ACCC Review of the Regulatory Test

Submission

prepared by

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on behalf of

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Executive Summary

This submission represents the combined views of five privately owned participants in the National Electricity Market (NEM). The owners of each of these businesses – TXU Electricity, Loy Yang Power Management, International Power Hazelwood, Edison Mission Energy Australia and Yallourn Energy - have each made a major investment in Australia's reformed electricity industry and the NEM. In these circumstances, we each have a vital interest in the ACCC's Review of the Regulatory Test, and we bring to the process the private investors' perspective of the various issues relevant to the Review.

The publication of the Discussion Paper by the ACCC on 5 February 2003 and its call for submissions have given interested stakeholders their second opportunity to provide comments and input into the ACCC's deliberations in the Review of the Regulatory Test. We appreciate the opportunities the ACCC has given to interested stakeholders to contribute to the review process and we trust that the ACCC will give serious consideration to our concerns and recommendations as it finalises its Review.

The Regulatory Test plays an important role in the overall legal and regulatory framework governing the operation of the NEM because it essentially determines how and where investments in regulated services will complement and interact with investments in the competitive sectors of the industry.

As private investors, we jointly have a somewhat different perspective to other interested stakeholders such as policymakers, regulated network service providers and electricity consumers. While we private investors in the industry are currently in the minority, we anticipate the NEM will be heavily reliant on private investment for new generation capacity additions rather than further investment by Government-owned businesses. As we believe that our views and concerns are representative of all existing and prospective privately owned participants, in our view, they should receive serious consideration by the ACCC throughout the remainder of the Review.

In our opinion, taken together, the current governance arrangements and legal and regulatory framework for the NEM are a matter of grave concern to private investors in the industry. It is our experience during the first four years of NEM operation that these arrangements involve an undue amount of regulatory and sovereign risk that is

discouraging further private investment in the industry and threatens to undermine the long-term success of the NEM. While some risk is understandable in the embryonic stages of a new market, both policymakers and regulators have considerable work to do to restore investor confidence in the NEM. This review of the Regulatory Test should be seen by the ACCC to be an important component of that process.

Bearing this in mind, we believe the ACCC should adopt the following as the key principles governing its deliberations throughout the remainder of the Review:

(i) It should retain economic efficiency and competitive neutrality as the core principles for both the development of the Test and its future application;

(ii) It should opt for a clear preference for at-risk capital investment in the NEM wherever practicable and only resort to regulated investment where it is unavoidable;

(iii) It should establish a clear distinction between market-driven investments based on commercial considerations only on one hand and additional 'interventionist' spending driven by centrally imposed standards of security and reliability deemed to be 'in the public interest' on the other; and

(iv) It should impose a clear obligation on the proponent of any new regulated investment to consider all other reasonable alternatives with a clear 'onus of proof' on the proponent to demonstrate that its' regulated proposal is aligned with the principles of maximising economic efficiency and preserving competitive neutrality and therefore its' preference over the alternatives is justified.

Consistent with these principles, the 5 co-sponsors of this submission remain implacably opposed to adding any consideration of so-called competition benefits to the Test. In our view, this would seriously undermine the integrity of the Test in the eyes of private investors and the long-term damage it would do in this respect would more than outweigh any perceived short-term advantage.

To maximise the value of the Review, we also believe its scope should be expanded to consider not only the detailed wording of the Test but also other matters that impact on its application in the NEM. We recognise that this will raise issues that

cannot be fully addressed within this Review, but the ACCC should refer those matters to other bodies as appropriate for resolution.

In all, throughout this submission we have made 19 main recommendations. These are summarised below.

	Recommendation
Scope of the ACCC Review	
1.	The ACCC should broaden the review to include consideration of not only the detailed wording of the Regulatory Test but also how it is administered and applied in relation to any specific proposal for new regulated network investment.
2.	The ACCC should defer consideration of the current $1 million and $10 million thresholds until it is clear what the new wording of the revised Regulatory Test and proposed changes to its administration and application to specific projects are, and stakeholders have an opportunity to consider and comment on the issue taking this new information into account.
Competition Benefits	
3.	The ACCC should abandon any plans for the consideration of so-called competition benefits, either within the Regulatory Test or separately, as a potential justification for new regulated network investments.
4.	If the ACCC proposes to ignore Recommendation 3 in spite of the overwhelming arguments against doing so, the ACCC should seek legal advice concerning the extent of its powers to introduce consideration of so-called competition benefits for this purpose and advise interested stakeholders accordingly.
5.	Also, if the ACCC ultimately decides to give consideration to so-called competition benefits, it should: (i) not entertain any approach other than using a determination process that is consistent with and as rigorously applied as the determination process used by the ACCC to authorise anti-

	Recommendation
	competitive arrangements under Part VII of the Trade Practices Act; and (ii) impose a condition of approval in marginal cases that the decision will be subject to further review whenever there is a major change in circumstances in the market or at a predetermined date in the future, whichever occurs earlier.
Reliability Investments	
6.	The ACCC should remove from the Regulatory Test the distinction between so-called reliability investments and other economic investments. All proposals for regulated status should be justified on the basis that they are the most economically efficient options to satisfy the needs of the market. In this regard, the level of reliability that any project aims to deliver should be no more than that which the market is apparently prepared to pay for taking into account the Codified level of VoLL. More specifically, the ACCC should remove sub-paragraph (a) in its entirety from the Test.
7.	The ACCC should request NECA to prepare proposed amendments to the Code that would extend the potential coverage of the Reserve Trader function of NEMMCO to include all potential interventionist projects including all forms of supply side, demand side and network options in order to meet its responsibilities. The ACCC should also require that any proposed Code changes developed as a result of this process will ensure that the appropriate market price signals are preserved at all times when any of the resources secured by the Reserve Trader are despatched.
8.	The ACCC should also request NECA to work in collaboration with the participating jurisdictions, State-based regulators, the Reliability Panel and NEMMCO as required to ensure that there is consistency throughout all aspects of the regulatory regime governing the NEM between the application of standards governing market driven service provision on the one hand and the imposition of more stringent requirements in terms of system security and reliability that are applied 'in the public interest'. Any

	Recommendation
	such additional requirements should be imposed in a way which preserves competitive neutrality and does not distort the market price signals that drive long-term economic investment in the NEM.
Coverage of the Test	
9.	The ACCC should collaborate with NECA and the jurisdictions as required to clarify the obligations of each NSP in terms of its supply of regulated services to users. In particular, it should clarify the extent, if any, to which a regulated NSP should be responsible and accountable for more economically efficient non-network related alternatives to regulated network augmentation as the means by which the service needs of users are satisfied.
10.	The ACCC should request NECA to bring forward Code changes for authorisation that will extend the application of the Regulatory Test to not only major augmentation projects, but also major network refurbishments and replacements as well as commitments to non-traditional network support arrangements that are considered to be more economically efficient than traditional network investment options.
11.	Subject to the outcome of Recommendation 9 above, the ACCC should ensure that all new investment commitments for the provision of regulated services (network augmentations or substitutes partly or totally funded by the NSP, replacements and refurbishment) should be required to pass the Test.
Preference for Market Based Network Investments	
12.	The ACCC should modify the Regulatory Test as required to ensure that, in order to pass the Test, a proponent of a new regulated investment must demonstrate to the satisfaction of the ACCC that it has made bone fide attempts to market the project (and potential variations thereof) to project beneficiaries and has valid reasons for pursuing a regulated approach to the project in preference to a market-based alternative.

	Recommendation
Maximise Utilisation of Network Facilities	
13.	The ACCC should require, as a condition of approval of any new regulated investment, that a proponent provides clear evidence of the arrangements in place or proposed, to ensure that the proponent has taken all reasonable steps available to ensure that the value of the relevant existing network facilities to the market is being maximised, and that it will similarly take all reasonable steps necessary to maximise the market benefits of the proposed new regulated investment.
Access to a Merits Based Review	
14.	The ACCC should collaborate with NECA and if necessary, the NEM participating jurisdictions as required to introduce an appropriate appeal mechanism that provides any aggrieved party the right to appeal against any ACCC decision to approve any major regulated network investments. The appeal should be heard by a technically competent appellate body with the relevant expertise to undertake a full merits-based review of the decision.
Minor Amendments	
15.	Subject to the more detailed comments in this submission, the ACCC should proceed with the proposed minor amendments to the Regulatory Test.
16.	In addition, the ACCC should collaborate with NECA to develop and implement appropriate review processes to ensure that, in future, total consistency will be maintained at all times between the Code and all relevant regulatory principles and guidelines published by the ACCC including the Regulatory Test.
Definitional Amendments	
17.	As a general principle, the ACCC should ensure that, in both the detailed wording of the Test and in its ongoing application, the 'onus of proof' clearly lies with the proponent seeking to justify regulated status for any

	Recommendation
	new investment proposal.
18.	Notwithstanding the precise wording of the definitions of *substitutability* and *practicability* adopted by the ACCC, there should be an overriding obligation on the proponent of a new regulated investment to consider all reasonable alternatives and promote the most economically efficient option – a strict legal interpretation of the definitions should no longer be an acceptable basis for excluding cost efficient options.
19.	The ACCC should clarify its position in terms of what it deems to be an appropriate 'commercial discount rate' for the economic evaluation of projects under the revised Regulatory Test. In this respect, we recommend that the ACCC endorse the use of a discount rate consistent with the rate that an entrepreneurial investor (with its own shareholder equity at risk) would apply.

We have also made quite a number of suggestions on more detailed matters that we request the ACCC to consider throughout the remainder of the Review.

