Ref 2/370/2

24th April, 2003

Submission on ACCC Discussion Paper – Review of the Regulatory Test

As a Transmission Network Service Provider faced with significant challenges in delivering timely transmission augmentations in the face of high load growth, Powerlink is pleased to offer comments on the discussion paper dated 5 February 2003 for consideration by the ACCC. Powerlink considers the options outlined in the discussion paper provide a good framework for identifying improvements to the Regulatory Test.

In our view, the existing Regulatory Test, as the key decision rule for assessing regulated transmission augmentations, does not need major modification apart from the need to incorporate competition benefits. Powerlink considers it essential to include the benefits transmission augmentation can deliver through increased competition in the wholesale electricity market. This would correct a major flaw in the existing Regulatory Test that is holding up the planning and approval of new interconnectors and the mitigation of intra-regional constraints, as highlighted in the Parer Report.

Transmission network augmentations, or the absence of such augmentations, results in 'winners' and 'losers' in terms of outcomes in the electricity market. These outcomes are treated as "wealth transfers" in the existing Regulatory Test. The existing test gives no value to wealth transfers from customers to generators ('losses' by customers due to higher prices offset the 'wins' by generators due to higher profits and result in a zero net economic benefit). Competition policy, which resulted in the establishment of the NEM, was aimed at delivering competitive prices to end users, yet the Regulatory Test in its current form does not recognise the losses to customers from higher prices.

This is a policy matter that goes to the heart of the purpose of the NEM. Policy-makers have expressed the view in the past that competition (and regulation where there is no competition) is intended to maximise long-term benefits to end-users. Powerlink notes that the benefits identified in the Parer Report (by ACIL Tasman) attributed to reform of transmission consist almost entirely of 'gross' benefits that could flow through to Australian consumers. We therefore caution against adopting a narrow economic focus on 'net economic benefits' that may not align with broader policy objectives.

Powerlink would welcome the opportunity to discuss any of the comments in the attached submission with the ACCC. Some of the issues, particularly relating to the introduction of competition benefits, are likely to require further consideration. We look forward to participating in this process.

Yours sincerely,

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1.0 EXECUTIVE SUMMARY

This submission makes the following key points:

Option 1 – ACCC Discussion Paper

- the reliability limb of the Regulatory Test is working well, and should remain essentially unchanged

- minor amendments are required to achieve consistency with the National Electricity Code

- the discussion paper erroneously implies that reliability augmentations are not subject to the Regulatory Test and dispute processes

- efficiency improvements can be achieved by raising the thresholds for new small and new large network assets

- Powerlink accepts that ACCC review of the prudency of investment in replacement assets and refurbishments is appropriate, and agrees that the Regulatory Test should apply only where such assets are also 'augmentations'

- The bias towards unregulated network investments needs to be removed from the Regulatory Test

Option 2 – ACCC Discussion Paper

- the justification for increasing the prescriptiveness of the Regulatory Test has not been sufficiently demonstrated

- more time is required to allow the NDR Code Changes to work. Many of the concerns expressed in response to the initial ACCC Issues Paper on the Review of the Regulatory Test in May 2002 were addressed in the Code changes which took effect in March 2002

- 'Greater definition' may theoretically reduce the likelihood of conflicting interpretations and disputes. However, "micro-managing" how the Regulatory Test should be applied relies on the definitions being exactly correct in every situation, or it will in practice lead to unintended consequences and inefficient outcomes.

Option 3 – ACCC Discussion Paper

- Competition benefits arising from transmission augmentations can be classified as 'net' (measured at market level) and 'gross' (measured at customer level) benefits.

- 'Net' competition benefits could readily be incorporated into the existing test. Making this change to the Regulatory Test regarding net competition benefits is desirable but will not satisfy the major issues that have been raised by market participants.

- 'Gross' competition benefits are the benefits to customers of lower overall pool prices through increased market competitiveness. These are clearly excluded from the existing test. References to competition benefits in the Parer Report, by customer groups and in Powerlink's previous submissions to the ACCC are in reference to 'gross benefits'.

- Inclusion of 'gross' or 'net' competition benefits in the economic test for justification of regulated transmission is a classic policy decision.

- If the policy objective is to deliver lower prices to electricity consumers via strong competition in generation in the NEM, this cannot be achieved by ignoring 'gross' competition benefits.

- Assuming that the policy decision is to include a mechanism for the assessment of gross benefits, Powerlink suggests the introduction of a separate competition test (3rd limb). This test could take the form of a 2 step process :

    - Step 1 – identify a "trigger" which shows the potential for increased generator competition. The "trigger" could be either the observed instance(s) of price outcomes during network constraint events or one of the more straightforward indexes put forward in the discussion paper (eg- HHI). If this shows the potential for prices to be higher than marginal costs, proceed to Step 2

    - Step 2 – identify the likely 'gross' customer benefits by either using the price data from observed events (arguably the most robust evidence of likely outcomes) and/or by carrying out forward-looking market modelling.

- Disputes may occur in any process that creates 'winners' and 'losers'. However, legitimate disputes are part of a proper process to ensure that a case for transmission augmentation is robust. The exclusion of a competition benefits test on the grounds of minimising disputes is not appropriate. It would be better policy to include competition benefits, make the process as robust as possible, and exclude vexatious disputes.

2.0 OPTION 1 – MINOR AMENDMENTS

Key Points

- **the reliability limb of the Regulatory Test is working well, and should remain essentially unchanged**

- **minor amendments are required to achieve consistency with the National Electricity Code**

- **the discussion paper erroneously implies that reliability augmentations are not subject to the Regulatory Test and dispute processes**

- **efficiency improvements can be achieved by raising the thresholds for new small and new large network assets**

- **Powerlink accepts that ACCC review of the prudency of investment in replacement assets and refurbishments is appropriate, and agrees that the Regulatory Test should apply only where such assets are also 'augmentations'**

- **The bias towards unregulated network investments needs to be removed from the Regulatory Test**

2.1 Reliability Limb Should Remain Essentially Unchanged

Powerlink generally supports Option 1 in the ACCC Discussion Paper, where only minor amendments are proposed to the existing Regulatory Test.

