulator might use to develop its view as to what constitutes the efficient costs.

If the Rules permit regulatory discretion then the Rules must also provide for the regulator to use this discretion without the asset owner being able to cherry pick specific elements of the decision in isolation. If given the ability to use its discretion the regulator must develop a series of guidelines which explain how the regulator intends to use its discretion. These guidelines must be reviewed to ensure that they achieve the goal of only just recovering “efficient costs”.

The Rules should specify that ultimately, the regulator has to make a judgement to balance the interests of network service providers and users: Experience, especially in access arrangements determination, shows the ease with which merits appeals are lodged where asset owners are able to cherry pick specific elements (e.g. of the WACC) of the decision in isolation. The idea is to reduce the number of vexatious appeals and to minimise regulatory gaming.

There is the expectation that these guidelines would evolve into a set of prescriptive rules in their own right as this would then result in the achievement of certainty of regulation.

Equally the Rules (and subsequent regulatory decisions) must provide clear guidance to the asset owner in the development of its Access Arrangement application but prevent the asset owner from cherry picking the highest yielding approach to the development of the application.

2. Are there areas, in addition to those noted above, where the Rules and current regulatory practices differ?

Refer to the points made above.

2.2 Alternative approaches

The NEL objective is to ensure that the efficient costs for providing the service are recovered, and the objective of consumers is that this should be the maximum recovery, that is, that there should be no abuse of monopoly power.

There is no regulatory approach which can replicate the pressures of market competition, and regulation is seen as a second best option. Notwithstanding that monopoly assets do not have competitive pressures on them, this is no reason not to attempt to apply the best equivalent to achieve this competitive pressure.

The four options proposed (CofS, TCE, indices and price monitoring) do not impose competitive pressure as such. What they do is to limit the amount of regulatory investigation (particularly in the case of TCE, indices and price monitoring) to assess whether the regulated business is indeed seeking to reduce its costs to efficient levels, but they still only utilise historic costs as a basis for future costs. These approaches imply that the current level of costs for the service provided is indeed at the most efficient point and that thereafter there is a need only to adjust for exogenous market pressures. This is fallacious, as technical and technological improvements and innovation can raise efficiency substantially.

It must be accepted that after a period of 10 years of regulation with perhaps two detailed regulatory reviews for some network businesses, and with many other monopoly businesses only having undergone one regulatory review, there can be no certainty that the businesses have reached the point of maximum efficiency. Thus, to commence using a less demanding form of regulation from this junction is not warranted.

This particularly applies in the case of electricity supply which has become a truly fundamental input to every element of life at this time. Electricity usage is now all pervasive. All users of electricity have become totally dependent on it – whether directly for lighting, powering motors, computers, communication, cooling, cooking, heating etc or indirectly for food supplies, water supplies, sewage disposal, transport, petrol pumps, night time safety, etc. In fact the loss of electricity in this day and age would be catastrophic for the economy.

Thus regulation is essential, and of a form that should result in reasonable returns, encouragement to reduce costs and that provides a reasonable (but no more) revenue needed to provide the service required.

The current building block approach with regular reviews achieves this outcome.

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

The building block approach (provided that it examines the key inputs and benchmarks to demonstrate efficient outcomes), can be a transparent method for assessing the reasonable costs for service provision. As noted above the alternative approaches suggested require as a basis that the current costs are efficient and with the limited number of reviews undertaken so far, this assumption cannot be made.

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

Refer to comments above.

Flexibility must be balanced by the potential for appeal (particularly appealing against specific elements rather than the entirety of a decision which is a balance of competing demands) leading ultimately to increased uncertainty for all involved.

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

In this relatively early stage of the deregulation process, to contemplate new and/or more complex arrangements is probably not warranted bearing in mind the need for as much certainty of

2.3 Relevant factors

Market Power

The AEMC suggests that to reduce the amount of regulation of TNSPs a multi-layer approach could apply, with less regulation applying to those matters for which the TNSP has less market power.

There is an assumption in the AEMC issues paper that by having a few well informed customers (eg airlines in the case of airports) and adequate information disclosure there is an ability to reduce the market power of the monopoly service provider. That is, there is a countervailing force

represented by the airlines. This is not correct, witness the on-going debate between the airlines and airports. There is also an assumption that they will act in concert to achieve an outcome which will benefit their customers – but is this really correct? When there were two airlines operating in Australia there was little attempt by the airlines to reduce costs which were common to both and could therefore be passed onto their customers without losing market share. After all why work hard at the costs that are common to both when there are all the costs to address which are unique to each? Operating in a commercial environment means that the effort is dedicated to where the effort will result in a commercial advantage. Thus where costs will be common to any facility user there is little reason to dedicate resources which will impact equally on competitors and not vary the relativity between competitors. These costs are passed through to their customers.

The AEMC is referred to the price monitoring of airports and to the current debate between airlines and airport owners, in particular the concerns with asset revaluations and the ramping up of prices. The AEMC is also encouraged to examine the efficiency of the price monitoring regime applied, against the background of concerns about the lack of accounting separation, the treatment of land values and asset revaluations, and the consistency of accounting principles.

In the case of electricity this lack of consumer support has become very apparent. Following the principles enunciated by AEMC, it would be expected that the electricity retailers would actively carry out representations to reduce costs on behalf of consumers. In fact, what consumers see is that the retailers typically pass through all regulated costs and other costs associated with the NEM. A typical bill for electricity lists all of the pass through charges which are: network peak, offpeak, standing charges and demand charges, the E&REC - MRET charge, NEMMCo ancillary charge and NEMMCo pool fees. In all of the reviews of network charges carried out in the past decade since the first network review was undertaken, it is not apparent to us that there has been any attempt by any retailers to assist their customers (consumers) reduce those charges which the retailers can pass through to consumers at no detriment to their retail competitive position.

Thus experience shows that although it is so often assumed that Market Participants will actively support consumer interests; the facts of the matter are that such an approach by retailers only occurs when there is a potential benefit to their market position.

The assumption that any Market Participant will use its own resources to reduce costs to consumers where there is no improvement in their competitive position is totally unfounded.

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

Transmission services are provided by a monopoly and there is little opportunity for them to be subject to competition. The attempt to encourage market transmission service providers has resulted in such enterprises becoming regulated as they did not provide a better alternative to the regulated option. The irony is that market transmission service providers benefit from 'creating' regional price differentials, and not in smoothing these differentials.

The Market Participant customers of TNSPs (ie the retailers and generators) have not sought to reduce the costs of transmission (or distribution) as they are fully aware that it is consumers that will bear the costs and that these costs can be passed through without any detriment to the commercial position of the TNSP customer. Thus there is virtually no pressure exerted on TNSPs other than that undertaken by major electricity consumers, or where a Market Participant has a specific issue which impacts it directly. That this is clearly the case is blatantly obvious when reviewing the responses to regulatory reviews and at public conferences held to discuss transmission and distribution issues.

Direct TNSP customers have done little to constrain the conduct of TNSPs and they have no incentive to commit their resources in a way which does not provide them with a commercial benefit.

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

As the market power lies entirely with the TNSP to assume that a Market Participant will use its resources to attempt to limit the ability of the monopoly provider to reduce its costs or improve its performance without reimbursement has no basis. To therefore accept that there may be services offered by the TNSP which would respond to a less prescriptive approach cannot be demonstrated or supported.

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

No, due to the market power held by the TNSP and the inability and lack of preparedness of Market Participants to dedicate resources to achieving such an outcome on behalf of consumers.

Information asymmetry

As noted above, the fact that a TNSP must know its network business better than the regulator is evidence that there is a powerful and extensive information asymmetry between TNSP and all other parties. Further the TNSP has a vested interest in concealing any information which could lead to the regulator assessing that there is greater efficiency available than that based on information which is divulged by the TNSP. The recent review of the Victorian distribution businesses highlighted this when the regulator used actual past performance as the fundamental benchmark for efficient costs rather than the claims made by the businesses.

9. How significant are information asymmetry problems for electricity transmission regulation?

It must be accepted that as the TNSP has qualified staff and by operating its businesses it must be assumed that it is better qualified than a regulator or other Interested Parties to understand the needs of the network and how to maximise the output for the minimum cost. At best a regulator is seen only to have a partial understanding of the fundamentals of operating an electricity transport network.

Equally, the TNSP as a corporation in its own right has the obligation to its shareholders to maximise the returns it gets from use of the assets. Thus the party with the greatest competence and all of the necessary information about operating a network also has the obligation to maximise its returns.

This then requires the regulator to use other means to assess the reasonableness of the observations and claims of the TNSP as there can be no certainty that the TNSP has provided all of the relevant data.

For the regulator to assume it has received a full and comprehensive response is an assumption without justification, nor established by experience with regulatory reviews of TNSP's over the past decade. Thus information asymmetry must be considered a major issue for the regulator

Continued

10. What issues arise under the current building block approach in respect of information asymmetry?

It is all of the information that is provided under the current approach that needs to be verified not only for accuracy, but for completeness. It must be assumed that a TNSP will seek to provide information if it considers that the release will jeopardise its negotiating position with the regulator.

This view is not limited to TNSPs as all businesses will attempt to avoid the party with which it is negotiating to discover information which would lead to a reduction in the resultant commercial position. However, for a regulator (or other negotiating party) not to actively seek all of the information it requires to ensure an equitable outcome, and rely purely on exogenous market movements, is doomed to return a less than optimum outcome.

Clearly, there is a need for all TNSP's to collect and collate data which can be presented as a regulatory set of accounts, with clear accounting and regulatory standards and guidelines established by the regulator. This set of accounts will be presented at each regulatory reset. Regulators will be able to require the collection and collation of data between regulatory resets. These accounts must be signed off by the chief executives of TNSP's to avoid 'errors' and 'omissions'.

Regulators should also be empowered (and prepared to exercise that power) to penetrate corporate veils to enable them to establish that related party transactions are robust and are at 'arms-length'.

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

All experienced negotiators are well aware of the need to seek as much direct and indirect information available and accessible to ensure the optimum outcome. For a regulator to assume that it has sufficient information to ensure an equitable outcome by relying exclusively on exogenous information, has no certainty that it has fulfilled its obligations to all of the parties involved.

The correct approach is to use direct information (see above) as well as benchmarking to properly perform a regulatory review.

Uniqueness of each business

The AEMC paper provides a very good description of the dilemma faced relating to benchmarking and the imposition of industry wide benchmarks in isolation of the individual (even unique) features of a specific TNSP. A review of all of the TNSP (and other) applications highlights the point that each of the Australian TNSPs considers that it has unique features when compared to the other TNSPs. To a reasonable extent, these comments have validity and cannot be ignored. Equally each of the TNSPs have features which are common and thus can be used in comparison benchmarking.

Thus the point made above again has relevance – that to use one tool (eg benchmarking) provides insufficient certainty that the outcome will not over or under provide adequately for each business. The only way to overcome such a concern is by the use of as many tools as are available to produce an appropriate outcome.

This means that there is a need for a top down and a bottom up review of the actual and perceived needs, a comparison with historic performance of the specific business and a benchmarking comparison which can be adjusted for specific and unique features of the business.

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

The concurrent review of needs measured by a range of approaches should be undertaken to give the necessary confidence that the decision provides an outcome which has a high degree of confidence in being as close as is reasonable.

Such an approach is used in competitive businesses when they assess their own needs for the future period. A business in a competitive environment seeks to have its products priced on a consistent basis and with a margin above the cost of production. This requires the business to assess what it costs into the future will be. These costs are debated and set using a number of separate approaches to ensure that they are indeed achievable and at the lowest level to identify the selling margin.

This approach is no different to what a regulator should do. To use a range of different approaches to setting a regulatory cost is the same as that carried out internally by every commercial enterprise. To benchmark across businesses and adjust for the specific differences for a business compared to its competitors is standard practice.

2.4 Form of price control

Under the revenue cap arrangement it is accepted that this reduces the risk to the TNSP except for the potential that there may be an over or under in capex which occurs during the period. Consumers have consistently seen that, except for a couple of instances, the capex for an NSP tends to under-run the allowances granted. This provides the NSP with an unearned benefit and the issue has been of such concern that some regulators have included in their decisions the need to “claw back” the benefit of unused capex.

It is quite apparent that NSPs have consistently over claimed for capex at a review with the express approach being that of an ambit claim.

Capex must be prudent and efficient and be demonstrable as such, whether on an ex ante or ex post basis. If a regulator is prepared to carry out two tasks, the concern voiced in the paper can be readily overcome in that prudent and efficient capex unforeseen at the start of a period could be accommodated within the current approach. The two issues are that

- The regulator must assess all capex for prudence and efficiency before it is rolled into the asset base (this is already a requirement under the Rules)
- The regulator should claw back the unearned return on unused capex.

If these two actions are undertaken then the risk of over awarding capex at the review diminishes, and places the NSP clearly under notice that it must be able to demonstrate that the investment program will be examined in detail.

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

The current arrangements can work if the return on unused capex is “clawed back”

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

If there is a claw back of the return on unused capex, the risk for the TNSP is reduced and so the need to adjust the MAR becomes less of an issue. Equally to build into the Rules that the MAR should be adjusted due to an increase but not a decrease on capex used, places the risk with the consumer of unnecessary price increases.

Alternative arrangements

The AEMC paper suggests that there are different approaches that can be used for price control and asks whether it is appropriate for there to be discretion available to the regulator.

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

The Revenue cap approach has a significant advantage over the price cap approach. One of the main points of contention with the price cap approach is a forecast of the expected growth in demand. This places a potential increase risk on both consumer and NSP with the regulator tending to err in favour of the NSP to the detriment of the consumer. The assumption is that a price cap provides an incentive on the NSP to increase usage of the network and so reduce the overall costs in the medium to long term.

What consumers have seen under the price cap is that the approach is used by the NSP to increase revenue by tariff manipulation and the growth expectation has not been fulfilled, thus not increasing utilisation with its resultant price reductions.

A revenue cap provides certainty to the NSP and the consumer, whereas the revenue cap is biased towards the NSP and has not resulted in any apparent benefit to consumers. If consumers are to see the lowest costs then it is clearly apparent that this will only come with reduced risk allowances to the NSPs.

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

The regulator requires some guidance as to how it should use its discretion. Under the gas access code, the discretion effectively lies with the NSP, and this encourages the NSP to use whichever option it considers will recover the greatest return, and this must come at the detriment of the consumer.

In this case the regulator must be given guidance, and this is best provided as a Rule.

The AEMC paper suggests that revenue and price caps can be used or a hybrid developed which reduces risk, but all of the attention is devoted to the risk faced by the NSP, it does not develop a countervailing view as to the risk that is faced by the consumer as a result of any of the options considered.

The views espoused in the paper imply that less prescription is good and that the NSP should have a greater say in the development of its pricing approach (eg whether to base more revenue on usage and less on recovering fixed costs). What is absent from the discussion is any view as to the impact these alternatives will have on consumers. As noted above the NSP is required to maximise its return to its shareholders, so to assume that granting greater flexibility to the NSP might reduce complexity (and therefore costs) must be balanced by the expectancy that it will use such flexibility to recover a greater return. As seen in the recent Victorian EDPR this is exactly what the businesses did.

