Dr John Tamblyn
Australian Electricity Market Commission
PO Box H166
AUSTRALIA SQUARE NSW 1215

Dear Dr Tamblyn

AEMC Chapter 6 Review – Transmission Revenue Draft Rule: Submission by Stanwell Corporation Limited

Stanwell welcomes the opportunity to respond to the *Transmission Revenue: Rule Proposal Report* (**Rule Proposal Report**) and *Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006* (**Draft Rule**), published by the Australian Energy Market Commission (**AMEC**) on 16 February 2006 as part of its review of the electricity transmission revenue and pricing rules. Stanwell has previously provided a response in respect of this review on 12 December 2005.

Stanwell has considered the Rule Proposal Report and the Draft Rule and makes the following submission further to its earlier submission of 12 December 2005. Together with this submission, Stanwell also provides a case study illustration of the broad principle with which its earlier submission was concerned – that is, the need for the transmission pricing rules to provide that where a service has been previously classified as a common service it may not be reclassified as a connection service (entry asset). This follows from discussions with staff of the AEMC in which it was suggested that it would be useful for Stanwell to provide such a case study.

1. Stanwell's previous submission.

In Stanwell's submission of 12 December 2005, within the context of a discussion of the market signals impacting on the locational decisions of generators, Stanwell noted the risk faced by generators that arises from potential network re-configurations by transmission network service providers.

In this discussion it was noted that:

- in making the initial investment in a generation facility, the decision of where it is to be located is one of the most important decisions a generator will make;
- once the locational decision is made and the generator constructs these generation facilities, the generator is likely to make further investments to maintain and/or expand those facilities over time;
- having made its locational decision and any further investment decisions, the generator faces a risk that the generator is unable to independently mitigate or manage in any manner – that is, the risk that the transmission network service provider may decide to

reconfigure the transmission network in a manner that is deleterious to the generator's interests;

- one of the potential harms for a generator that arises out of any network reconfiguration is that assets which were previously transmission network assets may be reclassified as entry assets, the costs of which could then potentially be sought to be recovered from an individual generator, resulting in significantly higher operating costs incurred by the generator;
- a similar situation arises where a generator locates in an area in which perhaps other generators and a load centre (such as a smelter) are located and at some point in the future the load centre ceases to operate – this is because there is a risk that the assets over which the transmission services were originally provided to the generators and the smelter (which were previously classified as transmission network assets) may become classified as entry assets;
- additionally, a network reconfiguration may, whilst still leaving the generator connected to the transmission network, result in the generator being unable to offer ancillary services (such as black start capability), resulting in decreased revenue being earned by the generator.

Stanwell's submission maintained that generators should not be forced to bear the risk of transmission network assets being reclassified as entry assets in circumstances where the generator is unable to predict, internalise, manage or mitigate further alterations to the transmission network in their region. If generators are required to bear this risk it will operate as a disincentive to efficient investment which may ultimately lead to increased electricity costs for consumers and decreased reliability and security of supply.

2. The Draft Rules

Stanwell is pleased to see that the concerns raised in its submission of 12 December 2005 about locational decisions and subsequent modifications to the transmission network that have a deleterious effect on a generator have been acknowledged by the AEMC in the Draft Rule and Rule Proposal Report. Stanwell notes that the Rule Proposal Report states that the proposed rule provides that '[C]osts in the RAB can not, in future, be allocated to the Negotiated Service charges'.[1] Stanwell also notes the further comments in relation to the AEMC's reasons for providing that such costs may not be reallocated:

> "[A]ssets cannot be reclassified and taken out of the RAB from Prescribed Services to allocate then to Negotiated Transmission Services. The Commission recognises that assets that were once used as part of a shared network may over time become dedicated to one user, as demand patterns change. However, given the user's locational decision has already been made, there is nothing to be gained by providing a price signal to that user via a negotiated charge, and requiring that user to pay for the entire cost of the asset, when it had not previously been doing so, would increase investment risk for the user."[2]

[1] Australian Energy Market Commission, *Review of the Electricity Revenue and Pricing Rules: Transmission Revenue: Rule Proposal Report*, February 2006, p 57.

[2] Ibid, p 60.

The relevant provision in the draft rule is 6.21(a)(7) which states:

> "(7) costs which have been allocated to prescribed transmission services must not be reallocated to negotiated transmission services."