It is important that the reliability limb of the Regulatory Test remain in its present form, apart from some minor modifications to achieve consistency with the National Electricity Code and to improve efficiency of the processes for all market participants.

The reasons for adopting a distinction between reliability and other augmentations in the ACCC Regulatory Test have not changed from 1999 when the Regulatory Test was developed. They are necessary to allow an NSP to meet statutory designated reliability standards without unreasonable barriers. We consider the present test, in conjunction with the rigorous public assessment process introduced with the NDR Code changes, sufficiently fulfils this requirement.

The Regulatory Test has been working well for reliability augmentations. There is growing understanding among market participants as to how it is to be applied, and the mechanisms for market participants to participate in the processes.

Powerlink considers there is value in maintaining stability and continuity in regulatory requirements for transmission investments where they are working well. This would also allow time for the market to build further understanding of processes and adjust to the NDR Code Changes.

In a State like Queensland where the long term trend for demand growth is 4% p.a., and where the peak summer demand in the SE corner (60% of the State load) grew by 8.4% this past, mild summer, and is projected to grow at 6% p.a. for the next 3 years, changes to the reliability limb of the test which create uncertainty and/or delays will have an extremely adverse effect on electricity consumers.

This view is supported by the COAG Energy Market review which concluded that: "the test for assessing reliability investment should be unchanged for both inter and intra-regional transmission investment."[1]

2.2 Achieving Consistency with the National Electricity Code etc

Powerlink supports all amendments that achieve consistency between the Regulatory Test and relevant National Electricity Code clauses, specifically those in section 5.6 (Network and Distributed Resources Code change package).

Amendments required to achieve this goal of consistency have been identified in section 3.1.3 of the ACCC Discussion Paper. Powerlink supports these amendments, but would suggest the following issues be addressed:

- Some errors in clause references appear to have been made in the discussion paper
- it is not considered necessary to state that a new small network asset is not a new large network asset. This is clear in the Code definitions of these terms.

The wording related to the application of the regulatory test would therefore read:

"The regulatory test is to be applied to:

(a) transmission system or distribution system augmentation proposals in accordance with clause 5.6.2 of the Code (*augmentation*)
(b) by NSPs to new small network assets identified under clause 5.6.2 and pursuant to clause 5.6.6A of the Code (*new small network assets*)
(c) by NSPs to new large network assets pursuant to clause 5.6.6 of the Code (*new large network assets*)"

2.3 Reliability Augmentations Subject to Regulatory Test and Dispute Processes

The Commission is proposing to change the Regulatory Test to state that:

"an augmentation satisfies this test if it is proposed in order to meet an objectively measurable 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 ... etc".

Powerlink agrees with this change as it makes the test consistent with the Code definition of a reliability augmentation, introduced during the NDR Code changes.

[1] [1] Energy Market Review Final Report December 2002 page 27.

It is clear from this clause that the Regulatory Test applies to reliability augmentations, under what is known as the 'reliability limb' of the Regulatory Test. However, the ACCC discussion paper states on page 27 that "if a TNSP proposes to construct a new large network asset, it must apply the Regulatory Test (unless the asset is a reliability augmentation)".

This is an error – the Regulatory Test must be applied to all new large network assets, whether they are required to address reliability standards or not. The only difference in the application of the Regulatory Test for reliability augmentations is that benefits are maximised by minimising costs.

A further error is made on page 36 of the discussion paper where it notes that reliability augmentations are not subject to dispute by market participants. This is incorrect. Clause 5.6.6(h) of the Code states that Code Participants and interested parties may dispute the contents, assumptions, findings or recommendations of the final report prepared under clause 5.6.6 (f). This final report is required for all new large network assets, including reliability augmentations. 5.6.6 (h) (3) goes on to say that the dispute may be raised in respect to why the applicant considers a new large network asset satisfies the criteria of a reliability augmentation. However, Powerlink believes this clause opens the door for vexatious disputants, in contrast with the earlier version of the Code which restricted disputants to reliability augmentations to those whose TUOS would materially increase. This was a more appropriate policy setting, ensuring that reliability outcomes for consumers at large , for which TNSPs have clear obligations, could not be threatened by vexatious disputants.

2.4 Improving the Efficiency of Approval Processes

The Commission has requested that interested parties comment on whether the current classification between large and small network assets in the Code is appropriate. The Commission noted that some parties had raised concerns during the NDR Code change process in 2000 and 2001 that the thresholds ($1M for new small network assets and $10M for new large network assets) were too low.

Powerlink was one of these parties. Powerlink has now applied the Regulatory Test for almost 3 ½ years, and the NDR Code changes for the past twelve months. Based on its experience, Powerlink considers that more appropriate thresholds would be $7-25M for new small network assets and >$25M for new large network assets.

The relevant Code requirements are as follows:

- The NDR Code changes require information to be disclosed on all proposed network augmentations (asset name, proposed commissioning date, reason required including all assumptions used, total cost etc) in a TNSP's Annual Planning Report (refer 5.6.2A (4)).

- The NDR Code changes require additional information to be published in the Annual Planning Report on new small network assets (refer 5.6.2A (5)). This additional information relates to the ranking of options considered and to why the new small asset satisfies the Regulatory Test.

- The NDR Code changes require that for new large assets, a separate (resource-intensive) consultation process be carried out for each project.

Powerlink is aware of views expressed regarding the need for disclosure of information regarding transmission network proposals, and accepts that a key objective of the NDR Code changes was to ensure transparency and reduce information asymmetry. However, we consider that the existing small and large asset thresholds were set based on numbers that 'sounded reasonable' without proper consideration of the realities (ie – actual costs) of transmission network developments.