The assumption that a price cap approach is less complex than a revenue cap is a bold assumption. The introduction of a forecast of future growth and the need to balance a basket of tariffs to comply with the CPI-X formula dramatically increases complexity and for a consumer to be satisfied that the tariff they see rise and assume that this rise is balanced by a fall in another tariff which does not relate to them, increases complexity and angst immeasurably.

Consumers are not convinced that a price cap approach does reduce complexity not that it provides a real incentive on the NSP to maximise growth and so reduce tariffs in the long term.

The AEMC paper assumes that there is a need to incentivise NSPs to invest in the network. Investment in the network should only occur if:-

- The additional demand will more than offset the costs of the augmentation
- The additional generation connected will reduce the costs to consumers
- The additional cost will result in an improved utilisation which will reduce overall costs to all consumers
- The additional costs will reduce opex in proportion to the investment.
- The additional cost will provide an appropriate increase in longevity of the network compared to the cost.

To incentivise any investment other than for these reasons is neither prudent nor efficient.

A prudent asset owner will invest if it sees that it will either prevent reduction in or gain an improvement of its profitability or that the investment will prevent loss or

cause an increase of market share either by reducing costs of production or increasing production for a lesser unit cost.

Any incentive arrangements which are contemplated to encourage investment by NSPs should be based on these commercial imperatives rather than drivers which are based on supposed economic assumptions.

17. What characteristics of electricity transmission are relevant in considering the choice of form of price control? Do these characteristics differ from those for electricity distribution where price caps often apply?

There is a need for clarity, understanding and price reflectivity to be easily seen by consumers. A revenue cap provides these more readily than does a price cap. The supposed incentive that a price cap is intended to deliver is not readily seen or has not occurred.

The AEMC suggests that the main reason for moving from a revenue cap (other than the supposed incentive) is that the MAR can be adjusted more easily to incorporate unexpected but needed investment which would not otherwise be recovered until the next review.

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

The key factor is the balancing of the increased risks to the NSP and consumer against the demonstrable and quantified benefits that will result. To base an approach on economic theory when not all of the aspects have been considered and quantified exposes consumers to paying a premium for the service provided

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

The assumption that a price cap incentivises the NSP to maximise utilisation of the network has not been proven. To incentivise augmentation of the network for any reason other than to provide prudent and efficient services (i.e. services that will result in the augmentation providing a benefit to consumers) should not occur.

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

Consumers see that there is only a detriment under a price cap as the supposed benefits to outweigh the detriments have not been proven to occur, yet the clear cost penalty of a price cap (erring in favour of the NSP

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

The move towards the price cap increases risks to both consumers and NSPs. The revenue cap is seen as the lowest risk option and therefore should be the lowest cost option. Unless there is a demonstrable and quantifiable benefit (which has yet to be shown to actually occur) to outweigh the increase risk of a price cap (or a move towards it) then the lowest risk option should be used

3. Scope of Regulation

The development of the electricity system in each jurisdiction was carried out by the State government, although in some cases very early elements of the electricity system were developed either privately or by local governments. The networks that are seen today were developed on a state wide basis predicated on the assumptions that the state government was the party best able to provide the lowest cost electricity supply system with the maximum of safety and security.

As a result the transmission and distribution networks are designed and built in a way which minimised unnecessary duplication. Thus the allocation of the networks by the government owner to corporations (either privately or publicly owned) would not and could not provide for competing corporations for the same service. There have been attempts by private organisations to duplicate parts of the networks (usually between adjacent regions) but the success of these market driven network augmentations has been modest at best and each of them has reverted to being a regulated service. The only market interconnection that still exists is Basslink which has effective government underwriting provided by Hydro Tasmania.

Thus the electricity supply networks are effective monopolies with virtually unlimited market power and which have this market power over almost every electricity generator (except those embedded within the distribution network) and every consumer (except those directly connected to a power station of which there are very few).

The very few attempts to duplicate transmission networks have meet with commercial failure, which demonstrates that there is little or no opportunity for a second party to build a competing network. Further to duplicate the networks would do little to reduce costs to consumers and most likely would result in higher costs.

It is therefore apparent to all that the core activities of the network service providers (that of transporting electricity) cannot be considered to be anything other than a monopoly service, and therefore must be closely regulated. As the transportation services are not necessarily related to the voltage used other than as delineation between transmission and distribution services, to assume that certain voltages of transmission could be more readily duplicated by another party is incorrect. Thus it is the function of the transmission (and distribution) which defines the degree of market power, not the voltage.

Where there has been an agreement between a consumer and the transmission service provider to connect directly, once the connection is made, it becomes a monopoly service, for to assume that either party would agree to build a duplicate

connection from the same source to the same point of consumption, implicitly means that the consumer will have to pay twice for the same transport service. Such a concept is commercially and conceptually flawed.

There are some services which the network can provide which could be considered to be competitive such as voltage stability which can be provided by either a generator or the network. Such ancillary services can be sought by NEMMCo on a competitive basis.

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

The deliniation as currently used results in the correct interpretation – that transmission services are a monopoly service. The use of voltage as a means to differentiate between prescribed services is flawed. The prescribed services should be assessed on the service provided rather than the voltage used.

Services outside the revenue cap

The NSP can provide services outside the direct transport service which is the core activity. Because the NSP is the main party involved in the transportation of electricity, it is quite difficult to have a competitive arrangement introduced for the final elements needed. Direct experience with negotiating such services is that in addition to the NSP being the owner of some of the network involved in providing these additional services, the NSP has the power of being the incumbent, which provides a position where to get a third party involved is commercially impossible as to provide the full service required will need the establishment of the third party to manage a only small element of an augmentation. Thus consumers have seen few examples where third parties become involved in another TNSPs geographic area. Thus not only has the core activity become a monopoly but the ability for a third party to enter a TNSPs geographic area is constrained by commercial implications. As a result there are very few (if any) examples where a third party has provided competitive services deep within a TNSP area.

The assumption that it is possible to negotiate with a monopoly provider is a “courageous” one. Consumers have attempted to negotiate with transmission service providers and the outcomes have invariably been advantageous to the NSP, with the NSP being able to pass all risk to the consumer. The principle of a negotiation implies “give and take” with the party best able to manage the risk accepting the risk. Experiences of many such negotiations with the monopoly owner of network facilities, shows that all risk is transferred to the consumer.

23. Are there other transmission services that may be amenable to a negotiate-mediate-arbitrate model of regulation?

Whilst it may seem to be possible that negotiation (or even competition) may be possible within a TNSP area, the actuality is that there is little possibility that competition will provide encouragement to a TNSP to negotiate. Thus no services that a TNSP could provide as part of its core business are really amenable to negotiation.

24. Are the 'negotiate—mediate—arbitrate' arrangements applying to transmission access services operating satisfactorily?

Consumers have no experience of the efficacy of the current mediation rules as they are only available to market participants and end users are not Market Participants.

25. Is there an opportunity to improve the efficiency of these arrangements and, if so, what problems need to be addressed?

Consumers are excluded from the Rules system for mediation as the Rules only apply to Market Participants. For equity as consumers actually pay for the TNSP services, the access to mediation/arbitration should be available to end users

Consumers generally accept the standard of service and quality of supply as provided by the TNSPs. The reasons for this are that few end users are directly connected to the transmission system and it is recognised that most of the reliability and quality issues relating to electricity supplies are a function of the distribution system rather than the transmission system.

Where a consumer is directly connected to the transmission system, they are usually advised that the cost to improve the reliability and quality of the transmission supplies is so great as not to be commercially viable. In such cases the end user will either tolerate the standard of supply or carry out internal adjustments to be able to manage the supply as provided by the TNSP.

The benefit of multiple consumers connected to a regulated network is that if many consumers are dissatisfied with the quality and reliability of supply, this matter can be taken to the regulator for attention (as did the end users in the Colac-Otway area of Victoria during the recent EDPR) highlighting that many consumers are dissatisfied and that the regulator requires the NSP to improve the service.

Thus for a single user to pay for NSP enhancements of reliability and quality is commercially not viable, it requires a number of consumers to be joined together. As most consumers find acting together a challenge the benefit of the regulator of the service is that consumer views from a wide range can be recognised and so pressure brought to bear and the costs spread over a large number of consumers who all benefit.

26. To what extent do TNSPs provide services on a basis higher or lower than the service standards referenced in the Rules?

There are few examples where a single consumer has paid the TNSP to improve the quality of service because the costs of doing so are excessive for one party to carry.

It is most unusual for an end user to want a reduction in the reliability or quality of supply.

27. What issues arise in relation to the negotiation provisions in the Rules for these services?

The fact that a NSP will load all of the costs for service enhancement onto the party requesting the enhancement and make little attempt to secure other consumers to pay for the benefit suggests that the NSP will only react to the pressure applied by a regulator, supporting the view that regulation itself is a tool to share costs for improvements in reliability and quality, rather than the ability of a consumer to seek the service.

28 Are there currently any services provided by TNSPs that fall under the provisions for 'excluded transmission services'?

We are not aware of any such services

Contestable services

As noted above it is service rather than the voltage that should be the consideration for assessing whether assets should be regulated. Whilst there are issues of how regulation is performed, the experience of consumers with non-contestable services highlights that the NSPs treat consumers with the same approach that they are a monopoly service and that consumers will take what is offered.

29. Are the current arrangements for defining and separating contestable transmission services satisfactory?

Yes.

In what ways could they be improved?

Are there other transmission services that could be treated as contestable?

3.2 Alternative arrangements

The AEMC paper refers to the Gas Code as providing an alternative approach to classifying whether there are alternatives to the in/out model used in electricity regulation. Before considering whether the Gas Code multi layer approach has applicability to electricity regulation it is essential to identify why the Gas Code permits such an approach, and in reality what elements of the gas pipeline industry can utilise the multi layer approach.

Firstly, gas distribution networks are seen as monopoly assets and the review by the Productivity Commission does not recommend that gas distribution not be subject to regulation. The PC accepts that a single pipeline for a gas field to a single point of demand with no competition from other sources is a monopoly. The PC and the Australian Competition Tribunal believe that two pipelines from separate gas fields to a common consumption point should not be regulated (eg Moomba Sydney Pipeline competes with the Eastern Australian Pipeline).

Where the analogy fails is that in the gas example there is a single source of gas (a gas field) which has the potential to provide the bulk of the needs of the consumer point. In counterpoint a single generator in the electricity system can provide only a small element of the total energy needs. Thus an electricity system has many feeder points and extraction points whereas a gas pipeline has usually one feeder point and a relatively few exit points.

Relevant Factors

- 30 Are the current arrangements in the Rules for identifying and classifying different elements of transmission service as prescribed, excluded and contestable appropriate? What potential improvements could be made?**

Yes.

- 31 To what extent is there scope for any element of the existing set of prescribed services to be provided on an excluded or contestable basis, thereby reducing the scope of the current revenue capped services? What services would these be?**

Consumers are satisfied with the current arrangements. We would expect that granting increased freedom to the NSPs will result in increased costs to consumers.

- 32 Are there any elements of existing transmission services not presently included as prescribed services that should be brought within that definition?**

Consumers are of the view that all activities of TNSPs should be subject to regulatory review, as even the so-called contestable services are not really subject to competition due to commercial constraints of getting a competent competitor to enter into a TNSP area.

- 33. Should the services to be included within the scope of the main regulatory control be set out in the Rules or left to the discretion of the AER? If the latter, what is the extent of appropriate guidance in the Rules as to the principles that the AER should adopt in making this determination?**

To allow discretion on an issue gives the TNSP the opportunity to lobby the regulator to exclude the service under review of the discretion. It is considered that less discretion reduces the power of the TNSP. Further overview by the regulator of any contestable service should be available to access users with the regulator able to arbitrate on the final outcome, and the TNSP bound by the arbitration.

34 Who is the appropriate body to determine the potential contestability of services? What guidance (if any) should be set out in the Rules on the principles to be adopted in such an assessment?

Equally the regulator should not necessarily be the most appropriate body to arbitrate and then decide on the outcome – some separation should exist between these two activities. As the AEMC has both the understanding of the issues and the technical competence to assess the issues in depth, it is suggested that the AEMC should assess the potential contestability of services. The rules should assume that all services should be regulated but set the necessary guidance for deciding what service might be made contestable.

35 Who is the appropriate body to determine the form(s) of regulation for services falling outside of the main regulatory control? What guidance (if any) should the Rules provide on the form of this regulation?

All TNSP services should be regulated except those decided by AEMC which might be considered as contestable. The AER should have the overview of the way the contestable service is costed to ensure the outcome is appropriate.

4. Performance Obligations and Incentives

4.1 Existing arrangements

The transmission service is a key element not only for the transport of electricity but also of the transport from the lowest cost generators available to a consumer. The loss of an element of a network can have major implications to consumers. For example the recent loss of part of the ElectraNet SA transmission system resulted in many consumers losing supply and those still receiving supply were exposed to VoLL of \$10,000/MWh.

Thus the availability and reliability of a transmission network has major implications for consumers. At the same time, there is only a minor incentive for the TNSP to pay a premium or cost on its capital and operating programs to ensure that the service is available when it is most needed.

Currently there is a program under the aegis of the ACCC/AER (the service standards working group) examining the ability of the TNSPs to be able to quantify the value to consumers for having the network available when it can provide the maximum benefit to consumers. When this working group develops its report then there is potential for being able to reward the TNSP under the regulatory regime for providing availability when it has most value to consumers.

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

The TNSPs should be able to have a reward for ensuring availability of their network when it has value to consumers. This reward should not only reimburse the TNSP for any costs it incurs in providing the benefit but also provide a degree of additional profitability for undertaking the effort.

Because such a scheme relies on a number of subjective assessments and needs some degree of quantifiable outcome to support the granting of the reward, such a scheme should have regulatory oversight to ensure that it is not being abused.

37 What service performance measures should be targeted?

Consumers are seeking the availability of networks when it provides a benefit. Thus the service measure that has meaning to consumers is availability of the network and its timing because this has value. This should be the basis of the reward to the TNSP.

Should they be general in nature or targeted at different categories of network users?

All consumers benefit from the availability of the network although some may suffer a greater impact from loss of supply than others. For example a short loss of supply may trip a production process and require a restart causing loss to the manufacturer, whereas the short term loss of supply may have only a marginal impact on a domestic consumer. A long term loss of supply might have the same impact on the manufacturer but the impact (in proportion) to a large number of domestic consumers through loss of food and other impacts may be greater than that suffered by the manufacturer.

Equally loss of availability at specific times can cause the pool price to spike. Such a spike might affect domestic consumers more greatly than manufacturing consumers as domestic consumers pay a much higher risk premium on electricity supplies than do most manufacturers.