Finally, if the ACCC has any questions on any aspect of this submission, please contact Ben Skinner, Manager NEM Policy at TXU Electricity on 03 8628 1280.

1. Introduction

Within the current NEM framework where the provision of transmission related services are still regarded as a regulated natural monopoly function, the Regulatory Test plays a critically important role in the effective functioning of the market.

Since the initial drafting of the National Electricity Code in the mid 1990s, the criteria for justification of new investment in regulated transmission assets have proven to be quite controversial. We have already witnessed one major shift in approach from an emphasis on 'customer benefits' to 'market benefits' in 1999. Since the commencement of the NEM, the application of the Regulatory Test has also proven to be quite controversial and the overall approval process incorporating the use of the Test has been quite tortuous and protracted for all concerned stakeholders. In our view, the difficulties being experienced in applying the Test appear to be primarily caused by a lack of understanding of the need to maintain competitive neutrality between regulated investment in transmission and investment in the competitive energy market.

We have also had a major change involving the transfer of responsibility from NEMMCO and the IRPC to the TNSPs (and by implication the ACCC) for applying the Test to new (and/or augmentations to existing) regulated inter-regional links. The aim of these changes has been to:

- Ensure the investment criteria for new regulated transmission investment are properly focused on economic efficiency and competitive neutrality issues; and

- The TNSPs are more directly accountable for the planning and investment decisions.

While we have been supportive of the need for these changes, they have nevertheless had the effect of destabilising the planning and investment approval process, and this current review of the Test being conducted by the ACCC is no doubt having a similar effect.

This brief history of continuous review and change to a key element of transmission network regulation is symptomatic of the regulatory risk and uncertainty surrounding the NEM. Although unfortunate and potentially quite costly to all market stakeholders, it is quite understandable at this early stage in the evolution of the NEM and the associated regulatory framework. It is in the interests of all NEM

stakeholders that the regulatory environment be rapidly stabilised. Otherwise, stakeholder confidence in the NEM will be undermined and this could have very serious consequences for the medium to long term success of the market.

The outcome of regulatory decisions in any particular set of circumstances must be reasonably predictable by all informed stakeholders and observers. Otherwise, undue regulatory risk will still be present in the market. In our opinion, the current Regulatory Test fails to deliver this predictability. Therefore, while recognising the need for regulatory stability, we fully support the current review and the reasons for it. At the same time however, we urge the ACCC to aim for a robust outcome to this current review process so that there is no need to contemplate further major changes to the Test within a relatively short period.

We acknowledge that this is the second phase of the ACCC's review process, and the options presented in its February 2003 Discussion Paper have been developed taking into account the views and concerns of stakeholders as expressed in their submissions in response to the ACCC Issues Paper published last year. As this is an extremely important issue, we have not confined our comments solely to the ACCC's options as presented in the Discussion Paper. In our view, the ACCC should be considering the detailed provisions of the Regulatory Test with a clear view of the role of transmission in the NEM and how this might be influenced by the Test. Secondly, some of the historical difficulties with the Test relate to the way it is applied and the lack of access of market stakeholders to a comprehensive merits based review of the decisions arising from its application.

In order to achieve a robust and stable regulatory environment for the Regulatory Test and its ongoing application in the NEM, we urge the ACCC to expand the scope of its current review to also address application issues and processes. We acknowledge that possible solutions to these concerns may necessitate Code changes and would therefore need to be referred back to NECA by the ACCC. However, we believe a single integrated review process of both the detailed provisions of the Test and continuing application problems should lead to a speedier and more robust outcome.

2. The Role of Transmission in the National Electricity Market

The traditional view of the transmission network, and the one that has held sway in the electricity industry restructuring and market reforms in Australia over the past decade, is one where the network is considered to be:

- A natural monopoly; and
- Merely a transport system that should be kept largely separate from the market.

Almost 10 years on, and with the benefit of hindsight, there is now an ever-increasing realisation that neither of these tenets holds true any more, even if they once did. Virtually all services now being provided by TNSPs can be displaced by other service providers in delivering a high quality, reliable supply of electricity to consumers. In the extreme case for example, with current generation and control technologies, it is quite feasible (but not necessarily economic) for even a small electricity user to establish and operate an isolated electricity supply completely independently of the transmission and distribution networks.

Even where the most economic method of meeting the consumers' needs involves some level of transmission network services, there is no compelling reason why these cannot be competitively sourced in the majority of cases. The only true 'natural monopoly' element of transmission related services is the economic imperative that it be properly coordinated and operated as a single integrated network so as to maintain a high quality electricity supply at all points throughout the network at all times.

From a commercial perspective therefore, the provision of new transmission related services should be seen as investments that compete with the available substitutes in order to maximise the value of electricity (or indeed even overall energy) supplies to users. Current trends in energy production and transport technologies only serve to reinforce the view of transmission related services being in competition with other alternatives. In particular, there appears to be a strong long-term emerging trend towards smaller, distributed generation sources, and there is a real risk that some elements of new transmission network capability that may be provided over the next decade could be made redundant within a relatively short period of time.

Secondly, even though we view transmission as being separate from the market, in reality, the NEM incorporates approximations of the short-term costs of transmission (ie. network losses and constraints) in the real time spot markets through the detailed functionality of the scheduling, dispatch and price determination processes. The more than 4 years of practical operating experience with the NEM has clearly demonstrated that the short-term costs of transmission, although relatively low on average, can at times of power system stress be very considerable indeed, and have quite major impacts on the financial performance of almost all market participants.

These (albeit simplified) locational price signals expose market participants to network related costs and risks over which they have virtually no control. Both the network investment and the network operational decisions of TNSPs potentially have quite a material effect on locational prices in the NEM. There have been many incidents where very significant price differentials between market regions have coincided with network outages. Often these have been unscheduled or forced outages. However, there have been a number of instances where the outages have been instigated by the relevant TNSP in association with planned network maintenance.

In summary, in the long term, we should be aiming to properly integrate the transmission network into a seamless supply chain in which all the alternative methods of meeting electricity users' needs compete on equal terms to provide those needs in the most economically efficient manner. In the meantime, it is vitally important that the Regulatory Test should be seen as a regulatory mechanism whose sole purpose is to emulate what one would expect to be the outcomes of a truly competitive market.

Current efforts by NECA in conjunction with the industry to develop a practical 'beneficiary pays' approach to network charges for new regulated transmission network investments is, in our view, a useful first step towards a more commercial approach to the treatment of transmission services in the NEM. However, we are all strongly in favour of pursuing a more entrepreneurial approach to transmission investment in the NEM which allows innovators and risk-takers to invest risk capital in new network facilities to the maximum extent practicable and sell the services created at market-based prices to those who need them.

In this context, in our view, there should be a clear preference for market-based investment in new transmission wherever possible, and the ACCC should not allow the Regulatory Test to be used to justify regulated network expansion in situations

where a market-based option is possible. A two-sided negotiated approach to 'beneficiary pays' would introduce at least some elements of entrepreneurship into regulated network expansion, but unregulated approaches should be preferred.

3. The Current Regulatory Test

The Regulatory Test as currently worded focuses quite intentionally on economic efficiency and competitive neutrality as the principal criteria governing new regulated network investment. Unfortunately though, arguably its current application in the NEM fails to deliver on either of these objectives.

In our view, there appear to be a number of reasons as to why this is the case:

- In its current form, the Test is too easily manipulated by project proponents in terms of selection of alternative projects, market input assumptions (substitutable technologies and their associated costs and performance, market scenarios etc.), assumed residual values of alternative investments at the end of the assessment period, discount rate used and so on;

- The test is extremely judgemental and therefore the outcome of the assessment for any given project proposal is not readily predictable – this creates undue risk, particularly for proponents of alternative projects but ironically not so for the TNSP – this increases the risk related cost of alternatives, increases the likelihood of market failure, and must ultimately lead to a heavier than optimum reliance on regulated investments; and

- Its application to date has been difficult, protracted and costly for all affected parties.

Its application to inter-regional network investments to date has resulted in 2 approved projects, neither of which will necessarily "maximise net market benefits" as originally envisaged when the Test was first published in 1999. While there were many complex issues involved in each case, after all of the less important factors are stripped away, it appears to us that:

- SNI was only approved because more cost effective alternatives were not considered in the assessment process, and this was accepted by NEMMCO and the NET simply because those projects lacked a project sponsor; and

? SNOVIC400 was justified essentially because it was seen to be a cheaper method of market intervention than activating the NEMMCO Reserve Trader function[1].

As a result, in our view, this recent experience has done considerable harm to the NEM by demonstrating the extent of the regulatory risk and uncertainty faced by any new investor in electricity industry infrastructure, the value of which can be materially impacted by what appear to be quite subjective decisions driven by complex legal argument rather than sound economic theory. While network investment decisions are generally based on market conditions at times of peak demand, the impacts of those investments affect market trading and economic value considerations at off-peak as well as peak times.

The SNI case in particular exposed very serious deficiencies with the Test and its current application in that:

- It allowed TransGrid to ignore other more economically efficient options for which they alone were the only feasible proponents – in effect, in our view, they were allowed to use their monopoly position to suppress other more cost efficient alternatives; and

- The regulatory decision to approve SNI has undermined the financial viability of the privately funded Murraylink project and, as a result, has provided a stark reminder to equity investors and financiers of the undue level of regulatory and sovereign risk in the NEM.

Both regulators and policy-makers now have considerable work to do to restore investor faith in the NEM, and the ACCC Review of the Regulatory Test is a key component of that work.

