

Electricity Transmission Network Owners

AEMC Review of Electricity Transmission Revenue and Pricing Rules

Response to Pricing Issues Paper

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ElectraNet ♦ Powerlink ♦ SP AusNet ♦ Transend ♦ TransGrid

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1. EXECUTIVE SUMMARY

This submission to the AEMC's *Transmission Pricing Issues Paper* (the Issues Paper) is made on behalf of the electricity transmission network owners: ElectraNet Pty Limited, Powerlink Queensland, SP AusNet, Transend Networks and TransGrid (the TNOs).

For ease of reference this submission follows the same structure as the Issues Paper.

The TNOs' position in response to the Issues Paper is summarised below.

1. The present level of prescription in the Rules should be preserved as this aids certainty, clarity and consistency in the regulatory arrangements. It would be a retrograde step if the review led to less certainty, clarity and consistency in transmission pricing.
2. The TNOs concur with the Commission's statement that a proposal for change to the transmission pricing Rules should only proceed if there is clear evidence that it will deliver a material net benefit.
3. While the current pricing arrangements coupled with the related design features of the NEM (including the regional pricing structure and non-firm grid access for generators) may be less than theoretically perfect, they do provide a reasonable and practicable means of delivering appropriate economic signals to transmission network users. In any event, transmission prices are rarely a first order issue for investments in the NEM.
4. There is no evidence of which the TNOs are aware that would support the view that the transmission pricing arrangements have led to materially inefficient consumption or investment decisions in the NEM. Improvements could be made at the margin, but these improvements will not require fundamental reform or substantial changes to the present Rules.
5. The TNOs do not support allowing customers to propose particular network pricing methods, such as modified CRNP. In practice, a reduction in charges to one group of customers will lead to a corresponding increase in charges to other customers. In this environment, customers themselves are not best placed to choose the most appropriate pricing method. Therefore, a better approach is to set out clear criteria in the Rules to guide the TNO's choice of pricing method.
6. The current TUOS discount regime and Guidelines should be modified to provide more certainty to all parties regarding the recovery of TUOS discounts.
7. The present level of discretion allowed in setting the usage price structure should be maintained. This enables TNOs to structure prices that reflect incremental cost drivers that may vary from one network to another.
8. The Issues Paper defines "non-prescribed services" as including *contestable services*. The paper then considers how non-prescribed services ought to be regulated, including negotiation provisions in the Rules. Contestable services should not be subject to any form of regulation under the Rules. If the service is contestable, then the negotiation will be conducted in the market place, rather than under the auspices of the Rules.
9. Inter-regional transmission pricing issues are policy matters that properly fall within the remit of the MCE.
10. The Issues Paper (page 72) suggests that the pricing Rules are expected to commence on 1 January 2007. Transmission prices are set on an annual basis and apply for a

financial year. Any amendments to the pricing Rules that come into effect on 1 January 2007 should only apply to prices that come into effect from 1 July 2007 to allow sufficient time for the necessary changes to pricing models and processes to be implemented. However, this timeline would need to be reconsidered if the review concluded that significant change to the existing pricing arrangements was required.

11. TNOs should be kept economically neutral to any changes in the pricing methodology through a pass-through arrangement to enable recovery of implementation costs and any increases in on-going costs.

2. APPROACH TO THE REVIEW

The TNOs generally support the Commission's approach to the review.

In particular, the Commission identifies the following threshold questions:

- is there a need for price regulation and what form should it be?; and
- if there is to be price regulation:
 - who should contribute to the recovery of the regulated revenue and how much should they each contribute?; and
 - how should such prices be structured?

It is equally important, however, not to lose sight of the interaction between the pricing review and the review of Rules for transmission revenue setting. The TNOs strongly support the following themes identified in the Transmission Revenue Issues Paper and re-stated in the Transmission Pricing Issues Paper:

- aligning the interests of TNOs with grid users; and
- seeking greater certainty, clarity and consistency of the regulatory arrangements.

The regulatory 'package' as a whole contributes to the alignment of the interests of TNOs and grid users. It is therefore the latter theme that is especially pertinent in relation to transmission pricing. Whatever the strength of the theoretical case for regulating transmission prices, there is significant benefit to all parties in having pricing arrangements that provide certainty, clarity and consistency.