Thus it may be impractical to assign a lesser or greater benefit to one or other of a customer class in a general way and a targeted incentive would have to assess the relative impacts on the different consumers, the timing of the loss of availability and the durations of the supply losses.

Should they be based on technical measures of availability and outages (as at present) or market impacts?

It is the financial impact on consumers that is of concern. Thus the measure of availability must recognise the market impact on consumers. If the loss occurs when consumers are not using supply, the value of the availability at that time is greatly diminished.

Precisely what measures would be most appropriate to promote the NEM objective?

It is availability (and its duration) at a time when the loss of availability has the greatest financial impact that has value to consumers.

38 How should target performance levels be set?

The target performance measures must be set to maximise the availability of the network at times when the network is essential to maintain supply and keep regional pool prices at the lowest levels.

If market impact measures are proposed, how should the difficulties surrounding the identification of TNSPs' roles in causing market impacts and the measuring of market impacts be addressed?

There should be no reward for not doing anything. However if the program of the TNSP is clearly one which is aimed at providing availability at critical times and for the minimum of lost time, then a reward should be provided.

39 How should achievement or non-achievement of performance levels be linked to TNSPs' regulated remuneration?

The value of the reward or penalty must be linked to the effort undertaken and to the benefit it provides to consumers. This can be included as an allowable increase or decrease in the revenue cap for the ensuing year as currently there is a yearly adjustment already undertaken to adjust for the unders-and-overs of the current year

40 What share of a TNSP's regulated remuneration should be at risk through service performance incentive schemes?

The level of reward or penalty must have meaning to incentivise the actions being sought.

At the lowest level the incentive must be sized so that the cost of undertaking the necessary actions is covered by the reward. Rather than setting a proportional of the allowable revenue, perhaps the reward could be set as a multiple of the costs the TNSP expects to incur to achieve the targeted outcome.

At the upper level the reward must be less than the costs incurred by consumers by failure of the incentive

4.1.1 Capital expenditure

There is no basic incentive on a NSP to invest because it sees there might be a need, that the investment will be good for the network or consumers. A NSP will only invest if there is money to be made from the investment.

Subject to funds being available, an investment will occur if by investing the return earned on the investment exceeds the return that would be achieved in other arenas for the same risk. It has become blindingly obvious from the recent floats of regulated assets (by Alinta, by SPI, by CKI, by BBI) that there is an appetite from the market for high yielding investments with the secure cash flow that electricity and gas networks provide.

This was identified by Mr Roger Leaning of ABN Amro Morgans when discussing the recent acquisition of an under sea electricity cable by Babcock and Brown Infrastructure when he stated:-

“BBI and their rivals [crave] more secure assets for their reliable performance. That’s the whole aim of these types of vehicles [which are a long term stream of reliable payments that can support a lot of borrowing and an attractive dividend yield]. They deliver predictable, reliable cash flows³

Thus, if the return on investment is attractive enough then any investment, as long as the regulator accepts it, will be made. If the return offered by the regulator is higher than the returns available for more risky investments then a regulated entity will be encouraged to over invest. If the returns available from the regulator are so low that the return is less than that which can be achieved by less risky investments, then there will be under investment in the network.

To assume that other less intangible incentives will encourage investment is to deny the fundamental reason for any party to invest – that a return will result from the investment. Governments might view that a lower return from an asset will be acceptable than a commercial enterprise but that is denying the incentive of a government wanting to invest to keep its voters content.

Thus investments in the networks will be made if the regulator offers a high enough return on the investment and that the regulator will allow the investment to be rolled into the asset base in perpetuity. There is no other reason for a network owner to invest unless these criteria are met, although a government asset owner may also want an investment to proceed if failure to invest has an impact on re-election.

³ Australian Financial Review 15 November 2005 “Diversity adds power to Babcock’s arm”

The role of chapter 5 of the Rules is twofold.

1. To identify what might be necessary to ensure what the network needs to be able to provide reliable supply, and
2. To provide sufficient evidence that the proposed investment by the NSP can be demonstrated to be prudent and efficient. By fulfilling these requirements the network owner has worked to eliminate the risk of the regulator deciding not to roll into the asset base the new investment.

Thus the regulator has a task to identify that the return it provides for regulated assets is sufficient to provide a return large enough compared to the risk to ensure that the attraction to invest in the network is present, but that the return is small enough not to create the incentive to over invest. Over investment will occur if the investment would occur for a more risky investment using the same rate of return. To assess this balance requires the regulator to identify what is the band width created by these two criteria relative to the risk of the investment.

So far no regulator has attempted to carry out such an investigation preferring instead to rely on the mathematical approach of the CAPM, based on assumptions of inputs to the formula to generate a figure which fits into the band width. It is essential that this bandwidth be clearly identified. There is no doubt by the avid acquisition of shares in the market floats of regulated assets that the returns granted by regulators have exceeded the lower bound of the band width. What is absent is any market test independent of a regulated asset owner⁴.

The AEMC should require that the Rules include for the AER to carryout a series of market based tests to identify the upper level at which at which investment is likely to occur for a more risky enterprise to the regulated asset for the same return. By examining the actual rewards generated in a competitive market the AER can develop a bandwidth of rates of return for no investment in the regulated assets ranging to investment occurring for a more risky venture than that of the regulated asset.

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

The Rules should stipulate that the rate of return awarded by the AER should lie between the upper and lower levels of returns which either provides for no investment or investment in more risky ventures in the market place.

⁴ For example the approach by Prime Investments over investing in the Dalrymple Bay Coal Terminal augmentation was an example of a regulated entity manipulating the regulator through a threat not to invest, and cannot be accepted as an independent market test

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

No. This should be a requirement of operating the network, and not incentivised

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

There is an implicit incentive already present to ensure that alternative options to network augmentation are considered in that if the investment is not approved in full by the regulator as being prudent and efficient and therefore able to be rolled into the asset base, then the full value of the investment will not be recovered. The regulator has the responsibility to ensure proper reviews of investments made.

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

The Rules permit others to connect to the TNSP assets. If funds are granted to the TNSP for a specific purpose which has been agreed as being necessary then the TNSP must be required to carry out the work at the time agreed, or lose the benefit of the capex included in the revenue cap. If another party carries out the work for which approval has been granted then the party investing should receive the benefit approved and not the TNSP.

4.1.2 Regulatory asset base

The issue of the regulatory asset base (RAB) has three essential implications.

- The initial values for RAB were set by the owners of the assets under derogations or specific instructions included in Chapter 6 of the Electricity Code. There has not been a sincere attempt to provide an initial value for the assets assessed independently. An example of this approach is the valuation of the Transend assets which was set by the Tasmanian government

regardless of the views of the regulator.

- The RAB is increased by the injection of approved capex
- The RAB is intended to be optimised on a regular basis to exclude assets that are redundant or are actually used at a capacity below the design rating

The fact that the asset values for TNSPs have not been independently assessed has resulted in an invariably higher value placed on these assets than can be properly and fairly justified. The outcome of this has been that consumers are paying a higher revenue than they should as result of over priced assets. To accept these inflated values and then build off these in perpetuity means that there will never be an optimisation and thus there will never be an adjustment based on a reasonable and fair value for the assets.

With regard to the stranding of an investment at a point in time in the future is of concern. However, stranding of an investment only occurs if the regulator carries out a subsequent optimisation of the asset base. If no optimisation is carried out (as suggested in an earlier section of the AEMC paper) then the issue of stranding has no foundation.

If an investment is made that meets a reasonable level of interrogation and at the time the investment is made is considered both prudent and efficient, then rather than pay a premium on the rate of return to accommodate this risk, there is merit in permitting the retention of the stranded asset in the asset base. On balance providing the rate of return awarded is below the upper bound of the investment bandwidth, then there is support for permitting the asset to remain in the asset base and not be “economically stranded” as implied by re-optimisation.

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

If there is an exposure to later optimisation, the business risk faced by the TNSP is greater. Thus, if this risk is retained then the TNSP should have a greater return than if the return was based on the lesser risk. If the TNSP has carried out an investment which is demonstrably sound (and meets the prudence and efficiency test) then in all likelihood the investment will meet the prudence and efficiency test into the future, although there is an acceptance that this might not apply in all cases.

Thus consumers are faced with the dilemma of paying a higher return on assets that most likely will not be optimised in the future, or accepting that a lower return is a better option when considering that there will be few examples where the asset base will be reduced due to optimisation.

On balance consumers see that the return should be reduced and accept the risk that the regulator has carried out its tasks of assessing that capex rolled in is prudent and efficient into the future

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

If the regulator does its job properly and assesses all capex for prudence and efficiency then the risk to the TNSP and the consumer is lower. By eliminating the potential for future optimisation of capex which has been demonstrated as prudent and efficient at the time, this should reduce the risk faced by TNSPs and so a lower return should result. Thus a lock in approach of prudent and efficient capex is supported if all capex is properly assessed at the time and if a lower rate of return is awarded to recognised the lower risk profile.

The incentive process for opex, capex and service standards recognises that the TNSP should be attempting to reduce the need for capex and opex over the long term whilst improving the quality of services.

If actual capex is rolled into the asset base after passing the prudence and efficiency tests then the incentive program is not impacted. There is a fine balance between capex/opex and service standards, with increases in service standards resulting (perhaps) from increases in capex and opex. To assess the benefit of improved service levels requires an ability to quantify the benefit to consumers in order to assess the value of the increased capex/opex. This requires the establishment of a baseline (a reasonable service level for a given capex/opex level) and a method of quantifying the improvement in service. These were addressed in the earlier section.

4.1.3 Return on and of capital expenditure

Before a decision can be made in relation to what return of, and on, capex should be permitted and on what basis, it is essential to understand what the drivers behind a decision to invest are.

The following explanation of the drivers behind investment were provided by the EUCV to ESCoV in relation to the recent Victorian EDPR

Is investing in a regulated environment different from other investments?

Buying in the stock market (particularly the accumulation index which is the basis of setting the MRP and provides guidance to an appropriate value for equity beta) provides a diversification of risk. Diversification of risk is reduced when the regulator sets the parameters for a single focus business such as the energy transport businesses. It is on the basis that a regulated business has only a single focus that the regulated businesses consider that this lack of diversification introduces an increase in the risk profile compared to the diversified investment. If the risk profile is increased then the equity beta should be higher.

Examples of where such a single focus has acted to the detriment of a monopoly business is where an investment has been made and the sunk assets established, yet the fundamentals of the investment have not been realized resulting in a major underperforming investment. Where such an investment has been made in a monopoly asset which is then regulated, the NSP alleges that regulation prevents an over recovery to balance investments made which under recovers.

The fallacy of this argument lies with what happens in a competitive environment. It is accepted that businesses operating in a competitive environment due make investments which with the passage of time prove to be major errors. A high profile example of one such is the BHP hot briquetted iron plant in the Pilbara. BHP has made other investments which have offset this loss making venture and regulated businesses are of the misguided view that such other investments are achieving unopposed super profits. What they fail to identify is that as soon as a competitor is thought to achieve super profits, then competitors immediately enter the same market and reduce profits to a more modest level. Very few, if any, businesses are permitted to operate in an environment where super profits can be made without competition starting immediately to reduce such super profits.

In the case of regulated businesses, they are regulated because there is no competitive pressure possible. It is absurd to consider that an electricity distribution business will see a competitor's poles and wires being erected. This simply does not happen as these are being erected in the main on public land, and effectively the public has given a right of access to just the one business, and will not allow a right of access to a second business. To do so is wasteful in the extreme. Regulation is an approach to replicate the competitive pressures which reduce profits to a level which is equivalent to the profits which would come under true competition.

Thus on this basis there is an argument that capex invested by a regulated business might receive a premium on new investment for a period until the equivalent pressure to when a competitor enters the market and so reduces any super profits to the normal profitability seen in competitive markets.

What are the reasons behind the decision to invest?

There are a number of basic assessments undertaken to ensure that investments are undertaken wisely, whether in a business itself (eg as a shareholder) or to increase the performance of the business (eg capital investment to impact earnings). At the most fundamental level, the decision to invest must be made based on the potential of the investment to deliver an earnings stream which is sufficient to provide for the structuring of the investment capital (i.e. sufficient to ensure that the debt used as part of the capital can not only be repaid, but also repay the interest over the life of the debt) and to provide a return of the equity injected into the investment.

To ensure that the debt element of the investment is protected the lender will review the earnings stream to ensure there is sufficient cash income to service the debt requirements, and to ensure that the likelihood of the earnings stream will cover the debt servicing requirements, the lender will normally require the earnings stream to be a multiple of the debt covering requirements. Depending on the assessed risk of the investment the lender may require the earnings stream to exceed the debt coverage requirements by a factor of two or even greater. But regardless of the multiple of debt coverage, the lender uses the earnings stream as the primary measure of the ability of the borrower to manage the debt provided.

Equally, the equity provider (investor) will assess the adequacy of the future earnings stream relative to the amount of equity required. The investor will assess both the historic earnings (as a guide to the certainty of recovery of the investment) and of the fundamentals underpinning the earnings stream in the future after the additional investment is made. Thus it is the earnings stream,

again, which is the primary measure as to the adequacy to provide both return of the equity, and the return on the equity.

Whilst there are many other issues which will be addressed before making an investment decision, it is the level of certainty of achievement of the target earnings, related to the risk of losing the invested funds, which ultimately drives the investment decision. To assess the likelihood of delivering the earnings, a range of scenarios with likely earnings for each will be developed and for each scenario, the present value of the earnings that will flow from each scenario will be assessed. This combined with a testing of possible variables that might affect the outcomes of each scenario (i.e. sensitivity testing) will provide a sound basis on which to assess the likely earnings from the investment and the risk assessment of not achieving the minimum earnings required to support the investment.

There are two basic investment decisions made by an investor.

1. The decision to invest in an enterprise (i.e. become a shareholder).

This decision is driven by the earnings arising from the dividend provided by the enterprise on each share, and the expectation of the market (based on the anticipated future earnings of the enterprise) as to what is an appropriate value for a share when traded on the open market. It is the sum of these two earnings (the dividend and the capital growth) which is measured by the accumulation index.

“One of the handiest tools for investors to use when assessing the value of stocks is the price-earnings ratio. It is easy to calculate and most useful for comparing stocks in the same sector – but it doesn’t tell you everything about a stock’s valuation. However when compared to the P/E ratio of other stocks, a lower P/E ratio] tells you that investors place a lower value on [the] earnings than for other stocks. ... [The] use of “prospective” P/E ratios ... [is] based on a consensus ... of a company’s future earnings⁵.”

Thus even the selection of stocks for investment purposes is driven by the expectation of earnings, and the likelihood that these earnings will be achieved.

2. The decision to invest capital to increase an earnings stream.

This decision is made to invest in an actual product rather than in an enterprise. This investment is usually referred to as capital expenditure (capex) in a new product or to maintain or improve an existing product. The performance of the investment is usually measured by assessing the present value of an earnings stream resulting from the specific investment for a specific outcome.

