TransÉnergie Australia Pty Ltd

ACN 084 240 602

A subsidiary of Hydro-Québec

GPO Box 7077, Riverside Centre,
Brisbane, Qld Australia 4001.
Level 11, 77 Eagle Street
(07) – 3211 – 8614 Fax: (07) – 3211 – 8619

28 March 2003

Mr Sebastian Roberts,
A/g General Manager,
Regulatory Affairs – Electricity,
ACCC,
PO Box 1199,
Dickson, ACT 2602.

Dear Mr Roberts,

RE: Comments on 'Discussion Paper - Review of the Regulatory Test'

As a developer of network services TransÉnergie Australia Pty Ltd (TransÉnergie) is pleased to contribute to the above consultation.

The Regulatory Test controls the development of regulated network services in the Australian National Electricity Market (NEM). TransÉnergie considers that regulated network service development is a key outstanding issue within the NEM. Central to the resolution of that issue is to first specify the role of regulated network services, and second, to ensure that the framework and methodology applied to the justification of regulated network services (through the Regulatory Test) are consistent with that role.

The present consultation does not appear to discuss the role of regulated network services in the NEM. In that case any proposed modifications to the Regulatory Test need to be consistent with the previously identified objectives of the Regulatory Test. TransÉnergie's submission is therefore in two parts:

- The submission first reviews previously identified objectives of the Regulatory Test; and
- Consistent with those objectives, the submission then comments on the proposed options.

Please do not hesitate to contact me should you have any queries regarding TransÉnergie's submission.

Regards,

Dr. A. Cook
Managing Director

1.0 Introduction

On February 5 2003 the Australian Competition and Consumer Commission (ACCC) released a 'Discussion Paper - Review of the Regulatory Test' (the Discussion Paper). The Discussion Paper summarised the main points of the submissions received in response to a 10 May 2002 consultation ('Issues Paper – Review of the Regulatory Test') and in addition, highlighted three options for the further development of the Regulatory Test.

The Regulatory Test controls the development of regulated network services in the Australian National Electricity Market (NEM). TransÉnergie Australia Pty Ltd (TransÉnergie) considers that regulated network service development is a key outstanding issue within the NEM. Central to the resolution of that issue is to first specify the role of regulated network services, and second, to ensure that the framework and methodology applied to the justification of regulated network services (through the Regulatory Test) are consistent with that role.

The present consultation does not appear to discuss the role of regulated network services in the NEM. In that case any proposed modifications to the Regulatory Test need to be consistent with the previously identified objectives of the Regulatory Test. TransÉnergie's submission is therefore set out as follows:

- Section 2 first reviews previously identified objectives of the Regulatory Test; and
- Section 3 comments on the proposed options, with a view to ensuring consistency with the previously identified objectives of the Regulatory Test.

2.0 Background

The Regulatory Test[1] controls the development of regulated network services in the NEM. The Regulatory Test is employed to assess regulated network service investment proposals to determine whether they are eligible to be subject to the transmission service regulation and pricing arrangements in Parts B and C of Chapter 6 of the National Electricity Code (the Code).

The role of the Regulatory Test is twofold:

- To ensure that regulated investment is not 'gold plated', and
- To ensure that regulated investments do not displace (or crowd out) more efficient non-regulated investment.

2.1 Market Failure

The Regulatory Test is not designed to promote the development of regulated network investment in the context of alternative investment opportunities in the NEM. New regulated investment is not an equally valid alternative to a market-driven option. Rather, new regulated investment is to proceed only where there is a clearly demonstrated market failure. To this end, the Regulatory Test contains market failure criterion provisions. These are contained in Note (7) of the Regulatory Test, which states that:

> "*the* proposed [regulated] augmentation *should not pre-empt nor distort potential unregulated developments*".[2]

[1] ACCC, *Regulatory Test for New Interconnectors and Network Augmentations* (15 December 1999) (***Regulatory Test***).
[2] *Regulatory Test*, page 21

Therefore, a key aspect of the Regulatory Test is to test or verify whether there is in fact a market failure. This view of the Regulatory Test is articulated by NSW Treasury in a submission to the ACCC on the role of the Regulatory Test:

> *"In the Government's view, the development of the market occurs over two stages. … This first stage can thus be regarded as competition by non-regulated alternatives for the market opportunity...*
>
> *It is only if the market does not respond (or does not respond adequately) that the second stage of market development takes place. This second stage can be characterised as competition for regulated projects under the auspices of the regulatory test.*"[3]

Just because the market fails to respond to an 'identified need' in a planning statement, there is no reason to assume that any project must be conferred with regulated status. The market may fail to put forward options on the basis of its own assessment that the 'identified need' is not real. In this sense, there will have been no market failure at all. This is different from the assumption that the market failed to put forward any proposals because it could not capture the benefits in the form of a competitive return on the assets.

TransÉnergie considers that the ACCC must ensure that these points are adhered to in the application of the Regulatory Test. There is a need for clear statements in the Regulatory Test provisions emphasising the intended focus on market-based outcomes and the requirement to demonstrate the existence of a market failure.

2.2 No Duplication

The application of the Regulatory Test requires modelling a range of market development scenarios. By this process, the proposed regulated project will be compared against 'committed', 'anticipated' and 'modelled' investments. Where projects are 'committed' or 'anticipated', they are to be included in the market development scenarios required to be modelled for the Regulatory Test analysis.[4] This indicates a presumption that regulated projects will not be developed to duplicate market-driven (non-regulated) projects (because the benefits of those projects are already captured), but to capture additional benefits to the extent that they have not been captured by market-driven projects, i.e. residual benefits. That is, regulated projects should only be required to deliver residual benefits not already captured by market-driven projects. This position is consistent with the market failure criterion of the Regulatory Test.

2.3 Requirement to Maximise Returns

The draft Regulatory Test released by the ACCC on 22 September 1999 contained a "*requirement that proponents of regulated augmentations must demonstrate that regulated options provide greater market benefit than unregulated options.*"[5] The ACCC has said that it introduced this requirement due to its "*concerns that proposed augmentations should not unnecessarily pre-empt nor distort unregulated proposed augmentations*".[6] It is clear from the paper by which the Test was promulgated, that the purpose of the market failure criterion is to address this concern.[7]

---

[3] Letter from K Cosgriff (NSW Treasury) to M Rawstron (ACCC) (undated) page 2
[4] Refer to Note 5 of the *Regulatory Test*
[5] *Regulatory Test* page 17
[6] Ibid, page 17
[7] Ibid, page 17

All Network Service Providers (NSP), whether they be privately owned or government owned, operate as commercial businesses aiming to maximise returns to their shareholders. TNSPs have an interest in promoting a network solution rather than generation or other investments. The Regulatory Test provides a means of ensuring the best solution is adopted, whether that be in the form of the greatest net market benefit or the lowest cost (as is applicable).