[1] At an initial investment cost of approximately $100/kW, SNOVIC400 is clearly economic to supply unserved energy at the current value of VoLL; ie. provided that one is confident that the diversity in peak demand between NSW and the southern States will remain, it is quite likely that the project would be justified on a proper economic assessment in any event, albeit maybe with a different optimum timing.

4. Governing Principles for the Review of the Regulatory Test

As stated earlier, in our view, the ACCC's objective of this review should be to establish a Regulatory Test that will be robust and stable and which ideally will not need to be the subject of regular major reviews and amendments. Regulatory stability is highly desirable for the proponents of regulated transmission investments, but it is critically important to prospective investors in alternative projects.

Based on the above discussion, we believe that the ACCC should adopt the following guiding principles in conducting the current review and deciding on possible changes to the current wording of the Regulatory Test.

4.1. Preference for Market Based Network Services

As transmission is an integral part of an overall supply chain in which there is growing competition within and between its various elements, we should be striving in the long term to incorporate transmission related services into the overall competitive market as much as possible and only rely on regulated services where competition is infeasible.

Regulation is in general a poor substitute for the economic discipline of a truly competitive market; therefore we should only be relying on regulatory measures where competition is clearly shown to be impractical (ie. totally infeasible or not practical because the transaction costs would be unacceptably high)[2].

Arguably, this is primarily a policy issue for Governments – however, even within the current legal and regulatory framework and in line with the NEM objectives as stated in the Code, there is still some room for the ACCC to promote market-based solutions in preference to regulated approaches wherever feasible and cost effective.

To the extent that we must continue to rely on regulatory processes governing both long-term investment in, and day to day delivery of, transmission network services to users, it is important that:

[2] If it can be demonstrated that the market won't support a proposed project, this may in fact be a clear signal that the market believes the proposed project will not deliver value (ie. its costs will outweigh its market benefits).

- The processes governing economic regulation of the regulated network businesses do no more than attempt to emulate the outcomes that a competitive market would deliver;

- The NSPs are obligated to manage the risks associated with the services they deliver where they are clearly in the best position to manage those risks at minimum cost; and

- The regulatory regime applies appropriate incentives on NSPs in both their investment decision-making and in their operational practices consistent with what one would expect would apply to them in a competitive market environment.

In particular, the onus of proof should be imposed on those who wish to retain a predominantly regulated approach to transmission services to continue to justify on a regular basis where and why a regulated approach should be retained.

The National Electricity Code already provides considerable flexibility for both regulated and unregulated investment in inter-regional interconnector capacity. Consistent with the above principle, we strongly believe that the Regulatory Test should require the proponent of new regulated interconnector capacity to demonstrate to the satisfaction of the ACCC why they cannot, or will not, invest in an unregulated alternative. This should include evidence that the proponent has made bona fide attempts to market the project to prospective counterparties (just as entrepreneurial transmission and generation projects would be required to do prior to approval) which among other things would indicate the viability of the project as an unregulated investment. This suggests that:

- At least one or more 'alternative projects' considered by the TNSP when applying the Regulatory Test should be an unregulated link (this also applies to major intra-regional projects even though it would also require the creation of new regional boundaries by NEMMCO); and

- In its overall administration of the existing economic regulatory regime, the ACCC should be using whatever levers it has available to it to 'encourage' the TNSPs to take more direct responsibility for the evolution of the existing network access regime to one that is more market oriented and less reliant on regulatory decision-making.

4.2. Maintain Focus on Economic Efficiency and Competitive Neutrality

We believe it is more important than ever that the ACCC retain the dual objectives of economic efficiency and competitive neutrality as the cornerstone principles governing future transmission investment decisions.

The whole purpose of the Regulatory Test is to impose a discipline on the perceived 'natural monopoly' elements of the supply chain that is equivalent to the pressures of competition that apply to the generation and retailing sectors.

There should be no place within the Regulatory Test for addressing other public policy objectives or 'public good' issues. In our view, these should be considered quite separately. Both the regulated and unregulated sectors of the industry should be treated identically in this respect; ie. the fact that the transmission network businesses receive a regulated income stream for their 'economic' investments is not a relevant consideration when considering the merits of any proposed interventionist spending 'in the public interest'.

Network investments that are interventionist in nature should be:

- Compared with and optimised against other potential interventionist strategies that would meet the stated objectives of the proposed intervention;
- Funded in the same way as other interventionist options; and
- Treated in the scheduling, dispatch and price determination processes in the spot markets in the same way as other interventionist options.

It should be noted at this point that we do not regard all so-called 'reliability investments' that are assessed under sub-paragraph (a) of the Regulatory Test are necessarily interventionist. This issue is addressed in more detail in Section 7 of this submission.

4.3. Onus of Proof on the Proponent of Regulated Investments

Given the very material impact that network investments can have on the economic value of other facilities in the supply chain and on final electricity prices to users, we are strongly of the view that the hurdles faced by proponents of new regulated investment should remain high. The 'onus of proof' should clearly lie with the

proponent in all aspects of the assessment process where the Regulatory Test is applied. More specifically:

- Approval of any new investment should be subject to a clear demonstration by the proponent that it has taken all practical steps to maximise the value (to the market) of the existing relevant regulated infrastructure (not just his own);

- There should be a high degree of transparency in relation to the application of the Test by a proponent with ample opportunity for all stakeholders to scrutinise it, and have access to background information that supports all of the input assumptions used in the assessment;

- The proponent should be required to demonstrate to the satisfaction of the ACCC that it will support the operation of the new facilities so that its true economic value in the market can be realised by network users (and sanctions should be applied where the proponent is subsequently shown not to have done so);

- All investment decisions should be subject to appeal by those who are adversely affected by the decision, and the appellate body should be a sufficiently expert body with access to all of the necessary technical, commercial and legal competencies to undertake a merits-based review of the decision; and

- There should be no more artificial barriers or regulatory loopholes that prevent an exhaustive analysis of potential competing options, and TNSPs should be clearly obligated to promote the most economically efficient solution.

We acknowledge that the transaction costs associated with the application of all of the above requirements may be material. However, imposing stringent requirements on a proponent in order to gain approval for a regulated revenue stream for any new investment does not of itself mean that the assessment and approval process must be difficult and protracted. It is incumbent on the ACCC and the TNSPs to develop assessment procedures, consultation mechanisms and avenues of appeal that are commensurate with the materiality of any proposed investment under consideration.

We also accept that, in principle, more streamlined approaches for less material investment proposals that may compromise to some extent the 'onus of proof' on the proponent may be appropriate. This would certainly be the case where the Test is being applied to the distribution network but it is also likely for at least some so-called 'small' transmission network investments.

The transactional costs resulting from the rigour of the Regulatory Test should be commensurate with the impact of the project. Excessively rigorous tests on small investments are not sensible from both a relative transaction cost and also the market effects perspectives. Nevertheless, big projects may cost over $100m with market impacts greater again; in those cases, a high degree of diligence should be mandatory as it would be for any proponent of a commercial commitment of that size.

5. ACCC Summary of Participant Positions

Three of the joint sponsors of this submission – TXU Electricity, Loy Yang Power Management and Edison Mission Energy Australia – submitted comments to the ACCC in response to the Issues Paper published by the ACCC in May 2002. In its latest Discussion Paper, the ACCC has accurately summarised almost all of the views expressed in those responses. However, we wish to clarify the position put by Edison Mission Energy Australia regarding its qualified support for the inclusion of competition benefits in the Regulatory Test.

In its June 2002 response, Edison Mission Energy Australia made the following statement:

> *"**Should the test be altered to reflect greater competition in a region from the introduction of network investment?***
>
> *EME sees some benefits in including competition as part of the test, as it reflects some of the benefits that entrepreneurs would be able to access. However, as issues of wealth transfer do not enhance the economic efficiency of the NEM, but rather forecast winners and losers, any such approach including competition aspects must be undertaken rigorously in order to avoid any arbitrary assessment by proponents. If the analysis is arbitrary proponents would be incentivised to game the outcome in favour of their proposed investments which would likely lead to massive over-investment in networks. In addition as the long-term benefits are very uncertain, the test should only capture benefits that are forecast in the first five years.*
>
> *In order to ensure a rigorous analysis, the test should use the same approach as is to be used for the "beneficiary pays" test as is currently under development by NECA and the industry."*

The ACCC's Discussion Paper has interpreted the EME position as follows:

> ***"Should the test be altered to reflect greater competition in a region from the introduction of network investment?***
>
> *CS Energy, ElectraNet SA, EME, Enertrade, Powerlink, TransGrid, and Stanwell believe that competition benefits should be included in the market benefit stream of the regulatory test. EME and CS Energy note that participant behaviour may make it difficult to quantify competition aspects and avoid arbitrary assessment by proponents."*

We believe it is misleading to characterise EME's qualified support for the inclusion of some consideration of competition benefits in the Test in the same vein as the other market participants listed. As stated in its earlier submission, EME's aim is to ensure that practical, alternative market-based network investment options are given appropriate consideration and are fairly assessed. As market-based options rely entirely on their ability to capture economic rents in the market, EME was simply acknowledging the fact that their capacity to do this would need to be investigated.

In their submission EME particularly stressed the need to reconcile competition benefits with economic efficiency (noting that many competition benefits are in fact simply wealth transfers). This is important because any inclusion of competition benefits must ensure that proponents do not double count benefits in order to justify what would otherwise represent a negative net benefit or at least a reduced benefit.