⁵ From “Market Basics” by Chris Wright, AFR 25 May 2005

This is done usually by assessing the internal rate of return (IRR on the earnings stream) or by measuring the time to recover the capital invested from the earnings stream over time (the simple or discounted payback period). Both the IRR and payback approaches are made on the earnings stream after the deduction of interest and debt repayments.

Thus the investment decision whether to invest in an enterprise or to invest in new works is underpinned by the earnings stream. The most powerful of the measures used in the assessment of an investment is the “earnings before interest and tax” (EBIT) as related to the value of the assets employed to deliver the earnings stream. Closely accompanying the earnings forecast is the certainty of this forecast being realized. At the very base level the ability of the business to deliver the earnings forecast over a significant period of time is a key element of the assessment of the potential outcome of the investment decision.

As there is a risk in assessing future earnings streams (either due to poor forecasting or exogenous issues) the hurdle rate for an investment in a new product (i.e. the capex investment) is commonly set higher than the average of the enterprise returns to accommodate the potential for under-recovery in the future earnings stream. Thus an enterprise that has a high risk profile will tend to have a higher EBIT/assets for its base business activity and have a higher than average hurdle rate for new capital investment. An enterprise with a secure and stable history of earnings over time and operating in a lower risk business will tend to have lower historical EBIT/assets and use a lower hurdle rate for the investment decision to reflect the certainty of the earnings stream.

In the market place businesses are graded into a range of categories which reflect the environment they operate in, and from this the lenders will have a different view between the approach they have to lending to the different categories and to the different businesses within each category. An example of this is the way ratings companies (eg Standard and Poors) will rate market sectors and businesses based on their performance and the risk profile of their activities. Fundamentally, such ratings are based on the earnings related to assets employed and the likelihood each sector (or business) has in achieving the earnings expected – a risk assessment.

Investment *in* an enterprise

Investment in an enterprise is usually assessed by the individual performance of the enterprise against its peers in the same sector (i.e. comparing one business with another facing the same or similar risks) and in assessing the performance of a sector against the market as a whole (i.e. comparing one

sector against the performance of the market – using sector indices as the gauge).

Thus an investor in the market will assess the likely exogenous issues which will cause one sector to outperform another. For example in a rising interest rate or inflation period, investment in the defensive stock sector (eg utilities, banks, etc) will be sought after in preference to stock sectors in more highly geared industries (eg tech businesses). As a result there is demonstrated volatility and variability in growth between different sectors over time.

Once a sector is selected as being potentially more likely to show growth than another, an investor will seek to invest in an enterprise which either is stable in its performance or in one which is underperforming but exhibiting the “right” fundamentals for managing its activities. It is this decision which (hopefully) leads to an outperformance in investment in the market.

Regardless of the reasons for selection of a particular sector, or a specific enterprise within a sector, it is the earnings (by dividend and capital growth) which are measured, and the result is measured against earnings achieved for the investment (assets) used.

The sum of the returns (earnings) from investment in the market (i.e. dividend and growth) is measured by the accumulation index and it is the accumulation index which is used by economists as the basis for the CAPM which is used to model the stock market and provide a basis for identifying the factors which impact on investment in stocks. The CAPM uses the accumulation index to calculate what the market premium an investor actually achieves by investing in the stock market. By making adjustments to reflect the volatility of returns and risk profiles of different market sectors (by the use of adjustments called equity betas), an average market risk premium can be identified. Out of the CAPM comes the “weighted average cost of capital” (WACC) which is a measure of the cost of capital which an enterprise might incur as part of its activities.

As it is “earnings” that drive the expectations of market investors and therefore the resultant dividend value and market growth, the measure EBIT/investment is the fundamental measure of performance of earnings from an investment⁶.

⁶ An allied term EBITDA is also used frequently, but as this includes non cash items (depreciation and amortization) it has its limits as a tool, partly because the assessments of amortization and depreciation can be manipulated. EBIT fails to capture capital expenditure but as the WACC used for regulated businesses also excludes capex, depreciation and amortization, and the opex allowed by the regulator is expected to be adequate and used entirely, EBIT/assets becomes a useful comparator to WACC

As an enterprise sources its capital needs from a variety of sources (deferred payment to vendors, borrowings from lenders, retained earnings and equity injection), a weighted average cost of capital can be calculated for any enterprise and for convenience sake this paper uses the term internal WACC for this actual but calculated figure⁷. The internal WACC will vary over times as debts are retired and new debts taken, with the duration of delayed payments, with the issuing of new shares or a buyback of shares. The internal WACC for an enterprise is continually changing, and is heavily affected by external pressures such as interest rate movements and inflation

A measure of performance of the efficacy of the enterprise's treasury is that the internal WACC is kept as low as possible, and therefore the level of internal WACC operated by an enterprise will be minimized wherever possible. As the pre tax internal WACC includes for the cost of debt, an internal assessment must be made to ensure that the internal WACC*assets is equal to or less than the EBIT. If the EBIT is lower than the internal WACC*funds employed (assets) then the enterprise is under performing. If the EBIT is higher than internal WACC*funds employed, then the enterprise is out performing and has additional revenue which may be retained or returned to shareholders. When shareholders (investors) see funds being retained due to out performance then this translates into a higher value being placed on each share of the enterprise. In market terms the higher value replicates the equity premium relative to the share.

Thus at a fundamental level the “market generated WACC” derived from the CAPM has a relationship to the EBIT/funds employed (or assets) generated by an enterprise or market sector.

Investment by an enterprise

The investment decision for new capex is based on one or a number of different and some times competing criteria.

- There must be a revenue stream to support the decision. As noted this will be based on an IRR⁸ (usually exceeding 12-15%), or a pay back period which may be over 3-6 years.
- The capex will improve the quality of the product and assist in creating new sales or preventing the loss of existing sales.

⁷ Internal WACC can be calculated so that it does reflect a value put on returns to shareholders through the dividend, and on retained profits to be used by the business for future needs. Thus internal WACC can be estimated in such a way that it can be compared with the CAPM WACC

⁸ IRR – internal rate of return. This places a value on the cash flow resulting from an investment. It is a measure of the discount that effectively arises from the cash flow resulting from implementing an investment. The higher the IRR, the better the return from the investment.

- The capex will generate a new product. A new product which has some risk attached to it would require a higher IRR or shorter payback.
- The capex will generate new sales or prevent loss of existing sales.
- The capex will eliminate the risk of failure of plant and this must equal or exceed the expected loss of production for the period of failure.
- The capex will be strategic to achieve a higher market share and/or eliminate competition.

The decision to invest capital to create a return for an enterprise is based on the internal WACC, usually enhanced by a premium to ensure that over a number of investment decisions there will be sufficient earnings to continue the stable operation of the enterprise and accommodate sub optimal returns from one or more of the investment decisions.

If there is a higher risk associated with the investment (eg potential for not achieving the expected earnings from the investment), then a higher return will be sought. An example would be the Dalrymple Bay Coal Terminal where the increased capacity currently being demanded by coal exporters might not be sustained into the future, when for example the strong demand from the Chinese market is reversed.

Thus the return on existing assets (i.e. the internal WACC) is often lower than the hurdle rate for new investments as there is some risk associated with forecasting the actual cash flow into the future and the level of sustainability. Where the decision to invest has some risk associated with it there is a valid argument for the hurdle rate for the capital investment decision to include a premium to reflect the increased risk.

The implications of using WACC for investment decisions

To relate “market generated WACC” as the basis for capex decisions is totally incorrect and inappropriate as CAPM is a tool for assessing the returns an investor in shares might obtain from the average of the share market (i.e. investing in the share index). The CAPM gives the base line for measuring performance in share investment.

The WACC as awarded to a regulated business to calculate the cash flow from the asset base should be lower than the WACC related to capex to which there is some element of risk. The WACC awarded should replicate the internal WACC which is a calculated figure for an enterprise. As regulated businesses have security in their cash flow it is expected that the internal WACC of such a business would be lower than the internal WACC for a business operating in a competitive environment.

In the case of electricity networks where the regulator does not optimize the network to recognize that an earlier investment made may be oversized or even redundant there is little reason for there to be a risk premium placed on the investment hurdle rate. If an investment is going to be optimized at the next reset, then there is an argument for increasing the hurdle rate for the new investment. If at the reset the full capex is included in the RAB, then the average WACC for the business should apply to the new investment from that time on as there is no longer a risk element involved.

An approach recognizing the benefit of a “split” WACC

If it is accepted that the WACC for capex should be higher, then there is a need to ensure that the WACC of the base business should reflect the returns that an average business (with a guaranteed income) should receive as a return.

To do this requires the regulator to carry out market assessments to see what financial indicators are appropriate for a continuing business operating in the competitive market place. These can be obtained from a number of sources such as IBISWorld or other similar group examining market performance of individual businesses or groups of businesses.

The regulator can calculate these same financial indicators from the revenue stream awarded to the regulated business (eg as ACCC did for TG) and benchmark them with the outcome of market realities.

Thus having developed a “basic WACC” for application to the existing assets, the regulator can develop a “capex WACC” for application to the forecast capex until the reward for the investment has been achieved and the capex is rolled into the asset base.

This approach gives the basis for having two WACC figures, one higher for capex and applying for a known period, and one lower application to the historic asset base. Such an approach replicates the approach used by all enterprises in a competitive environment.

Is there a difference between a “capex WACC” for a revenue cap compared to a price cap?

The electricity market has two types of revenue delivery – a revenue cap for transmission and a price cap for distribution. In both approaches, capex for replacement and refurbishment is essentially protected (i.e. is automatically accepted as legitimate expenditure by the regulator), whereas capex for

augmentation is a risk under a price cap regime if the sales forecasts are not achieved (equally if the sales forecasts are underestimated, then there is potential for a windfall).

- In a revenue cap arrangement where a return on the investment is guaranteed during the life of the review period and there is little or no chance for the capex not to be rolled into the RAB at the next reset, the risk of not maintaining future returns is minimal.
- In a price cap arrangement where there is some risk that the forecast sales volume might not be met during the review period, capex investment is protected providing the business does not exceed the amount of capex included in the review. If the capex is dependent on exceeding the sales forecast, there is a risk to the business, but this only applies to the capex involved in generating the additional revenue.

Conclusions

The regulator has two fundamental concerns when setting the WACC for a regulated business.

- The first is to minimize the ability of a monopoly enterprise from garnering monopoly rents, and
- The second is to ensure that the WACC is high enough to encourage the future necessary investment.

Minimizing monopoly rents

The WACC used by a regulator as a return on assets should reflect the internal WACC of the “average enterprise”, adjusted for the gearing. It should not exceed the “average internal WACC” which would apply across a range of businesses (eg as calculated across the ASX 200 companies), for to do so will permit a greater recovery of cash for the regulated business than applies to the “average” business.

Incentivising investment

Just as the “average enterprise” will set its internal hurdle rate for new investment at a higher level than its average internal WACC then there is a sound case for a regulator to permit a regulated business a higher WACC for capex *where that capex may be at risk until the regulator has rolled the amount into the RAB*. Once there is certainty that the investment will be accepted into the RAB (and therefore no longer at risk) then the WACC for the main assets can apply.

There are a number of benefits which flow from a decision to have a separate (higher) WACC for capex.

1. In its review of the recent EDPR in Victoria the ESCoV has identified that the Victorian DBs had underspent considerably on the capex allowed at the time of the last review. If the ORG had identified that a higher WACC would apply to capex before it was rolled into the RAB then there is a positive incentive for the business to carryout its capex program in the time frame recognized as being appropriate. If the higher WACC terminates at a point in time identified by the regulator (eg at the next review, five years after the allowance was accepted into the revenue stream, etc) then the regulated business is incentivised to meet the capex program intended.
2. Such an approach provides an incentive on the business to establish a capex program that is realistic and not front-end loaded as seen in most regulatory applications.
3. As TransGrid found to its cost in the recent review of its revenue by the ACCC, the ACCC discounted the value of the third feeder to the Sydney market (the Haymarket augmentation). This shows that there is additional risk for capex as distinct from a return on existing assets, and TransGrid could aver that such a risk should provide an increased return

Allocating different WACCs for existing assets and capex does in fact recognize the reality of operating in a competitive environment, and the way a business operates in it.

But it should equally be noted that there is little value in awarding a premium to the regulated WACC for all capital (existing and potential) investments where there is certainty that the investment will be accepted and therefore having no risk of the investment being included in the regulated asset base.

How to manage the regulatory approach to capex inclusion in the revenue cap

Accepting that there is an argument supporting having a higher WACC for capex as distinct from using a base WACC for existing assets, there is a need to assess the different approaches for addressing how the capex is granted in a regulatory decision.

There must be a fundamental premise that the RAB be increased only by the actual capex used by a NSP and which has been accepted by the regulator is demonstrably prudent and efficient. An ex ante assessment of capex cannot reflect the actual capex used. Only an ex post assessment can identify the actual

amount of capex used. The ACCC proposes the ex ante approach is used but this does not verify the actual capex used; therefore either there is an ex post review which does verify the actual capex or there is no review as to the actual amount of capex used.

The ex ante approach assumes that the capex permitted will all be used and be prudent and efficient, but raises the risk to the TNSP that additional capex may have been used but not recovered. It also raises the risk to the consumer that the capex paid for was not used and if there is no review ex post then consumers would be paying in perpetuity for capex never invested. This was and still is a major concern for consumers with the approach suggested by the ACCC in the development of the SRP.

The request for capex by a NSP at the regulatory review has been consistently been higher than the capex ultimately awarded by the regulator, indicating an element of ambit in the claim. Subsequent reviews have shown that even with a lesser amount approved, the capex awarded is still not always used⁹.

Under the ex ante approach, unless there is an ex post review of actual capex, all capex awarded is rolled into the RAB. The implications of an ex ante approach assumes that the awarded capex is seen a prudent and efficient. The risk then to the TNSP is that it requires more capex than that awarded and has to seek an adjustment ex post. The risk to consumers is that the ex ante capex awarded is never used but automatically rolled into the RAB.

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

The ex ante approach encourages the NSP to over claim for capex and to underspend. An ex post regime rewards actual expenditure and allows the regulator to identify the trends of capex needs. But it is only effective if the regulator exercises due diligence.

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

The ex ante regime provides incentive to the NSP to “game” the regulator. The ex post regime allows the regulator to assess the prudence and efficiency of the actual expenditure incurred, and prevent unused capex being rolled into the RAB.

The ex ante approach gives a degree of certainty to the NSP but at a significant risk to consumers.

The ex post approach requires the NSP to be diligent in assessing the prudence and efficiency of the capex used, and by maintaining proper records to show that the capex has been prudent and efficient then the NSP has little risk exposure

Regardless of the ex ante or ex post regime the regulator still has the obligation to assess whether the amount of capex to go into the RAB meets the prudence and efficiency requirements. In theory this does not reduce the burden on the regulator. By assessing the actual expenditure ex ante and then reviewing the actual expenditure ex post as must be done, then the work for the ex ante regime is greater.