TNOs believe that certainty, clarity and consistency are important factors in encouraging investment both within the electricity sector, and in upstream and downstream markets. In this regard, the TNOs believe that the present level of prescription in the Rules should be preserved as this aids certainty, clarity and consistency in the regulatory arrangements.

A consideration of the Commission's approach to the review raises the important question of how options for change should be assessed. The TNOs believe that:

- the Commission should undertake an economic assessment of all Rule change proposals; and
- a proposal should only proceed if there is clear evidence that a material net benefit will be achieved.

The TNOs note that the Commission makes a statement to this effect on page 37 of the Issues Paper. While such statements are welcomed, they should be given greater prominence in guiding the overall approach to the review. In addition, a pass-through arrangement should allow each TNO to recover its implementation costs as well as any additional on-going costs that it incurs as a result of any change to the pricing methodology.

The TNOs also note that the Issues Paper should make appropriate references to section 35 of the NEL, as this section imposes important requirements on the AEMC in its review of the Rules. In particular, section 35 requires that the Rules must provide a reasonable opportunity for a regulated transmission system operator to recover the efficient costs of complying with a regulatory obligation.

The TNOs note that the following matters are outside the scope of this review¹:

- the regional pricing structure of the NEM;
- the open (non-firm) access regime applying to transmission; and
- regulatory arrangements for transmission planning and investment (including the Regulatory Test).

In undertaking the pricing review, the TNOs consider it appropriate for the Commission to use the existing pricing Rules as the starting point, and to modify these Rules where there is a net benefit. This reflects that for pricing:

- the NEL does not provide specific new guidance;
- regulatory practice has not changed since the present Rules were drafted; and
- outcomes delivered by the present Rules over the last decade would suggest that the present Rules are largely appropriate.

3. REQUIREMENT FOR PRICE REGULATION

The Commission addresses the threshold question as to whether there is a requirement to regulate transmission prices.

The TNOs consider that price regulation should remain in the Rules but for different reasons than those identified in the Issues Paper. To explain the TNOs' position, it is important to make two observations that are particularly relevant to electricity transmission:

- Firstly, TNOs are revenue capped. Prices are therefore a mechanism to collect the regulated revenue cap from generation and load. It is widely recognised that there is no single correct method for recovering sunk costs from transmission users.
- Secondly, prices are already regulated in the Rules. As noted earlier, the current level of prescription provides certainty, clarity and consistency for transmission customers. An important threshold question, therefore, is whether there is any net benefit in removing the existing Rules in favour of substantially less regulation or no regulation at all.

¹ Page 10 of the Issues Paper

In considering alternative approaches to network pricing, it is important to recognise that the characteristics of electricity transmission set it apart from other energy networks. For instance, in the case of a gas transmission pipeline it is comparatively easy to identify and charge the relevant shippers. In this environment, the parties to an access agreement are able to negotiate charges without recourse to detailed pricing rules.

The physical characteristics of electricity and gas transmission are quite different. The debate around 'who should pay TUOS' in electricity transmission illustrates that it is not easy to identify the users or beneficiaries of the shared electricity transmission network. In this environment, a high level of prescription in relation to the pricing methodology serves a very important purpose. In particular, it provides guidance to both users and the TNOs as to how the relatively intractable transmission pricing issues are to be dealt with in the NEM. In the absence of prescription, users will face an on-going risk of transmission price shocks as pricing methodologies are changed or challenged by particular user groups.

Regulated access prices presently apply to almost all services provided by the TNOs. These arrangements contrast rather sharply with those applying to gas transmission pipelines, where:

- users and beneficiaries can be readily identified;
- property rights can be readily assigned (thus supporting long-term contracting of transmission capacity); and
- regulated access prices usually only apply to the capacity not already paid for by 'foundation' contracts.

If electricity transmission pricing rules were not 'laid out' in the Rules then TNOs would be required to negotiate prices that deliver their entire regulated revenue entitlement. Any approach to transmission network pricing which is centred on negotiation would need to address the problems of 'free riders' and the difficulties of resolving who pays TUOS among multiple users when the value of transmission services from a particular investment is hard to define and varies over time. In the TNOs' view, these basic problems would render an approach to transmission pricing based on negotiation impracticable. Notwithstanding this view, it seems self evident that the consequence of adopting greater discretion in relation to transmission pricing – either in relation to how individual charges would be determined or with respect to targeting specific groups of users or 'beneficiaries' – would almost certainly increase the scope for disputes. Such disputes are inherently intractable and costly; the costs would eventually be borne by customers, as would be the risk of delayed investment.