Although not spelt out in its response to the ACCC Issues Paper, EME envisages a system of property rights associated with transmission investments. EME also envisages the competition benefits being calculated and allocated using the same methodology as is being developed under NECA's 'beneficiary pays' model. The ACCC has asked NECA to develop the property rights concept as part of that process. Where benefits are allocated under the 'beneficiary pays' process to beneficiaries of competition benefits, they would receive a portion of the property rights (as a proportion of the total benefits). In addition as EME considers that the 'beneficiary pays' process is only workable where networks actually negotiate commercial outcomes with prospective beneficiaries (the prescriptive "crank the handle approach will never easily resolve "who pays"), these prospective beneficiaries will negotiate for an appropriate portion of the total net benefits for their payment. The portion of the benefits negotiated as property rights will then need to

be subtracted from the total net benefits calculated as they will have been captured by the specific beneficiaries and should not be double counted.

The 'beneficiary pays' approach to determine the funding of new regulated investments still under development by NECA and the industry will purportedly identify not only who the market beneficiaries are in each case but also the extent to which they benefit and therefore the proportion of the cost of the new investment that they will each be required to bear. If this approach is considered to be robust enough to be a basis for determining regulated network charges, then it should also be robust enough to assess the market impacts of new unregulated network options and the extent to which they can be captured by the investor.

In summary, to clarify EME's position, it supports appropriate consideration of competition benefits in the Test to the extent necessary to ensure that NSP's have an incentive to act entrepreneurially and seek out prospective beneficiaries to assist with the funding of new investments rather than simply rely on the Regulatory Test which ultimately leads to some form of socialisation of the costs with all its attendant inefficiencies. In addition EME sought to ensure that competing, unregulated investment options are given proper consideration in the application of the Test. EME does not support inclusion of a competition benefits test as a means of applying a 'public good' argument to justify new regulated investments when they would otherwise fail the remaining provisions of the Test.

The other four co-sponsors of this submission – TXU Electricity, Loy Yang Power Management, International Power Hazelwood and Yallourn Energy – all fully support the EME position on this issue as clarified above.

6. ACCC Options Approach

In its Discussion Paper, the ACCC has considered possible amendments to the Regulatory Test in three parts:

- Minor amendments;
- Definitional Amendments; and
- Possible inclusion of a Competition Benefits Test.

In general terms, we are very supportive of the ACCC's approach in categorising the various amendments under consideration in this way. We also agree that the three options as presented by the ACCC are not mutually exclusive.

Having said that however, most of the minor amendments and even some of the definitional amendments illustrate the need for the Regulatory Test to be reviewed and if necessary updated whenever Code changes and the like necessitate complementary changes to the Test. The ACCC should be aiming to ensure compatibility between the Regulatory Test and the Industry Access Code as defined in the National Electricity Code is maintained at all times. We therefore recommend that the ACCC collaborate with NECA and the Code Change Panel to define and implement an appropriate process to achieve this for the future. Two possible approaches come to mind:

- NECA and the Code Change Panel, when submitting proposed Code changes for authorisation, could also put forward recommendations to the ACCC for complementary amendments to relevant ACCC regulatory principles and guidelines where considered necessary including the Regulatory Test; and/or

- The ACCC could develop and publish its own proposals in this respect and undertake public consultation in respect of those proposals in parallel with its Code change authorisation process.

In summary, the ACCC should take steps to ensure that, after this review has been completed and the Regulatory Test is once again appropriately aligned with the Industry Access Code, this alignment is then maintained on a continuous basis into the future.

Secondly, we are also concerned that the options published by the ACCC do not adequately address all of our perceived problems with the Regulatory Test in its current form and the way it is administered. As we discuss in more detail in latter sections of this submission, we believe the following aspects of the Test require further consideration by the ACCC:

- the definition and treatment of so-called 'reliability investments';

- the full range of market disruption costs resulting from new regulated network investments;

- the legal and regulatory framework within which the Regulatory Test operates; and

- the level of accountability of proponents of new projects who wish to use the Test to secure their future revenue stream to recover the costs of their project.

7. Option 1: Minor Amendments

The following table summarises our joint position on each of the minor amendments discussed by the ACCC under Option 1.

Issue	Proposed Amendment	Comments
NDR code changes	None	? We support the ACCC's position provided that this does not result in the relaxation of the obligations on network planners and investment decision makers to comply with the Regulatory Test (as otherwise modified) compared with the position when the Regulatory Test was first introduced in 1999 – we understand that this is the case but we believe the ACCC should confirm this and advise stakeholders accordingly.
Preamble	"The Australian Competition and Consumer Commission promulgates this regulatory test in accordance with clause 5.6.5A(a) of the National Electricity Code (the Code)."	? We support this amendment.
	"An *augmentation* satisfies this test if - (b) in the event the *augmentation* is proposed in order to meet an objectively measurable	? presumably '(b)' should read '(a)' ? The application of standards here, in our view, is merely a mechanism for forcing NSPs to spend more than the market is apparently willing to pay.

Issue	Proposed Amendment	Comments
	service standard linked to the technical requirements of schedule 5.1 of the Code or in relevant legislation, regulations or any statutory instrument of a *participating jurisdiction* –the *augmentation* minimises the net present value of the *cost* of meeting those standards; or … "	• Our first preference would be to eliminate separate jurisdictional standards, particularly where those standards have the potential to distort market outcomes and promote market inefficiency. • If our first preference is unachievable, our second preference is to only distinguish between economically justified investments and the marginal component of incremental interventionist type investment rather than classifying the full project cost of a regulated network investment proposal as a reliability investment. • Also, if approved, the network capacity added as a result of the incremental interventionist component of any project should also be treated like any other interventionist action in the market (with 'what if' pricing, separate funding etc.), in which case it would not be appropriate to even address it within the framework of the Regulatory Test.
Application	"The regulatory test is to be applied: (a) to transmission system or distribution system augmentation proposals in accordance with clause 5.6.2 of the Code (augmentation);	• We support the ACCC's position. • However, we believe that the Test should also apply to major replacements and refurbishments – see later comments on this issue.

Issue	Proposed Amendment	Comments
	(b) by NSPs to *new small network assets* identified under clause 5.6.5 and pursuant to clause 5.6.6A of the Code, other than to a *new large network assets* in accordance with clause 5.6.6 *(new small network assets);* and *(c)* by NSPs to *new large network assets* pursuant to clause 5.6.6A of the Code *(new large network assets)* In this test, *augmentations*, *new large network assets* and *new small network assets* are called *proposed* *augmentations*."	
Small and large network assets	None	? We believe the Regulatory Test should be amended to ensure proper consistency between the Test and the current Code provisions. ? We note that the current Code provisions provide some latitude to the ACCC to review and modify the existing $1M and $10M investment thresholds. However, rather than the ACCC using this review process to consider possible changes to the expenditure thresholds for small and large projects, we would prefer the ACCC to consider this in a subsequent

Issue	Proposed Amendment	Comments
		process once the detailed provisions of the revised Regulatory Test have been determined as only then do you know the likely transactional costs caused by the rigour of the Test and whether it is sensible to apply it to small projects. ? It is also worth noting that ranking proposed regulated network investments in terms of their potential impact on other stakeholders may not be the same as their ranking in terms of initial capital cost. Arguably, it is their assessed impact on the market rather than their capital cost that should determine how the Test should be applied. ? As we cannot ascertain the transaction costs involved in the application of the Test until the other matters under consideration in this review are resolved and a revised Test is published, it would be premature to make any specific comments at this time on the current $1m and $10m thresholds and how they might be amended.
Replacement assets and refurbishments	Confine the application of the test to the incremental spending which can be defined as a network augmentation	? Ideally, we would prefer the Regulatory Test to apply to all large network projects for which a regulated revenue will be sought, not merely those which are defined as augmentations. We note that TNSPs should have the obligation imposed upon them to

Issue	Proposed Amendment	Comments
		consider not just replacement of existing projects but rather optimisation of replacement investments which may include greater capacity, less capacity or simply removing the asset and building a new asset at different locations. This creates the incentive to transform the network to its more optimised form where possible. ? We agree with the ACCC's current interpretation of the Code, and we acknowledge that our concerns in this respect would need to be addressed via a Code change; ie. they cannot be addressed within the detailed provisions of the Regulatory Test itself.
Optimisation	None – to be considered further in the ACCC's finalisation of the Statement of Regulatory Principles	? The Regulatory Test should be robust enough to accommodate whatever approach the ACCC chooses to adopt on the issue of asset optimisation. ? While optimisation at least in theory has some value in terms of incentivising NSPs to think very carefully before proceeding with marginal projects, in reality we believe it would be very difficult for the ACCC to apply in practice and therefore has little practical value. As soon as any new facilities are added to the power system, the market will quickly adapt and make use of those facilities and maximise their value in the market (eg. other 'would be' economic investments

Issue	Proposed Amendment	Comments
		will be deferred). ? In these circumstances, we consider the Regulatory Test should be framed in such a way that it does not rely at all on the asset optimisation process to discourage proponents of marginal projects from proceeding with them.

Most of the issues that have been addressed in the list of possible minor amendments are themselves relatively minor. However, the way in which the Regulatory Test currently defines which projects are addressed under sub-paragraph (a) [ie. reliability investments] and sub-paragraph (b) [ie. economic investments] warrants further discussion and comment.

We are strongly opposed to the current approach that defines any augmentation project that is proposed in order to meet "an objectively measurable service standard" should merely be required to satisfy a least cost test. The reasons for this are discussed below.

7.1. Inappropriate Standards

The standards currently in place are generally 'network-centric' in that they presume the so-called 'natural monopoly' position of the network and fail to give adequate recognition to the available substitutes that have the potential to be more economically efficient while also satisfying the needs of electricity users.