3. Concerns about the potential uncertainty of interpretation of clause 6.21(a)(7)

Whilst Stanwell is pleased to see that its concerns have been reflected in the Draft Rule, Stanwell believes that some minor amendments to the drafting are desirable to ensure that the provision gives effect to the intention of the AEMC as it is expressed in the Rule Proposal Report. These amendments are necessary to:

(a) reflect the principle that costs related to the transmission network which have been allocated to prescribed transmission services must not be allocated to negotiated transmission services applies both within and between regulatory years in a regulatory control period, and also between regulatory control periods;

(b) ensure that the principle in subparagraph (7) applies notwithstanding subparagraphs (2) and (3) of clause 6.21; and

(c) clarify the interaction of subparagraph (7) with clause 6.2.3(e), which is concerned with the removal of assets from the regulatory asset base.

Stanwell's suggesting wording is as follows:

> (7) notwithstanding anything in paragraphs (2) and (3) above and clause 6.2.3(e), costs associated with the *transmission network* which have been allocated to *prescribed transmission services* in one *regulatory control period* must not be reallocated to *negotiated transmission services* within a *regulatory year*, from one *regulatory year* to a subsequent *regulatory year*, or from one *regulatory control period* to a subsequent *regulatory control period*.

4. Rules for transmission pricing

As the AEMC would be aware, it will be necessary to ensure that Phase II of the AEMC's Chapter 6 review, relating to transmission pricing, is consistent with the final rule that results from Phase I of the Chapter 6 review, concerning transmission revenue requirements. Stanwell looks forward to participating in the consultation conducted by the AEMC on transmission pricing.

Yours sincerely,

Andrew Bills
General Manager Trading

Reclassification of Prescribed Transmission Services as Negotiated Transmission Services

A Case Study by Stanwell Corporation

1 Purpose of this note

The purpose of this note is to further explain the principle outlined in Stanwell's submission to the AEMC dated 12 December 2005, concerning the need for a rule that provides that once a service is classified as a common service it cannot be reclassified as a connection service (entry asset). In particular, AEMC staff suggested that some hypothetical examples would facilitate a better understanding of the issue.

2 Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006

Stanwell notes that the AEMC has now released draft Rules for transmission revenue requirements. Given this, Stanwell has adopted the terminology used in these draft Rules in the hypothetical examples described below.

Stanwell also notes that clause 6.21(a)(7) of the draft Rules provides that costs which have been allocated to prescribed transmission services must not be reallocated to negotiated transmission services.

3 Hypothetical case studies

3.1 Reconfiguration of the transmission network

Take for example Generator Z that is considering investing in generating plant in Queensland and is looking at two options.

(i) A hydro generating plant which would be located some distance from the transmission network with the consequence that the network would have to be extended some distance to connect the hydro electric plant to the network – representing a significant charge to the generator in the form of entry services.

(ii) A coal-fired generation plant which is located in an area in which there is, and has been for some time, significant transmission network infrastructure. A site is identified with three transmission lines out to service loads. Additionally, the configuration of the existing network means that ancillary services, such as black start services may be offered (following further investment), and additional revenue obtained from these services.

Both options offer a similar marginal return. Generator Z elects option (ii) on the basis of the lower transmission network charges and the ability to generate future additional revenue from offering ancillary services.

The coal-fired generation plant developed by Generator Z represents a significant sunk investment, and Generator Z does not expect to commence making a positive return on its investment until year 20 of its investment. Ten years after making its initial investment, Generator Z makes a further investment to increase the capacity of its generating plant so it can offer black start services to NEMMCO that would enable a gas-fired power station located near Town A, north of Generator Z to restore normal power system operation from a black system condition.