In summary, the TNOs seriously doubt whether reducing the current degree of prescription in the transmission pricing arrangements would deliver a demonstrable net benefit. Transmission users would have substantially less certainty and clarity in relation to pricing if the current level of prescription in the Rules was reduced. It is not appropriate for TNOs to make pricing decisions that can affect re-distribution of wealth (thereby creating 'winners' and 'losers') for the monopoly services covered under the revenue cap. Disagreements over 'who pays' for a particular transmission investment could also delay investment that is required to deliver reliability or economic benefits to the community. For these reasons, the cost allocation methodology should be established up-front and be clear to all.

The TNOs also note that the existing Rules do not require extensive regulatory involvement in approving prices. In circumstances where the current level of prescription was greatly diminished, transmission pricing may require greater regulatory oversight. Whilst the TNOs do not object to regulatory oversight per se, the additional costs involved would need to be justified with reference to some compensating benefit elsewhere. As noted earlier, the TNOs

doubt whether there is any benefit in moving away from the current level of prescription in the Rules.

4. CONTEXT AND OBJECTIVES FOR THE REVIEW

In this section of the Issues Paper, the Commission properly refers interested parties to the NEM objective, which guides the Commission. That objective is set out in section 7 of the NEL as follows:

“The national electricity market objective is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.”

In developing, assessing and determining any proposed Rule changes, including Rule changes arising from its present review, the Commission is obliged to apply the Rule making test, which states:

- (1) *The AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective.*
- (2) *For the purposes of subsection (1), the AEMC may give weight to any aspect of the national electricity market objective as it considers appropriate in all the circumstances, having regard to any relevant MCE statement of policy principles.*

The TNOs welcome the Commission’s statement that the Rule making test and the NEM objective are the critical reference points for this Review².

The Commission also notes that the NEM objective refers to the long-term interests of consumers. The Issues Paper comments that one interpretation of this is that the Rules should be designed to benefit consumers as a whole, without considering the distribution of benefits amongst consumers either on a class or on a geographical basis³.

The TNOs accept that wealth distribution issues *per se* should be addressed separately from economic efficiency considerations and should be addressed transparently by policy-makers, rather than through network pricing arrangements.

However, the TNOs also consider that the AEMC’s interpretation of the NEM objective for the purpose of this particular pricing review should fully recognise the practical challenges in network pricing, and the implications of changing the pricing Rules at this time. The AEMC should consider any prospective distributional issues or price shocks as part of its review.

5. CURRENT TRANSMISSION PRICING REGIME

The Issues Paper provides a description of the current transmission pricing regime and poses a number of questions regarding the appropriateness of these arrangements.

In addition to the questions raised by the Commission, the TNOs believe that there are additional issues of detail that could be addressed in the review. Whilst these are not necessarily central to the review, obtaining greater certainty, clarity and consistency on

² Page 14 of the Issues Paper

³ Page 15 of the Issues Paper

points of detail would assist TNOs and their customers. The TNOs will collate a list of issues for the Commission's consideration in the coming months.

The Issues Paper includes a very helpful description of the CRNP methodology. It is worth noting that CRNP was developed through extensive industry consultation. The CRNP methodology was reviewed by the NECA transmission and distribution pricing review, which concluded that the existing methodology should be supplemented by *modified CRNP*. The ACCC's subsequent analysis and consultation confirmed NECA's findings in making the necessary Code changes.

Whilst it is widely acknowledged that CRNP is not a perfect pricing methodology, the question before the Commission is whether a materially better method can be found. The TNOs believe that the recent history in developing and reviewing CRNP suggests that this is unlikely to be the case. In sections 6 and 7 below, the TNOs comment on the overall efficacy of the current transmission pricing arrangements in the broader context of the NEM.

