Comments on the ACCC's Regulatory Test for Augmentation of Transmission

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The following comments are offered in response to the ACCC's "Discussion paper: Review of the regulatory test" (5 February, 2003), particularly the invitation to comment on chapter 3 ("Competition test").

It might seem remarkable to many taxpayers that a Commission with the words "competition" and "consumer" in its title has so far appeared to ignore these factors in the promulgation of its regulatory test for augmenting transmission. The creation of the NEM was "sold" to taxpayers mainly on the basis that it would send the correct price signals to industry and other consumers of electricity so that investment and employment might benefit not only in the electricity supply industry but throughout the economy. If the Commission is to command credibility with taxpayers and the industry then the absence of a "competition" element in the regulatory test for augmentation should be explained in plain language and by more than a passing reference to static economic models and the dismissal of mere "wealth transfers".

Market simulation would appear to be the best of the alternatives considered in the Discussion paper. As stated in the paper:

> *The main advantage of this approach is that, if modelled correctly, it will accurately measure long term competition benefits that could be captured by an augmentation. Further this approach could also be applied equally within regions as well as between regions.*
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> *However, the main criticism of this approach is that, as with any modelling, it will be subject to the assumptions, inputs and modelling techniques employed. The Commission is concerned that this will potentially result in an application being subject to the appeals process set out in the code.*

This concern with assumptions, inputs and modelling techniques, and appeals, is somewhat puzzling, given the record of applying the current regulatory test to Transgrid's proposal on SNI. In practice, the current test is already replete with these assumptions, appeals, etc. so that the presence of these unavoidable elements is hardly a justification for omitting a competition element.

An important and critical feature of simulation is the creation of thousands of runs with demand in each region, losses, binding of constraints, etc. generated in each run by random draws from probability distributions. Historical data on many of these features can provide the basis of specifying these distributions. Reductions in the value of energy resulting from a proposed augmentation can be estimated for each run and the thousands of runs summarised in a histogram The ACCC can then choose the confidence level it prefers to utilize – e.g., augmentation is acceptable if the median (or 75%) PV of the reduced value of spot price times load exceeds the PV of augmentation costs.

Many market participants and consultants already have models of the NEM which could be used for these simulations. It is understood that NEMMCO also has such a model, which it uses for training purposes. This is exactly the kind of analysis which a commercial entity might undertake in evaluating investment in an "entrepreneurial" interconnect.

Where an existing connection is being evaluated for possible augmentation, the Commission's alternative "Commercial benefits analysis" based on IRSRs would also appear to be worth considering. A process already exists for setting reserve prices in the auctions of these residues, and the analysis underlying these reserve prices may provide a basis for valuing competition benefits.

Perhaps the Commission has been reluctant to date to accept full NEM simulation because of the inevitable focus which such an approach will bring on the resulting "winners" and "losers" from a proposed augmentation. For example, SA consumers can be expected to be the main beneficiaries of SNI, via significantly lower average pool prices in SA – at the expense of SA generators. NSW generators should also benefit from SNI through higher levels of dispatch, with some increase in average NSW pool prices – at the expense of NSW consumers.

Market simulation has the potential to clearly identify the "winners" and "losers" from a proposed augmentation. If the "losers" are clearly identified, political agitation for compensation would appear inevitable, especially on behalf of disadvantaged consumers. One approach to dealing with such consequences would be for the TUOS charges which result from the augmentation to be allocated in such a way as to be borne by the "winners". The Code provisions which deal with "cost reflective" transmission charges appear to have been largely ignored to date. Perhaps these provisions could be used to appropriately allocate incremental TUOS charges resulting from an augmentation. For example, SNI will largely physically exist in NSW, with NSW consumers bearing the resulting TUOS charges. The Commission might rule that for, say, the first 3 (or 5) years the incremental TUOS charges should be borne (say) 85% by SA consumers and 15% by NSW generators. Subsequent reviews might vary the initial allocation.

Another alternative would be to invite tenders for any proposed augmentation, with the winner being the party that proposes the lowest TUOS charges for the first (say) 15 years. There would remain a right to reject all tenders. Technical requirements would be specified, (interest earning) security deposits would be lodged to ensure completion (environmental approvals, right of way, etc.), compliance and satisfactory maintenance. A version of this approach appears to be practiced by VenCorp in VIC. These "public/private" partnerships require careful drafting of contracts to ensure that the risks are appropriately allocated, and so that the monopoly provider is not able to exploit its position after winning the tender.

As part of its review of the regulatory test for augmentation, the Commission might also like to consider the role of "entrepreneurial" or "merchant" investment in transmission versus "regulated" augmentation. The following paper should be of particular interest in this regard: "Merchant Transmission Investment" by P. Joskow and J. Tirole (MIT, February 2003) which concludes: "Relying primarily on a market driven investment framework to govern investment in electric transmission networks is likely to lead to inefficient investment decisions and undermine the performance of competitive markets for electricity."