TXU Response to "Draft Decision – The review of the regulatory test for network augmentations"

1. Introduction

TXU welcomes the opportunity to respond to the "Draft Determination – The review of the Regulatory test for network augmentations. " The intention of the regulatory test is to promote economic efficiency and competitive neutrality with regards to competing investment options in the National Electricity Market (NEM). Any other issues that are considered as part of the regulatory test are subsidiary to these two issues.

TXU's position on the Draft decision is

- It supports the definitional changes to the regulatory test that apply to the term "alternative projects."
- It supports the definitional changes to the regulatory test that apply to the term "Market Benefits"
- It supports the definitional changes to the regulatory test that apply to the term "Market Costs"
- It supports the definition for a 'committed projects & anticipated projects' in the regulatory test derived from NEMCO'S definition of a committed project.
- It supports the use of only unregulated commercial discount rates in applying the regulatory test.
- It does not support the ACCC's position to provide TNSPs with the option to use multiple values of customer interruption.
- It does not support the removal of note 7 from the regulatory test, in particular 7(a) that has not been explained in discussion and could have very widespread and serious unintended consequences.
- It supports the ACCC's position to providing a guide on the type of sensitivity analysis that that a proponent must consider in a regulatory test assessment
- It supports the inclusion of a competition benefits test in the regulatory test subject to some strong caveats.

TXU is concerned that in proposing these changes, the ACCC is giving undue weight to facilitating TNSP expansion without sufficiently considering the inevitable harm upon the market investment playing field. We remind the ACCC of Ernst & Young's criteria when promulgating the original regulatory test in 1999:

> " *The main impact of any uncertainty will be on non regulated alternatives, rather than on regulated augmentations itself. Increased risks will deter investments in generation & other non regulated alternatives rather than on the regulated investment itself.*"[1]

Whilst the test is very useful in enhancing efficiency in facilitating regulated projects, its main purpose is actually to give confidence to market investors regarding clear and sensible rules to understand their own risk of becoming stranded by such projects.

[1] Enrst and Young, Review of the Assessment Criterion for New Interconnectors and Network Augmentation, Final Report to ACCC, March 1999, p. 17

2. Option 2 – Definitional changes to clarify ambiguous parts of the regulatory test

TXU's position on the ACCC's position to clarify the ambiguous parts of the regulatory test is that it supports these changes in principle.

a. Alternative Projects:

The ACCC's definition of alternative projects will encompass two limbs to cover both reliability & non-reliability. TXU supports

- The ACCC's position that it is in appropriate to exclude a possible alternative project on the basis that it does not have an identifiable proponent.
- The ACCC's position that whilst the existence of a proponent of a project is a good indicator of feasibility, it does not believe that it be a fundamental requirement that such a proponent be clearly identifiable.
- The ACCC's position that it is not strictly necessary to define the number of alternatives to consider when considering a proposed augmentation.

b. Market Benefits

The ACCC has provided guidance on the type of benefits that might be included when conducting the regulatory test. TXU supports

- The ACCC's position of including a non-exhaustive list of benefits into the regulatory test. It supports the ACCC's position that it be done in such a way as not to preclude other valid benefits from being included in the analysis when it is appropriate.
- The ACCC's position to leave the decision on how to calculate market benefits to be left to the market. However, TXU believes that the benefits claimed in any regulatory test assessment must be tangible and specific to the electricity industry.
- The ACCC's position that the calculation of benefits in the regulatory test should only be made by those who produce, distribute or consume electricity.

The proposed amendment to the regulatory test includes both: (c)i. "savings in reduction in loss of load" and (d)i. "deferral of reliability entry plant". This potentially allows double counting. NEMMCO's SNI analysis counted the benefits of deferral of reliability entry plant with the intention of retaining loss of load to an immaterial amount. Thus to also count the avoidance of loss of load would be an inaccurate double counting. To avoid this risk, the amendment should be worded as "reduction in loss of load ***OR*** deferral of reliability entry plant".

As the market benefits assessment is effectively comparing a regulated to market options, TXU is of the view that reliability benefits should only be permitted through (c)i "savings in reduction in loss of load" as this, multiplied by VoLL, is equivalent to the value that could be captured by a market based investment. Market options can not capture the value of deferral of reliability plant (i.e. Reserve Trader).

c. Market Costs

The ACCC has provided guidance on the type of costs that might be included when conducting the regulatory test. TXU supports

- The ACCC's position to include a non-exhaustive list of market costs to be incorporated into the regulatory test.
- The ACCC's position to provide guidance on the range of costs that should be considered in the evaluation of the proposed augmentation & its alternatives under the regulatory test.
- The ACCC position that the costs assessed in relation to an augmentation need not be the same as those being assessed for alternative projects being considered in the regulatory test analysis.