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

The ex ante regime still exposes the NSP to the risk of over spending and having no return on the excess of the investment. However as the capex is expended over time the duration a NSP is exposed to an under-recovery is quite short. The ex ante approach encourages the NSP to carry out its capex program later than forecast, in order to maximise the cash benefit of delayed investment. By doing so the loss of return on any overspend is further diminished.

- 50 Should regulatory determinations be capable of being reopened to incorporate the cost of specific and unforeseen capital projects into any existing revenue or price caps? Where regulatory determinations can be reopened in this way, is the overall risk of inefficient investments increased and if so how can that be managed?**

Re-opening a determination (presumably only because the NSP seeks additional funds – not because it considers that it has too much capex for a specific task!)¹ Reduces the controls on the NSP to manage its affairs within a given revenue. To allow easy re-opening permits the NSP to hide its inefficiencies in capex control. The regulator has a role in being equitable between the service provider and those that pay for the service. To allow re-opening introduces an asymmetry in favour of the NSP to the detriment of the consumer.

51 What are the respective implications of an *ex ante* or an *ex post* approach to the regulatory assessment of capital investments for the development, content and application of other incentive schemes targeted at operating expenditure and network performance?

Ex ante reviews do not provide the regulator with the necessary information to assess whether the NSP has used its capex wisely and to develop self benchmarking of the NSP. Assessing ex post the actual capex needs provides the regulator with a clear understanding of what capex is really needed by the NSP to provide the level of service performance.

It must be remembered that capex has a number of functions and the regulator must be able to identify the outcomes from the investment in order to assess a reasonable level of capex for the future requirements.

4.1.4 Operating expenditure

The principle of incentives is supported, provided that it is not a mechanism to increase revenue without providing a benefit to the party paying the incentive. Any incentive scheme must have an outcome which can be assessed against the value of the resultant benefit. Currently the approach has been to accept that the resultant benefit is the value between the benchmark allowances and the actual outcome. Thus the incentive to the NSP is to set the benchmark as high as possible and be able to retain the difference¹⁰.

An incentive should only reward for effort – if a NSP works hard to find ways to reduce its opex from a reasonable benchmark then it is entitled to have a reward. But to “game” the regulator into setting too high a benchmark should not be the basis for a reward.

52 Should the regulatory arrangements allow TNSPs to retain some share of operating expenditure reductions below target levels into the next regulatory period in order to provide an incentive to incur only efficient operating expenditure?

Yes, providing the reduction is a result of effort on the part of the NSP

¹⁰ For example the Vic EDPR allowed for the DBs to retain some \$430m of unspent opex for the period 2001-05, much of it attributable to setting too high a benchmark in the previous review.

If so, how should those arrangements operate?

The benefit of a fixed amount built into the revenue for each year resulting from the saving earned by the NSP allows the price shock for making such a payment to be minimised. A glide path or a lump sum payable in the first year adds significant costs to the transition from one period to the next.

Is an efficiency carryover arrangement a better way to provide incentives for reducing operational expenditure than a glide-path or other approach?

53 To what extent should the Rules provide guidance on the operational expenditure incentive arrangements to be adopted by the AER?

The rules should require the regulator to provide an incentive to reduce costs. Care must be taken to ensure that the cost reduction is not a result of gaming the benchmark. Thus the rules must be clear that the incentive must relate to actual effort used by the NSP to reduce costs.

4.2 Alternative arrangements

The ACCC (now the AER) has established a service standards working group to investigate this matter. It is suggested that the AEMC recognise this and look to incorporate the outcomes of this group into the Rules.

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

The Ofgem approach and the results were discussed at length by the ACCC service standards working group. The initial attraction was the outcome identified, but as there was no clear evidence as to the origin of each of the cost reductions which occurred, and the fact that NGC is both owner and operator, it was agreed that the NGC option was not readily transferable to the Australian model.

The SSWG is actively seeking a model which can provide a quantitative outcome for specific actions of a TNSP. As stated above the incentive program must be able to identify a quantitative outcome for a given input.

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

The service improvement outcome must have a quantifiable value greater than the inputs (capex or opex). Industry normally seeks an IRR of at least 15%, and sometimes greater depending on the risk and the availability of funds

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

Whilst to have a minimum standard of performance for a given revenue would make the setting of performance standards possible, it is recognised that the design and age of each of the transmission networks is significantly different so as to make the setting of a national standard impracticable.

In the absence of a national standard of performance to prescribe a performance regime becomes impracticable.

Capex

The aim of having consistency between gas and electricity and transmission and distribution is supported **provided that** this provides a better outcome for consumers.

The slavish following of consistency for the sake of consistency is not supported as there are few supply side enterprises that would benefit from having common rules for all.

57 Should issues of consistency between the regulatory arrangements for electricity transmission and gas transmission or between electricity transmission and electricity distribution be a consideration in making Rules for the regulatory treatment of the RAB?

Where consistency adds value then this should be sought, but it should not have primacy over the obtaining of outcomes that benefit the market operations.

That the gas code provides for both ex ante and ex post review of capex supports the MEU comments made above regarding the assessment of prudence and efficiency of capex in the electricity arena. Such an approach is essential to fulfil the obligations that all capex to be rolled into the asset base must be demonstrably to have been incurred and was prudent and efficient.

58 Do issues of consistency between the regulatory arrangements for electricity transmission and gas transmission or between electricity transmission and electricity distribution affect the appropriate regulatory treatment of the return on and of capital expenditure?

All regulatory arrangements should require inclusion only of the actual amount of capex invested and which amount is demonstrably prudent and efficient.

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

An ex post assessment of capex provides a number of controls in that the prudence and efficiency must be demonstrated prior to committing large amounts of capital. By the development of the prudence and efficiency it defines the maximum amount of capital that can be used to comply with the requirement of prudence and efficiency. Any amount of capital used which is less than this amount would automatically be rolled into the asset base.

If the TNSP exceeds the maximum amount of capital that would be deemed prudent and efficient, then this would normally be the result of poor management of the project or poor estimating by the TNSP. Consumers should not be exposed to poor business practices of a TNSP.

Opex

The NSP should be incentivised to reduce its opex. This can only be by providing a revenue benefit in proportion to the real cost reductions it achieves by its own actions, and must exclude any under-run of opex caused by having too high a benchmark. Unfortunately, what consumers consistently see is the business makes savings early in the period which are stated to be unsustainable and the opex in the later years rises. This approach is a form of “gaming” and allows the business to hold the earlier savings in their entirety, with the rise in the later years being used to justify a higher level of opex in the new period. This allows the game to continue.

The reward for a permanent reduction in opex from actions by the business should be a share of the saving for a period of time. From a consumer viewpoint the payment of this incentive should be introduced into the next period to limit any price shock.

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

See comments above.

5. Approach to Determining Cost Components

5.1 Asset valuation

The rate of return and the asset valuation are closely intertwined as it is the multiple of the two elements that constitutes the payment consumers are required to make for use of the assets. Thus to examine the two elements in isolation can lead to perverse outcomes.

The approach to setting the rate of return is to examine the actual market to develop inputs to the CAPM which is then used to set the rate of return. Thus the way in which the CAPM uses the market data must be identical to the way the market places a value on the assets in the market. To permit a construct in the regulatory approach which uses some data based on one approach and then to apply it in a different construct will result in inaccuracies.

The traditional way an enterprise values its assets is to include the asset at cost less depreciation. This is usually referred to as the depreciated actual cost (DAC). If an asset is seen to be earning a higher than expected return, the asset might be revalued based on the expected future earnings – this is typically the way property is valued, based on a multiple of earnings from rental. Any change in the valuation of assets from one year to the next (i.e. if a DAC value is changed) is either added (if an increase) or deducted (if a decrease) in the profit and loss statement and therefore impacts on the earnings of the enterprise, and from there the change is incorporated into the dividend paid and the amount of retained earnings.

The share value of an enterprise is effectively the net present value of the future earnings stream, usually estimated as a multiple of earnings. Thus the movement of the share value and the dividend are both dependent on earnings of the enterprise. The share accumulation of an enterprise value is the addition of the share price increase and the share dividend. Both of these figures are effectively derived from the earnings of the enterprise. When the addition of the share accumulation is calculated across a number of enterprises, the share price accumulation index is developed.

The share price accumulation index provides the basis of the equity risk premium, and the movement of the share price leads to the equity beta both of which are used in the CAPM to develop the rate of return.

Thus implicitly it is the DAC approach to asset valuation which provides the outputs used in developing the CAPM element valuations used as inputs for creating a rate of return. For consistency the asset valuation for regulated assets should use the same basis as that used for the rate of return calculations.

Regulators have used the optimised replacement cost (DORC) method to attempt replicating the optimised deprival value (ODV) which is the basis of the Rules. Whilst the concept of the ODV has legitimacy in valuing assets, the practice of assessing the value is extremely subjective, leading to significant inaccuracies. Equally the DORC value is a subjective assessment and creates its own inaccuracies, but possibly to a lesser extent. The regulatory approach to developing the DORC value is to add inflation and deduct depreciation as a ready approximation of the DORC value.

By adding inflation to the DAC value of an asset (to replicate the DORC value) this results in an effective revaluation of the asset. As the development of equity risk premium is based on taking revaluations to account in the profit and loss statement, the increase in the DORC value from inflation should be taken as revenue in order to be consistent with the derivations of the rate of return elements.

Thus the current regulatory approach of setting the revenue by using a CPI inflated asset value multiplied by the rate of return, adding for depreciation and opex and adding approved capex into the asset base each year, provides the NSP with a wind fall when compared to the manner in which the share market calculates the equity risk premium.

The Gas Code provides some flexibility in assessing asset value, requiring that it lie between the values of DORC and DAC. In this way the regulator has the flexibility to use one or a number of methods to assess asset value. This does create some confusion and NSPs see this as a regulatory risk.

The two other major problems associated with setting the asset value and which have created significant dissention has been the valuation of easements and the derogations in the Code preventing the regulator from setting the asset value.

NSPs have stated that easements should be valued in relation to land values. Consumers and regulators consider that easements should be valued at actual acquisition costs incurred¹¹. If the NSP approach is used as the basis for easement valuation the absurd outcome is that as land tends to consistently increase in value (especially close to cities) then the value of easements would ultimately be the overwhelming element of the asset value – but one which an NSP could not (and should not) ever capitalise upon.

The Code derogations which effectively permitted the government owners to set their own valuations for NSPs have created significant imposts on consumers. The approach of rolling in the past asset base with new capex and not carrying

¹¹ See for example *Energy Transmission Easements - A Commentary on Valuation used by Transmission Companies and Regulators* July 2002 Prepared by Bob Lim & Co and Headberry Partners on behalf of BHP-Billiton Petroleum And Electricity Consumers Coalition of South Australia

out any optimisation will embed a windfall revenue for all NSPs in perpetuity. This is not in keeping with the principle of efficiency on which the Rules were developed.

61 How prescriptive should the Rules be in relation to asset valuation? Is the relatively wide discretion in the current Rules appropriate? If not, are there approaches in other regulatory instruments that provide a useful guide?

For the sake of minimising regulatory risk, a prescriptive approach provides certainty. The reason the Gas Code provides some flexibility is that there was no consensus possible during the drafting of the Code¹.

To lock in a specific approach requires that the approach is reasonable and fair to all concerned and that it will not be the subject of legal appeals.

62 Should the lock in approach in the SRP be elevated to the Rules? Do the principles in the SRP provide sufficient certainty as to the method by which the lock in approach will be applied? If not, what additional guidance could be provided in the Rules?

In principle to lock in an approach provides certainty. The lock in approach used by the regulators to date (subject to ensuring there is consistency between the method used and the inputs to other elements) is supported.

63 Should the Rules allow for revaluation of the asset base, or further consideration of issues such as the value of land and easements? If so, under what circumstances and who should be able to initiate such a revaluation?

The principle of optimisation of the asset base was to provide an incentive on the NSP towards prudence and efficiency of capex. It should not be used to create a windfall profit to the NSP at the expense of consumers

The Rules should not permit the asset base to allow for more than the acquisition costs of acquiring easements. The costs of holding these easements are an element of the opex awarded in the revenue calculation and therefore paid for by consumers.

If land is purchased for a specific purpose using funds supported by consumers, then this should not be permitted to be sold at a profit to the NSP, but the profit should be applied to reducing NSP charges. It is the role of the regulator to ensure that land acquired under the allowed capex (and therefore supported by consumers) is prudent and efficient.

64 Should the Rules cover the approach to be adopted by the AER in determining the opening asset base for an MNSP that converts to regulated status? If so, what principles should be adopted?

An MNSP has the election of operating independently or being regulated. If it elects to be regulated then it should be treated in the same way as a regulated NSP. The asset the MNSP brings to be regulated has to be optimised as if it were capex invested by a regulated NSP

5.2 Efficient investment

This issue is addressed at length in the previous section. Efficient and prudent investment must be where the costs of the investment either result in a reduction of opex, or that the NPV of the additional revenue from the investment exceeds the cost of the investment, as measured by the IRR of the project.

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

A benchmark IRR could be set by the regulator for the establishment of what it considers to be efficient and prudent

Industry in a competitive environment has to invest to ensure that it will remain viable in the medium term. The critical issues relating to investment is the amount of funds available, the return likely to be earned on the investment and the medium term implications of not investing in specific aspects. Internally the business will assess the likely returns from each of the potential investments, and the impact on the business if they are not implemented. Thus a project with a lower return may proceed than another with a higher return due to the limited funds available and the impact on the business if it does not carryout the work.

Actual capex which is efficient and prudent is rolled into the asset base. There needs to be an agreed approach as to what constitutes actual, prudent and efficient. If the actual is not prudent or efficient, then a lesser amount can be rolled in which meets these criteria. The Regulatory Test is supposed to demonstrate prudence and efficiency.

However as noted above the RT does not include for the benefits that accrue to consumers by the investment of capital which would either increase the availability of the network when it is needed (the ACCC/AER SSWG is addressing this) and which will increase generator competition by reducing the inter-regional constraints (the reduction of the inter-regional pool price disparity. This second issue has been the focus of a number of representations made by consumers over the past years.

66 What should be the role of the Regulatory Test in determining the efficiency of capital investment?

The Regulatory Test should provide the methodology which a NSP can follow in order to give it a high degree of certainty that if followed will ensure the capex used will be rolled into the asset base. The NSP should be able to provide the regulator with its evaluation based on the RT to provide the regulator with the substantiation that the capex is prudent and efficient.

The RT is the document which provides the basis for acceptance or rejection of all capex which will be rolled into the asset base.

67 Should the value adopted in the Regulatory Test be taken as the appropriate asset value to include in the asset base, regardless of outturn expenditure? If so, what implications does this have for the manner in which the Regulatory Test is applied?