The standards are generally set and applied without any clear definition of the scope of an NSP's responsibility to ensure that the standards are indeed satisfied[3]. Rarely is the NSP in control of all the various facilities and functions in the supply chain that

[3] For example, NSPs are not held responsible for the provision of network control ancillary services where these services are provided by service providers other than the NSP. Yet the provision of the services is often quite critical in terms of meeting the voltage control and loss of load benchmarks established in the Code or in other jurisdictional imposed standards.

interact with and complement one another to provide the service in accord with the stipulated standard. Even the ACCC has to date adopted a rather ambiguous position on this question by allowing the regulated network businesses total discretion to make the argument for inclusion of non-traditional assets and services within the scope of assets and services for which they are entitled to receive a regulated revenue stream. Also, as far as we have been able to ascertain, the ACCC has given no clear indication to date as to what criteria it would apply to determine the appropriateness or otherwise of extending the scope of an NSP's regulated business beyond the traditional and rather narrow perspective represented by their traditional network asset base.

Ideally, we would prefer to see jurisdictional imposed service standards and license obligations abandoned in favour of a single uniform national approach under the auspices of the National Electricity Code and the Reliability Panel.

Secondly, any standards that are applied should be constructed so that they clearly distinguish between what are potentially two quite different needs.

The first of these relates to the provision of regulated network services in lieu of practical alternatives on a competitively neutral basis. In such cases, it should be possible within the current market design and detailed Code provisions for the alternative providers to compete with the NSPs and earn a commercial return without undue regulatory risk and uncertainty created by the Regulatory Test or the behaviour of the NSPs.

The second concerns the increase in the stringency of the standard to a level dictated by other public policy considerations and which are generally beyond what the market, left to its own devices, would deliver. As an example of this, the assessment for both SNI and SNOVIC400 carried out by ROAM Consulting on behalf of NEMMCO in 2001 ascribed a major component of the 'net market benefit' to the capital deferral of reliability plant that would otherwise be needed in the southern States. In effect, the regulated network investments were seen as more economically efficient alternatives to intervention action by the NEMMCO Reserve Trader function. This raises a range of inter-related issues that should be addressed holistically by the ACCC. For example, it suggests:

- The current value of VOLL and NEMMCO's operational reserve standard are incompatible and, unless something is changed, we should expect market intervention in one form or another as a permanent feature of the market;

- Arguably, NEMMCO's operational reserve standard is also incompatible with the Reliability Panel's reliability threshold4 of a maximum level of unserved energy within any region of 0.002% - NEMMCO's operational reserve standard appears to be considerably more onerous than one which would be consistent with the Reliability Panel's planning standard5;

- Either or both of the value of VOLL and NEMMCO's operational reserve standard could (and arguably should) be modified to be more in line with what the market is prepared to pay. If this is not done, recent outcomes from the application of the Regulatory Test show that the Test will continue to justify long term investments that have a 70-year asset life and a high risk of eventually being stranded6;

- While NEMMCO sets market prices so that any interventionist actions it instigates do not distort market price signals, interventionist action in the form of over-investment in the network can and in fact does distort market price signals; and

- Where transmission investments are justified on the basis of a market interventionist action, under the current regulatory framework, the costs of this action are likely to be borne by the assessed beneficiaries under the 'beneficiary pays' arrangement on a very long term basis, even though the assessed benefit may be relatively short term and/or the beneficiaries may change considerably over time, as the market grows and evolves and the overall topology of the network also changes.

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[4] In the MMA Report "Review of NEMMCO Reserve Margin" Refer to MMA report" prepared fro NECA and published on 25 September 2002, it states inter alia "… (with) reserve margins based on the size of the largest unit over the 10% POE demand, USE (ie. unserved energy) would be typically 0.00001% in NSW to 0.0008 in SA, well below the 0.002% standard"

[5] Even if the Reliability Panel's planning threshold is met by the market, on a probabilistic basis, there would be times where there is insufficient capacity available to satisfy NEMMCO's operational reserve standard in all regions. It was NEMMCO's operational reserve standard that was used to determine the level of reliability capacity required by the market in the assessment of the so-called net 'market benefits' of SNI and SNOVIC400.

[6] Even new investments in generation capacity supplied to NEMMCO under a Reserve Trader contract are relatively short term in that the owner of the plant will carry the full stranded asset risk when the Reserve Trader contract expires. Presumably, the owner would not invest in new facilities to meet its contractual commitment to NEMMCO unless it was confident that the market would be able to absorb the new capacity at that time.

The majority of the TNSPs still apply a rather simple (n-1) planning criterion against a 10% POE demand forecast to justify new network investment proposals, arguing that this is in line with jurisdictional based planning standards. However, at least some jurisdictional regulators recognise that adopting an (n-1) reliability standard should not prevent the NSP or others from seeking new innovative ways of meeting consumer's needs, and in fact they require the NSP to consider the full range of possible alternatives before approving the regulated network option. In some cases, they have even allowed NSP cost recovery (through their regulated revenue) of non-traditional alternatives to new network investment on the basis that these were more economically efficient. Within the context of the Regulatory Test, these alternative options can and should be considered within the framework suggested above; ie.

- The market-driven component of any investment proposal should be assessed as an economic investment option seeking to maximise market benefits; and

- Any additional investment over and above the economically justified amount due to a requirement to satisfy a security or reliability standard that is in excess of what one could reasonably expect the market to deliver should be considered in the same way as any other interventionist spending proposal outside the purview of the Regulatory Test altogether.

In our view, it would be remiss of the ACCC to continue to ignore these quite fundamental issues during the latter stages of this review. We do not expect the ACCC to resolve all of these matters, and some of them are not within the purview of the ACCC to address in any event. However, it would be possible for the ACCC to recognise the inappropriateness of applying the Regulatory Test to interventionist network investments and call on NECA to develop proposals that would ensure the principles governing other interventionist actions in the market equally apply to the network.

If the ACCC adopted this approach, it would remove much of the ambiguity and confusion surrounding the current application of the Test in the NEM. It would also confine the Test to deal with the primary objectives for which it was originally intended – economic efficiency and competitive neutrality. If indeed there is a justification for additional investment in transmission for public policy or public good reasons, then these should be given due consideration under an entirely separate process, and arguably even their funding should be quite independent of normal Transmission Use of System charges.

8. Option 2: Definitional Amendments

The following table summarises our joint position on each of the definitional amendments discussed by the ACCC under Option 2.

Issue	Proposed Amendment	Comments
Alternative projects	The following criterion should be used when deciding which alternative project should be taken into account in applying the regulatory test Ñ have a clearly identifiable proponent, or (a) the project should be a genuine alternative to the project being assessed, ie., a substitute; and (b) the project should also be practicable.	• We support the ACCC's position subject to further clarification of a proponent's responsibility to consider the full range of practical alternatives. This issue is addressed in more detail in the definitions of *substitutability* and *practicability* below.
Substitutability	For a proposal to be a substitute: ? Ñ the outcomes delivered by the proposal should be similar to those delivered by the project; and ? Ñ the proposal should become operational in a similar time frame to the project.	• We strongly disagree that the proposed definition of substitutability is adequate and it still leaves open considerable room for legal debate about what might constitute an acceptable substitute • Every alternative project will deliver at least some differences in outcomes, and non-network investment options in particular will generally have quite substantial differences in outputs. Nevertheless they may still be more than adequate (and involving substantially less value at risk) substitutes for the proposed network option. Alternative projects therefore should only need to deliver similar outcomes to the extent that they all satisfy the identified objective or

Issue	Proposed Amendment	Comments
		market need even though the detailed characteristics of the outputs of each may be substantially different. In particular, those seeking new innovative ways to meet the market's needed should not be frustrated by an unduly narrow definition of substitutability • TNSPs have long argued that non-network related investments are less inherently reliable because the TNSPs themselves don't have direct control over them. In reality, where the market discipline applies to these alternatives, the commercial incentives and accountabilities of proponents of these projects are clearly superior to those of the TNSPs under the current access regime. However, this has essentially been ignored in the economic assessment process. • Secondly, the requirement for the alternative to become operational in a similar timeframe is arguably superfluous. The timing of any alternative including the TNSP's preferred option should be timed to maximise its net benefit (in this sense any practical alternative timing should itself be considered to be an eligible alternative project) – provided any alternative project meets the perceived needs of the market it should be an eligible project and subject to the same "maximisation of net market benefits" objective as any other
Practicability	In considering the practicability of a proposal,	? Again, these definitions are still too vague and open to gaming by a TNSP. For

Issue	Proposed Amendment	Comments
	the following issues need to be considered: ? the technical feasibility of the additional proposal; and ? the commercial feasibility of the additional proposal.	example, is a project technically and/or commercially infeasible merely because it would involve changes to the proponent's assets which the proponent is not prepared to sponsor? ? the clear intent should be that a project should be considered on the basis of its technical and commercial merits which are in no way affected by ownership or operational control issues – to do otherwise is to suggest that we must accept market inefficiencies are an inevitable outcome of multiple stakeholders being involved in the construction and operation of the power system – we do not subscribe to this view
Market benefits	Inclusion of ROAM Consulting's list of examples	? Subject to the more detailed matters discussed below, we support the ACCC position that the appropriate measure of net market benefits is the increase in consumers' and producers' surplus or an equivalent thereof ? arguably, the benefits of reduction in involuntary load shedding and the benefits of capital deferral of reliability entry plant are two different approaches to measuring the same benefit ? assuming the target reliability of supply of all competing options is to match the Reliability Panel's published reliability standard, then one would expect there to be little or no comparative benefit between proposals in terms of reductions in involuntary load shedding ? as stated earlier, we believe there should

