3 January 2006

Australian Energy Market Commission
PO Box H166
AUSTRALIA SQUARE NSW 1215

Submission by email: submissions@aemc.gov.au

Dear Sir/Madam,

RE: REVIEW OF THE ELECTRICITY TRANSMISSION REVENUE AND PRICING RULES – TRANSMISSION PRICING ISSUES PAPER

The National Generators Forum (NGF) welcomes the opportunity to comment on the Transmission Pricing Issues Paper.

Our response is primarily in relation to the current arrangements for providing both long term locational and short term production transmission pricing signals and their impact on efficient energy market outcomes.

The NGF is supportive of the pricing principles identified in relation to generators. There is however some concern regarding their application in practice.

**The objective of transmission pricing**

The NGF agrees that it is important for transmission pricing to drive economically efficient outcomes to the extent that pricing affects participant decisions, the timeframe of those decisions and the resultant level of necessary transmission investment. Transmission prices are of importance to generators when generators are making (a) locational investment decisions, or (b) production and consumption decisions.

To promote efficiency of generation investment and operation, transmission pricing for generation should reflect appropriate LRMC and/or SRMC price signals at the time that a relevant decision is being made.

The NGF agrees with the approach outlined by the Commission.
a. *(long term) locational investment decisions;*

The cost of the physical network is only relevant when a generation investment decision is made. There is only a need for generators to consider Transmission LRMC as a one off cost reflecting the incremental transmission costs of the generator’s investment decision. Further, such assets, once developed, have no alternative use. The expenditure on such assets is referred to as ‘sunk’.

Sunk transmission costs should be recovered in a way that minimises impacts on production and consumption decisions. This should occur, as the AEMC notes, as a fixed charge at a point where the elasticity of demand is lowest. Application of the sunk costs to consumers is unlikely to impact consumption and utilisation of the network whereas the same charge applied to generators would distort efficient energy consumption and dispatch. Recovering sunk costs from generators does not have any locational or production and consumption signalling function because the cost has already been incurred and subsequently cannot influence future behaviour. Therefore the NGF considers that the current transmission pricing framework for recovering sunk costs from consumers is appropriate.

b. *(short term) production and consumption decisions;*

The capital and fixed costs of the physical network are irrelevant to the determination of short run marginal cost (SRMC) because it is incurred regardless of the decisions of network users. The SRMC of transmission is largely made up of the cost of constraints and losses. This suggests that to promote efficiency in the short run, the price of using the transmission network should equal the cost of constraints and losses.

**Do the current market arrangements for generator transmission pricing meet the above objectives?**

In relation to the above we note the Commission considers that it is important for the transmission pricing arrangements to complement the consumption, production and investment signals already provided by other aspects of the NEM arrangements, namely:

- regional pricing structure (section 6.1.1);
- non-firm grid access for generators (section 6.1.2); and
- the transmission investment arrangements, including the Regulatory Test (section 6.1.3).

We note that these aspects are not themselves to be the subject of this review.

The Commission has however described how these arrangements provide incentives as both short term operational and long term investment signals to generators, to consumers and investors to behave efficiently and which align with the pricing principles described above. These signals are:

- the regional pricing structure which provides SRMC signals to guide efficient production decisions

and

- the non firm access and regulatory test which may provide locational signals for generators and alternative sources of supply at the time an investment decision is made.

This approach in theory is consistent with providing the appropriate investment signals. The NGF however believes that in practice relying on non firm access and the regulatory test to achieve the objectives of transmission pricing will lead to uncertain outcomes. This is not conducive to encouraging generation investment in an already highly uncertain competitive market, particularly if private-sector investment is to be encouraged.
**Efficient Operational Decision Drivers**

The issues paper appears to conclude that the existing NEM market dispatch and pricing arrangements, being:

- Marginal loss factors;
- Regional Pricing; and
- Intra-regional congestion management

should provide satisfactory SRMC incentives upon existing generators.

The position seems accurate in respect of the first two matters, however the AEMC should note that intra-regional congestion management is problematic at present and that it remains to be seen if future congestion support mechanisms will resolve these issues.

It should be recognised that under the current congestion management arrangements congestion is allocated on a “volume” basis rather than “marginal price” basis, therefore if multiple generators are affected, each will incur only a share, rather then the full impact of the congestion. In practice NEMMCO attempts to allocate sharing on the cheapest apparent presented offer of a generator. Whilst this appears efficient, it has the following complications:

- Generators are at liberty to offer any price, and when facing congestion respond by offering at the market floor price. NEMMCO are then required to determine sharing according to other technical parameters that have unpredictable features;
- Some generators are less technically capable of reducing output than others, and as a result receive commensurately less congestion;
- A generator whose output congests or supports an interconnector has distorted incentives, generally an advantage, compared to the generators across the interconnector.
- No consideration is taken of incumbency in allocating shares, thus a new entrant locating in a generation rich area will face only a share rather than the full effect. The new-entrant’s congestion signal will diminish in proportion to the number of incumbents in the generation rich area.

Thus we would discourage the AEMC from presuming that the existing intra-regional congestion management provides efficient SRMC impact of congestion upon generators.

**Efficient Investment Decision Drivers**

The Commission implies that the regulatory test will provide a comparison of two alternative projects and allow an investor to choose the most economically efficient, the one that maximises the NPV, or the least cost where the alternatives provide the same benefits as in the examples provided in the issues paper.

This may not occur for the following reasons:

- New generation investors are not required to conduct a “regulatory test” and demonstrate that their investment is least cost, when compared to a range of alternatives and nor should they. The regulatory test is only applied by TNSPs’ to regulated transmission investment based on “committed” (existing) generation projects.
- Investors in new generation will however carry out their own cost benefit analysis in the knowledge that:
if the regulatory test for transmission were to be applied before the project is committed, the full cost of the project including fuel delivery fixed and variable costs, power station fixed and variable costs and transmission augmentation costs (to the regional reference node) would be considered to be avoidable when compared to a potential lower cost local generator requiring minimal transmission augmentation.

if the regulatory test for transmission were to be applied after the project is committed, only the variable costs of the project which include fuel delivery variable costs, power station variable costs and transmission augmentation costs (to the regional reference node) would be considered to be avoidable when compared to a potential lower cost local generator requiring minimal transmission augmentation.

This means that by committing to a project the fixed costs or sunk costs of a remotely located generator are not included in any subsequent application of the regulatory test, thus providing an advantage to the committed remote generator when compared to the cost of a local generator.

Because it is possible for generators to avoid transmission costs or the full impact of the subsequent congestion a project may cause, there is little incentive to locate efficiently to minimise the overall cost of projects, (from fuel source to regional node).

**Conclusion**

In the NGFs’ view the current arrangements for addressing intra regional congestion management do not support efficient short term production decisions and the locational investment signals create considerable uncertainty as there is no guarantee that new investors in generation will take into account the cost of transmission in their locational decisions. As a result there is a risk that the economically efficient operation of the market will continue to be compromised.

Dealing with this issue may require consideration of other issues beyond the scope of this review. In past submissions (to the ACCC and NECA) on this topic the NGF has identified property rights as key to providing the certainty to encourage efficient investment in generation assets. Alternatively the forthcoming review by the AEMC into congestion management may offer an alternative solution.

Stanwell Corporation does not support this submission.

If you have any questions in relation to this proposal, please call Roger Oakley on 03 9612 2211 or 0408 512 484.

Yours faithfully

(signed)

JOHN EDELSTEN  
CHAIRMAN