The RT should provide confirmation that the capex proposed for a specific task meets the prudence and efficiency requirements. It can also provide a maximum value for capex that can be used for a networking solution before an alternative solution becomes more viable or the project becomes non-viable.

68 Should there be a requirement for the TNSP to reapply the Regulatory Test if the expected capital expenditure is expected to materially change? If so, should this be mandated in the Rules?

The RT need only be completed to prove the efficacy of the proposed capex, and to identify the maximum allowance for capex that can be allowed. If there is an over-run of capex, then the amount of the actual capex that will be permitted will be the maximum that would result before the investment would be classed as non-viable or an alternative solution would prove to be a lower cost option, whichever is the lesser amount.

The ex ante approach sets a given amount of capex the purpose for which is at

the discretion of the NSP. There is still a need for the regulator to assess the prudence and efficiency of all capex invested at the next review. The risk to the consumer of such an approach is that there is no requirement that the capex paid for within the regulatory period is actually used, although the actual approved capex will be rolled into the future asset base.

This approach encourages the NSP to maximise the amount of capex included in any one period and to underspend the capex as there is no penalty for doing so. This could easily result in the capex for one period being developed on the assumption that a specific project is highly likely to proceed but the NSP decides to put the consumer at risk by deferring the project to the next period. In this way the consumer is put at risk because of the potential failure of the network due to the delay in using the capex but still providing a return on the unused capex.

There are many examples of this approach being used by NSPs both for opex and capex where a specific activity is identified by the NSP as being required to be carried out in one period and then not done. This double dipping is carried out at a significant cost to consumers but is not prevented by actions of the regulatory approach, nor by the regulator accepting that such an approach is unreasonable. Allied to this has been the approach of some NSPs to grossly overstate the need for capex (even to the extent of the NSP stating it will double its asset value in a five year period through new investment). The under-run of the capex earns a return and presents no risk to the NSP. Because of its concerns the ACCC instituted a claw back provision for the return on unused capex.

One fundamental reason for excessive capex claims by NSPs is that the return offered by the regulator is too high thereby encouraging over investment. This was discussed above in more detail.

69 What operational issues arise under the *ex ante* approach set out in the SRP? Should there be different incentive rates applied to different asset categories, as implied by the *ex ante* approach? Does the *ex ante* approach affect TNSPs incentives to classify assets as long-lived?

The *ex ante* approach does provide the NSP with greater flexibility on its capex program. In theory it permits the NSP to use its capex to achieve the optimum outcome for the network and supposedly in the interests of consumers. It also provides an incentive to the NSP to manipulate the usage of capex to maximise its profitability.

Providing there is *ex post* review of incurred capex (to confirm that each element of the actual capex did meet the RT requirements) and there is provision for clawback of the return included on the unused capex, there should be limited risks for consumers that the NSP is manipulating capex to the detriment of consumers.

70 If an *ex ante* approach to capital investment assessments is adopted, should the approach set out in the SRP be elevated to the Rules?

The *ex ante* approach is not necessarily the appropriate approach in every case. It may be that a specific project approach at times may be a more appropriate method, with *ex post* approvals. Because of this to mandate a specific approach is not supported.

5.3 Operating expenditure

The use of exogenous benchmarks is predicated on the assumption that the current opex level is efficient and correct for the specific NSP. All NSPs have commented that they are unique in their design, geography and so forth, placing significant concern that the benchmarks used are applicable. The best benchmark is the actual opex used by the NSP itself, as the ESCoV recognised in the recent EDPR in Victoria.

Notwithstanding that benchmarks are available to ascertain whether the opex is really at the point of maximum efficiency, actual opex compared to claimed opex shows a consistent pattern of actual opex being well below benchmark opex for the first 2-3 years of a period with actual opex rising in years 4 and 5, even exceeding benchmark in the final years. With this sort of experience it is impossible to deduce that all NSPs have reached the maximum efficiency levels and intrusive reviews are still seen by consumers as being essential until maximum efficiency can be demonstrated.,

71 To what extent should the Rules provide guidance on the approach to be taken by the AER in determining an efficient level of operating expenditure? What benefits could be expected in relation to transparency and predictability? What disadvantages may there be in terms of a loss of flexibility?

All NSPs have developed at different rates and the regulatory requirements on each are different; some provide a significant amount of data and others provide too little. There is no consistency amongst the NSP's approach to regulation.

To prescribe for the regulator that it must follow a particular path in all cases is premature. It is the need to identify efficient opex that is the aim of regulation. To constrain the regulator in how it achieves this outcome, especially at this early stage, is not seen as resulting in the optimum outcome

72 To the extent that guidance should be provided in the Rules, what are the relevant characteristics of electricity transmission to consider in determining the form of this guidance?

The only guidance that should be provided is that the regulator must attempt to set opex at an efficient level, and that there be a positive incentive on the NSP to reduce its opex. When the regulator is convinced that opex for a specific NSP is at the maximum efficiency, then it should be free to examine alternatives of setting opex into the future.

73 Should the Rules provide for the application of benchmarking by the AER in determining an efficient level of operating costs?

Benchmarking is the only way to assess that the opex has reached even close to maximum efficiency with any degree of certainty. The regulator must be required to carry out both local and international benchmarking studies. When the outcomes of these benchmarking efforts results in consistent outcomes, then there is potential for using indexing of opex such as by TFP.

74 Should the approach set out in the SRP be elevated to the Rules? Should the Rules provide for the future adoption of benchmarking approaches?

The requirement for benchmarking is the only competitive pressure that can be placed on any NSP. The requirement to benchmark should be a requirement to verify that there is an approach to a requirement for efficient opex.

5.4 Depreciation

Depreciation is a method for returning the capital invested by an enterprise. The rate of depreciation used by the enterprise can be based on the expected life of the asset (i.e. when it needs to be replaced) or it can reflect a faster return based on the usage of the asset (where the expected active usage is limited by economic factors). The asset replacement life used is often that permitted by the Tax Rules for establishing a tax deduction.

For regulatory purposes the life for depreciation of an asset is the life expected before the asset is due to be replaced – the reason for this approach is that monopoly assets such as electricity and gas transport are seen to be required for very long periods, such as some electrical switchgear and transformers which are still in use since being built in the 1930s.

However in very specific purposes (such as when an asset is stranded or is to be significantly under utilised) the regulator may allow the specific asset to be depreciated faster. This faster depreciation recognises that the asset was provided in good faith and at the time met the RT tests for prudence and efficiency. In such a case the regulator sees that to allow a return on the asset is inappropriate but as it was provided in accordance with the controls applied by the regulator, to eliminate it from the asset base would result in an unexpected loss to the regulated business.

Thus the approach to depreciation has a number of impacts on other elements of the building block approach.

- As it is the notional NSP that is being regulated, the depreciation approach should be common to all NSPs and not reflect the taxation status of the NSP nor its taxation methodology.
- If the regulator accepts that faster depreciation of an asset will be permitted under certain conditions, this reduces the risk faced by the regulated business – reducing risk should lead to a lower return on assets
- New materials of construction have extended the life of assets considerably. For instance when cast iron gas mains were initially provided, the life of the cast iron was considered to be many decades. The introduction of plastic piping using the cast iron mains as a guide for “gold lining” has resulted in a significant increase in asset life. Equally the life of some types of electric cabling has been seen in reality to be shorter than the expected life.
- The same asset in one climate may have a different life to an asset in a different climate
- Increasing the rate of depreciation increases the revenue stream and so elevates the resultant costs to current consumers.
- Increasing the rate of depreciation reduces the asset base, transferring a cost from future users to current users of the asset.

Thus to be too prescriptive in the Rules as to how a regulator must address depreciation can have wide reaching consequences. Equally there is a need for consistency of asset life for the same type of asset between different NSPs.

75 What issues (if any) arise from the current treatment of regulatory depreciation?

Refer to comments above. A degree of flexibility is required by the regulator, but there should be consistency of asset lives across all NSPs, subject to the impact of different weather climates

76 Is there a need to include specific guidance in the Rules in relation to regulatory depreciation? If so, in what areas?

There is a need for a degree of flexibility in the application of depreciation

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

If an asset has been built and complies with the RT then there is a basis for faster depreciation of the asset. This point is discussed at some length above. By allowing a faster depreciation for a stranded asset which initially met the prudence and efficiency tests should result in a lower rate of return as the risk faced by the NSP is lower.

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

See comments above.

5.5 Rate of Return (ROR)

The rate of return permitted by the regulator must be comparable to the rates of return achieved by similar risk profile businesses operating in a competitive environment. It is by doing so that the regulated business is being effectively subjected to competitive pressures and follows the principle that regulation is the surrogate of competition whereby competitive pressure is applied by comparison.

The very clear outcome of such a principle is that the RoR developed by the regulator must be actively compared to what is actually occurring in the market place.

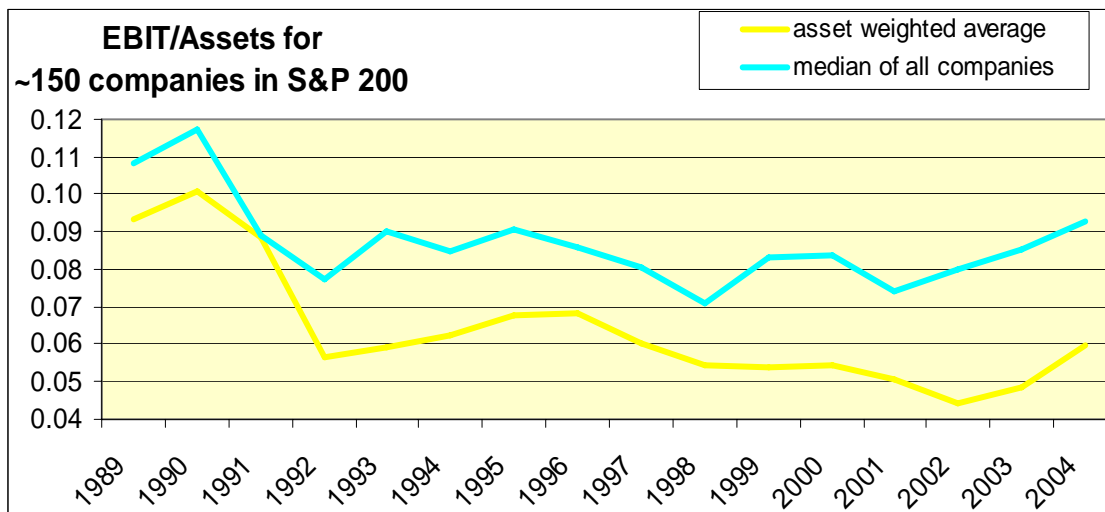
This principle is a requirement of the current arrangements yet no regulator currently does any comparisons noted as required by the AEMC paper¹²

¹² AEMC Issues Paper page 65, referring to Clause 6.2.4(c)(4), National Electricity Rules

“...having regard to the risk adjusted cash flow rate of return required by investors in commercial enterprises facing similar business risks.”

The nearest any regulator gets to complying with this requirement is the generation of the financial indicators which flow from the calculation of the WACC¹³ yet there is no comparison to these outworkings to any commercial enterprises facing similar risks. Other regulators consider that if there is a discussion about each of the elements used in the CAPM to arrive at the WACC, then this complies with the NE Rules.

A typical comparison basis is as follows using data supplied by IBISWorld.



When comparing these observations with the EBIT/assets awarded by the ACCC to TransGrid in the most recent review shows that the outcome for TransGrid as measured by EBIT/assets was ~11%

Thus even an explicit requirement in the Rules is ignored by the regulators.

What is of equal concern is that the SRP states that the ACCC will use fixed elements of the CAPM, despite the fact that all Interested Parties now accept that these input figures vary considerably over time. By using fixed inputs the ACCC assumes that when market conditions reverse (i.e. when higher a RoR is appropriate) that it will maintain these fixed inputs and so cause the regulated businesses to have a RoR that will be too low. The outcome will inevitably be that higher input values will be used as the regulated business must stay in business.

¹³ For example see appendix D table 1 of ACCC final Decision on Transend December 2003

Other regulators (eg ESCoSA, IPART and QCA) have accepted that some of the input values to CAPM included in the SRP are too high and have used lower values in the current economic climate, thus allowing them to increase these values should the economic climate change. To prescribe the input values to CAPM is not appropriate and the regulator should be permitted to use values which result in a RoR being granted which is in keeping with the economic times.

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?

The Rules already require the regulator to benchmark the outworkings of the WACC development with equivalent businesses of a similar risk profile operating in a competitive environment. This is not being undertaken.

This requirement should be reinforced requiring this comparison to be made and to modify the outcome if there is a reasonable difference between the two figures.

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?

In principle each form of WACC should be interchangeable giving the same revenue outcome. If this is not the case then the businesses would undertake forum shopping to identify the best outcome for it.

It is now well appreciated that the inputs to the CAPM vary both in the short and long term. To prescribe any of the inputs and so prevents the regulator from setting a WACC which replicates those for equivalent businesses of a similar risk profile operating in a competitive environment. This would be contrary to the principle of competition by comparison.

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

The WACC has to recognise that each NSP will have a different capital structure and it is not the realm of the regulator to advise which structure is most appropriate for each NSP as the capital structure is the responsibility of the business. Equally if each business is able to get the regulator to set a RoR based on their unique capital structure then the NSP has an incentive to structure in such a way to maximise its return. The approach of using a notional (or benchmark) structure eliminates this ability and permits clear comparison benchmarking of RoR between each NSP.

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

No, for to do so eliminates the ability of the regulator to modify allowed returns with benchmarks from competitive enterprises as is required by the principle of competition by comparison.

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?

No. The WACC parameters must be able to be varied at any time, and not locked in for fixed periods.

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

One of the principles of regulation is to provide certainty for consumers and the business. In all likelihood the re-opening would inevitably be initiated by the business resulting in an increase. The business is unlikely to request a re-opening if returns in the market were falling.

5.6 Tax

The approach using a notational NSP financial structure should result in the same notional taxation treatment for all NSPs regardless of their individual financial structures and internal decisions on accelerated depreciation. Each business should be able to structure itself to meet the needs of its owners, but this approach should not be a mechanism to allow one NSP to be able to acquire an enhanced revenue. By treating all NSPs as if they all have the same financial structure the outcomes (pre or post tax should be the same for all. If there is a variance then this results from an incorrect financial structure for the notional business.

What is of concern that consumers must not be disadvantaged by the way the notional business is structured. Once the revenue is set then how the business then manages its affairs is its own business and its relationship with the tax office.

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

In theory if the notional financial structure is established correctly either approach should result in the same outcome for consumers. If the NSP can convince the tax office that it should accelerate its depreciation for taxation reasons this should not affect the outcome for consumers unless the regulator allows the faster depreciation to be inputted into the revenue calculation.

The regulator should only allow depreciation on the notional NSP structure based on the stated economic life of the assets and not on any tax office approaches to depreciation.

However it is essential that there be only one regulatory approach to setting WACC so that direct comparisons can be made between NSP WACCs allowed and for benchmarking the equivalent outcomes identified from businesses in a competitive environment.