2.4 Economic Efficiency and Competitive Neutrality

In developing the Regulatory Test, the ACCC relied on the two key principles of economic efficiency and competitive neutrality.[8]

The ACCC has stated that:

> "*the Commission has based the regulatory test on the traditional cost-benefit analysis framework but with a number of clarifications to limit any adverse impacts that regulated network investments might have on the competitive processes in the contestable parts of the industry.*"[9]

This is consistent with the ACCC's concerns that the Code, which was introduced to further the National Competition Policy Review and to lead to enhanced competition and efficiency within States and Territories as well as between jurisdictions,[10] not serve to entrench monopolistic behaviour in the transmission sector. Rather, competition is to be facilitated where possible. Upon authorising the Code, the ACCC stated:

> "*The Commission is concerned with the extent to which the* [Code] *provisions may be arrangements which protect NSPs and other network users from potential externalities, create a barrier to market entry, and limit contestability of network augmentation. All of these may limit competition for augmentation and may increase costs to network users.*"[11]

The principle of "*competitive neutrality*", which the ACCC has said is a "*key principle*"[12] underpinning the Regulatory Test, must be interpreted consistently with the market failure criterion of the Regulatory Test, and the Regulatory Test's express objective of preventing regulated investment from pre-empting market solutions. This objective does imply a presumption in favour of market-based investment. Regulated investments need to be 'held back' to ensure that market-driven investments are not adversely impacted. Regulated status confers a competitive advantage through guaranteeing a return on investment rather than relying on market outcomes, and the role of the Regulatory Test is to preserve as level a playing field as possible.

2.5 No Gold Plating

The Regulatory Test ensures that network augmentations are not gold plated. The ACCC has stated:

> "*the Commission believes that the interests of network users and access seekers would be further promoted if the Code included additional incentives to ensure that network augmentation is undertaken at least cost.*"[13]

---

[8] *Regulatory Test* executive summary, page 2
[9] Ibid, executive summary, page 2
[10] Refer to Clause 1.2.1(d) of the Code.
[11] ACCC, *Determination: Applications for Authorisation – National Electricity Code* (10 December 1997) page 146
[12] *Regulatory Test* executive summary, page 2
[13] ACCC, *Determination: Applications for Authorisation – National Electricity Code* (10 December 1997) page 149

2.6 Comments on the Discussion Paper

In this section TransÉnergie comments on a number of statements made in submissions to the ACCC, and detailed in Section 2.0 of the Discussion Paper:

- Maximising net market benefits
  TransÉnergie agrees that:

  > *"the maximising net benefits to the market hurdle in the regulatory test is appropriate and consistent with the principles of economic efficiency,"*[14] and
  >
  > *"where a project is justified on the basis of reliability, it should be required to be delayed to the last possible time in order to meet the reliability requirement."*[15]

  TransÉnergie strongly rejects the notion that the maximising market benefits test is a hurdle that is too high or that the Regulatory Test simply refer to nominal hurdle values. Accordingly, TransÉnergie urges the ACCC to ignore the suggestion put forward by the Reliability and Network Planning Panel (RNPP) that there should be an arbitrary and potentially subjective threshold applicable at the project level, based on minimum service standards. This would be highly inconsistent with the concept of using the cost-benefit framework to determine that an optimal outcome is identified and not just any option that generates a positive NPV.

  Cost-benefit analysis includes an efficiency threshold for project assessment, that being that the NPV must be positive (or at least greater than zero) and the optimal project is that which maximises the NPV outcome. Even if the analysis of all options reveals a NPV below zero, but a project must be undertaken for minimum service standards to be met, the objective to maximise benefits (in this case, minimising the NPV of costs/losses) is still the best ranking criteria. Just because the NPV is negative, there is no reason to depart from the logic of picking the option with the highest NPV result.

  The RNPP approach has the potential to seriously undermine the validity of the Regulatory Test by ignoring the first-order test for market failure. If a proponent has a project that meets the transmission only threshold implied by meeting minimum service standards and does not have to undertake the full Regulatory Test analysis, then there seems little scope for the validity of alternative, unregulated or even non-transmission solutions to be considered.

- Competitive impacts of network investment
  TransÉnergie agrees that:

  > *"the objective of the test is to maximise the economic efficiency of a regulated investment."*[16]

- Network and Distributed Resource Code change package
  1. TransÉnergie agrees that:

     There is a need for *"a more prescriptive regulatory test, to ensure competitive neutrality, clarify which costs and benefits should be taken into account, and reduce possibilities for dispute."*[17]

---

[14] *Discussion Paper*, page 6
[15] *Discussion Paper*, page 7
[16] *Discussion Paper*, page 10

TransÉnergie also notes the comment that:

"a requirement that a given proportion of net benefits should be realised within a reasonable forecast timeframe (eg 5 years) might be considered. It contends that it is questionable that a project can be justified on the basis of net benefits that were weighted heavily in the future years of the forecast period, recognising the increasing uncertainty attached to any estimates of future costs and benefits."[18]

2. TransÉnergie does not agree that*:*

"it should be put beyond doubt that "alternative projects" means "alternative non-regulated projects", or at least "alternative projects that do not involve regulated augmentation of the proponent's network."[19] *(as contended by ElectraNet and NSW Treasury)*

This position cannot be sustained. In particular:

- NEMMCO considered the regulated SNOVIC 400 as an alternative project to SNI.
- Clause 5.6.5(k)(1) of the Code is expressly stated to be inclusive of, but not limited to, "*generation, demand side options and market network service provider options*". Likewise, the reference in the document by which the ACCC promulgated the Regulatory Test to "generation*, demand side and non-regulated alternatives*"[20] is an inclusive, rather than an exclusive, expression.
- Most significantly, the maximisation of benefits required by the Regulatory Test cannot possibly be achieved if the range of alternatives for the purposes of the comparison is limited to projects which have not otherwise been proposed for regulated status. In this regard, the document by which the ACCC promulgated the Regulatory Test states:

  "*the Commission has proposed to extend the cost/benefit framework in order that an optimal outcome is identified and not just any option that generates a net public benefit.*"[21]

Excluding regulated alternatives from consideration may prevent identification of the "*optimal outcome*".