Powerlink considers the new small network asset threshold of $1-10M is too low for the following reasons:

- There are very limited transmission network augmentations that can be constructed for a capitalisation value of under $10M. The only such augmentations that Powerlink can envisage falling into this category are capacitor banks, the installation of small transformers where minimal substation works are required, and minor upratings of existing transmission lines.

- It is Powerlink's experience that market participants and interested parties have very limited interest in these types of assets. There is some desire to be informed at a high level that such network developments are proposed, but nothing further.

- In the majority of these cases, there are few, if any, feasible network alternatives and no non-network alternatives. For example, the requirement for an additional small transformer due to load growth is unlikely to be able to be addressed by any generation or other market solution. Powerlink's experience is that market participants are unlikely to develop alternatives to defer these low cost long life assets. Voltage control limitations for which a capacitor bank would be proposed as a solution can usually not be met through any other network mechanism, except by the installation of assets costing upwards of five times the cost of a capacitor bank. The provision of information regarding ranking of options and Regulatory Test analysis for assets under $10M is therefore of very limited value.

The primary benefit of raising the small asset threshold would be to increase responsiveness. Small augmentations are generally required to meet localised load increases that arise at short notice. Raising the threshold would also reduce the unnecessary use of resources to provide information that is of little value and little interest to market participants. This would be an improvement in the efficiency of these NEM processes.

Powerlink proposes that the threshold for new small network assets and new large network assets be raised to $7M and $25M respectively. This would not meaningfully change the level of information disclosure available to the market for the following reasons:

- Information on assets with a value of less than $7M would still be required to be published in the APR for the information of market participants and other interested parties, under clause 5.6.2A (b)(4).

- The additional information required for new small network assets related to the ranking of options considered and the Regulatory Test would be provided in the Annual Planning Report for options between $7M and $25M. As outlined above, assets with a capitalisation value under $7M have few, if any, feasible network or non-network alternatives. Such information is therefore of very limited value in these cases. It should be noted that the Code mandates the provision of details commensurate with the size and significance of the project.

- Significant augmentation projects of broad interest to market participants and non-network solution providers are unlikely to be able to be constructed for less than $25M and therefore the existing processes for 'new large network assets' would apply to such augmentations. Powerlink has completed, or is in the process of finalising, Regulatory Test evaluations for six (6) large network assets since the Regulatory Test was introduced in December 1999. The estimated costs of these proposed new large network assets were approximately $44M, $33M, $64M, $25M, $23M, and $71M. Powerlink anticipates consulting on two further 'new large network assets' in calendar year 2003, with expected capitalisation values of >$40M each.

- The main message from these sample projects is that Powerlink considers that a $10M threshold for new large network assets is far too low. Only one out of 8 major augmentation projects in four years that are presently defined as new large network assets would have fallen within the proposed $7M and $25M threshold. It could have adequately been addressed through the Annual Planning Report process, reducing the resource requirements on the TNSP and providing succinct information to market participants within a document they are already likely to have an interest in. In the future, Powerlink can foresee other projects falling into this category thereby making the NEM processes for these augmentations more efficient. However, we would emphasise that major network augmentations in which market participants take a keen interest can rarely be built for less than $25M.

Utilising the Annual Planning Report process for more projects (ie – those between $7M and $25M) will have significant benefits in terms of resource efficiency for the TNSP, NEMMCO and market participants. The publication of the APR occurs only once a year (although there is the requirement for a separate report if a 'new small network asset' is not included in the APR). This streamlines the flow of information to market participants and potential non-network solution providers and reduces the number of separate consultations being conducted in the NEM. It is envisaged this would be of interest to and deliver efficiency to all NEM participants.

2.5 Replacement Assets and Refurbishments

Powerlink has a similar interpretation of the Regulatory Test in relation to asset replacements and refurbishments as that expressed by the ACCC in its discussion paper. That is, a TNSP is "not required to apply the regulatory test to refurbishment and replacement capital expenditure", where such expenditure does not augment the capability of its network.

Powerlink expects that the ACCC will review the prudency of all capital expenditure during the revenue regulation processes for the TNSP. Existing processes for the

regulation of transmission revenue provide for inefficient replacement and refurbishment expenditure to face the risk of optimisation, similar to all other regulated capital expenditure.

Assets at the end of their life requiring replacement or refurbishment are unlikely to have any feasible non-network alternatives. This is because the electricity system will have developed and be operated relying on the existence of these assets which will have been in service for a considerable time. Network alternatives may exist depending on the nature of the assets. However, any network alternatives would be evaluated by the TNSP using economic analysis similar to those prescribed by the Regulatory Test. This analysis would be subject to the scrutiny of the ACCC during the revenue regulation processes as discussed above.

Powerlink does not support mandatory application of the regulatory test to asset replacements and refurbishments that do not augment the capability of the transmission network. Non-network alternatives are unlikely to be feasible and existing arrangements include checks and balances on the prudency of the replacement or refurbishment.

2.6 Other Suggested Changes

Powerlink would also suggest other changes to the existing Regulatory Test:

2.6.1. Scenarios

A minor change is necessary to correct what appears to be an unintentional wording in the existing test. The Regulatory Test states that a proposed augmentation maximises market benefit if it achieves a greater market benefits or minimises the cost in "most (although not all) credible scenarios".

It seems unlikely that the ACCC intended that a solution that maximises market benefits under all scenarios would not pass the test, although this could be interpreted as the outcome under the existing wording. We therefore suggest these words be altered to "most (although not necessarily all) credible scenarios."

2.6.2. Bias Against Regulated Interconnectors

There presently exists in the Regulatory Test a requirement that 'new interconnectors must not be determined to satisfy this test if start of construction is within 18 moths of the project's need first being identified' in a public report. This is an unjustified bias towards non-regulated interconnectors.

NEMMCO's report quoted in the initial issues paper found that the Regulatory Test should be modified to not unduly favour non-regulated solutions. Powerlink would agree that there is no valid reason for continuing this approach. Other mechanisms such as the relatively new requirement for NEMMCO and the Inter-regional Planning Committee to carry out and publish an Annual Interconnector Review will provide greater information to market participants and interested parties. The Regulatory Test requires that all alternatives be considered on an equal basis in terms of benefits associated with them, so bias towards one form of investment is not justified.