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

There is a benefit in having a standard basis for WACC comparisons.

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

In the case of WACC there is little difference between the different NSPs (be they for electricity and gas, or transmission or distribution). A standard approach across all which allows ready benchmarking against businesses in the competitive environment is essential.

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

With a fixed notional financial structure which is used to develop the notional WACC, the effect of exogenous issues is eliminated.

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

The WACC should be developed on the notional business. If an actual NSP then wants to address its unique taxation position it is free to do so on the basis of the revenue developed for the notional business. To incentivise a business on its tax approach for its unique structure is for its owners to decide.

5.7 Financial impact

Financial ratios without comparison to outcomes in the competitive world have little value.

The purpose of developing the financial ratios is twofold

- To verify that the regulated business has financial outcomes that ensure that it can stay in business
- To ensure that the financial outcomes from the WACC calculation are consistent with those extant in the competitive world.

To develop the financial indicators and not use them is a waste of effort. They must be compared to ensure viability and competitive pressure outcomes.

Consumers operate in the competitive world and they need to see that the returns granted a regulated monopoly do not provide the monopoly with a better financial outcome than consumers themselves are earning.

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

Properly used the development of the financial indicators provides the regulator the ability to benchmark the calculated WACC against returns under competitive pressures and to ensure that the outworkings of the calculation provide for a financially viable NSP.

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

See comments above.

6. Extent of Discretion and Design of the Rules

6.1 Existing arrangements

There are many issues addressed above that lead to the need for a minimum of regulatory discretion – not the least being that there is a significant asymmetry in information experienced by regulators. In addition, the market place is continuously changing and regulators have to “draw a line in the sand” with respect to the adoption of assumptions, information and data, when making determinations.

The AEMC points to the need for regulatory certainty as a core factor for investment and that investment will lead to long term benefits to consumers. Regulatory certainty is often the code word for tilting the incentives to favour asset owners. Exactly what it is, is difficult to grasp. Regulated businesses are provided with guaranteed minimum revenues, with a lot of upside advantage if the regulated business performs well, is able to drive more efficiency, and grow the business. They will prosper even more if they are successful in gaming the regulator. These businesses are particularly favoured by investors with long-term patient capital. On the other hand, businesses operating in a competitive market environment are not so well-blessed. They face competition on a day to day basis from rival firms and they do not receive any guaranteed revenue stream. They succeed or fail on the basis of their own business performance.

That network businesses are regulated is a reflection of the world of the second best where natural monopolies are provided with business franchises in return for a form of economic regulation. The public policy objective is to prevent the abuse of monopoly power. In our view ‘regulatory certainty’ is akin to efficient regulation, where regulatory judgements are exercised to balance the competing interests of network owners and users of the networks. ‘Regulatory certainty’ must not be equated with tilting the incentives in favour of asset owners in order that investments are made.

It is emphasised here that in the experience of MEU members with energy network regulation over the past decade, the over-whelming evidence is that capex proposals from network businesses are predominantly approved by regulators. It is only in the ex-post assessment of past capex during the regulatory review that a proportion (not the over-whelming part) is deemed to be not prudent and/or inefficient. That regulators do judge some investment not to be prudent or efficient should not lead to the conclusion that such actions necessarily equate with ‘regulatory uncertainty’.

Investment (as discussed earlier) will occur if the investor can see an enhancement of its market share and/or increased profits. Just because there is investment does not imply that it will benefit the long term benefits for

consumers. As the AEMC itself points out not all capex is necessarily prudent and efficient. The AEMC points to the need to ensure that this is the case before such capex is permitted to be rolled into the RAB. The supposition from this need for assessment is that not all investment will be to the long term benefit of consumers. Thus, to develop a regulatory control mechanism that is predicated on encouragement of investment to the exclusion of all other requirements is essentially flawed.

What is required is an environment where efficient investment is encouraged. It is not necessarily a foregone conclusion that elimination (or reduction) of regulatory discretion will lead to this desired outcome. In fact investment could very well be enhanced by the exercise of discretion. An example of this is the regulator decides that a different (increased) RoR for certain (new) capex should be permitted and a lower RoR determined for sunk investments. Another example could be that if the inputs to the CAPM were fixed (eg equity risk premium) at the long term level, but that market circumstances had changed effectively increasing the ERP to levels above the long term average. The outturn of the CAPM would then provide a lower return than market conditions encouraging investment not in the networks but in other higher yielding areas.

It must also be borne in mind that the regulatory decision is a balance between competing interests. To lock one element of a balanced position between competing views does not permit the regulator the necessary ability to trade off one issue against another. In any negotiation it is essential that the party best able to manage a contentious issue should be the one to take responsibility for it. This allows the negotiators the ability to readily trade off between issues needing resolution. However, if the regulator is constrained by the Rule which prevents the balanced outcome to result, then the optimum regulatory decision will be prevented.

Thus to set into the Rules a reduction in regulatory discretion whilst providing greater certainty as to what the regulator can do, may lead to an undesired outcome. What the Rules should do is to provide a framework about what the regulator is to achieve with clear direction as to the objectives of the regulation.

The Rules must permit the regulator to allow it the ability to balance between the key issues. This cannot happen in a prescriptive environment. As a result if the regulator uses its discretion then no Interested Party must be able to appeal just an element – an appeal must permit an opening to all issues impacted by the use of discretion.

For example if the WACC calculation is appealed against with reference to only a specific equity beta (as happened in the recent ESCoSA decision on ETSA Utilities) then the use of discretion would have enabled a balancing of the values of a range of inputs. Thus an appeal of the value of equity beta must not be seen in isolation, but in context with all other values used in the CAPM, such as equity risk premium, debt premium, risk free rate, etc. Equally, as discussed above

opex and capex are inter-related. If an appeal is made on one element of opex then the whole of the capex and opex allowances should be open to rebalancing.

The issue of appeals is better discussed in the MEU response to MCE SCO which provided comments on the MCE issues paper.

92. What should be taken into account in determining the appropriate degree of regulatory discretion?

Economic regulation is an inexact art (and is not a science). Regulators can only seek to replicate the likely outcome as though the decision is due to full interplay of market forces. A range of possible outcomes is often the case and the regulator should have the discretion to exercise judgement to the best of his/her ability provided it is supported by relevant tests (statistical or otherwise) and benchmarks.

It is the issue itself that determines the degree of discretion that should be exercised. For example the Rules can state that the CAPM formula is to be used to establish an appropriate WACC and that actual outcomes in the market should be used to assess whether the WACC is consistent with the market. If comparisons show that the calculated WACC is at odds with market indicators, then the inputs to CAPM need to be readdressed in light of these actual market conditions. Thus the regulator has flexibility to adjust the specific inputs to CAPM, but the outcome must replicate the actual market.

What are the advantages and disadvantages in leaving a wide degree of discretion for the AER?

The advantages are that AER can balance the competing views and exercise the discretion between conflicting issues. The downside is that the regulator can provide changing inputs over time and so introduce a degree of regulatory uncertainty. As there is no clear relationship between regulatory uncertainty and investment (as discussed above) this regulatory uncertainty should not take precedence over the balance between issues

What are the arguments for and against a more prescriptive approach?

This is discussed above

Alternatively, should the Rules prescribe/confer discretion in a way that is more tailored to the specific decisions that must be made?

The discretion should be structured so that it is the outcomes of the discretion used that must replicate market conditions. If market conditions are replicated then it is clear that the discretion has been used wisely and therefore can be sustained and supported.

93. Are the principles listed above the appropriate ones to guide consideration of the appropriate balance between prescription and discretion in the Rules?

The principles enunciated are acceptable but they omit an essential element in that it is the competitive market that regulation is attempting to mimic and therefore it is essential that another principle be added that the outcomes, that regulatory review must replicate the outcomes extant in a competitive market. This addition would require the regulator to benchmark all its outcomes with those subject to market pressures.

Are there additional factors that should be taken into account?

See above

94. Given that regulatory practice and methodology will evolve over time, to what extent should the Rules accommodate future change without the need for progressive amendments?

It is because of the fact that issues are still changing quickly at this time that discretion is so important. The assumption behind reducing regulatory discretion is that all of the issues associated with establishing the electricity market are now resolved. In fact there is still a continuum of change still occurring that needs addressing. When there is equilibrium there is potential for instituting a less flexible approach, but this equilibrium is still many years away. As the ESCoV found in Victoria after only two regulatory reviews, the Interested Parties have not yet reached even a modicum of agreement of the issues. Until there is some degree of agreement between the NSP and consumers, it is essential that the regulator has the power to exercise discretion as it attempts the unenviable task of balancing between the competing views of supplier and consumer.

Alternatively, is it preferable that future changes in approach be implemented via a future Rule change process?

An appropriate time for examining the potential for greater prescription is after there is a degree of agreement between the competing views of supplier and consumer.

The AEMC refers to the SRP and the degree of clarity that NSPs have from the SRP. Again the AEMC has overlooked the needs of the consumers when it refers to the lesser level of transparency and predictability that the ACCC provides from its SRP. Consumers have continued to express that their needs be also recognised and as long as there continues to be a wide gulf between the NSP aspirations (as are expressed by the NSP applications for new access arrangements) and the needs of consumers (as expressed by their continual need for information disclosure and desire for appropriate benchmarking against outcomes seen in the competitive market), then there is a need for the regulator to be given express requirements to benchmark outcomes for NSPs against those experienced in a competitive environment

6.2 Alternative arrangements

The principles that currently exist for TNSPs are that a revenue cap applies. A revenue cap minimises the risk faced by the NSP as it is no longer exposed to the risk of volume and demand resulting from the vagaries of the forward demand by consumers. This should result in a reduction of the WACC to represent the risk faced by TNSPs.

As mentioned above the risk of an issue should be managed by the party best able to manage the risk exposure. As it is within the ambit of consumers to manage the risk of variable demand, this risk should be accepted by consumers rather than making the NSP responsible. If the risk is accepted by consumers then the WACC given to TNSPs should be lower than that granted to NSPs required to accept the risk of demand/volume variation. Unfortunately the WACC awarded TNSPs which do not face this risk, is the same as that awarded those DNSPs who do face this risk.

The reward must replicate the risk faced. So far regulators have not recognised the variation in risk faced by changing the parameters in the CAPM. If anything, the ACCC (as the TNSP regulator) has lagged those regional regulators who are applying a WACC to DNSPs who face greater risk.

The essential premise that must underlie a change to the Rules is that the risk must be managed by the party best able to manage the risk. If this approach is not applied then there will result an asymmetry in response to the problem.

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

As a fundamental principle the AEMC should attempt to allocate the risk to the party best able to manage the risk. From this principle decisions as to risk allocation and the cost disbursement will flow. For example if the risk of volume lies with consumers, then it is consumers who should attempt to manage the risk rather than allocation it to an NSP who has no means of managing the risk, but only to react to variations. Once the risk management is allocated then the rewards for managing the risk go to the party taking the risk.

It is Important to recognise that regulation (as distinct from competition) must provide the essential disciplines extant from competition do apply and so ensure that the market pressures are replicated in the regulatory decision. A regulatory decision (as with market pressures) is a trade off between competing aspects.

For example does an enterprise reduce costs arbitrarily to increase market share which would result in a lower cost per unit? Such an approach is endemic within a commercial enterprise. The market reaction to such an approach will vary from replicating the same approach from competitors to no move at all. Regulation must provide such pressure to such a searching question of the monopoly provider.

It is the Rules that will imply such a question of the monopoly NSP. Thus the Rules must include for such pressures to be applied to the NSP. It is not the role of the regulator (who addresses such an issue every five years) to attempt to impose such pressure.

96 Is there a role for further objectives in the Rules given the single NEM objective?

Yes. The Rules themselves must be seen as imposing competitive pressure on the NSP by requiring the NSP to be exposed to competitive pressure – that its WACC will be set against market outcomes, that its capex must meet specific outcomes, that is opex must achieve certain benchmark outcomes else it must unilaterally be reduced, that if it improves performance as measured against agreed outcomes its profitability will be enhanced, etc.

To what extent should the general objectives currently included in the Rules be removed, reduced or rationalised?

The outcomes of regulatory review must be clearly expressed in the Rules and be clearly enunciated, with a requirement that the regulator must quantify the outcome expected from the regulatory decision.

An example of such an approach is from the SAIPAR decision on Envestra in 2003. SAIPAR stipulated that unaccounted for gas (UAFG) was to reduce as result of the opex decision. UAFG actually increased after the decision. In the view of consumers Envestra should be penalized as it did not achieve the specific outcome for the grant of opex. In this instance Envestra must be penalized. The Rules must require a penalty or reward for achieving a specific outcome.

The discussion above clearly supports the regulatory process of seeking outcomes that match the competitive environment. Too definite prescription in the Rules will preclude the ability of the regulator to verify calculated outcomes with those observed in the competitive market place.

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

MEU strongly advocates a regulatory process which, wherever possible, verifies requires the regulator to verify its calculated outcomes by benchmarking to those extant in the competitive market. The calculated outcomes should then be adjusted to account for the market based benchmarking.

7. Regulatory Procedures

7.1 Decision Making

The MEU and MEG strongly support the principles of robust and clear procedures for regulatory decision making. It is the process by which the regulator makes its decision that has a major impact on the execution of the review, and how the outcomes have been developed.

Further, in addition to the points made by AEMC, experience of involvement by consumers in reviews also shows that the timeframe allowed by regulators to undertake a review does not usually permit the regulator sufficient time to require the NSP to provide the data necessary to undertake the review. As an adjunct to this, in order to make best use of the time available the applicant should be advised well ahead of the application being required, of the format the regulator requires the information and data to be supplied in.

Despite the fact that the regulated businesses allege that regulatory certainty is essential to encourage proper investment, the businesses themselves do little to actively encourage a rapid decision through delays in providing accurate and useful information.

It is also apparent from the many appeals made by the regulated businesses (especially transmission pipelines where every ACCC review of transmission pipelines has been appealed) that the businesses are more keen to maximise revenue than to have certainty – certainty takes a poor second best position to maximising revenue. If certainty was the key then the decision would be accepted.

What is regularly seen is that regulatory flexibility is used by the regulated business as the basis for an appeal and so to maximise revenue through the appeal process. MEU and MEG are of the view that there needs to be a connection between the extent of flexibility required by the regulator to carry out an equitable review, and the ability of the regulated business to appeal the parts of the decision it does not like in order to maximise revenue.

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

The MEU is of the view that it is not so much the degree of prescription in the Rules relating to the review, but that it is the specifics of what procedures are to be prescribed.

Each review will have its unique features which results in the need for some discretion by the regulator. Thus MEU considers that the specifics to be prescribed should recognise there is variation between reviews of different NSPs. For example, the prescription should be focused on the fact that the NSP must comply with the requirements of the regulator with regard to the extent of information disclosure, its format and that the information must be provided by a given time, rather than on prescribing the detail of what information, in what format and when.