3. TransÉnergie notes the suggestion by TransGrid that:

   "TransGrid supports a proposal where for a project to be deemed as "committed", the proponent should be required to lodge some form of non-refundable bond (eg 5% of expected project costs), unless it has reached an irreversible stage of development. This will demonstrate that it is certainly more economic for the project to be completed than left incomplete. A similar bond, albeit smaller (eg 1%), should be submitted for "anticipated" projects. TransGrid explains that the purpose of a

---

[17] *Discussion Paper*, page 14
[18] *Discussion Paper*, page 15
[19] *Discussion Paper*, page 16
[20] *Regulatory Test* page 6
[21] *Regulatory Test* page 6

bond would not be to create a barrier to entry for unregulated projects, but to reduce the risk of gaming of the regulatory test by vested interests."[22]

TransÉnergie does not agree with this proposal, particularly given that in order to achieve 'committed' or 'anticipated' project status (as defined by NEMMCO) a proponent will already have expended considerable funds on permitting, land acquisition etc. By comparison, the proponent of a regulated project appears to have to do little in order for the proposal to gain credibility. In that situation the issue is not one of gaming of the Regulatory Test by proponents of non-regulated projects, but of gaming by the proponents of regulated projects. TransÉnergie therefore strongly supports either:

(a) the posting of a bond by the proponent of a regulated project, or
(b) the need for a regulated project to be awarded 'committed' project status (as defined by NEMMCO) before the proponent is permitted to perform a Regulatory Test evaluation.

These conditions are required to prevent gaming of the market by regulated projects, and to provide a level playing field between regulated and non-regulated projects.

- Timing Delays
  The Discussion Paper states[23]:

  "*One of the criticisms of the regulatory test relates to the time taken to approve an interconnector under the current arrangements. For example, SNI was approved in December 2001, two years after it had been submitted to the Inter Regional Planning Committee (IRPC) for assessment*".

  The claim that the IRPC took two years to approve SNI is incorrect. In fact the scope of SNI was modified by TransGrid as late as March 2001, necessitating a re-starting of the IRPC assessment from that date. Therefore the SNI assessment can only have been claimed to have extended over the period March –December 2001 i.e. a period of only 10 months.

  In contrast, the IRPC commenced the non-regulated Murraylink technical studies in March 2000, with an interim report published in November 2000, and a final report not published until August 2001 i.e. a period of 18 months.

3.0 Regulatory Test Options

The Discussion Paper outlines three alternative options for amendments to the Regulatory Test. At this time TransÉnergie generally supports the implementation of options 1 and 2.
TransÉnergie has concerns about option 3. TransEnergie does not consider that sufficient information has been provided to enable an informed decision on option 3.

3.1 Option 1- Minor Amendments

Option 1 for amendments to the Regulatory Test maintains the current Regulatory Test, with minor modifications to ensure consistency between the Regulatory Test and the Code following the Network and Distributed Resource (NDR) Code changes.

[22] *Discussion Paper*, page 17
[23] *Discussion Paper*, page 18

3.1.1 Retention of the Maximisation of Benefits

As discussed in Section 2 of this document, TransÉnergie supports the ACCC in its position to retain maximization of net benefits. This is required in order to:

- Promote efficient regulated investments in the context of alternative (non-regulated) investments;
- Ensure that regulated investments do not pre-empt nor distort non-regulated investments; and
- Ensure economic efficiency and competitive neutrality between regulated and non-regulated investments.

3.1.2 Ensuring Consistency between the Regulatory Test and the Code

TransÉnergie agrees with the ACCC that '*realigning the regulatory test with the code following the NDR amendments will provide uniformity between the code and the regulatory test, and less confusion and contradiction in its interpretation.*"[24]

TransÉnergie agrees with the ACCC's proposed changes to the 'Preamble', 'Reliability augmentations' and 'Other amendments' as set out on pages 24 and 25 of the Discussion Paper.

3.1.3 The Classification of Small and Large Network Assets

TransÉnergie supports the current classification between 'small' and 'large' network assets in the Code as being appropriate.

3.2 Option 2 – Definitional Amendments

Option 2 for amendments to the Regulatory Test involves defining and clarifying elements of the Regulatory Test to ensure a consistent application of the test across the NEM. This is particularly required now that the Network and Distributed Resource Code changes permit the application of the Regulatory Test by individual TNSPs.

3.2.1 Alternative Projects

The Regulatory Test requires that the proposed project maximises net market benefits, as compared with alternative projects.

The ACCC has previously stated that "*it would anticipate that the number of alternatives considered would be proportional to the size and/or importance of the proposed augmentation.*"[25] NEMMCO and the IRPC evaluated the Base Case, SNI, SNOVIC 400 and SNI+SNOVIC 400 in their assessment of the SNI project. However, neither the Base Case nor SNI are 'alternative projects'. Therefore NEMMCO only considered two alternatives to the Base Case and SNI (and the second alternative was simply the first alternative plus SNI). The ACCC's statement is suggestive of the fact that a larger number of alternatives to SNI should have been considered. In addition, <u>all</u> of the projects (the proposed project and the comparator 'alternative projects') were awarded regulated status by NEMMCO (with the exception of the "'*do nothing' scenario*"). This outcome strongly suggests that NEMMCO misapplied the Regulatory Test because the purpose of the alternative projects comparison is to single out a particular project as having the highest net present value of market benefit. If all the projects are awarded regulated status, they can hardly be true alternatives.

[24] *Discussion Paper*, page 24
[25] *Regulatory Test*, page 10

NEMMCO applied two criteria in selecting alternative projects to compare against SNI: substitutability and practicability. Substitutability is an appropriate criterion in that an alternative should perform a similar function to the project against which it is compared. Practicability as applied by NEMMCO has three components viz technical feasibility, commercial feasibility and whether there is or is likely to be a proponent.

3.2.1.1 Technical Feasibility

TransÉnergie agrees that technical feasibility is an appropriate criterion. However, TransÉnergie has strong concerns that a technical feasibility criterion not be used inappropriately by a proponent TNSP to game the outcomes of the Regulatory Test.

Technical feasibility is not a 'black and white' issue. For example, NEMMCO stated in its SNI Determination:

> *"NEMMCO is not aware of anything at this stage which would suggest that the SNOVIC 800 proposal is not technically feasible."*[26]

VENCorp identified SNOVIC 800 as a potential project, and on that basis it would appear that VENCorp also considered that SNOVIC 800 was a technically feasible project. VENCorp also identified SNOVIC 1000 as a potential project, and on this basis it would also appear that VENCorp also considered that SNOVIC 1000 was a technically feasible project.

