31 March 2003

Mr Sebastian Roberts
A/g General Manager
Regulatory Affairs-Electricity
Australian Competition and Consumer Commission

By Email**:** **Electricity.group@accc.gov.au**

Dear Sebastian

TXU Submission to ACCC Discussion Paper-Review of the Regulatory Test

Along with several other privately owned participants, TXU Electricity has sponsored a comprehensive submission to this discussion paper prepared by Gallaugher & Associates. TXU shares the opinions expressed therein.

We wish to further express our particular view regarding the possible introduction of a competition test. Please find brief comments to that end attached.

I would welcome any questions on (03) 8628 1280.

Yours sincerely

Ben Skinner
NEM Policy Manager

Definition of Competition Benefits: Economic or "Social"?

The exact interpretation of "competition benefits" within an economic test has been a point of confusion to the industry. The commission notes "A competition benefits test may therefore ensure that all allocative efficiency benefits, market prices are at marginal cost, and dynamic efficiency benefits, eliminating inefficient generator entry, of network augmentation are captured"[1]. However all these efficiency benefits are arguably already encapsulated within the definition of "market benefits" test. For example, 80% of the benefits of SnoVic and SNI, which were described as "reliability benefits", were effectively the benefit of eliminated generator entry.

Notwithstanding the commission's view, we have observed two distinct and non-overlapping interpretations of the term in the broader industry:

- Economic: The increased economic surplus that occurs as a result of increased satisfied demand when prices return closer to marginal cost due to increased competition; and

- "Social": The direct transfer of value away from producers to consumers when prices fall due to increased competition.

TXU believes the first definition can already be captured within the existing "net market benefits" test. This is consistent with normal regulatory practice of facilitating competition for the benefit of the broader public-including producers. In practice however, transmission proponents may have chosen to ignore the effect, but this has been at their own discretion, not a limitation of the test.

It appears from submissions and the competition test options published that the latter definition is being contemplated here. As stated in our earlier submission, a regulatory approach that aims purely to transfer value to one sector of the public-consumers, away from another-producers, at the cost of some economic surplus, contradicts normal economic regulatory practice. A regulator that sees its role to enforce a wealth transfer (as opposed to facilitating efficient markets) is taking a substantial step away from economic regulation and into the realms of policy making and social intervention.

We strongly caution the commission from attempting such a value transfer for its benefit alone. It is likely to be highly disputable, and probably unstable; e.g. the level of competition that develops naturally is probably dependent upon the potential for the regulator to intervene to create it. A transmission project that needs a wealth transfer to achieve justification is by definition reducing producer/consumer surplus and has a net public disbenefit.

Whilst disagreeing with the inclusion of a "competition benefits" test along the lines of the "social" interpretation, TXU nevertheless supports its inclusion along the lines of the "economic" interpretation. Whilst we feel it can already be captured within the words of the existing test, the commission might respond to criticism by making capture of economic competition benefits more explicit. The definition of *market benefit* could have a clarification such as "including a change in producer/consumer surplus resulting from the indirect effects of price changes caused by competition changes and network levy changes due to the augmentation".

Calculation of the economic benefit of the increased competition would still need to be by modelling of predicted bidding behaviour on a case by case basis. We accept this would be difficult but we see no alternative, and indeed no less deterministic than that used by entrepreneurs when modelling their own market investments in the NEM or any other commercial project. The most important principle is that the modelling is subject to genuinely independent and competent diligence.

[1] Discussion Paper: Pg. 38

In the following comments we refer to competition benefits of the "social" definition which we suspect has become the industry's interpretation of the term.

The Commission's View on Competition Benefits

Whilst we agree with the commission that the lack of recognition of competition benefits is an oft-stated criticism, TXU is alarmed that the commission appears to have accepted this criticism as valid and has focussed its discussion instead to the difficulty of measurement. Whilst we agree quantification of competition is problematic we feel there are more fundamental reasons for not including competition benefits, even if they were measurable. The discussion paper has not properly challenged the premise of competition benefits, except to note submission comments and the broad criticism of the regulatory test.

We urge the commission to focus on approaches of greatest economic merit rather than bowing to the pressure of a multitude of groups with vested interests in the expansion of transmission networks.

Australian Electricity Transmission-Is it under-invested?

As stated in our earlier submission, this oft-stated view is inaccurate. The concept of a "transmission super highway"-where the entire NEM experiences no transmission congestion-is grossly inefficient and unnecessary. Australia already has a healthy level of long distance transmission considering the distances between urban load centres and similar fuel costs.

We remind the commission of two simple engineering rules that makes the need to rapidly expand the long-distance transmission grid counter-intuitive:

- Energy can be transferred through gas pipelines at one-third the capital cost of electricity transmission. (And losses are near zero). For these reasons, centrally planned utilities always locate their gas-fired generators near load centres.

- At distances longer than about 400km (and shorter in non-ideal situations), the cost of transmission exceeds the capital cost per MW of peaking plants. Thus at longer distances it is cheaper to duplicate local generation rather than use transmission to take advantage of demand diversity.

Intuitively, transmission built for a coal-dominated power system will naturally be adequately invested for the current environment of mostly gas-fired new entrants. The load centres of Australia are at least 600 km apart with little load in between. In some situations, for example the SnoVic project, incremental investments upon an existing transmission system can be made for little cost. However following sensible exploitation of these options, further augmentations will have costs equivalent to greenfield transmission.