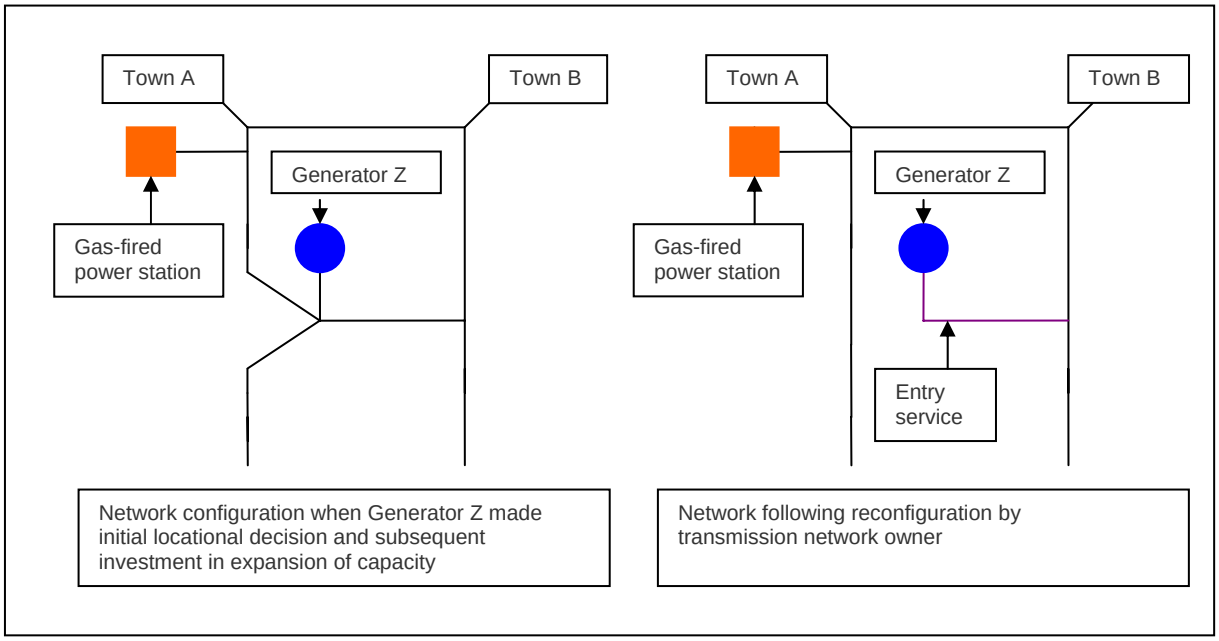
In year 15, the transmission network operator implements a reconfiguration of the transmission network in the area in which Generator Z is located. Following this reconfiguration, the generator,

whilst still connected to the network, is now only able to evacuate its power along one transmission line. This has two serious implications for Generator Z's viability as follows:

(i) the line along which Generator Z now evacuates its power takes on the character of a entry service, that is, a service provided to Generator Z at a single transmission network connection point; and

(ii) whereas previously Generator Z was able to offer black start capability and receive additional revenue for this, Generator Z is no longer able to offer these services as it is unable to generate sufficient power to energise the (now longer) line between it and the gas-fired power station.

The situation before and after the network reconfiguration is presented diagrammatically below.



Under the initial National Electricity Rule (that is, before the Chapter 6 review commenced) Generator Z would not only face increased costs as a result of the reclassification of part of the transmission network from a prescribed transmission service to a negotiated transmission service (as an entry service), but also decreased revenue as a consequence of no longer being able to offer ancillary services (black start capability). As the initial investment was marginal, and the subsequent investment in increasing the capacity of the generating plant so that ancillary services could be offered was reliant on revenue being received for these services, Generator Z will have to reassess whether it should continue to operate the generator.

Generator Z is also now considering making another investment in generating plant, this time in South Australia. Generator Z carries out a thorough investigation into whether this investment will deliver a sufficient return to shareholders. If the calculation of the expected return is based on the current configuration of the transmission network in South Australia, with the only changes being to increase or expand the network, it appears that a sufficient return will be earned. However, if an allowance is made for the risk that the transmission network could change such that a more significant part of the transmission network may come to be classified as providing entry services, the additional costs that Generator Z will face as a result mean that a sufficient return will not be earned. As there is no way available to Generator Z to manage the risk that the existing network may be reconfigured in a way that is materially detrimental to Generator Z, it chooses not to make this investment.