d. Committed Projects & Anticipated projects

TXU supports the ACCC's position that the definition for 'committed projects & anticipated projects' in the regulatory test be derived from NEMMCO'S definition of a committed & anticipated project.

e. Commercial discount rate to apply in regulatory test

TXU supports the ACCC's recognition that the market benefits of the test is effectively comparing a regulated option to market based options and therefore can only be accurate if an unregulated discount

rate is used. Regulated investments typically have WACC rates 150 basis points lower. Whilst we agree a range can be provided if the appropriate unregulated rate is uncertain, we strongly disagree that the range should be broad enough to include the level of regulated assets. If this is permitted, the regulated rate will always be used to justify marginal projects and the test will not operate in a competitively neutral manner. The ACCC needs to make a clear statement as to which risk profile is accurate in the assessment.

f. VOLL

TXU does not support the ACCC's position to provide TNSPs with the option to use both VoLL of $10,000/MWh, and VCR, in a regulatory test evaluation. As discussed above, the assessment of market benefits is effectively comparing a regulated option to market options that cannot receive income greater than VoLL when operating during load shedding. Thus, only the use of a VoLL of $10,000/MWh is in accordance with the principles of competitive neutrality.

To provide the proponent a choice encourages gaming of the test-in some cases customers can have a VCR lower than VoLL. If the ACCC is firmly of the view that VCR is appropriate, then this must be enforced in all cases (or vice versa).

g. Market Failure test

TXU is disappointed at the ACCC's desire to remove part 7, having considered the debate only within the context of historical conflicts between regulated interconnectors and MNSP's. The issues have equal importance to the role of generators. The 18 months notice period forced the TNSP's to provide an adequate time to permit non-network options to come forward. To rely purely upon the TNSP's own consultation timeframes will not allow a fair preparation.

Whilst there is discussion of the historic misinterpretations of 7. (c) leading ACCC to propose its removal, there is no explanation for the removal of 7.(a). The ACCC must consider the importance of this clause to the success of the unregulated electricity market. Gas-fired generator investments (the predominant alternative to network solutions) are sensibly committed only about 1-2 years ahead of commissioning. Therefore, if a test is carried out upon market conditions beyond that timeframe, there will always be a lack of *committed* generation projects in the outlook. One can then justify regulated solutions to meet an apparently looming shortfall that is not real. Regulated solutions must consider the market needs *after* the market has had time to invest and not before.

Indeed, if the removal of 7(a) leads to TNSP's running regulatory tests on investments, say, ten years into the future and subsequently committing them, then there would no longer be any need (and certainly no value) in market based investments in the NEM. For example, as the committed supply/demand situation always appears to be in shortfall more than 3 years into the future, TNSP's could justify constructing regulated generation through the test to meet that shortfall! The ACCC must seriously consider whether they intend to convert the NEM generation investment regime to an entirely regulated one before they remove 7(a).

h. Sensitivity Analysis

TXU supports the ACCC's position in providing guidance on the type of sensitivity analysis that that a proponent must consider in a regulatory test assessment that covers both the reliability and market based limbs of the test. Whilst it acknowledges that the regulatory test provides a guide to what market development scenarios must encompass, it supports the ACCC's position to provide a non-exhaustive list of input parameters, which the sensitivity analysis should encompass.

3. Option 3 - The inclusion of 'Competition benefits' in the Regulatory test

TXU supports the inclusion of a competition benefits test in the regulatory test subject to the following important caveats.

1. It supports including competition benefits in the regulatory test on the basis that when transmission augmentation leads to pricing closer to marginal costs then this represents a potentially more efficient outcome as a whole.

2. The increased efficiency captured as a result of including competition benefits is subject to a genuinely in-elastic demand/supply curve for electricity. Hence, the efficiency increase (captured through a reduction in generator prices which leads to generators bidding closer to marginal cost) will be small. Thus, TXU notes the relatively in-elastic nature of the of the demand curve (steepness) for electricity in Appendix F – "Calculating Competition benefits; A general framework" is appropriate.[2]

3.TXU supports the inclusion of a 'Competition benefits' test in the regulatory test on the basis that the in-elastic nature of the demand curve in electricity would be expected to lead to small efficiency increases. Hence, it is very surprised when the Nash modelling for the 400 MW interconnect between Snowy to Vic region in the NEM results in a $31 million dollar/year competition benefit as this is a counter-intuitive outcome. If the outcome is highly variable and dependent upon subjective inputs, then the risk of over-estimating the benefit in this way may exceed the advantages of calculating the benefit. The example provided by TransGrid may highlight this problem. (See also note 9 below)

4. TXU believes that in identifying the competition benefit in the economic analysis presented by the ACCC (Appendix F: Calculating Competition benefits; A general framework) that the ACCC has not factored in the increase in TUOS in its determination. Whilst the ACCC has concluded that generators bidding closer to their marginal cost leads to lower wholesale price of energy, the analysis does not factor in the counter effect upon consumer prices caused by the resulting increase in TUOS. This then reduces the amount of price variation seen by the customer and therefore the welfare triangle available to the analysis.