On the other hand, TransGrid asserted that SNOVIC 800 was not technically feasible.

In the face of these conflicting expert opinions, the ACCC needs to ensure the presence of sufficient safeguards so that technical feasibility cannot be used to game the outcome of the Regulatory Test.

3.2.1.2 Commercial Feasibility

NEMMCO considered commercial feasibility as an appropriate criterion for whether an alternative project was practicable. However, in the end NEMMCO only considered subjective commercial feasibility, through the fact that it asked only TransGrid whether it was prepared to be a proponent of the NSW component of the SNOVIC 800 project. NEMMCO should have asked other entities whether they would have considered being a proponent of the NSW component of SNOVIC 800 in order to fully test commercial feasibility.

Asking other entities whether they would have considered being a proponent of the NSW component of SNOVIC 800 would probably have elicited a range of responses, reflecting that different market participants have different tolerances to risk. In this regard, Gregory Houston (an expert witness for TransGrid in the National Electricity Tribunal review of the SNI decision) agreed when he stated:

> "*TransGrid (or any other proponent) should not have an exclusive right to determine the commercial feasibility of any alternative network augmentation proposal ... Different parties have different appetites for risk and different perceptions of the risks that face them.*"[27]

Consistent with that statement, commercial feasibility is not an appropriate criterion to apply to an alternative project.

---

[26] NEMMCO, '*Determination Under Clause 5.6.6 of the Code – SNI Option* (6 December 2001)', page 15 (***Determination***).

[27] Gregory Houston, '*Witness Statement'*, National Electricity Tribunal, Application No. 1 of 2001, http://www.nera.com/wwt/misc_documents/5584.pdf, paragraph 188

Commercial feasibility can only be disproved when a project is shown to be technically feasible, is identified to the market place as an alternative project, is shown to maximise net benefits under the Regulatory Test, and no proponent comes forward. Certainly a TNSP, with its traditionally low risk tolerance, is in no position to rule on commercial feasibility.

3.2.1.3 The Likelihood of a Proponent

There is no requirement in the Regulatory Test or the Code that an alternative project should have a committed, or even a likely, proponent. Indeed, Section (5)(d) of the Regulatory Test specifically requires that the market development scenarios include:

> "*any other projects identified during the consultation process.*"[28]

In the first instance it should also be noted that requiring alternative network service projects to have a proponent is inconsistent with not requiring alternative generation and demand side projects to have proponents.

Second, the proponent criterion effectively gives a TNSP the 'power of veto' over alternative projects. This is inconsistent with the position adopted by Professor Alfred Kahn (an expert witness for TransGrid in the National Electricity Tribunal review of the SNI decision):

> *"No party, applicant or non-applicant should or would have a veto over what other projects are considered and evaluated."* [29]

TransÉnergie agrees with the ACCC that the proponent criterion:

> *"encourages gaming by transmission companies and encourages those companies to mix socially desirable augmentations with socially undesirable augmentations."*[30]

This outcome was observed in the National Electricity Tribunal review of the SNI decision, in which Professor Stephen Littlechild[31] demonstrated that based on the work of Intelligent Energy Systems (as a consultant for TransGrid) the SNI component consisting of the transmission line from Buronga – Robertstown delivered a net benefit of -$144.1 M i.e. it delivered no net benefit at all. Such an outcome led Professor Littlechild to conclude:

> *"It surely cannot be sensible to waste – literally waste – no less than $ 144 M on building and operating a duplicate interconnector …….. My considered opinion is that to do so would be irresponsible, not to say scandalous."*

The Discussion Paper notes that:

> "*there have been suggestions that the existence of a proponent may be a shorthand way of showing that a project is both commercially and technically feasible, and that if a project has a proponent, this would be sufficient to establish that it is commercially and technically feasible."*[32]

---

[28] *Regulatory Test*, page 21

[29] Anthony Cook, '*Statement in Reply'*, National Electricity Tribunal, Application No. 1 of 2001, 16 August 2001, paragraph 428

[30] *Discussion Paper*, page 29

[31] Stephen Littlechild, '*Statement in Reply'*, National Electricity Tribunal, Application No. 1 of 2001, 16 August 2001

[32] *Discussion Paper*, page 30

TransÉnergie agrees that the existence of a proponent is a shorthand way of showing that a project is both technically and commercially feasible. However, the absence of a proponent should not be taken in any way to imply that an alternative project is neither technically nor commercially feasible. In particular, the Regulatory Test compares the proposed project with alternative projects. It may well be that the consideration of an alternative project in the application of the Regulatory Test serves to highlight to the market that there is a superior alternative project, and a proponent may well then emerge for the superior alternative. This position is supported by Gregory Houston (as an expert witness for TransGrid in the National Electricity Tribunal review of the SNI decision):

> "*the drawing of attention to such potential opportunities through the application of the regulatory test may in itself be instrumental in stimulating such investment.*"[33]

3.2.1.4 Recommendations

TransÉnergie agrees with the ACCC's proposed definitional amendment:

> *'that the following criterion should be used when deciding which alternative project should be taken into account in applying the regulatory test:*
>
> - *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.'*34

TransÉnergie agrees with the definition of a 'substitute':

> *'For a proposal to be a substitute:*
>
> - *the outcomes delivered by the proposal should be similar to those delivered by the project; and*
> - *the proposal should become operational in a similar time frame to the project.'*[35]

TransÉnergie does not agree with the definition of 'practicable':

> '*In considering the practicability of a proposal, the following issues need to be considered:*
>
> - *the technical feasibility of the additional proposal; and*
> - *the commercial feasibility of the additional proposal.'*[36]

This definition is not sufficiently prescriptive to define and clarify these elements of the Regulatory Test in order to ensure a consistent and more rigorous application across the NEM.

---

[33] Gregory Houston, '*Witness Statement'*, National Electricity Tribunal, Application No. 1 of 2001, http://www.nera.com/wwt/misc_documents/5584.pdf, paragraph 52

[34] *Discussion Paper*, page 30

[35] *Ibid*, page 30

[36] *Ibid*, page 30

The ACCC needs to further consider the issues raised in this submission, and then set down how the technical and commercial feasibility criteria are to be employed. For example, one approach would be as follows:

- Technical feasibility
  The technical feasibility of alternative projects should not be left solely to the proponent TNSP. Rather, any decision on technical feasibility should be made by an independent party.

- Commercial feasibility
  Commercial infeasibility can only be proven after an alternative project has been shown to maximize the net benefits, and that alternative project is not proposed as a regulated project.[37]

It is only with these safeguards in place that the application of the Regulatory Test will be in accordance with its objectives of being economically efficient and competitively neutral.