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

A number of the state based regulators have instituted procedures which enable the flow of reviews to proceed more smoothly. Such innovations include commencing reviews earlier, holding discussion groups to address specific matters of concern, the regulator converting the information into a format readily usable by interested parties, requiring specific information to be provided by the businesses in a format readily used by the regulator.

Whilst such approaches have improved the review process more needs to be done, specifically with regard to provision of information and timing. A major concern of consumers is that insufficient information is being provided and the time available to absorb the information provided is too short.

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

The very early attempts by all regulators to carry out the review processes show that regulatory review is a developing process. More recent reviews show improvement. The major concern is that the review process is often started too late and the regulated businesses use the limited time available to exercise their attempts at regulatory “gaming”.

Another major concern is related to the loss of “corporate knowledge” by regulators (eg what was done last time and have the requirements of the last review been fulfilled) due to a high turnover of staff,

Continued

The third major concern is the lack of business experience held by regulator's staff carrying out the regulatory review. Consumers see that the regulated business uses its superior knowledge of business management and corporate controls to confuse the regulator and so disadvantage consumers.

Where these issues have not been addressed the experience is that the outcome has been considered less satisfactory by consumers.

The approaches by the ESCoV and IPART where there have been directions to the business as to the structure of the information required and its format has been a significant benefit in consumers contributing to the regulatory review. Further both of these organisations (and others) have commenced the review much earlier than the ACCC has, allowing the release of issues papers on specific matters.

Allowing the business to control the review process permits the business to effectively "set the rules" and more effectively use the regulatory games available to it, to maximise revenue

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

Yes

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

Yes, but only to the regulated business. It then controls the timeframe, and the regulatory approach. From this powerful position the business can then use its control of the process to the detriment of a balanced and equitable decision.

103. Should the Rules prescribe a timeframe for transmission determinations?

The benefit of having a fixed review period is that the review can be properly prepared for and that the timeframe (and so costs) can be constrained.

Continued

While it is essential that a regulatory decision is carried out smoothly and quickly experience shows that when timing is left to the business, it uses the timeframe to its advantage. An excellent example is that of the SAIPAR review of the Envestra gas distribution business. As part of its final decision SAIPAR stated that the timeframe allowed in the Gas access Code (and compounded by using the approach of allowing the business to submit its application to commence the process), was too short and the following review had to commence earlier.

MEU suggests that there be a minimum timeframe set but that the regulator can require the business to be involved earlier as the regulator addresses issues of concern to it ahead of time. Experience shows that the nominal 9 months used by the ACCC is too short. The timeframes used by ESCoV and IPART are more appropriate.

If so, should that timeframe be capable of extension, by whom and in what circumstances?

It is essential that the new tariffs be available to consumers as soon as possible so that they can accommodate the changes in their businesses. Thus rather than extending the time for review at the back end of the timeframe, the time should be extended at the front end, by commencing earlier. As it is usually the business that causes the delays by not providing information in a timely fashion and useful format, the regulator must have available to it a means of controlling the provision of the information.

It is suggested that if the regulator is unable to make a final decision within the set timeframe then the regulator can set preliminary revenue which will apply for the first year of the next period, allowing the regulator more time to complete the review in a careful manner. This will provide an incentive to the business to respond accurately and quickly to requests of the regulator and is in keeping with the approach to incentive based regulation.

104. If there are limited extension provisions, what stop-the-clock provisions would be appropriate?

This is addressed above

What incentives should be provided for the regulated business and the AER to meet the required timeframes?

This is addressed above, but it must be considered that a penalty on the regulator will ultimately be borne by consumers who have not caused the problem. Whilst in theory the regulator can cause the need for an

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

The need for an extension of time will be significantly reduced if the process commences earlier and there is an effective incentive (or penalty) on the regulated business.

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

The regulator should provide a revenue based on its preliminary findings and require the business adjust its tariffs to reflect this revenue. To continue to use the past revenue as the basis for the future revenue has the potential to cause the need for an extension of time if the indications are that a reduction in revenue is likely, as the business will want to have the higher revenue for as long as possible.

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

To backdate a revenue decision is equitable so far as the balance between consumers and business is concerned, but it provides no incentive on the business to actively cooperate with the regulator. As the intention is operate under and incentive regime, there must be an incentive on the business to provide active assistance in completing the review in an acceptable timeframe.

To have all revenue decisions carried out concurrently has an initial attraction as all transmission businesses will be treated in a similar fashion. However this initial attraction is lost quickly when the resources needed to execute such an approach are considered. It would effectively mean that the regulator and interested parties would have to gear up for an immense amount of work in a relatively short time. The outcome of this would be the loss of any corporate knowledge and understanding of the issues generated during the intense multiple review periods. The regulatory staff and interested party staff would be dispersed after the review with little likelihood of using the same staff again at the next review in five years time. Thus the ability to have regulatory consistency for all businesses at the same time must be contrasted with the variation that would apply at the time of the next review.

By having the same staff carrying out a similar approach each year for each of the businesses consecutively will have a greater chance of ensuring consistency in the long haul than a major exercise every five years.

Further as the market is changing continuously and new information is continually coming into the regulatory debates, a small change each year is preferable for the sake of consistency and each business identifying the trends over time.

From a consumer viewpoint there are limited resources available and to attempt to hold these over a five year period for a massive exercise is seen as a major challenge.

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

The MEU considers that on balance the “big bang” approach is likely to benefit the regulated businesses significantly. They will have absorbed most to the resources available for engineering and economic support in the development of their applications. This will leave the regulators with a small pool of external resources to assist them and the need to quickly develop teams to address each of the applications. The remaining resources (if any) would be available to consumers to assist them in their involvement in the processes and attempting to address five major reviews concurrently.

The additional cost of consecutive reviews will be readily offset by the benefits of adequate resourcing of regulators and interested party inputs.

The MEU considers that consecutive reviews are a far more a preferable approach to concurrent reviews.

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

The MEU considers that the current written decisions provide an understanding of the basics of the review. The availability of the modelling used should be available to consumers should they want it.

However there is one aspect of the decisions which is not publicly available and is essential for consumer understanding, and that is the way the NSP allocates the revenue in the development of its tariffs. The regulator usually allows this discretion to lie with the NSP, requiring only that the tariff for each sector recover between the avoided cost and the standalone cost.

Continued

The electricity Rules (and the Gas Code) both allude to the need that tariffs be cost reflective, yet no regulatory decision demonstrates that actual cost reflectivity has been addressed by the NSP. In the case of a price cap approach, this failure of the regulator to demonstrate even a degree of cost reflectivity allows the NSP to manipulate the basket of tariffs to maximise its revenue. Even in a revenue cap decision the costs allocation can be used to benefit the NSP by disadvantaging alternatives to network solutions.

Thus the AER must examine the actual tariffs to ensure they are as close to cost reflectivity as possible, and that the examination is properly developed and available to consumers.

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 NSPs allege that they should not have to divulge “confidential” information as this will disadvantage them. NSPs are monopolies and that is why they are regulated. By definition a monopoly has no competitor.

The decisions and development of the regulatory review should be available publicly in the interests of transparency and good governance. This requirement should be in the Rules.

7.2 Regulatory Information

The disclosure of information is fundamental to sound regulation. Interested Parties need access to this information so they can provide sensible input to the regulatory review.

It is common that the information disclosed in an application is insufficient and additional information required. In many cases this additional information is provided by the regulator either directly in an issues paper or discussion paper or indirectly through a report from the consultant to the regulator examining the opex and capex elements of the application. In some cases even then some information is either not provided or is treated as “confidential”.

Generally the information ultimately provided is sufficient for the needs of consumers so they can provide sensible input. It is more common that information needed is being classed as confidential.

Consumers have noticed that in some cases NSPs have “flooded” the regulator with large amounts of information, which is also passed onto consumers. This is one of the regulatory games played by NSPs. One recent feature by the ESCoV was to summarise the information provided by the five electricity DBs. This was a very useful document and is recommended that the regulator should be required to provide information in such a way for Interested Parties. In the generation of such a document the regulator can quickly identify what additional information might be required.

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

The current Rules appear to enable the regulator to ultimately source the required information. Usually it is the time taken to get the data that creates the main problem in information disclosure.

A new trend is for NSPs to be shell companies and outsource all of their activities to other (often related) parties. The NSP then uses its inability to source the required information from its contractor to prevent disclosure. The ESCoV faced this issue in relation to its recent EDPR where the NSP pointed to the excessive time its limited staff would need to provide the information sought.

The Rules should require that the NSP is responsible to provide the necessary information and that lack of resources or “corporate veil” is not accepted as a reason not to provide information considered essential.

112 Should the Rules set out high level, qualitative principles in relation to the AER’s information gathering powers, or should they seek to prescribe what information is to be provided, both routinely, and/or on an occasional basis?

The Rules should stipulate the requirement to divulge information and eliminate the ability of the NSP to circumvent the disclosure of information.

As each review has its own unique features to attempt to be all encompassing in the Rules as to the disclosure. There should be regulatory discretion beyond certain high level principles. In this regard the principles and focus on disclosure in the Gas Access Code provides the degree of disclosures required. Such a listing should not be all encompassing as additional data may well be required.

113 Should the Rules set out the minimum relevant requirements in relation to the content of regulatory accounts?

See above. The MEU considers that as each review is unique there will be the need for more information than can be stipulated. Thus the Rules must only set a minimum requirement.

114 Is there a need to make specific provision in the Rules in relation to information requirements for third party contracts?

The aspect of the format of the regulatory accounts is best left to the regulator. Suffice to state that the NSP must provide regulatory accounts in a form acceptable to the regulator.

115 Are the current requirements in the Rules about the content of the Regulatory Accounts satisfactory?

The MEU suggests that the Rules require the provision of regulatory accounts, but the format should be established by the regulator.

Should the Rules be more prescriptive on any specific matters relating to regulatory accounts?

See above

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

The MEU suggests that this is an aspect where regulation between electricity and gas converge. The same requirements should apply to both with regard to regulatory accounts and the Rules should stipulate that regulatory accounts are to be maintained and provided to the regulator on demand.

The format of the accounts should be established by the regulator.

7.3 The TNSP Proposal

Already it is accepted that the majority of the power in a regulatory review lies with the NSP due to its ability to impact the time frame, information asymmetry and the ability to refuse to invest if its needs are not met by a favourable regulatory decision¹⁴.

To further permit the application to stand if the answer lies within a plausible range will result in the NSP using this ability to further enhance its revenue by seeking to be in the higher end of the plausible range. This is not in the interests of consumers, either in the short or long term.

The debate implies that there will be regulatory error but not that the NSP can use this approach as the basis for extracting monopoly rents.

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

No. It will lead to more disputation and can permit the extraction of monopoly rents.

118 What is the likely impact of such an approach on the extent of regulatory certainty?

Allowing a range of plausible outcomes will not result in less uncertainty. It will lead to a debate as to the extent of the range (the NSP seeking a higher range and consumers seeking a lower range) and where the regulator has not used inputs which would allow the application revenue to fall within the plausible range.

Are regulatory outcomes more or less easy to predict if the decision criterion is within a plausible range, rather than the best or central estimate?

No. What will occur is that the NSP will ask for inflated revenues and then attempt to get the regulator to accept that the calculations surrounding the plausible range need adjustment to allow the requested revenue to fall into a revised plausible range.

¹⁴ For example see the approach by Prime Investments over the Dalrymple Bay decision of QCA when Prime considered the RoR provided was too low.

119 What would be the basis on which the AER is to determine that an outcome is within a plausible range?

The MEU do not believe that a range of answers is the correct approach to use as it has the potential to allow the NSP to extract monopoly rents.

To decide on the parameters needed to develop the plausible range will provide a further avenue for dispute with the NSP.

To what extent could this be by reference to objective criteria or would it by need to be at the AER's discretion?

A range of solutions does not lend itself to being developed from objective criteria. Objective criteria lead to a single solution – it is subjective criteria which lend themselves to a range of possible outcomes.

When all is considered the NSP is seeking a single solution – a revenue amount that it can allocate to develop tariffs. At the same time it is seeking a revenue amount that will allow it to maximise profitability and be at the highest value acceptable to the regulator.

To accept that the NSP can decide on a single answer but assume the regulator can only deduce a broad range of answers would appear to be irrational.

In order to assess the impact of an approach to effectively grant more money to an NSP there is a need to assess what the investment is for.

As discussed earlier in this submission, investment by a business will proceed if the owner sees that it will receive a better return on the investment relative to risk for one opportunity over another.

An investor in a business will seek increased earnings per share relative to risk for one opportunity over another. Thus if an owner is attempting to sell its network business it will seek to enhance the earnings/share to maximise the sale value.

Thus to incentivise an owner of a monopoly NSP to invest in the business requires the regulator to provide a better return on future investments (i.e. capex). Beyond this the owner will seek to enhance overall profitability by under spending on opex, and attempting to maximise the return on the sunk assets.

Thus at most to incentivise the network owner to invest only requires a higher return relative to risk on the capex element of the revenue.

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

Yes. To err in favour of higher revenue for the NSP will inflate the profitability of the network but will not necessarily encourage investment. Only increasing the return on investment will further incentivise investment in the business.

121 If so, is that an appropriate objective given the value apparently placed by customers on reliability and security in the long run?

No. Consumers expect that the value of the service should to a large degree reflect the cost of providing the service – this is the expectation of the pressures of competition. The alternative is to provide the network owner with monopoly rents.

Are the consequences of underinvestment in electricity transmission of more detriment to achieving the market objective than the consequences of overinvestment?

The MEU accepts that underinvestment by the NSP has the power to reduce the value of the investment made by consumers due to less secure supplies of an essential service.

Equally granting the NSP a monopoly rent makes the consumer less commercially viable in its own right, with the potential for the consumer to cease using the NSP services (either by going out of business or relocating to another state or country). Either way by granting monopoly rents is not in the long term interests of the NSP as assets will be stranded.

122 If such an objective is appropriate, are there alternative ways of achieving it? Would such alternatives better achieve the market objective?

The MEU does not consider that allowing the NSP to secure enhanced profitability is necessary to encourage investment, nor it in the long term interests of the consumer, the NSP or indeed the national interests as jobs are moved offshore.

7.4 Transitional Issues

The MEU supports the approach that the existing Rules should continue for each TNSP until they are due for their next review. Thus it would be expected that all TNSPs (other than perhaps PowerLink) would continue under the existing Rules until their next scheduled review. If a TNSP seeks to have a revision to its current arrangement then the TNSP should be subject to any new Rules applying at the time in relation to the matter being reviewed.

If the new Rules are not in place at the time PowerLink is due for review, then PowerLink should be reviewed under the old Rules, and its revenue adjusted as the old Rules require until its next review.

Such an approach will give a degree of certainty to both the TNSPs and consumers.

123 What issues need to be supported or provided for in savings and transitional Rules?

Refer comments above

What is the best approach to the management of these issues?

Refer to comments above