3.2 Removal of a load centre and other generators from a single transmission network connection point

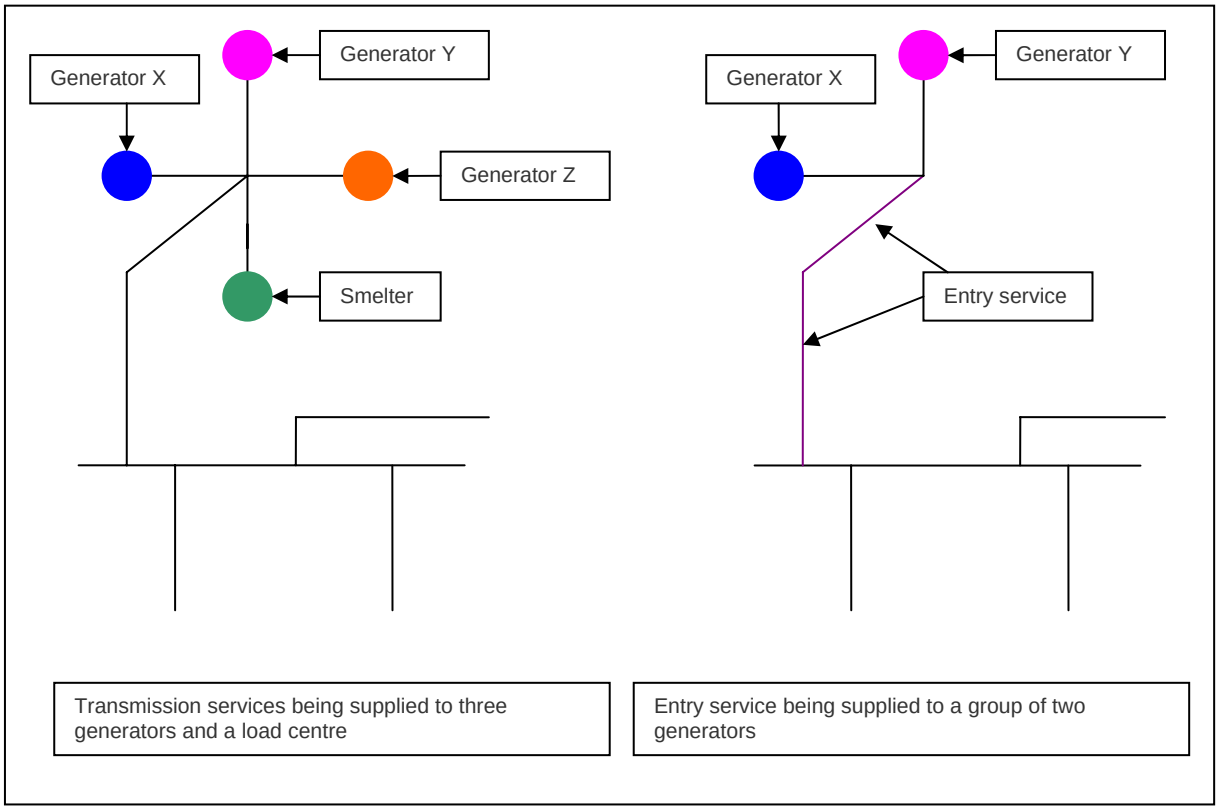
A generator may also be disadvantaged where it locates in an area where there are a group of generators and a load centre and the load is removed and, potentially, the number of generators in that region decreases.

Take, for example, Generator X who choses to locate in a region where two other generators (Generators Y and Z) are already located. There is also a significant load located in the region, a large smelter. The transmission line that connects Generators X, Y and Z, and the smelter, to the transmission network is a prescribed transmission service, and as a result, the costs of this line are recovered from all network users.

The investment by Generator X is a large sunk cost with Generator X expecting to recover the costs of its investment over a period of thirty years.

However, after 15 years, the smelter closes down and Generator Z also ceases operations. Generators X and Y are still generating, however, the transmission line that previously connected the generators and the smelter to the transmission network is now reclassified as a connection service (entry service) and the costs of this significant piece of infrastructure are now to be borne by Generators X and Y.

Generator Y is unable to bear the additional costs to its operations and fears that it must also cease operating. In the event that this occurs, the cost of the transmission line will then be fully allocated to Generator X and it would similarly have to seriously consider whether it could continue to operate.