5.1 Modified CRNP

The Issues Paper raises a number of questions in relation to modified CRNP, and the role of the AER and customers in approving or proposing use of the method. In raising these questions, it is important for the Commission to have regard to the lengthy NECA review that developed the modified CRNP concept. Whilst the methodology may unavoidably contain some apparently arbitrary elements, it is designed to provide appropriate signals to customers to increase the utilisation of network assets that have a relatively low level of utilisation. There may be some benefit if the Rules clarified the circumstances in which modified CRNP could be adopted.

The TNOs do not support allowing customers to propose particular network pricing methods, such as modified CRNP. Transmission pricing is a zero-sum methodology, in which there will always be some customers that would benefit from an alternative methodology, leaving others worse off. In this environment it would be inappropriate to delegate the choice of pricing method to individual customers. A better approach is to set out clear criteria in the Rules to guide the application of the pricing methodology.

5.2 TUOS discounts

TUOS discounts are associated with avoiding uneconomic bypass of the transmission network. AER guidelines presently set out the arrangements for TUOS discounts and the circumstances in which the discounts can be recovered from other customers. The current arrangements should be improved with the objective of providing greater certainty to all parties in relation to the recovery of discounts from other customers.

In particular, the key discounting criteria in the guidelines should be elevated and included in the Rules. In addition, instead of the AER providing a letter of comfort at the time of the discount application, the AER's decision at the time of the discount application should be binding for the duration of the discount period.

The Rules should also define timeframes and processes for consulting on, setting and reviewing the guidelines, and for approval of the recovery by TNOs of the cost of discounts.

5.3 TUOS rebates

TUOS rebates apply to embedded generators where they reduce a Distribution NSP's transmission charges. The TNOs believe that TUOS rebates provide price signals that generally encourage economic development of embedded generation, but there may be

scope to improve the cost-reflectivity of those signals through refinement of the regime. More detailed comments will be provided during the course of the review.

6. EFFICIENCY AND TRANSMISSION PRICING CONCEPTS

Prices reflecting short-run marginal costs alone are not sufficient to recover the full costs of the transmission network. Sustainable businesses must earn a reasonable return on their investment, and therefore it is fundamentally important to ensure that transmission prices are set in a manner that allows for the full recovery of the total revenue requirement over the long run.

The Issues Paper notes (in section 7.2.1.1) that the present CRNP methodology involves complicated load flow modelling. However, such modelling is very familiar to TNSPs as a power system planning tool, which means that suitable models are already in place to derive transmission prices. As noted earlier, whilst the CRNP methodology may be imperfect, it was developed through extensive industry involvement and subsequently reviewed in detail by NECA. It has clearly proved challenging to develop a materially better method.

It is also important to note that any shift from CRNP or modified CRNP would be likely to involve material development and implementation costs. Further, in section 7.2.1.2 of the Issues Paper, the Commission observes that the determination of transmission prices using the existing approach is well developed, as far as the TNOs are concerned, and involves little ongoing costs to maintain and update. The TNOs concur with this observation.

As an overall observation, the TNOs believe that the current pricing arrangements, whilst unavoidably imperfect, do provide a reasonable and practicable means of delivering appropriate signals to transmission customers when combined with wholesale market pricing arrangements and the other features described in section 6.1 of the Issues Paper. In particular:

- the wholesale market provides appropriate short-run cost signals to generators through its treatment of constraints and losses;
- a new generator's decision to locate in the NEM will depend on the expected wholesale market prices and the availability of transmission network capacity; and
- a new generator is likely to take account of the Regulatory Test, which underpins a TNSP's network augmentation decisions.

Together these features of the NEM design will assist in ensuring that generation capacity is provided in broadly the correct locations. It is arguable that price signals to load are less important because demand tends to be relatively inelastic and transmission costs are a small percentage of a typical customer's total electricity bill.

The Commission has rightly observed that its task is to implement change only where it will deliver a demonstrable net benefit. The TNOs note that the above aspects of the NEM design are highly relevant in assessing the efficacy of the transmission pricing arrangements. In particular, the TNOs are not aware of any instances where the pricing arrangements have led to materially inefficient investment decisions.