3.0 OPTION 2 – DEFINITIONAL AMENDMENTS

Key Points

- **the justification for increasing the prescriptiveness of the Regulatory Test (Option 2) has not been sufficiently demonstrated**

- **more time is required to allow the NDR Code Changes to work. Many of the concerns expressed in response to the initial ACCC Issues Paper on the Review of the Regulatory Test in May 2002 were addressed in the Code changes which took effect in March 2002**

- **'Greater definition' may theoretically reduce the likelihood of conflicting interpretations and disputes. However, "micro-managing" how the Regulatory Test should be applied relies on the definitions being exactly correct in every situation, or it will in practice lead to unintended consequences and inefficient outcomes.**

3.1 Increasing prescriptiveness is not warranted

In general, Powerlink does not support Option 2 amendments for the ACCC to "take a more rigorous approach to defining the boundaries of the regulatory test".

The stated aim of the ACCC is "to ensure compliance costs are minimised and that the regulatory process is objective, transparent and as light-handed as possible"[2]. Option 2 would be a step down a path towards heavy-handed regulation, and Powerlink considers that the ACCC has not provided sufficient justification that such an approach is necessary.

The justification the ACCC provides for this approach seems to be based on the NDR Code changes giving primary responsibility to TNSPs for conducting the regulatory test. The ACCC notes that multiple parties applying the regulatory test may give rise to multiple and conflicting interpretations of its application.

This is not an appropriate justification, as individual TNSPs have been responsible for applying the regulatory test to intra-regional augmentations since the test was introduced in late 1999. The only change due to the NDR Code changes is that TNSPs now apply the test for augmentation of interconnectors instead of NEMMCO and the IRPC.

Before introducing further prescription into the Regulatory Test, and reducing its flexibility, it is important to demonstrate such an approach is required. Powerlink does not consider that this is the case. The current Code requirements for public consultation provide adequate checks and balances. Powerlink's experience to date for intra-regional augmentations is that no disputes have been raised. Discussion with market participants about our approach to the regulatory test - including our interpretation of various definitions and assumptions - has in all cases been constructive. There have, in

[2] Page ix. Draft Statement of Principles for the Regulation of Transmission Revenues, May 1999.

fact, been several cases where this discussion has led to the refinement of our interpretation of the analysis required under the regulatory test and the level of information disclosure required by participants.

3.1.1. Example: Discount Rates

Powerlink finds the discussion on 'commercial discount rates' of more theoretical than practical relevance. We would agree that pre-tax real cash flows and WACC seems an appropriate approach in the application of the regulatory test. However, in practical terms, the existing regulatory test requires that sensitivity tests be conducted to discount rates. As far as we are aware, all TNSP's have tested sensitivity to at least three different discount rates in their application of the regulatory test to date. Powerlink has not received any comments from market participants regarding its use of discount rates in the regulatory test. If we did receive such a comment in a submission, then our interpretation of the Code is that we would be required to demonstrate the effect of a differing discount rate in our response to that submission.

3.1.2. Example: Costs

The Commission is proposing to provide examples of costs for inclusion in the Regulatory Test. Powerlink does not consider this is warranted. The Regulatory Test already states "*cost means the total cost of the augmentation to all those who produce, distribute or consume electricity in the National Electricity Market*". This is a comprehensive definition, particularly when read in conjunction with the notes to the Regulatory Test. Powerlink sees the examples as superfluous. Powerlink has received no comments on its inclusion of relevant costs in any of the consultations conducted to date, and the ACCC itself says that "there has been little controversy regarding what costs should be included in the assessment of an augmentation under the Regulatory Test". It appears that the proposed changes are change for change sake, with little justification.

Powerlink notes the ACCC's suggestion that the 'cost of disruption to the NEM for testing of augmentations or upgrades' should also be included. There is a related issue that the ACCC is required to take into account costs included in the Regulatory Test analysis when determining a TNSP's regulated asset value (refer 5.6.6A (e) (2)), including the costs of a modern, equivalent asset in valuing the existing asset base.

Powerlink would also comment that 'cost of testing' would need to be applied to all alternative options, not just a proposed transmission augmentation, to ensure the analysis is carried out on an equivalent basis. This could be quite controversial and difficult to quantify for both local generation and transmission options (given the costs are spread between one or more TNSPs, NEMMCO and market participants, and may include labour costs, costs arising from dispatch changes, pool price impacts etc). It would have to be calculated on a 'net' basis (removing wealth transfers) and may also not be material in terms of changing the ranking of options evaluated under the Regulatory Test.

3.2 Allow the NDR Code changes time to work

Powerlink considers it important that the ACCC allow the NDR Code changes time to work. The NDR Code changes have been in operation since 7th March 2002 – a little over twelve months.

Powerlink estimates that less than five large network proposals have been progressed under these Code requirements to date throughout the entire NEM. For example, Powerlink has initiated Code processes for two new large network assets since the NDR Code changes have been in place, neither of which are finalised. We, like other TNSPs, have published only one Annual Planning Report, containing details of proposed small network assets, since the NDR Code changes.

Powerlink is not aware of any disputes arising from the application of the Regulatory Test, post the NDR Code changes.

We consider it is far too early to gauge the effect of these Code changes, and the need for additional prescription in the regulatory test. The concerns that have been reported to the ACCC were in response to the initial issues paper on the review of the Regulatory Test published in May 2002. It would be erroneous to expect that sufficient time had passed at that stage, or even now, for the full effects of the NDR Code changes to flow through.