Issue	Proposed Amendment	Comments
		be a clear distinction between investment which is an economic substitute for alternative economic investments and those which are substitutes for alternative interventionist investments, and an entirely different process should be applied for addressing and approving interventionist spending to ensure it is totally transparent, does not suppress market price signals or distort competition, or have the costs of it buried in so called "beneficiary pays" based TUoS charges on a long-term basis
Costs	Inclusion of the IRPC definition of costs plus the market disruption costs associated with testing of any transmission asset	• We support the proposed inclusions but wish to add the full range of market disruption costs associated with any new project. These include market disruption costs associated with: o construction; o commissioning; o operational testing; and o ongoing maintenance.
Committed / anticipated project	Adopt NEMMCO's list of criteria for committed projects and a modification of the above proposed by the ACCC for anticipated projects	• In broad terms, we support the ACCC's position on this issue • Essentially there are two key questions which should determine whether a project is likely to proceed: (a) Are there still barriers to the project going ahead which are outside the control of the proponent, and what is the likelihood that these will cause its indefinite deferral or total abandonment? and

Issue	Proposed Amendment	Comments
		(b) What are the avoided costs of the project in the future (ie. ignoring irrecoverable sunk costs on the project to date) compared to its expected commercial benefits to the proponent if it goes ahead? ? In some respects, the NEMMCO list of criteria attempt to capture the above but it is possible in some cases that they will not. • We therefore suggest that if a proponent of an alternative project is aggrieved by the way its project has been classified in accord with the proposed criteria, it should have the opportunity to make a case for a change in classification based on a verifiable statement of its position in relation to questions (a) and (b) above.
Commercial discount rate	None	• The ACCC's discussion on this issue implies but does not overtly state that the regulated WACC or something similar to this would be a reasonable rate to apply. In our view, this is not consistent with the stated aim of removing "a potential source of bias between generation and transmission options" as proposed by Ernst & Young • A key consideration in the NPV analysis of a transmission investment option over a relatively short (ie. up to 10 years) period is the assumed residual value of the investment at the end of the assessment period. • If a relatively low 'commercial' discount

Issue	Proposed Amendment	Comments
		rate is applied, we strongly suggest that the proponent should be required to undertake at least some form of risk analysis of the residual value and discount it accordingly. • Alternatively, they should raise the discount rate to a level more in line with that applied by generators. The 'required rate of return on equity' r in the WACC calculation should be based on the risk free rate + market risk premium * Beta. The proponent should be required to explicitly relate the return on equity to the risk inherent in the proposal as indicated by the range of outcomes represented in the modelling by adjusting the Beta value. • In particular, we believe it is quite inappropriate in the application of the Test to use as the discount rate, a rate equivalent to the regulator's value of WACC used for revenue determination processes. Rather it should be based on a higher beta value that is more in line with the perceived risk of this type of project to an entrepreneurial investor • We believe the ACCC should be more explicit on its attitude to this issue
VoLL	$10,000 per MWh should apply	• We agree with the ACCC that using a VoLL of $10, 000 per MWh in accord with the relevant provision of the Code would be competitively neutral. However, the practical effect of this in the application of the Test in its proposed form would be minimal because the bulk of regulated

Issue	Proposed Amendment	Comments
		transmission investment would be justified on the basis of satisfying one form of standard or another, none of which are at all consistent with the application of a $10,000 per MWh value of VoLL • For example, the assessed market benefits of SNOVIC400 were principally driven by the deferred capital for 'reliability' plant, the amount of which was based on NEMMCO's operating reserve policy which imputes a value of VoLL well in excess of $10,000 per MWh • Therefore, this proposal by the ACCC will have no discernible effect unless steps are taken to isolate 'interventionist' investment proposals and consider them under a completely separate process
Reliability Augmentation	Inclusion of more stringent information disclosure requirements on the proponent	• While we support any initiative that will improve the accountability of TNSPs in relation to all regulated investment proposals, our first preference for addressing the issue would be to delete sub-paragraph (a), require the TNSPs to treat all 'market driven' investment proposals as economic investments, and introduce an entirely new process to address the issue of 'interventionist' investment proposals including their method of funding

In summary, we are very supportive of the broad intent of the ACCC's proposed definitional amendments but in some cases we do not believe they go far enough to

allay our current concerns with the detailed wording of the Test or the way in which it is currently applied by TNSPs.

9. Option 3: Competition Benefits Test

In its Discussion Paper, the ACCC stated as follows:

> *At this stage, the Commission does not have any views on whether the competition test should be recognised as a benefit to be measured within the existing regulatory test framework, or to be applied as a separate test.*

We interpret this to mean that the ACCC has already accepted the view that so-called competition benefits ought to be recognised; however as yet the Commission has not made up its mind on how best to do this.

As privately owned businesses with considerable shareholder equity invested in the NEM, we are alarmed by the ACCC's acquiescence to the line of argument presented to it by what are quite short-sighted and self-interested stakeholders who are promoting their immediate commercial interests at the expense of long-term economic efficiency for the market overall.

We all remain implacably opposed to the non-specific inclusion of a competition benefits test for the following reasons[7]:

- It breaches the principle of competitive neutrality with any other investment option as it would allow transmission options to impose outcomes on participants (one sided negotiation) as distinct from undertaking a commercial negotiation between equals;

- It completely discounts the structural options available which arguably would be more effective mechanisms for addressing the competition issue and with a lower net cost to the consumers who are the intended beneficiaries of the enhanced competition;

[7] We note that EME's proposal envisaged NSP's undertaking commercial negotiations with specific beneficiaries of enhanced competition.

- It quite possibly results in double-counting of some of the benefits already accounted for in the traditional NPV analysis associated with the traditional market benefits test;

- All of the tests canvassed by the ACCC have serious flaws as is discussed in more detail below; and

- Finally, none of the tests provides a quantitative measure of the so-called competition benefits in a form that is consistent with and additive to the measure of net market benefits derived from the conventional DCF analysis. Therefore, we are concerned about how the test could actually be applied other than in a highly qualitative and therefore quite arbitrary fashion which then undermines the objectivity of the process in any event. We note that the ACCC's Discussion Paper offers no insights on this issue on which we can comment.

Broadly speaking, participant behaviour in the market is likely to be significantly influenced by a range of factors and therefore the so-called competition benefits will be very difficult to predict in any event.

For example, it will be influenced not only by the existing sanctions that can be applied to errant behaviour but also by the perceived risk or regulatory threat of more stringent controls being applied if necessary. In our view, a private investor in the NEM would not justify an otherwise marginal investment because of perceived opportunities to exercise market power. To do so would deny the very real risk that the opportunity to exercise that market power could quite quickly and readily be removed by any number of legislative, regulatory, structural and/or investment options available to Governments and/or regulators if they chose to exercise them. Why therefore should the ACCC apply a fundamentally different standard or approach to regulated network investments? In our view, the fact that the ACCC can pass on the stranded asset risk associated with a regulated investment to electricity users (presumably, under the 'beneficiary pays' approach, none of the so-called competition benefits would accrue to generators) is not a legitimate reason for including 'a public good' argument as a basis for justifying such a project.

On the contrary, if it can be clearly demonstrated that the level of market concentration demands attention, it would be in the best interests of the electricity customers to pursue what are in effect much cheaper and more cost-effective solutions than simply over-investing in expensive transmission facilities. However,

we recognise that proper resolution of this problem is beyond the scope of this review, and indeed, involves policy decisions that are not the responsibility of the ACCC to make. Having said that, we strongly object to the ACCC even countenancing such compromises to the pursuit of economic efficiency and sound regulatory principles for what would appear to be reasons of political expediency.

We also question the ACCC's legal authority in its role as economic regulator of the TNSPs to expand the Test to include a competition benefits test.

9.1. ACCC's legal authority

We have not sought a legal opinion on this matter nor do we think that it is our role at this stage in the development of a revised Regulatory Test to do so. Rather, we believe it is incumbent on the ACCC to demonstrate that it has the power to incorporate what would in effect be a discriminatory provision in the Regulatory Test in favour of regulated transmission investment over competing alternatives in the name of "enhanced competition", particularly when there are other equally effective or arguably superior (and certainly cheaper) strategies available to address the same issue.

By the powers vested in the ACCC under the National Electricity Law, we contend that the ACCC, in its role as economic regulator of the transmission network, is constrained by the market and code objectives and the detailed provisions of the network access regime embodied in the code that it has already authorised.

In our view, the addition of a competition benefits test in the Regulatory Test is not consistent with the market objectives because it fails to promote economic efficiency or competitive neutrality.

If the ACCC intends including a competition benefits test, we recommend that it confirm its legal power to do so. Otherwise, the validity of the Test may be vulnerable to legal challenge particularly where future regulated investments rely on the so-called competition benefits to justify them.

9.2. The alternative competition benefits tests

Market simulations

Market simulations are in effect an attempt to predict competitive market behaviour assuming that all competitors attempt to profit-maximise taking into account their

need to comply with general competition law and any detailed rules governing specific market behaviours.

The profit maximising objective of a participant in the market is not necessarily synonymous with maximising spot market revenues. The financial impacts of a participant's contract position are a major influencing factor and therefore market simulations must involve key assumptions about each party's contract position.

Most market modelling approaches can only address all of these behavioural factors in a rather simplified way and the modelling results are quite sensitive to the input assumptions made in relation to each.

Therefore, in our view, the results of market simulations are open to manipulation and the so-called assessed competition benefits of any particular regulated investment proposal will necessarily be highly subjective.