7. RELEVANT NEM CONTEXT

The TNOs welcome this section of the Issues Paper because it attempts to put the transmission pricing issue into the NEM context. As noted above, the Issues Paper states that there are three other features of the NEM design that provide locational signals in addition to transmission pricing. These features are:

- the regional pricing structure of the wholesale market design;
- non-firm grid access for generators; and
- the transmission investment arrangements, including the Regulatory Test.⁴

The Issues Paper asks whether the complementary price signals provided by these features are sufficient, when combined with the present transmission pricing signals, to promote efficient behaviour by actual and potential consumers and producers of electricity in the short and long run. As noted in section 6 above, the TNOs agree with the sentiments in the Issues Paper that these sources of locational signals will tend to encourage consumers and producers of electricity to make efficient consumption and investment decisions.

The complexity of electricity transmission networks means that it is very difficult to determine objectively correct transmission pricing signals.

In the absence of fundamental market redesign – which is outside the scope of this review - the TNOs consider that the existing arrangements are acceptable from the perspective of providing appropriate signals to consumers, and providing reasonable certainty, clarity and consistency in transmission pricing across the NEM. There is no evidence of which the TNOs are aware that would support the view that the present arrangements have led to materially inefficient consumption or investment decisions in the NEM. TNOs have little doubt that improvements could be made at the margin, but these improvements will not require substantial changes to the current allocation of TUOS costs to different categories of consumers. Changes should only be made if demonstrable benefits will be delivered.

8. ALLOCATION OF REGULATED REVENUE ACROSS TRANSMISSION USERS

The Issues Paper provides a detailed discussion of the allocation of regulated revenue across transmission users. It raises issues in relation to:

- shallow versus deep connection charges;
- other pricing signals provided in the NEM (noted in section 7 above);
- the question of whether generators should pay a greater share of TUOS;
- alternative pricing arrangements to CRNP and modified CRNP (noted in section 5.1 above); and
- prudent discounts and rebates (noted in section 5.2 above).

The TNOs do not have any further comments on these issues at this time (other than those noted earlier).

⁴ Page 37 of the Issues Paper

9. STRUCTURE OF PRICES

The Issues Paper explains that the Rules presently provide TNSPs with significant discretion in terms of the price structure⁵. The TNOs consider the contrary; that TNSP discretion is limited. Discretion only relates to setting pricing structures for the locational usage charge; the structure of the other charges is in fact quite tightly prescribed, and these make up more than half the total charges paid by customers. Moreover, the discretion in setting usage prices applies only once the prescribed cost allocation method has been undertaken.

Each TNO has already made its own assessment of the appropriate structure of prices for its network. Changes to these pricing structures should only be made if demonstrable net benefits are likely, and should that occur, a transition path from the existing price structure would be required to minimise price shocks for consumers.

10. PRICING OF NON-PRESCRIBED SERVICES

The Issues Paper explains that not all of the services provided by a TNSP are prescribed services that fall within the revenue cap. The Issues Paper comments that the current Rules make provision for two distinct categories of service to be treated outside the scope of the revenue cap. These are: certain excluded non-contestable services; and contestable services. These services are referred to in this chapter of the Issues Paper as ‘non-prescribed services’⁶.

The TNOs note that the Commission asks the following question:

Are the negotiation provisions in the Rules regarding prices for non-prescribed services appropriate? What difficulties (if any) have been experienced?

Given that the Commission has defined excluded non-contestable services *and* contestable services as “non-prescribed services”, the TNOs do not believe that the question is appropriate. If a service is contestable, then negotiation will be conducted in the market place, rather than under the auspices of the Rules.

The TNOs are keen to ensure that the review appropriately distinguishes between services that are prescribed, those that are excluded non-contestable and those that are contestable. Contestable services should not be subject to regulation under the Rules; nor should they be within the scope of this review.

In relation to excluded non-contestable services, the TNOs note that those seeking these services are almost exclusively large, financially astute and sophisticated entities, with the protection of the National Electricity Law and Rules, Trade Practices Act, Corporations and other laws. The TNOs are not aware of any difficulties that have been experienced in negotiating transmission pricing arrangements with these entities.

11. INTER-REGIONAL TRANSMISSION PRICING ISSUES

The TNOs note that inter-regional transmission pricing issues are policy matters that should properly fall within the remit of the MCE.

⁵ Page 58 of the Issues Paper

⁶ Page 62 of the Issues Paper