Ref. 06-GHJLtrAEMCIssuesPaperSuppSub1301

13 January, 2006

Australian Energy Market Commission
Attn: Dr John Tamblyn
Chairman
Level 16
1 Margaret Street
SYDNEY NSW 2000

Dear John,

Issues paper (Transmission Pricing) – Supplementary Submission

Whilst Powerlink has responded to the Issues Paper as part of the Electricity Transmission Network Owners, we feel compelled to challenge the accuracy of a number of assertions in the joint submission from TRUenergy, NRG Flinders, International Power and Loy Yang Marketing Management Co (aka "the Group"), and in the individual submission from TRUenergy.

Regulatory test / Transmission augmentations

In section 4 of its submission, headed *"New Generator causes augmentation"*, the Group asserts that the entry of a new generator would lead to an augmentation of the shared grid.

> *"To all intents and purposes, the new generator has caused the augmentation, even though it may not have requested or proposed such augmentation " (p10)*
>
> and
>
> *"A generator will commit where it knows that its commitment will cause the necessary augmentation to pass the Test and proceed" (p10).*

Contrary to these assertions, the arrival (impending or actual) of a new generator does **NOT** trigger a Regulatory test nor cause a TNSP to undertake an augmentation.

Virtually all transmission development in the NEM is driven by the need to meet mandated reliability obligations as the load grows. It is **imminent load growth** that triggers the need for the TNSP to apply the Regulatory test to evaluate options (including non-network options) for maintaining the reliability standards as the load in a load centre grows. All transmission development in Queensland in the past 10 years has been driven by, and matched to, load growth. There have been **no** augmentations triggered by the arrival of new generation (of which there has been a substantial volume).

Further, in assessing the need for augmentation, the TNSP is concerned with delivering adequate transfer capability to meet the growing load. That is, the transfer capacity is matched to the (downstream) load, **not** the (upstream) installed generation capacity. The grid provides enough transfer capability to reliably meet the load, but typically less capability than would be needed to allow every MW of installed generation capacity to reach the load centre.

The upshot is that the generators – incumbents and new arrivals – have to compete with each other to meet the customer load. This is a fundamental of the NEM design. If a new arrival can sustainably operate at a lower cost than some of the incumbent generation, then it will displace some of that generation. Again, this is a fundamental of the NEM design.

One might argue that an intending new generator in a region which is experiencing load growth might reasonably expect that the grid will be augmented to meet the load growth. However, that potential investor has no assurances whatsoever that a grid augmentation will occur in a location favourable to it, or whether the Regulatory test will deliver a network solution. The potential generation investor may form its own predictions, but it knows that the grid will only be augmented to match the load growth and that it will have to compete with the incumbent generators.

A new generation entrant can increase the chances of a load growth/reliability driven transmission augmentation happening in a location favourable to it, by locating close to the load centre – this would enhance the comparative economics of that augmentation compared with other feasible augmentations and non-network solutions.

The Group's assertion that *"a committed new generator could expect that transmission augmentation required to transport its output to the market will pass the regulatory test, wherever it decides to locate "* is incorrect on several counts.

As stated above, the arrival (impending or actual) of a new generator does not trigger a Regulatory test nor cause an augmentation. The grid is sized to meet the load, not to enable the output of all installed generation to get to market. And the new generator has no assurances that any load-driven grid augmentation will be in a location favourable to it.

In its separate submission, TRU energy states that *"Once committed to a location, there is no certainty regarding the future level of deep transmission access for a generator. Future new-entrant generators may degrade the presumed level of access."*

We would agree that the first sentence in the above quotation is correct. We would re-characterise the second sentence as "if a new entrant generator comes along with sustainably lower costs, it can displace some of the incumbent's capacity in the market dispatch". We would disagree with TRUenergy's characterization of this as an *"inefficiency"*.

We would also query the thinking behind the wording *"presumed level of access"* – firstly, there is nothing in the NEM arrangements which could lead a generator to perceive it had anything other than non-firm access to the grid, and secondly, it conveys the impression that the incumbents have some presumption that they should be protected from competition from (lower cost) new entrants.

New generation locational decisions

The submission suggests that transmission pricing is a key issue in the locational decisions of new generation.

Our observation is that it is a third or fourth order issue in generation investment decisions. The first order issue appears (by a long margin) to be the availability of competitively-priced fuel. Second order issues appear to be a site that can achieve environmental approval, access to water, proximity to the grid etc.

The Group's submission (section 6) also seeks to argue that the existing arrangements can lead to inefficient generation investment, although this is (prudently) qualified by *"The group does not have access to sufficient information to make a robust claim that these real cases were actually inefficient".*

In its separate submission, TRUenergy has been less circumspect (and, in our view, poorly informed) in stating:

> *"We would add the dearth of generation projects within the NEM's fastest growing load zone i.e. South East Qld, and the commensurate necessity of the TNSP to embark on several major reinforcement projects"*

Both submissions suggest that generation that is "remote" from the load centre is inherently inefficient.

In the case of South East Queensland, the dearth of generation projects within the load centre has nothing to do with transmission pricing, and lots to do with the lack of sufficient quantities of competitively-priced fuel, and also the unavailability of environmentally-acceptable sites in this largely urbanized area. (We suspect it's the same reasons that most of the Victorian power stations are not in Melbourne).

Apart from an extremely limited supply of gas, the only fuel source within the SEQ load centre is very high cost liquid fuel. It should be noted that the load growth in SEQ is 300MW each year! Most of the new power stations that have been developed in South Queensland are sited on very low cost coal resources on the Darling Downs (some 200kms from the load centre, but still the closest source of low cost fuel to the load centre). A new gas fired power station (Swanbank E), with an installed capacity of 385MW was established 3 years ago within the load centre, but it operates at a load factor of only 40% - restricted by the limited gas supply. The effective output is less than 1 year's load growth in SEQ.

The facts do not support the assertions about inefficient generation investment. We would note that the new entrants, with their lower costs, have displaced higher cost generation, and that more of the power supply into SEQ now comes from the Darling Downs (200kms away), whereas it previously came mostly from Central Queensland (some 500kms away).

What has emerged is a shift in the generation pattern towards the nearest sources of low cost fuel to the major load centre.

Finally, we should point out that "remote" is a relative term. A distance of 200kms might seem remote in a comparatively compact geography like Victoria, but in the vast Queensland geography, where the northern end of the grid is 1,700kms from SEQ, a transmission distance of 200kms is comparatively small.

Conclusions

The conclusions in these two submissions are derived from the incorrect premise that the arrival (impending or actual) of a new generator will trigger a Regulatory test and cause an augmentation. It does not.

The assertion that generation investments in SQ have been inefficient is not supported by the facts. The suggestion that "remote" equates to "inefficient" is dubious.

Yours sincerely,

GH Jardine

Gordon H. Jardine
CHIEF EXECUTIVE