3.2.1. Example: Reliability Augmentations

For example, the Commission is proposing to require disclosure of information on reliability augmentations (refer 3.2.8 of the discussion paper). Powerlink has no issue with providing this information. However, we wonder if the ACCC is aware that it is simply duplicating Code requirements that were introduced in the NDR Code changes. The Code requires a TNSP to publish the cost of all proposed augmentations, the reasons they are required (and therefore the implications if they do not proceed) and why it considers that an augmentation is a 'reliability augmentation'. The same concerns that the ACCC says they are seeking to address have already been dealt with through the NDR Code changes. Duplication in the Regulatory Test offers no additional value, and could create the potential for conflicting interpretations of a TNSP's obligations.

3.3 Greater definition may lead to greater disputes and inefficient outcomes

Powerlink would welcome less ambiguity in the application of the Regulatory Test. However, while good in theory, we strongly doubt that the changes proposed by the ACCC will lessen the likelihood of debate and dispute and achieve the clarity the ACCC is seeking.

There is a significant problem associated with prescribing detailed definitions for matters within the Regulatory Test. If prescription is added, it is essential that definitions are correct and inclusive of all potential situations, now and in the future. Otherwise, there is a risk of new problems arising from 'fixing something that isn't broken'.

The risk of introducing errors and inefficiencies is real. Increasing definitions may, in fact, increase the grounds for debate and dispute. Powerlink considers that it is better for definitions to evolve over time through precedent and the public processes introduced through the NDR Code changes. In this way, the Regulatory Test retains flexibility for the consideration of future issues that have not yet been identified.

3.3.1. Example: Market Benefits

By providing a list of 'example' market benefits, the ACCC is not lessening the risk of disputes regarding how such market benefits are calculated (this is likely to be impossible to achieve in a way that would suit all situations).

It is, however, opening up the possibility that the list will be interpreted as a list of benefits that must be calculated for all applications of the Regulatory Test and that no other benefits can be included. It is essential that this is avoided. Any list should not be able to be used to dispute the inclusion of valid market benefits that are not included in the list. Other issues are that the list may not be comprehensive (particularly as the market changes over time), some items on the list may not be applicable to all augmentations (eg - intra-regional augmentations) or may not be material for others (eg – small network assets).

Powerlink considers that a better approach is for the evaluation of market benefits to converge through the setting of precedents over time. Market participants can also use the publication of the Application Notice (draft recommendation for large assets) as an opportunity to point out any market benefits that they consider have not been appropriately evaluated. Such input to assumptions and review of the evaluation process is the purpose of the Code consultation process.

3.3.2. Example: Alternative Projects

Powerlink has serious concerns regarding the ACCC's definitions related to alternative projects.

Firstly, the NDR Code changes have overcome the problems encountered with SNI where NEMMCO felt it was not in a position to assess an option which did not have a proponent. The Code requires the TNSP to consider:

"all reasonable network and non-network alternatives, including but not limited to interconnectors, generation options, market network service options and options involving other transmission and distribution networks" (refer 5.6.6 (b)(iii)).

Secondly, it is for the market, not TNSPs, to propose non-network solutions. TNSPs are not experts in non-network solutions, and the whole Regulatory Test and consultation process was designed to allow competitive neutrality between market-based and regulated projects.

Thirdly, the definitions proposed by the ACCC are inappropriate for augmentations required to maintain reliability standards for customers, and could

result in unintended difficulties in applying the Regulatory Test to such augmentations.

The objective of the Regulatory Test is to provide an important 'decision tool' to determine whether a regulated network asset should proceed. For reliability augmentations, the process must result in a decision to do something to address reliability limitations, whether that be through a network augmentation or a committed non-network alternative. If action is not taken, by definition, reliability of supply consequences would result. Words such as 'operational in a similar timeframe' and the concept that a proponent is not required are a nonsense for reliability augmentations.

A 'similar timeframe' is not good enough if it does not address the reliability limitations. Likewise a proponent is essential if reliability standards are to be met. TNSPs such as Powerlink have clear obligations for maintaining reliability standards. For a TNSP to satisfy its reliability obligations through the implementation of a non-network alternative, Powerlink considers a contractual arrangement must be in place with the provider of that alternative. If not, a TNSP may be considered negligent in meeting its obligations should an alternative project fail to be delivered by the required timeframe. Entering a contractual arrangement when there is no proponent is not possible. The alternative is to remove reliability obligations from TNSPs.

We would also draw the ACCC's attention to the fact that it has allowed the cost of grid support arrangements to be included in the TNSP's revenue cap as an alternative to network augmentation. Evaluating the cost of grid support in accordance with the detailed economic analysis required under the Regulatory Test would be fraught with problems if there is no proponent to advise what it would charge for such a service. The ACCC has acknowledged the difficulty associated with determining these costs by making grid support expenditure a pass through arrangement within the revenue cap.

Powerlink is also confused by the ACCC's reference to clause 5.5.6 of the Code in its discussion paper as to why a proponent criterion cannot be included. There is no such Code clause, and Powerlink is unaware of any other Code clause that states it is not necessary for specific proponents of a project in the competitive sectors of the market to be identified. Clause 5.6.6, for example, makes no reference to alternatives either having or not having a proponent.

3.3.3. Example: Committed Projects

The definition of committed projects proposed by the ACCC may lead to serious inefficiencies because it has varying degrees of relevance to different types of projects.

The proposed criteria are not relevant to a regulated network investment. This is because, for a regulated transmission project, the Regulatory Test itself IS the 'commitment process'. The Regulatory Test can be likened to financing arrangements for an investment – unless a project satisfies the Regulatory Test, the likelihood of obtaining regulated revenue to fund the asset is very low. A

TNSP would face significant risks if it awarded construction contracts prior to the finalisation of the Regulatory Test.