5 TXU shares the concerns of ESCOSA that whilst the modelling of net market benefits is in itsself a straightforward process, it is open to manipulation. As such, TXU recommends

(a) Any quantitative methodology applied by a TNSP to calculate the "net market benefit" of a transmission augmentation whose value is greater than $20 million dollars be subject to an independent audit by the ACCC.

The independent audit undertaken by the ACCC should scrutinise the value of the competition benefits included in the 'net market benefit' applied by the TNSP.

6 TXU reminds the ACCC to carefully examine the intention of the inclusion of the regulatory test as part of the National Electricity Code (NEC). It believes the intention of the regulatory test is to promote economic efficiency and competitive neutrality with regards to competing investment options in the National Electricity Market (NEM). If subjectively large competition benefits have been included in the regulatory test with many augmentations passing the regulatory test on the basis of including competition benefits, then this will have severe implications of the efficiency of all investment in the NEM and the risk burden upon merchant investors.

7 TXU shares the concerns noted by Professor Littlechild of including 'competition benefits' in the regulatory test at the recent ACCC Forum "Competition benefits and Market Review Forum" in the Regulatory Test. TXU concerns include

(a) The concern that the inclusion of competition benefits might lead to an expansion of un-economic TNSP augmentations

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[2] TXU makes no comment regarding the appropriateness of any quantitative values attached in Dr. Biggar's Appendix F. Based on the relatively steep slope of the demand curve, it has determined that it is relatively in-elastic.

(b) The inclusion of a competition benefit included as a market benefit creates a bias in terms of regulated investments, given a non regulated solution would never gain a financial benefit from a competition benefit.
(c) The concern that controversial inclusion of competition benefits in the regulatory test assessment might give way to greater controversy with more controversial appraisals.

These concerns expressed above are specifically captured by Professor Littlechild on p.15 in his presentation to the ACCC Forum "Competition benefits and Market Review Forum" in the Regulatory Test.

> " *Or, alternatively, will including competition benefits in the regulatory test tend to give more scope to incumbent transmission operators, often still publicly owned, to expand unduly? Will the additional lines be those that respond to political or managerial pressures but are difficult to justify economically or commercially? Will the increased scope for transmission investments tend to restrict or discourage the growth of new entrants into both generation and transmission? For example, will there be a gradual tendency for market participants to seek the protection of regulated status? Will regulators gradually be bogged down in more and more lengthy and more controversial appraisals that could increase costs and divert regulatory attention from more productive activities? In short, will the modification to the regulatory test render it more subject to distortions that will tend to reduce efficiency and increase costs, increase uncertainty and discourage the growth of competition, and if anything undermine the operation of the NEM?*

8. There are legitimate questions that need to be addressed by the ACCC before it determines how to include competitions benefits in the regulatory test.
(a) Will the inclusion of competitions benefits in the regulatory test lead to more controversial appraisals?
(b) Will this lead to greater litigation?
(c) Will it lead to greater bias towards regulated investments vs market based investments especially if the ACCC is lenient on the quantifiable values it allows in the calculation of competition benefits?
(d) Will the inclusion of competition benefits in the regulatory test lead to greater disincentives for investment with increased costs?

9. The Frontier analysis of the sensitivity of demand appears to have a calculation error. The quoted consumer demand sensitivity, i.e. -%/% is the volume variation caused by long-term price variation *seen by the customer*. The analysis however appears to have calculated the volume change only upon the wholesale pool price % change, which is much less in absolute terms than the price seen by the customers.

Customer prices include TUOS, DUOS, retail margin and levies, and the cost of retail insurance (contracting). Typically the resultant absolute price seen by the customer is about four times the pool price. Thus, a $2.73 price change will lead to a volume change only one quarter of what is estimated here.

The analysis is worked upon the assumption that the elasticity figures provided are applicable to prices of the order of $30, yet the average Victorian customer tariff is actually $106/MWh[3]. If it is assumed that the wholesale pool price change will flow through to the customer in time, the actual percentage change in Vic in Table 3 should be only –2.7%. With an elasticity of -.38, the Victorian volume change is only +54MW.

The Victorian price reduction would need to be further offset by the resultant increase in TUOS caused by the project.

[3] "Electricity Prices in Australia 2003/4" Electricity Supply Association of Australia.