3.2.2 Market Benefits

TransÉnergie notes the ACCC's proposal regarding the inclusion of a list of the types of market benefits that can arise from regulated network services. TransÉnergie consents to this approach. However, TransÉnergie considers that in addition the ACCC also needs to set down a methodology as to how the appropriate levels of some of the individual benefits are derived.

3.2.2.1 Benefits in Capital Deferrals

The ACCC's intent in the Regulatory Test is to ensure competitive neutrality as between both regulated and market options. This is evident from the strong emphasis in the Regulatory Test on competitive neutrality (refer to Section 2 of this document). Capacity deferral benefits should only therefore be included in a manner consistent with the strong emphasis that the ACCC has placed on competitive neutrality.

The level of generation capacity deferral benefits is broadly based on assumptions concerning the need for additional plant, not obtained through market mechanisms, to maintain reliability levels, and NEMMCO's 'Reserve Trader' role. In turn, NEMMCO's Reserve Trader role is intimately linked to the level of Value of Lost Load (VoLL), which the ACCC recently permitted to increase in order to promote adequate market investment responses. That is, one of the ACCC's objectives in increasing the level of VoLL was to encourage investment in new generation plant without the need for a 'Reserve Trader'. Therefore the ACCC needs to ensure that the functions of the Reserve Trader role in the application of the Regulatory Test and the purpose of the level of VoLL are always complementary in nature.

NEMMCO's SNI analysis assumed that SNI would be the preferred Reserve Trader option after all offers to supply reserve capacity were evaluated by NEMMCO. TransÉnergie considers that the following procedure should be implemented in order to derive the appropriate level of generation capacity benefits for a proposed regulated investment:

- There needs to be a formal acknowledgement that market failure has occurred;
- The Reserve Trader should call for options to meet the identified need – this could include generation, demand side and market network service provider options;
- The cost of the generation, demand side and market network service provider options should be ranked against the cost of the proposed regulated network service; and

[37] Only the proposed project can pass the Regulatory Test i.e. that an alternative project maximises the net market benefits does not mean that it automatically passes the Regulatory Test.

- Contracts should be awarded to the options in order of increasing cost, until the identified shortfall has been met.

The above approach highlights that generation, demand side and market network services are capable of supplying 'regulated' services, and provides a mechanism for them to do so on a 'level playing field' with regulated network services. It also ensures that the proper economically efficient level of capacity deferrals is awarded to the proposed regulated network service.

3.2.2.2 Deliverability of a Capacity Benefit

A generation or demand side capacity option is clearly backed by generation plant and interruptible loads respectively, and therefore deliverability (of their capacity benefit) is not a problem. However, the deliverability of the capacity benefit of regulated network services is dependent on the presence of surplus generation capacity in the exporting region. VENCorp agreed with this position when it noted that:

> "*transmission augmentation does not necessarily, of itself, provide additional reserve capacity unless additional generating capacity is made available as a result of the augmentation.*"[38]

In fact, VENCorp considered that an interconnection would only be a potentially economic source of new capacity if two conditions were satisfied:

- "*it has a relatively low capital cost per unit of capacity;* and
- *reasonably abundant surplus (sunk) generating capacity is available in other regions for export to Victoria*."[39]

The deliverability of the capacity benefit of a regulated network service needs to be tied down in order to ensure that it is competing on a level playing field with non-regulated options, and to ensure continued benefits to the consumers paying for the regulated network service.

For example, the availability of "*sufficient surplus capacity*" and "*reasonably abundant surplus (sunk) generating capacity ... available in other regions for export to Victoria*" were key considerations in VENCorp's analysis of the SNOVIC options. In fact, in their SNOVIC project analysis VENCorp went so far as to perform sensitivity analyses on the NSW maximum demand forecasts and their impact on the availability of surplus NSW generation capacity. VENCorp's conclusion was that:

> *"the surplus reserve capacity would only be available for importation into Victoria for three years after the commissioning date of mid 2002 for both the 250 MW and 400 MW upgrade options. For the 800 MW option, only 544 MW would be available in the year of commissioning (mid 2004)."*[40]

That is, based on the VENCorp analysis the surplus reserve capacity would not be available after mid 2005, and therefore any regulated interconnector should be credited with no benefits after that date.

---

[38] VENCorp, *Assessment of Options for Upgrading of the Snowy to Victoria Transmission Capacity* (29 March 2001) page 2 (***VENCorp Report***)
[39] Ibid, page 3
[40] Ibid, page 45

In order to deal with this issue TransÉnergie recommends that:

- In the short term, there is a need to perform sensitivity analysis to confirm the availability of sufficient surplus capacity in other regions; and
- In the longer term, the proponents of regulated network services should be required to enter into contracts with interstate generation to confirm the deliverability of the promised capacity.

Regarding the second recommendation, it is noted that a reserve sharing benefit (as opposed to a capacity benefit) will exist between regions to the extent that generator breakdowns and peak loads do not occur simultaneously. However, there is a limit to the extent of the reserve sharing benefit. This is because interconnections can only increase the utilization of spare plant; once this has reached a limit reliability levels can only be increased by the installation of new generation capacity.[41]

3.2.3 Costs

TransÉnergie agrees with the ACCC that '*the cost of disruption to the NEM for testing or augmentations or upgrades should also be included'*[42] in the application of the Regulatory Test.

3.2.4 Committed/anticipated Projects

TransÉnergie agrees with the ACCC that the NEMMCO definitions for committed and anticipated projects should be included in the application of the Regulatory Test.

3.2.5 Reliability Augmentations

TNSPs often rely on the reliability obligations of Chapter 5 of the Code as the rationale for proposing regulated investments. Whilst it is true they must meet these obligations, any proposed investment that unilaterally passes a large proportion of the risk of an investment back to consumers must be assessed against all viable options.

TransÉnergie notes the ACCC's concerns regarding reliability augmentations, and the concern that the portion of the Regulatory Test dealing with reliability driven augmentation does not place sufficient accountability on the proponent. TransÉnergie agrees with this concern.

TransÉnergie agrees with the additional requirements proposed to be imposed on proponents of reliability driven augmentations. However, in addition to these requirements, TransÉnergie also proposes that the proponent should be required to disclose the following additional information:

- the alternatives considered in arriving at the preferred reliability driven augmentation,
- the cost of the preferred project and its alternatives,
- the net present value of the preferred project and its alternatives, and
- the reasons why the alternatives were considered inferior to the proposed reliability driven augmentation.