Powerlink also suggests the ACCC be extremely careful imposing links between the Regulatory Test and the acquisition of easements for a transmission line project. Acquiring a single site for a local generation project is significantly different from obtaining a linear easement that may stretch over tens or hundreds of kilometres. Communities generally require Powerlink to consult widely and over a lengthy period regarding transmission line routes. It is not unusual for such planning processes to take in excess of 18 months. In Queensland, there are various consent processes (such as formally acquiring easements via legislative processes and designating the project as community infrastructure) that are required after the finalisation of the EIA and transmission line route. Requiring that all planning consents be finalised before a transmission project can be assessed via the Regulatory Test would significantly lengthen project leadtimes by requiring sequential processes. This is completely unacceptable in a high growth state such as Queensland, where overlapping preparatory work in terms of easement acquisition and legal and regulatory processes is essential to maintain reliability. Conducting the Regulatory Test earlier prior to these activities would be in conflict with the aim of allowing competitive solutions to emerge as the regulated solution would be locked in.

It is Powerlink's view that the aim of using committed and anticipated projects in the Regulatory Test is to carry out the Test based on the probability of certain projects proceeding. Prior to the application of the Regulatory Test, there is no certainty that a network investment will proceed. Following the application of the Regulatory Test, there is a very high probability that the project will proceed.

Powerlink agrees that some form of criteria are useful in determining the probability that non-regulated projects will proceed. The NEMMCO criteria are a useful guide, but should be only a guide, and used only for non-regulated projects. Some non-regulated projects may not require financing arrangements (being conducted from balance sheet); other projects may have contracts in place, but may be dependent on related developments proceeding that are themselves known but uncertain. For example, the development of Kogan Creek Power Station in Queensland could be considered probable (it has planning consents, a site etc), but the timing of its development is thought to be dependent on the rate of load growth within Queensland, and/or the commitment of as-yet-not-fully-committed new industrial loads.

3.3.4. Example: VoLL

Powerlink does not support the proposal by the ACCC to specify the value of Value of Lost Load (VoLL) for the purpose of the Regulatory Test at the level set out in the Code. The relevant Code clause clearly says that VoLL is a price cap to be applied to dispatch prices in the NEM. The Reliability Panel reviews reliability issues and in its work on VOLL made it clear that VoLL is not intended to be a measure of the value customers place on loss of supply for network reliability purposes.

Powerlink would not support any suggestion that the Code definition of VoLL represents the value customers place on supply reliability. This value varies by location, customer type etc and the true value of supply reliability is considered to be significantly higher than the present price cap used in the NEM. The Reliability Panel determined the VOLL based on other considerations such as availability of hedging instruments etc.

4.0 OPTION 3 – COMPETITION BENEFITS

Key Points

- **Competition benefits arising from transmission augmentations can be classified as 'net' (measured at market level) and 'gross' (measured at customer level) benefits.**

- **'Net' competition benefits could readily be incorporated into the existing test. Making this change to the Regulatory Test regarding net competition benefits is desirable but will not satisfy the major issues that have been raised by market participants.**

- **'Gross' competition benefits are the benefits to customers of lower overall pool prices through increased market competitiveness. These are clearly excluded from the existing test. References to competition benefits in the Parer Report, by customer groups and in Powerlink's previous submissions to the ACCC are in reference to 'gross benefits'.**

- **Inclusion of 'gross' or 'net' competition benefits in the economic test for justification of regulated transmission is a classic policy decision.**

- **If the policy objective is to deliver lower prices to electricity consumers via strong competition in generation in the NEM, this cannot be achieved by ignoring 'gross' competition benefits.**

- **Assuming that the policy decision is to include a mechanism for the assessment of gross benefits, Powerlink suggests the introduction of a separate competition test (3rd limb). This test could take the form of a 2 step process :**

    - **Step 1 – identify a "trigger" which shows the potential for increased generator competition. The "trigger" could be either the observed instance(s) of price outcomes during network constraint events or one of the more straightforward indexes put forward in the discussion paper (eg- HHI). If this shows the potential for prices to be higher than marginal costs, proceed to Step 2**

    - **Step 2 – identify the likely 'gross' customer benefits by either using the price data from observed events (arguably the most robust evidence of likely outcomes) and/or by carrying out forward-looking market modelling.**

- **Disputes may occur in any process that creates 'winners' and 'losers'. However, legitimate disputes are part of a proper process to ensure that a case for transmission augmentation is robust. The exclusion of a competition benefits test on the grounds of minimising disputes is not appropriate. It would be better policy to include competition benefits, make the process as robust as possible, and exclude vexatious disputes.**

4.1 Classification of Competition Benefits – "Net" and "Gross"

Powerlink has long been on record as saying that it is necessary to include 'competition benefits' in the evaluation of network augmentations. The failure of the Regulatory Test to allow the incorporation of the full range of these benefits is a deficiency that can lead to uneconomic investment and/or prevent regulated augmentations from being proposed to address network constraints that impede efficient market operation.

'Competition benefits' is a phrase that is used generally by market participants, governments, market commentators etc. It is used to describe the benefits of lower pool prices from increased competition between generators in the wholesale electricity market that can result from a network augmentation.

There are numerous aspects to such benefits, and they can arise intra-regionally as well as inter-regionally. However, Powerlink considers the most important distinction in the context of this review of the Regulatory Test is the difference between 'net' and 'gross' competition benefits:

- Net benefits are measured at market level. 'Net competition benefits' include the consumption benefits that exist due to consumers being willing to purchase greater quantities of electricity at lower prices (assuming some elasticity of demand).

  Wealth transfers between groups within the market (eg – between customers and generators) are irrelevant in any assessment of net competition benefit, as they offset each other in economic terms. That is, the gains made by customers due to lower prices are equal to lower profits generators make at those lower prices.

  It is noted that benefits may also arise from fuel cost savings due to dispatch of lower cost generators. These are included in the net market benefits determined in the market benefits test (limb 2).

- Gross benefits, on the other hand, explicitly recognise benefits at a customer level. Gross competition benefits include reduction in the purchase cost of electricity resulting from the lower pool prices that occur due to increased competition among generators. That is, the benefit to consumers of lower overall prices due to increased competition is captured.

  Gross competition benefits is a measure of the benefits to customers that arise due to reduction in generation market power, and the surpluses generators would otherwise accumulate.

By definition, for competition benefits to arise, the market cannot be perfectly competitive. This point is obvious, but is emphasised because it is central to the reason why the existing test is considered by many to be inadequate.