However, in the event that the relevant NSP undertook a commercial two-sided negotiation with one or more prospective beneficiaries of competition benefits, market simulations would be an important tool to help conclude the negotiations. It is envisaged that both sides would work through a variety of simulations based on agreed inputs to gain confidence that the prospective benefits existed with an acceptable degree of certainty.

Powerlink's public benefits test

Powerlink's proposed public benefits test is simply a particular form of a market simulation approach with:

- Some proposed measures of the so-called competition benefits; and
- Some preconditions that need to be satisfied before the test can be applied.

In addition to our general concerns discussed above in relation to a market simulations approach, there are some other aspects of the Powerlink proposal that warrant further comment.

Proposed Measure of Competition Benefits	Comments
Actual pool price	Attempting to quantify a so-called competition benefit in

Proposed Measure of Competition Benefits	Comments
outcomes	this form pre-supposes the model simulations would provide a reasonably accurate picture of the extent to which market prices might be reduced by the increased network capacity being proposed. In any event, even if it were possible to do this, it still leaves open the question of how to combine this assessment quantitatively with the outcome of the conventional NPV assessment to determine whether the proposal passes or fails the Test.
Consideration of strategic bidding scenarios	This is not an output but merely a factor in deciding what potential bidding scenarios involving alleged misuse of market power should be considered. Acceptance of this measure would invite NSP's to manipulate the outcome, as it would constitute a one-sided negotiation.
Major load development scenarios	This appears to be an entirely different issue to what is generally discussed as a "competition benefit". This appears to be a proposal to attempt to justify uneconomic investment in the network on the basis that it would facilitate long-term State economic development. Presumably, it would also need to entail a proposal whereby the costs of the network investment would be smeared broadly over network users rather than being allocated on a strict 'beneficiaries pays' basis; (ie. the line of argument would be that as all consumers and presumably generators in the State are indirect beneficiaries of the enhanced State economy, smearing the costs of the investment quite broadly is justifiable). Therefore, in our view, this proposal raises a whole new set of issues that go well beyond the scope of this review, and this is not the appropriate process in which to address them. It is clear that these sorts of benefits would be driven by political objectives (exactly the type of objective

Proposed Measure of Competition Benefits	Comments
	that was to be removed by de-regulation of the electricity industry as it was one of the main failures of the monopoly State -based system).

In summary, Powerlink's proposed measures reduce down to simply market price effects that are presumably the same measure that is proposed for the first option – ie. market simulations.

Condition precedent	Comment
History of market prices significantly above marginal cost	In an energy only market with minimal demand side involvement and a market price cap in place, it is inevitable in a reasonably balanced market that market prices would rise 'significantly above (short run) marginal cost' for at least some of the time. Therefore, the precise interpretation of this condition precedent will necessarily be quite subjective, based on a presumption that, if it is deemed to have been met, then one or more parties in the market have been unduly exercising market power. Otherwise, if the behaviour is deemed to be reasonable, why would anyone propose over-investment in the network to suppress it?
Market power occurs or will occur	This seems to be at odds with the first condition precedent in that in this case, the mere presence or likely future presence of market power is sufficient to apply the test. This seems superfluous in any event because ultimately the competition benefits assessment would need to come to some form of judgement as to the extent to which the market power that is present is likely to be unduly exploited. Therefore, if no market power exists or is likely to exist, the proponent would be unable to identify any so-called competition benefit.

Condition precedent	Comment
Relieving a constraint is deemed to be important by a jurisdiction	This appears to be an extension of the 'public good' rationale associated with general policy objectives that a State Government may wish to pursue such as encouraging foot-loose energy intensive industries to locate within their borders. It would have the effect of allowing State Governments to continue past practices of using their power industries as instruments of Government policy without the appropriate level of transparency and accountability for the 'assistance' those target industries may be offered to induce them to invest in their State. This is essentially an issue for Governments. Nevertheless, in our view, Governments have any number of ways of implementing public policies such as is described above without resorting to what would in effect be manipulation and distortion of the processes governing economic regulation of the network. In the event that a jurisdiction felt that the relief of a constraint was important to that jurisdiction, they have the ability even under the current system to transparently commit that jurisdiction's tax dollars to an entrepreneurial investment that could be operated passively (would look to the market like a regulated investment).

However, if the ACCC decides to go ahead with the idea of considering competition benefits in some form, then, as a general principle, the idea of a 'public benefits' assessment along the lines that applies for any application for authorisation under Part VII of the Trade Practices Act probably has more merit than any of the other options proposed to date. In essence, deliberate over-investment in the network is both anti-competitive and economically inefficient in that it distorts the competitive market environment and adds avoidable costs to end users' electricity bills.

Therefore, it ought to be incumbent on the proponent of such over-investment to go through a comprehensive justification that mirrors the Part VII authorisation process.

The proponent would be required to demonstrate to the satisfaction of the ACCC that the purported public benefit in terms of enhanced competition outweighs the detrimental effects of the proposal on other stakeholders when compared with the most economically efficient investment scenario. When making its case, the proponent would also need to consider other possibilities that could be implemented to address the same issue and demonstrate why their investment proposal should be the preferred option.

This approach would at least be much more rigorous than any of the alternatives currently being canvassed in the Discussion Paper. It would involve much greater exposure of the issues and arguments behind any application and it would provide a much better opportunity for opponents to put their views directly to the ACCC before a decision is made.

In any event however, the final decision by the ACCC is still likely to be very subjective because it calls for a prediction of the extent of regulatory and market failure and a judgement by the ACCC that the costs imposed on the market by the proposed investment are outweighed by the so-called competition benefit.

If this approach was followed and the same general principles for authorisation of anti-competitive conduct under Part VII of the Trade Practices Act were applied, the ACCC would also need to decide whether to:

- Place strict time limits on the decision after which it would be subject to a full scale review[8]; and

- Reserve the right to overturn its decision in the event of a material change in market circumstances.

In our view, there may well be good reason for the ACCC to qualify any decision in relation to competition benefits particularly in cases where:

[8] Presumably, if the ACCC found that at the subsequent review that the so-called competition benefits were no longer applicable, the network assets would then be subject to the normal optimisation process that is part of the periodic regulatory process for determining the network businesses' regulated revenues.

- reliance on alleged competition benefits is significant in the ACCC's decision that the project in question passes the Test; and

- in spite of this alleged benefit, the project is still marginal.

Hopefully, this would prevent proponents from asking for approval of projects that are clearly uneconomic and using rather dubious assessments of so-called competition benefits in an attempt to justify them.

Hirschmann-Herfindahl Index

The Hirschmann-Herfindahl Index (HHI) is a widely used measure of market concentration and economists have often attempted to apply it to competitive electricity markets to assess the potential for misuse of market power. However, there are some major flaws with the application of the HHI to electricity markets as is explained by the following excerpt from a paper by Borenstein, Bushnell and Knittel[9]

> *"Often concentration measures, such as the Hirschmann-Herfindahl Index (HHI) are used instead. Measures of industry concentration and individual firm market share are often correlated with market power, but this is not always the case.*
>
> *Some of the weaknesses of concentration measures as indicators of market power are exacerbated when applied to the electricity industry. Market definitions, which are always an issue in the use of concentration and market share measures, in electricity markets will depend on transmission constraints, which will vary with load, and may be determined by firms that also own generation and distribution assets. Within a market, firms will have differing incentives to try to raise or lower the wholesale price, which will depend on the degree of vertical integration and the ability to hedge price risk in the market. Though standard measures of concentration provide some information about the*

[9] "A Cournot-Nash Equilibrium - Analysis of the New Jersey Electricity Market", Severin Borenstein, James Bushnell, and Christopher Knittel, November, 1997

potential for market power abuse, it is clear that they cannot capture some of the most important information necessary for the analysis.

Even within the generation market itself, the standard structural measures suffer two serious shortcomings in the context of electricity markets. First, traditional "market share" measures, based upon historical sales, are of questionable value since the nature of the market after deregulation will be so radically changed. Second, other structural measures that don't rely on historic sales, such as generating capacity, do not account for the relationship between capacity and demand or the relative cost curves of competitors (these features would, to some extent, be reflected in measures based upon historical sales, if those were relevant for the restructured industry). In particular, capacity-based measures do not incorporate the extent to which independent generating capacity and imports can meet demand and whether the marginal cost of that capacity is competitive with that of dominant firms.

The most widely used structural measure of concentration in a market is the Hirschmann-Herfindahl Index (HHI), which is defined as the sum of the squared market shares. An appeal of the HHI is that it is linked directly to market power in one theoretical model of competition, known as Cournot competition. Two factors, in general, determine the level of market power that a firm can exercise: the elasticity of demand in a market and the degree of competition among sellers. In perfect competition, the elasticity of demand becomes irrelevant due to the intensity of competition. In monopoly, only the demand elasticity matters since there are no competitors. ….. the HHI measures directly one of the two factors that determine the exercise of market power, but it gives no indication of the elasticity of demand and, therefore, very imperfect indication of the severity of the market power problem. In this case, the HHI indicates by how much price exceeds marginal cost relative to the outcome that would result under monopoly. Predicting oligopolistic equilibria can be difficult and often requires a great deal of proprietary data, while computing an HHI is often fairly straightforward.

However, in the electricity industry, with its long history of regulation, there is a wealth of cost information available. This allows us to simulate the price cost margin directly."

In our view, the HHI cannot be applied to competitive electricity markets in the same way as it is applied to other markets which are much more open (ie. not constrained by the physical limitations of a closed network) and where instantaneous production and consumption don't need to be balanced precisely at all times (ie. fluctuations in product inventories play a critical role in the market dynamics and heavily influence competitive behaviours).