---

[41] For a further discussion of these issues refer to: Anthony Cook, '*Statement in Reply*', National Electricity Tribunal, Application No. 1 of 2001, 16 August 2001, paragraphs 454 etc.

[42] *Discussion Paper*, page 33

4.0 Competition Benefits

The Discussion Paper highlights the current push by TNSPs to include so-called competition benefits as a separately identifiable and measurable source of (consumer) benefits in the Regulatory Test assessment process. Put simply, competition benefits are touted as the additional price effects benefiting consumers from increased competition between generators where 'equilibrium prices' are otherwise assumed to be above the level of long-run marginal costs (LRMC) assumed by perfect competition. In other words, it implies an augmentation will, in the case of an interconnector, import generator price competition such that generators in the import market cannot exercise market power, if it exists, to maintain prices above their LRMC.

In terms of pure economics, a competition benefit is the reduction of the deadweight loss in excess of other price-induced wealth transfers (i.e. the incremental or net gain after the reduction in producer surplus and increase in consumer surplus resulting from a price reduction).

A simple diagrammatic example of the potential for competition benefits is shown in Figure 4.1. Under perfect competition conditions, the market will settle at the point of equilibrium (E) of supply (S^1S^2) and demand (D^1D^2) with a market clearing price and quantity of P^E and Q^E respectively. The value of consumer surplus benefits (P^ED^1E) is equivalent to the area under the demand curve bounded by the vertical axis and the market price. The value of producer surplus benefits (P^ES^1E) is equivalent to the area above the supply curve bounded by the vertical axis and the market price. Under perfect competition, all market participants are assumed to be price-takers with no ability to influence price individually. As such, there will be no potential to derive any competition benefits.

If, however, one or more generators in the market is assumed to be able to influence the market price, an assumption that market power exists, then the price will rise to say P^M and supply fall to Q^M. The value of consumer surplus benefits is reduced to the equivalence of P^MD^1d, a reduction equivalent to the area of P^EP^Mde. On the other hand, the value of producer surplus benefits will rise to the equivalent of P^MS^1sd, an increase equivalent to the area of P^EP^Mde less the area of se.[43]

Clearly, total consumer and producer benefits have reduced from S^1D^1E to S^1D^1ds, a loss equivalent to the area of sdE. This comprises a net loss of consumer surplus benefits (edE) and a loss of producer surplus of seE. This is known as the deadweight loss to society as a result of the exercise of market power. The TNSPs refer to this as the potential competition benefits that can be recovered by introducing external generator competition that is expected to lower the market price back towards the level associated with perfect competition (P^E). Note that the rectangular area $P^Mde P^E$ is not considered to be part of the deadweight loss because consumers' loss of that area is exactly offset by the profit gain to the generators. That is, it represents a direct transfer of wealth within the total society.

[43] Observe that in this case, the marginal cost of supply (P^N) is less than the market price (P^M). Therefore, the excess profits (i.e. economic profits) earned by the generator(s) exercising market power is equivalent to the area of P^MdsP^N.

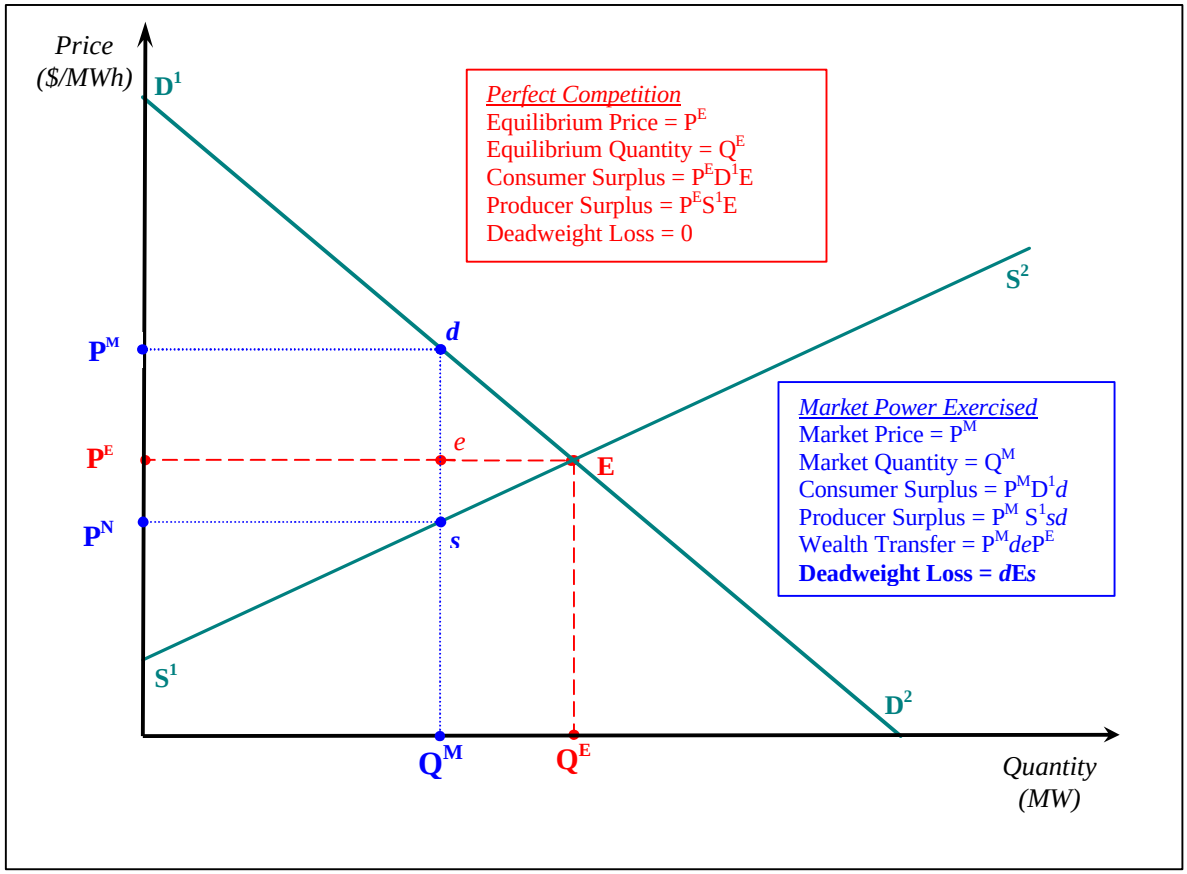

Figure 4.1

It is important to recognise that the potential to accumulate competition benefits of any significant magnitude will arise only where there is an opportunity to remove excess profits of a generator(s) that has the opportunity to exercise substantial market power. That is, any competition benefit would be the additional societal welfare gain that results from more than just the transfer of wealth from the generator to consumers.