The National Electricity Market is not perfectly competitive. This was a key finding of the COAG Energy Market Review in late 2002:

"there is insufficient generator competition to allow Australia's gross pool system to work as intended. There are too many periods of excessive generator market power and pool price volatility"[3].

It is therefore important that any investment decision regarding network augmentation, be made in the context of this situation. The benefits that transmission augmentation can deliver in terms of enhancing the efficient operation of the NEM should be allowable under any regulatory assessment.

4.2 Include the Full Range of 'Net Benefits' in Existing Test

It is Powerlink's view that the Regulatory Test should allow the inclusion of the full range of net benefits delivered by a transmission augmentation.

At present, the net market benefits limb of the test considers a range of net market benefits. For example, it allows the inclusion of net market benefits associated with changes in generator dispatch and associated changes in the marginal cost of supply. This benefit arises due to fuel cost savings if a transmission augmentation allows greater access by lower cost generators to consumer demand:

> "Some of the benefits associated with additional competition between generators will be included as part of the assessment. For instance, a new link may mean that a high cost generator will be displaced from the market by a more efficient generator with lower fuel costs"[45].

However, the existing test does not allow the inclusion of net competition benefits associated with changes in the cost of supply (where this is above marginal cost) and the effects of resulting pool price changes on electricity consumption.

Supply costs other than marginal costs cannot be included in the Regulatory Test evaluation. Note (1)(b)(iii) states that determination of market benefit is to consider "the ***efficient*** operating costs of competitively supplying energy". Powerlink interprets this to mean only costs associated with a purely competitive market (ie – efficient market) are allowable. This interpretation is supported by the discussion on pages 4-6 of the Preamble and in particular, the use of the term "economic costs":

> "Cost-benefit analysis does not rely on market prices where there is good reason to believe these prices are distorted by a market failure (eg – use of market power). For this reason, the Commission has based the regulatory test on the notion of net public benefit derived from a comparison of the economic costs associated with each alternative. The Commission has moved away from a test based on price outcomes which may not reflect competitive market behaviour but may include distortions due to behaviour reflecting the use of market power."

Powerlink considers that the existing Regulatory Test could be easily modified to allow the inclusion of net competition benefits, in addition to the fuel cost savings already allowed.

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[3] Energy Market Review Final Report December 2002 page 9.
[4] Regulatory Test Preamble, page 7
[5] Note (6) of the Test allows the consideration of different market development scenarios (both competitive and non-competitive) in determining changes in generation dispatch

As wealth transfers are ignored in any net benefit assessment, net competition benefits are due to any additional consumption associated with elasticity of demand. Calculating such benefits would require modelling of pool price outcomes, and quantification of the effects of an augmentation on electricity consumption associated with elasticity of demand.

It is Powerlink's view that including changes in generator bidding and pool price outcomes is essential to allow the full range of net benefits of a transmission augmentation to be assessed.

However, including net competition benefits in the 'net benefit' limb is arguably 'cosmetic surgery' only. Including net competition benefits, and ignoring gross competition benefits, will not address the issues that have been raised by Powerlink, market reform commentators, jurisdictions and various market participants.

4.3 Majority of Comments refer to Gross Competition Benefits

As stated above, 'gross' competition benefits are the benefits to customers of lower overall pool prices arising through increased market competitiveness. These are clearly excluded from the existing test – page 5 of the Preamble states that "no account is taken of sectional impact and the benefits of one group of users over another".

Most comments in regard to changing the Regulatory Test to include competition benefits are in reference to 'gross benefits'. Customer groups have expressed their concern about generator market power and the negative outcomes that this brings in terms of higher customer prices. Retailers have expressed views relating to pool price volatility, the difficulty in hedging and the market power generators are able to exercise during periods of binding network constraints. Powerlink's previous submissions to the ACCC also have focused on the need to recognise that transmission augmentations can deliver price reductions by enhancing competition between generators.

These types of comments are all clearly associated with gross competition benefits, rather than net benefits. The COAG Energy Market Review (Parer Report) was also clearly referring to the need to recognise 'gross competition benefits' in its conclusions on required transmission reform:

"The system for augmenting transmission investment is flawed, which sees inadequate links being built. The currently applied regulatory benefits test is inappropriate. This is because the test is not a commercial one as it ignores the market power that can be exercised when transmission lines bind. It is recommended that the test be changed to take account of price (and not just cost) differentials that arise due to line congestion."[6].

The benefits identified by the Parer Report as achievable through reform of transmission were all determined on the basis of 'gross' benefits, that is the impact on pool prices and the purchase cost of electricity. The report assumes that the objective of the NEM is 'efficiency' and that it is desirable to have a transfer of wealth from generators to customers if that wealth would be accumulated due to the market being less than fully

[6] Energy Market Review Final Report December 2002 page 23.

competitive. For example, the economic benefit analysis conducted for the Energy Market Review by ACIL Tasman found that:

"The benefits to electricity consumers of a more competitive market (where generators offer prices closer to marginal cost ie – have little or no market power) take the form of lower and less volatile pool prices. The net present value of the savings in electricity purchase costs is estimated at $641M," and

"There are substantial market benefits stemming from an enhanced transmission system. The benefits in terms of lower pool prices and electricity purchase costs that result from a 20% increase in interconnector capacities throughout the NEM have been estimated at $1.1 billion over the period 2005-2010."[7]

In a net benefit analysis, these benefits would not exist, as reductions in the purchase cost of the same amount of energy would be considered a 'wealth transfer' between customers and generators. Benefits that ACIL Tasman has identified in terms of more efficient use of capital as well as an increase in international competitiveness of the industries that use electricity would be ignored.

In this context, it is noted that an increase in interconnector capacity between regions which reduces prices in one region could coincidentally increase prices in the adjacent region. Both impacts would need to be taken into account in a gross benefits assessment.

4.4 Gross or net is a classic policy decision

The decision between the alternative paths of evaluating investments on the basis of 'net' or 'gross' benefits is a classic policy decision.