The HHI also takes no account of the mitigating effect upon exercise of market power of the new entry threat in an environment of low barriers to entry. In electricity generation with open access transmission this is extremely relevant. The brief history of the NEM shows that whenever forward prices have moved above new-entrant costs, proponents for new generation projects have quickly emerged.

Even if the application of the HHI could be adjusted appropriately to take account of the above factors, it still wouldn't provide a direct measure of so-called competition benefits; it would merely provide a measure of the change in market concentration for any given set of market conditions which themselves are constantly changing in the electricity market.

Residual Supply Analysis

The ACCC Discussion Paper has already identified the more serious weaknesses with this approach and we have no further comments to add regarding its potential application within the framework of the Regulatory Test.

Commercial Benefits Analysis

We agree with the ACCC's conclusions concerning this possible approach where it said:

> *" … the Commission acknowledges that this measure lacks economic rigour and is therefore a crude approximation of competition benefits. The measure also signals future interconnection using historic information rather than future information. A modified approach may consider forecasting the level of IRSRs but this detracts from the simplicity of the approach, and it would be better to run market simulations rather than attempt to forecast IRSRs. Another downside of the measure is that it cannot be applied to intra-regional investments."*

In fact, we have much stronger reservations about the validity of using the IRSRs as any sort of reliable indication of so-called competition benefits. For example, the COAG Energy Market Review Panel's final report proposed that the market value of FTRs (which would more or less be the market's perceived value of future IRSRs) should be used as a measure of the economic value of future investment in the network. This suggests to us therefore that the estimated change in the expected value of future IRSRs (with the proposed augmentation compared to the 'do nothing' case) would include both the expected net market benefits (assuming perfect competition) as well as the expected so-called competition benefits. Therefore, adopting this type of measure as an indicator of so-called competition benefit in our view would be a case of double-counting.

Stanwell Competition Index

We endorse the ACCC's view that the proposed Stanwell Competition Index is a qualitative measure and therefore would be vulnerable to considerable disputation. Arguably however, this comment also applies to all of the proposed measures under consideration. In our view, it is an inescapable fact that any attempt to predict the likely level of misuse of market power taking all the relevant factors into account for any particular market and competition regulation scenario would be quite subjective and unlikely to survive rigorous analysis of all of the many complex assumptions that lay behind it.

10. Summary & Recommendations

The Regulatory Test plays a vital role in the overall economic regulation of the current monopolistic treatment of much of the network in the current NEM arrangements. New investment in transmission services can and does have a material impact on the competitive market and the economic value of the equity invested in the NEM by other market participants.

In these circumstances, we strongly urge the ACCC to give very careful consideration to the concerns being expressed widely by private investors in the NEM concerning the deficiencies with the current wording of the Test and the way it is currently being applied in the NEM.

In this submission, we have discussed a range of concerns which can be summarised as follows. The existing Regulatory Test:

- Is vulnerable to manipulation by a proponent of a new transmission project to justify almost whatever project it prefers over more economically efficient alternatives;

- Is not competitively neutral in that it enables new network investments justified on reliability grounds to 'crowd out' alternative economically efficient investments;

- Represents a serious regulatory and sovereign risk to new private investors in the NEM that, taken together with other regulatory and sovereign risks present in the market, threatens the very success of the NEM – ie. – the achievement of the NEM and Code objectives as defined in Chapter 1 of the NEC;

- Has been difficult to administer with each attempted application of the Test, particularly to interconnector augmentation proposals, being both protracted and costly for all the affected parties including the proponent as well as other market participants.

The ACCC has an opportunity as a result of this review to address a major part of our concerns and those of other private participants in the NEM. Based on our discussions and proposals throughout this submission, we make the following specific recommendations to the ACCC.

	Recommendation
Scope of the ACCC Review	
1.	The ACCC should broaden the review to include consideration of not only the detailed wording of the Regulatory Test but also how it is administered and applied in relation to any specific proposal for new regulated network investment.
2.	The ACCC should defer consideration of the current $1 million and $10 million thresholds until it is clear what the new wording of the revised Regulatory Test and proposed changes to its administration and application to specific projects are, and stakeholders have an opportunity to consider and comment on the issue taking this new information into account.
Competition Benefits	

	Recommendation
3.	The ACCC should abandon any plans for the consideration of so-called competition benefits, either within the Regulatory Test or separately, as a potential justification for new regulated network investments.
4.	If the ACCC proposes to ignore Recommendation 3 in spite of the overwhelming arguments against doing so, the ACCC should seek legal advice concerning the extent of its powers to introduce consideration of so-called competition benefits for this purpose and advise interested stakeholders accordingly.
5.	Also, if the ACCC ultimately decides to give consideration to so-called competition benefits, it should: (iii) not entertain any approach other than using a determination process that is consistent with and as rigorously applied as the determination process used by the ACCC to authorise anti-competitive arrangements under Part VII of the Trade Practices Act; and (iv) impose a condition of approval in marginal cases that the decision will be subject to further review whenever there is a major change in circumstances in the market or at a predetermined date in the future, whichever occurs earlier.
Reliability Investments	
6.	The ACCC should remove from the Regulatory Test the distinction between so-called reliability investments and other economic investments. All proposals for regulated status should be justified on the basis that they are the most economically efficient options to satisfy the needs of the market. In this regard, the level of reliability that any project aims to deliver should be no more than that which the market is apparently prepared to pay for taking into account the Codified level of VoLL. More specifically, the ACCC should remove sub-paragraph (a) in its entirety from the Test.
7.	The ACCC should request NECA to prepare proposed amendments to

	Recommendation
	the Code that would extend the potential coverage of the Reserve Trader function of NEMMCO to include all potential interventionist projects including all forms of supply side, demand side and network options in order to meet its responsibilities. The ACCC should also require that any proposed Code changes developed as a result of this process will ensure that the appropriate market price signals are preserved at all times when any of the resources secured by the Reserve Trader are despatched.
8.	The ACCC should also request NECA to work in collaboration with the participating jurisdictions, State-based regulators, the Reliability Panel and NEMMCO as required to ensure that there is consistency throughout all aspects of the regulatory regime governing the NEM between the application of standards governing market driven service provision on the one hand and the imposition of more stringent requirements in terms of system security and reliability that are applied 'in the public interest'. Any such additional requirements should be imposed in a way which preserves competitive neutrality and does not distort the market price signals that drive long-term economic investment in the NEM.
Coverage of the Test	
9.	The ACCC should collaborate with NECA and the jurisdictions as required to clarify the obligations of each NSP in terms of its supply of regulated services to users. In particular, it should clarify the extent, if any, to which a regulated NSP should be responsible and accountable for more economically efficient non-network related alternatives to regulated network augmentation as the means by which the service needs of users are satisfied.
10.	The ACCC should request NECA to bring forward Code changes for authorisation that will extend the application of the Regulatory Test to not only major augmentation projects, but also major network refurbishments and replacements as well as commitments to non-traditional network support arrangements that are considered to be more economically efficient than traditional network investment options.

	Recommendation
11.	Subject to the outcome of Recommendation 9 above, the ACCC should ensure that all new investment commitments for the provision of regulated services (network augmentations or substitutes partly or totally funded by the NSP, replacements and refurbishment) should be required to pass the Test.
Preference for Market Based Network Investments	
12.	The ACCC should modify the Regulatory Test as required to ensure that, in order to pass the Test, a proponent of a new regulated investment must demonstrate to the satisfaction of the ACCC that it has made bone fide attempts to market the project (and potential variations thereof) to project beneficiaries and has valid reasons for pursuing a regulated approach to the project in preference to a market-based alternative.
Maximise Utilisation of Network Facilities	
13.	The ACCC should require, as a condition of approval of any new regulated investment, that a proponent provides clear evidence of the arrangements in place or proposed, to ensure that the proponent has taken all reasonable steps available to ensure that the value of the relevant existing network facilities to the market is being maximised, and that it will similarly take all reasonable steps necessary to maximise the market benefits of the proposed new regulated investment.
Access to a Merits Based Review	
14.	The ACCC should collaborate with NECA and if necessary, the NEM participating jurisdictions as required to introduce an appropriate appeal mechanism that provides any aggrieved party the right to appeal against any ACCC decision to approve any major regulated network investments. The appeal should be heard by a technically competent appellate body with the relevant expertise to undertake a full merits-based review of the decision.

	Recommendation
Minor Amendments	
15.	Subject to the more detailed comments in this submission, the ACCC should proceed with the proposed minor amendments to the Regulatory Test.
16.	In addition, the ACCC should collaborate with NECA to develop and implement appropriate review processes to ensure that, in future, total consistency will be maintained at all times between the Code and all relevant regulatory principles and guidelines published by the ACCC including the Regulatory Test.
Definitional Amendments	
17.	As a general principle, the ACCC should ensure that, in both the detailed wording of the Test and in its ongoing application, the 'onus of proof' clearly lies with the proponent seeking to justify regulated status for any new investment proposal.
18.	Notwithstanding the precise wording of the definitions of *substitutability* and *practicability* adopted by the ACCC, there should be an overriding obligation on the proponent of a new regulated investment to consider all reasonable alternatives and promote the most economically efficient option – a strict legal interpretation of the definitions should no longer be an acceptable basis for excluding cost efficient options.
19.	The ACCC should clarify its position in terms of what it deems to be an appropriate 'commercial discount rate' for the economic evaluation of projects under the revised Regulatory Test. In this respect, we recommend that the ACCC endorse the use of a discount rate consistent with the rate that an entrepreneurial investor (with its own shareholder equity at risk) would apply.