In terms of pure economics, a competition benefit is the reduction of the deadweight loss in excess of other price-induced wealth transfers (i.e. the incremental or net gain after the reduction in producer surplus and increase in consumer surplus resulting from a price reduction).

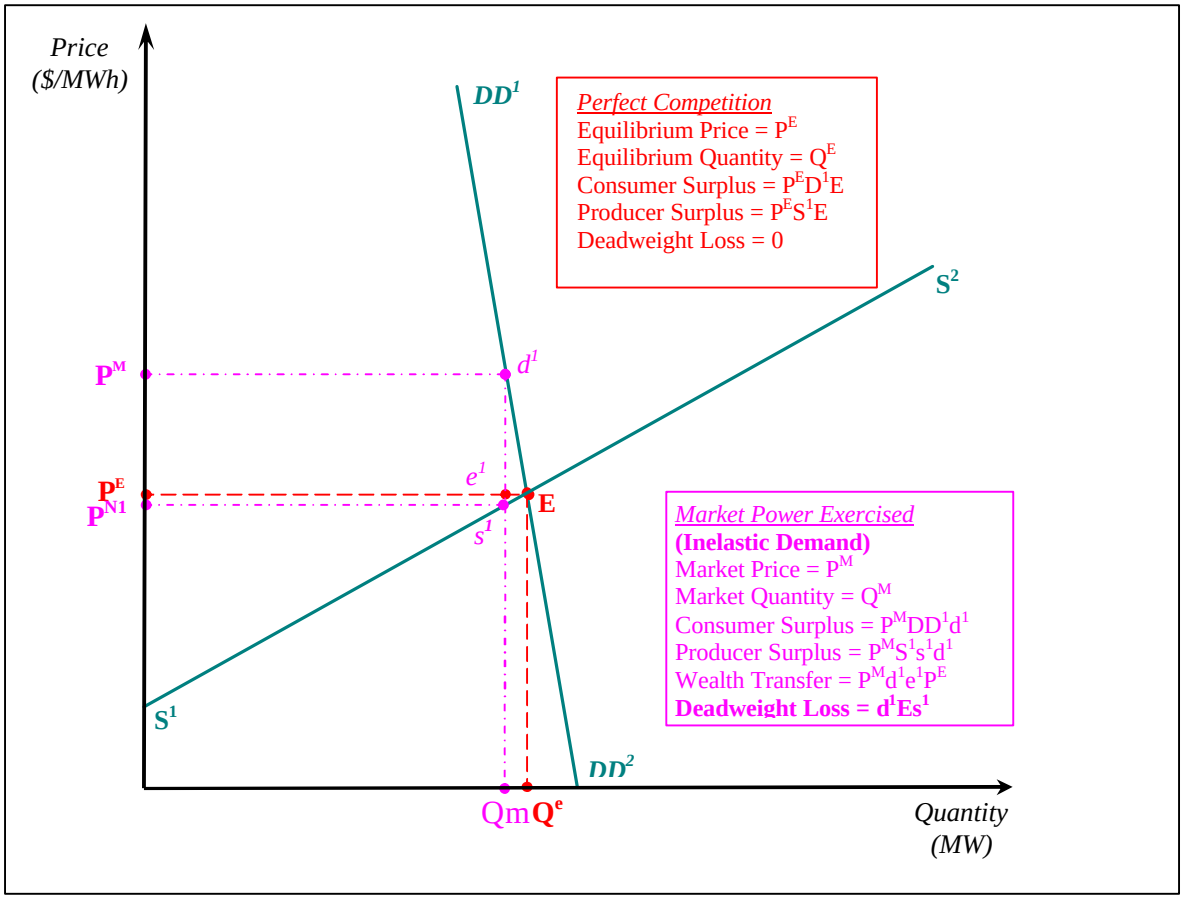

Figure 4.2

To highlight the significance of the above point, consider an industry such as the NEM where the demand curve is characterised as being highly inelastic. There is a theoretical potential to earn profits in excess of normal profits from the exercise of market power where the incumbent generators have the ability to dramatically increase prices without significantly affecting the level of demand and without the threat of competitive generator response. Therefore, the logic follows that where a transmission augmentation can introduce competition, or at least the threat of competition, to limit the ability to extract economic profits, there may be a competition benefit equal to the incremental benefits associated with the reduced prices. However, as shown in Figure 4.2, the assumption of highly inelastic demand, which can aid the exercise of market power, can also limit the magnitude of achievable competition benefits.

Figure 4.2, where the demand curve (DD^1DD^2) is assumed to be highly inelastic but all other factors remaining the same, indicates that value of the potential competition benefits (d^1Es^1) is considerably smaller than in the example shown in Figure 4.1 where the demand curve has an elasticity of demand closer to unity. In this case, the total loss of consumer surplus has not changed, however the reduction of potential competition benefits has been offset by a greater proportion of that loss represented as a welfare transfer to the generators. In other words, the reduction in potential competition benefits has been equally offset by an increase in the producer surplus (generator profits).

The above example highlights that it can be inappropriate for a marginal regulated transmission augmentation to be approved on the basis that there may be additive competition benefits over and above the benefits already calculated. In this case, it would be appear that the equity considerations raised by the potential for the misuse of generator market power are best dealt with by means of direct regulatory controls (as per the existing provisions in the Trade Practices Act) or structural changes to the market design. However, the preferred option is to promote market-based solutions where the market participant is expected to venture its own risk capital if it believes there are benefits (including competition benefits) able to be captured sufficient to provide an adequate return on the investment. Given the uncertainty associated with both the calculation and whether the benefits can actually be realised, consumers should not be expected to fund such investments through taxes such as TUOS.

In addition to the above issues TransÉnergie has a number of serious concerns with the ability to practically and effectively introduce a competition test to explicitly recognise the benefit as a benefit over and above those already identified in the application of the Regulatory Test, either within the existing Regulatory Test framework or to be applied as a separate test.

The basis of these concerns is as follows:

- *Market Simulations*
  As noted in the Discussion Paper in reference to the requirements of Note 6 of the Regulatory Test, LRMC bidding is generally used to proxy actual market bidding and prices. To the extent that the modelled outcomes for both the base case and the various market development scenarios currently reflect LRMC outcomes, the long-run competition benefits will already be included in the totals benefits ascribed to an augmentation, although they have not been identified as a separate benefit category to date. Therefore, the approach to develop an index that takes the difference between the forecast pool price and both the SRMC and LRMC of generators in the NEM, will only serve to more clearly highlight the categorisation or make-up of the total benefits, and will not provide a measure of any additional benefits.