It relates to the distribution of benefits among groups within the market, and is therefore fundamental to the purpose of the NEM. If price impacts are considered 'wealth transfers' and are assigned no economic value under a 'net benefits' approach, this assumes that wealth transfers are of no consequence to policy bodies.

This assumption may be closely aligned with public policy in cases where a market is competitive, or near competitive. A 'pure economic' approach may then be considered appropriate.

However, where competition in a market is less aggressive and the potential for market power exists, policy makers must decide whether a 'net benefits' approach deals adequately with anomalies that can arise. It is necessary to determine whether the outcomes are likely to be consistent with the desired policy objectives of market reforms.

The focus of 'competition policy' within Australia to date has been to facilitate increased competition within markets to deliver more efficient outcomes and lower prices for end-users. Policy bodies may consider that this objective is best able to be delivered through a measure that allows consideration of the benefits and price impacts of transmission at a 'gross' or customer level.

[7] ACIL Tasman Report: COAG Energy Market Reforms, December 2002. Executive Summary.

Thus, the decision for inclusion of 'gross' competition benefits appears to be a broader issue than the ACCC can address alone. Powerlink suggests that consultation with governments and relevant policy bodies is necessary to obtain the required policy direction.

4.5 Gross competition benefits cannot be ignored if the policy objective is to deliver benefits to electricity consumers

The NEM is characterised by a relatively small number of producers. This can lead to a problem where generators compete less aggressively with each other resulting in higher prices for consumers. Additional transmission can assist in overcoming this, by allowing unconstrained power flows and thereby increasing competition between geographically separate generators.

A key conclusion of the COAG Energy Market Review was that:

"Transmission is the largest NEM problem. Many current problems are caused by inadequate transmission. A proposed solution is to increase transmission as one mechanism to make the current pool system perform as intended. This would enable a truly national electricity market, and increase competition".[8]

If the policy objective is to deliver benefits to electricity consumers via strong competition in generation in the NEM, facilitated by a strong 'backbone' transmission network, this cannot be achieved by ignoring 'gross' competition benefits.

By far the largest dollar savings due to increasing the competitiveness of the generation market are the benefits in terms of lower costs to consumers due to reduced market power. This 'gross competition benefit' is likely to be sizeable due to a multiplier effect across the large number of relevant customers. Even a relatively small price increase, when multiplied by the large volume of customer demand that incurs that price, results in a significant impost on customers as a group. Where market power exists, and prices spike to levels well above marginal costs, this impact is magnified many times over.

It is important that these dollar savings are able to be captured in the evaluation of potential transmission augmentations if the policy objective is to achieve a strong transmission grid to facilitate market competition.

After all, these are the benefits being pursued by a range of other market reforms and should also be achievable through network enhancements.

4.6 A Way Forward

Should the policy decision be to include a mechanism for the assessment of gross benefits, Powerlink suggests the development of a separate competition test. This test is envisaged as a "3rd limb" of the regulatory test, and would be in addition to the existing 'reliability limb' and 'market benefits limb'.

[8] Energy Market Review Final Report December 2002 pages 20 & 22.

A separate test would assist in minimising disputes for evaluations carried out under the existing two limbs of the Regulatory Test.

The proposed separate '3rd limb' could take the form of a two-step process. Step 1 would specify the conditions under which gross competition benefits can be utilised in the assessment of a transmission augmentation. Step 2 would then quantify those benefits and be used to determine whether the transmission augmentation should proceed (ie – whether benefits outweigh the costs).

Step 1 – Identify whether there is potential for increased generation competition

The first step in the proposed competition benefits limb would be to determine whether a transmission augmentation could potentially increase generator competition. This step is essentially a test of the competitiveness of the existing wholesale market, and the potential for use of market power by generators.

The 'trigger' for action could be either the observed instance(s) of price outcomes during network constraint events (where available) or one of the more straightforward market power indexes put forward in the ACCC discussion paper (eg- HHI).

Step 2 – Quantify the benefits (including gross competition benefits) of the proposed transmission augmentation.

Powerlink proposes that Step 2 only be implemented if a positive 'trigger' is identified in Step 1 (ie – if there is the potential for prices to be higher than marginal costs).

The quantification of benefits could be carried out in two ways: (1) analysis using historical data and/or (2) forward looking market modelling. Both methods could allow consumer benefits due to the difference between market bidding and short-run marginal cost to be captured in the analysis.

If a history of non-competitive bidding exists, Powerlink considers that the Regulatory Test should allow the use of actual bidding behaviour. This methodology would be most relevant where no major changes to the structure of the electricity system are anticipated.

The second methodology would be to carry out forward-looking market modelling of costs and benefits as for the existing market benefits test. The difference to the 'market benefit limb' would be that, as well as determining any fuel cost savings, wealth transfer effects would be explicitly recognised in the analysis to capture benefits to customers of lower overall prices. The analysis would require an assessment of all costs and benefits to customers and generators with and without the augmentation. Lost profits to generators (wealth transfers from customers to generators due to the presence of market power) would be excluded from the analysis.

A transmission augmentation would be deemed to pass the Regulatory Test if the total benefits of the augmentation (including gross competition benefits to customers due to price reductions) exceeded the total costs in net present value terms.

4.7 Legitimate disputes ensure that a case for augmentation is robust

Powerlink accepts that market modelling approaches such as that proposed for a competition benefits test will be based on assumptions and therefore subject to challenge.

However, the exclusion of a competition benefits test on the grounds of minimising disputes is not appropriate. Disputes may occur in any process that creates 'winners' and 'losers'. Legitimate disputes are part of a proper process to ensure that a case for augmentation is robust.

It would be more appropriate to include competition benefits, make the process as robust as possible, and exclude vexatious disputes. The ACCC is incorrect in stating that inclusion of competition benefits in the Regulatory Test will slow down the process. If anything, addition of a third limb will give added flexibility to a process which is currently deficient.