To ensure efficient (and competitive) investment to meet future demands, the focus should be more upon removing obstacles to the development of pipelines and local generation than transmission. Indeed, public discussions favouring a "transmission super highway" may themselves be deterring more efficient entrepreneurial investments. This is self-fulfilling, in turn favouring those parties keen to develop more transmission.

TXU questions the data presented in the COAG *Energy market review* table 4.1 "Incidence and cost of price separation in the NEM during 2001-02[2] which claims a heavy cost of transmission congestion by calculating increased pool settlement volumes supposedly caused by transmission constraint. Material amounts only accrued during May and June 2002 when ETEF mechanisms triggered an unusual bidding behaviour in NSW. The ETEF mechanism incentives are such that even if

[2] Page 129: COAG Energy Market Review "Towards a truly national and efficient energy market".

transmission capacity were significantly greater into NSW, the generators would have further altered their bidding to achieve a similar price and congestion outcome.

What is the cheapest way to maximise competition?

New transmission lines cost hundreds of millions of dollars. It is clearly wasteful for the economy if we must invest these amounts purely in the pursuit of competition. Pre-NEM there was no question of such investment. It would be of great shame that in the pursuit of competition the NEM is denied a level of capital efficiency that was achieved by the central utilities.

For the most part, the NEM is competitive, and mostly prices are well below new-entry level. Even when market power appears to be present, the open access that facilitates new entry is a very strong discipline. Where the commission is so concerned about lack of competition that it feels intervention is required, it should surely be achieved through means much cheaper than new transmission lines, such as changing market structure.

Perverse outcomes of "competition test"

It is worthwhile considering some potential outcomes of a competition test justifying NEM transmission augmentation.

NSW

At present the region recognised as having the most concerns with competitive generator structure is NSW. Indeed, it was NSW bidding behaviour that lead to the material events described in the COAG report table 4.1. A competition benefits test would presumably used to justify the construction of more transmission capacity from neighbouring regions into NSW.

But NSW is also the most oversupplied region of the NEM, in capacity terms, and has low short and long run marginal costs. Thus we would have justified constructing an interconnector into the region where it is of least economic value!

The structure and bidding incentives of NSW generators result directly from their ownership. A "competition benefits" test that triggers transmission augmentation as a result of these will benefit a TNSP with the same owner. The owner's desire to address competition issues in their generators by other means is therefore affected by this conflict of interest.

Tasmania

Tasmania is to join the NEM with a very concentrated generation sector. Basslink's southwards capacity of 300MW, plus one small generator, will be small in comparison to Hydro Tasmania and Tasmania's peak demand of about 1700MW. A competition benefits test will presumably dictate the construction of further interconnection until Hydro Tasmania's dominance is eroded. This might require building another *two* Basslinks in the pursuit of competition, at $500m each!

This becomes more absurd considering that local peaking generation plant entry in Tasmania which might have eroded Hydro Tasmania's dominance would have had a capital cost/MW about half that of another Basslink.

Thus it is clear that relying upon new transmission to foster competition can be expensive to the point of absurdity. Whilst Tasmania is the extreme, all regions show this to a degree.

Queensland Regions

Powerlink has claimed that it needs to include "competition benefits" to permit its augmentation to relieve the Braemar and Tarong constraints in Southern Qld that limit competitive generator access to

the Queensland regional reference node in Brisbane. It is claimed that if the pool price outcomes across Qld were considered that it might justify an augmentation that would create more competition at Brisbane.

However only half Queensland's load is actually in the Brisbane area, yet all Queensland is priced off the locational marginal cost at Brisbane. The creation of more regions in Queensland would immediately halve the impact of any lack of competition downstream of these constraints.

Modelling Complexity

TXU recognises the complexities of modelling power markets and notes the Essential Services Commission of South Australia comments that suggest simply providing state jurisdictions an unfettered right to augment transmission without a test.

In response we first note that modelling material "*net market benefits"* of a transmission augmentation is a relatively straightforward process of valuing avoided unserved energies, fuel and electrical losses. Whilst the merit order of generation must be assumed, bidding strategies and prices are not necessarily required.

Nevertheless even such a straightforward process is open to manipulation as implied by the ESCoSA comments. This reinforces the need for the modelling to be performed and reviewed by genuinely independent and technically competent staff, but it does not suggest the process should be discarded. Modelling is the fundamental basis of diligent investment. A market where investments are politically decided will greatly increase the sovereign risk of the NEM and effectively repeat the same flaws of government owned central utilities that provoked electricity industry reform.

Modelling of "competition benefits" be they economic or "social" is much more difficult as it requires a judgemental forecast of the bidding strategies of price influencing producers. Thus the commission options propose simplified calculations to provide a deterministic surrogate. TXU urges great caution regarding use of these. The complexity and uncertainties of modelling competition is identical to that which any merchant investor faces, be they generators, merchant transmission or demand side participation. Such investors have to model their own perceptions of bidding behaviour if they wish to capture economic rents from producers pricing above marginal cost. It is difficult, but part of the critical due diligence of spending one's own money. To allow TNSP's to invest others' money using a lower level of diligence will bias the process towards regulated transmission.