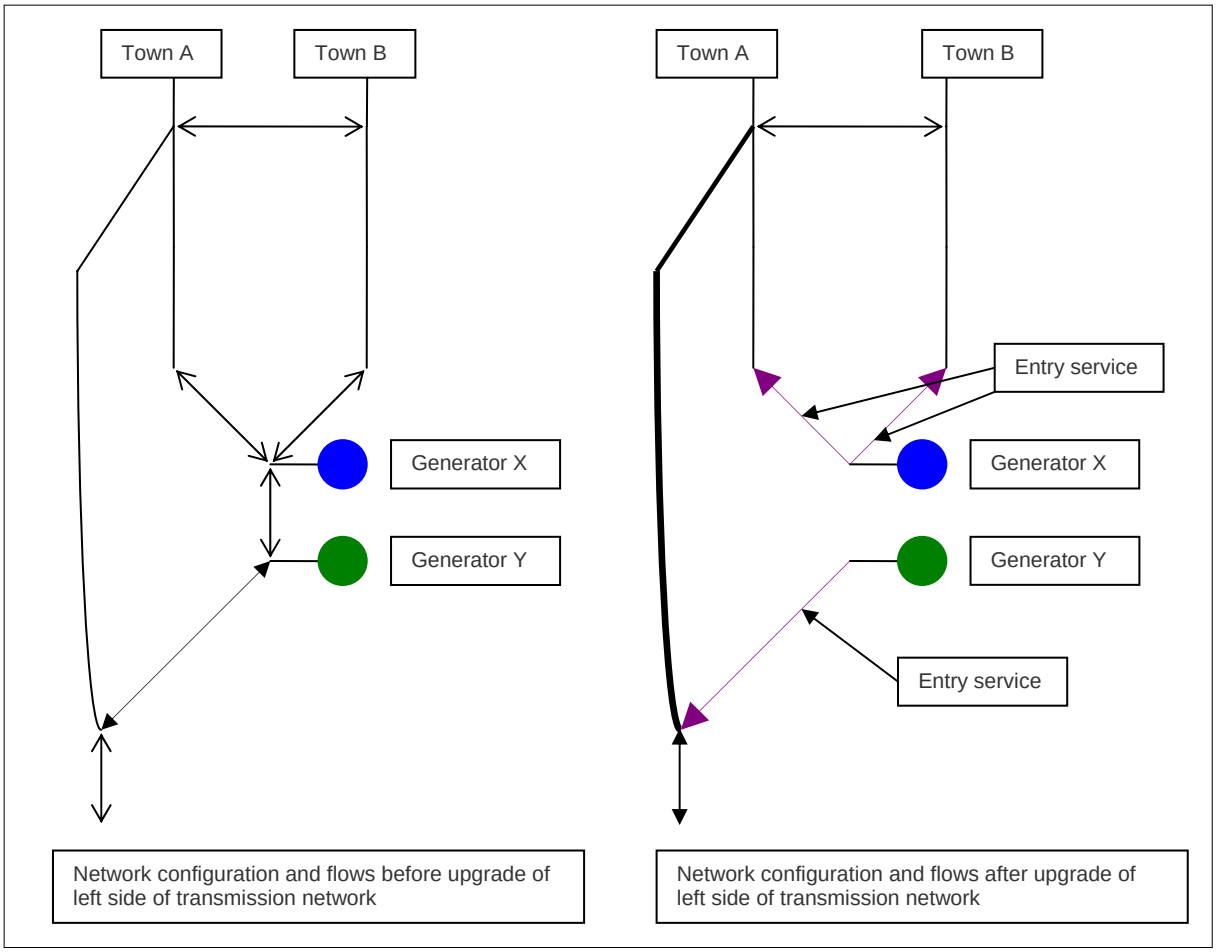


However, should the reverse situation occur, where the transmission network has been built out to serve one generator, and more generators or a load centre also commence using that infrastructure, it is appropriate that the costs of that network infrastructure be shared between the four generators. This is because that load centre and the other generators should not be able to free-ride on the investment made by the original generator in having the transmission line extended.

3.3 *Augmentation of the transmission network that results in the by-passing of parts of the existing network*

Generators may also be disadvantaged if the transmission network along which the power of generators is evacuated is by-passed through a significant upgrade in the capacity of the network in a more distant location.

This is shown diagrammatically below.



In the above diagram, energy was previously flowing north and south along both transmission lines. The costs for transmission services that Generators X and Y were paying were largely made up of charges for prescribed transmission services.

However, following a significant upgrade of the capacity of the transmission line on the left, a small part of the network is removed between Generators X and Y, and as a result, Generators X and Y will each become responsible for the costs of significant parts of transmission network infrastructure.