- *Deferred Generation Benefits*
  It seems somewhat peculiar that benefits can be attributed to an option which defers the capital costs associated with new generation, yet then consider including additional competition benefits which would not arise if that generation had instead occurred. If this represents a substitution of one benefit for another, then there will need to be further consideration of other issues, not the least of which is the desirability of a regulated option, which places a tax on consumers, being preferred to a market investment in generation.

- *Powerlink's Public Benefits Competition Test*
  Powerlink suggests that an optional "public benefits test" could be applied in circumstances where:

  - Historical evidence exists that wholesale prices have been significantly above marginal costs.

    Whilst it is important to take historical evidence into account, the Regulatory Test must be a forward looking test and not based solely on past activity. To the extent that a market response has not occurred to reduce any historical gap between wholesale prices and marginal costs or is not forecast to do so through the market development scenarios is symptomatic of an underlying structural inefficiency in the market. It is not an efficient outcome to overcome or counteract the inefficiencies of an uncompetitive generator structure with investments in transmission which would otherwise fail the efficiency test. In the market-based system such as the NEM, it is more efficient to directly address the structural barriers affecting new market entry in generation. In such cases, regulatory responses inhibiting any excessive or sustained maintenance of a price margin may also be more efficient than a regulated transmission investment imposing a tax on consumers.

  - Market power occurs or will occur, necessitating a definition of when market power arises.

    TransÉnergie agrees with the ACCC that the criteria proposed by Powerlink are highly subjective and are likely to lead to increased disputation on how to appropriately capture the associated competition benefits.

    In considering market power issues and in order to assume an augmentation will capture competition benefits, it will need to be clearly demonstrated, on a case by case basis, that in the absence of the proposed augmentation, incumbent generator activity will lead to, or is likely to lead to, a substantial lessening of competition in the relevant market. It is noted that even the Trade Practices Act (TPA) does not include a definition of the phrase 'substantial lessening of competition', simply because there are such a wide variety of circumstances in which a substantial lessening of competition could be perceived to occur. Essentially, it has been left to the Federal Court and the Australian Competition Tribunal to ask to what extent there may be competition in a market, to what extent the activity of one party is likely to lessen competition, and whether the lessening of competition is in fact substantial.

    Market power is the ability of a firm to insulate itself from competition. Within a market, a firm's market power will be determined by a combination of factors, including:

    - how difficult it is for competitors to enter the market;
    - the firm's ability to behave with little regard to what its competitors, suppliers or customers do;
    - the firm's market share;
    - the firm's financial strength; and
    - the firm's ability to consistently restrict competition.

Section 46 of the TPA prohibits a firm with a substantial degree of market power (by market share or otherwise) from using this power for the purpose of:

- Eliminating or substantially damaging a competitor;
- Preventing the entry of a person into any market; or
- Deterring or preventing a person from engaging in competitive conduct in any market.

Importantly, a firm does not breach s.46 simply because it possesses or acquires substantial market power. Nor is it unlawful for a firm to use that market power provided it is not used for one of the three anti-competitive **purposes** listed above. Furthermore, if a particular action taken by a company which has market power is no different to one it would have taken under competitive conditions, the company may not have misused its market power. In other words, while s.46 prohibits the misuse of market power, it does not prohibit the mere possession of that power or use of that power as long as it is not for a prescribed anti-competitive purpose.

Substantial market power has been taken to mean that the degree of power is more than trivial or minimal and that it is real and of substance.[44]

Where a firm has a monopoly, or at least a dominant share of the relevant market, it may seem obvious that it must have a substantial degree of power in that market. This may be true, although there are many exceptions. One possible exception is the case of a 'contestable market' in which a dominant firm is subject to a continuing threat of 'hit and run' entry from entrants which believe that they can capture some of the monopoly profits being earned by the incumbent and then withdraw from the market without significant penalty when there are no longer profits to be earned.

If the dominant firm takes the threat of entry seriously, prices in the market would tend to be no higher than they would if the market were competitive, even if no new firms actually enter the market. However, this outcome could only occur if an entrant is always able to enter or exit the market without incurring significant sunk costs.

The market power, even of a dominant firm, will depend not only on its current share of a market, but also on the likelihood that a substantial and efficient rival firm will enter the market in the near future.[45] The risk of this occurring will depend in turn on the height of barriers of entry to the market.

In many respects, it is possible to liken the operation of the electricity spot market to that of a contestable market. This is because at any time there is the possibility that competing generators of any size can rebid a lower price to secure the right to supply over a generator offering a higher cost bid. In effect, there is no artificial restriction on a competitor undercutting any other competitor in the market.

---

44. *Mark Lyons Pty Ltd v. Bursill Sports Gear Pty Ltd* (1987) 75 ALR 581 at pp.591-2.

45 This indicates that tools relying primarily on market share analysis or market share indices, such as the Hirschmann-Herfindahl Index, will be insufficient as a competition test.

In summary, if the possession or acquisition of market power is an insufficient condition to constitute a breach of the relevant provisions of the Trade Practices Act (TPA), is it appropriate that it be used by a TNSP in the context suggested by Powerlink? This approach not only assumes that a market participant has market power but that it will abuse that power and that it will be a substantial market power that is able to be sustained over an extended period. As noted in the above example, it is questionable whether a transmission investment would be the most efficient solution here as opposed to a regulatory response under the provisions of the TPA.

As discussed above, the definition of market power is a significant issue in itself that is the subject of much literature with respect to the TPA. It is often left to the courts to decide whether market power is present in particular circumstances so a single definition within the confines of the regulatory test would appear to oversimplify the complexity of the issue. Alternatively, expanding the regulatory test to embrace all the issues relevant to determining the existence and then misuse of market power is unlikely to appease the objective of simplifying and reducing the time it takes to apply the regulatory test.

- Overcoming a particular network limitation is considered sufficiently important by one or more jurisdictions.

This is a highly inappropriate criterion whilst the NEM continues to have state governments owning generators and TNSPs likely to benefit from particular decisions to relieve network constraints. This criterion is inconsistent with the key findings of the Parer Report that noted that the effectiveness of the NEM is under pressure from vested interests. This included governments who appear to be taking a shareholding view of matters rather than a policy perspective (i.e. maximising returns to Treasury as a primary objective) and who do not fully understand the risks to the market of their actions.