11 September 2006

Dr John Tamblyn  
Chairman  
Australian Energy Market Commission  
Level 16  
1 Margaret Street  
Sydney NSW 2000

Dear Dr Tamblyn

Economic Regulation of Transmission Service

EnergyAustralia has provided a second submission in response to the above Rule change. We have provided this submission under separate heading to allow the Commission to specifically focus on EnergyAustralia's current regulatory environment.

Our network business operated primarily to provide distribution services to customers in our footprint area. As a consequence of providing this service, some of our assets are technically classified as forming part of the transmission network. As a result, we are subject to two regulatory processes for what is essentially the same service.

We do not believe the Commission has specifically addressed this issue to date. The current wording in the second draft Rule remains unchanged from the current Chapter 6 Rule. There are flow on implications if this issue is not addressed relating to cost allocation and the lock-in of RAB values.

We therefore submit this response for consideration by the Commission and look forward to your assessment.

If you have any queries or comments regarding this supplementary submission please do not hesitate to contact me on (02) 9269 2111, or Mr Harry Colebourn, Manager – Network Regulation and Pricing on (02) 9269 4171.

Yours sincerely

GEORGE MALTABAROW
Managing Director

18033
Economic Regulation of Transmission Services
Supplementary Submission

September 2006
CONTENTS

EXECUTIVE SUMMARY........................................................................................................1

1 INTRODUCTION..................................................................................................................2

2 CURRENT RULE ................................................................................................................3
  2.1 Current delineation of Transmission and Distribution Networks ..................3
      2.1.1 Definitions ..........................................................................................................3
      2.1.2 Economic regulation of Transmission and Distribution networks ............4
  2.2 Implications for regulated businesses .................................................................4
      2.2.1 EnergyAustralia ..............................................................................................4
      2.2.2 Ergon and Energex .........................................................................................5
      2.2.3 Other DNSPs ....................................................................................................5

3 REVISED RULE ................................................................................................................5

4 RECOMMENDED CHANGES TO THE SECOND DRAFT RULE .....................5
  4.1 Revenue Arrangements .........................................................................................5
  4.2 Transitional Arrangements ....................................................................................6

5 HOW THE CHANGES PROMOTE THE NEM OBJECTIVE..........................7
Executive Summary

EnergyAustralia owns a significant number of assets that, on the basis of the definitions in the Rules, form part of the transmission system. However they only represent a small proportion (around 12%) of EnergyAustralia’s total regulated asset base.

In both the 2004 and 1999 IPART and ACCC determinations, EnergyAustralia was subjected to separate regulatory determinations for its transmission and distribution networks. A significant level of duplication and redundancy has been evident in the undertaking of two concurrent reviews. This problem will be exacerbated when responsibility for the regulation of both networks rests with the same regulator.

EnergyAustralia has been exploring options aimed at streamlining regulatory processes for its distribution and transmission networks. The release of the Draft Rules for transmission revenue regulation provides a perfect opportunity to streamline the regulatory process. An amendment to the Chapter 6A Rules to reflect these outcomes would promote the market objective and align this aspect of the Rules with other changes the AEMC proposes to affect.

Both transmission networks and distribution networks are defined in the Rules. At the margin, however, there is very little that segregates the two networks other than operational differences. This causes an issue in EnergyAustralia’s case where its transmission assets have a predominantly supply function and are owned and operated, together with distribution, as a single integrated business. The transmission function is incidental to EnergyAustralia’s predominantly distribution function.

The existing Rules provide little assistance for owners of distribution assets who invest in assets which may take on the characteristics of a transmission network as defined in the Rules. There is currently no clear functional definition of assets which would allow all assets whose primary function is to ensure reliable and secure supply to customers through the distribution network to be subject to distribution regulatory arrangements. This has implications for the majority of DNSPs.

EnergyAustralia proposes a change to the existing Rules that focuses on the underlying characteristics of the services provided by the network operator so as to determine as to whether any benefits accrue from assets at the margin being subject to a different regulatory regime.

EnergyAustralia believes these changes promote the NEM Objective for the following reasons:

- It reflects the new governance arrangements for economic regulation of Transmission services and the future economic regulation of Distribution services;
- For EnergyAustralia and the AER it would dramatically reduce the regulatory obligations associated with two regimes for effectively similar assets, with no pricing impact on customers.
- For many other DNSPs it clarifies in the Rules current regulatory practice and would have no pricing impact on customers;
- It promotes the characteristics of the Chapter 6A Rules by ensuring that the AER is provided guidance in its decision-making for this Clause. It also clarifies existing ambiguity about the delineation between distribution and transmission services and regulation;
- It overcomes the classification of the regulatory framework based on a technical definition of the asset and focuses more on the service provided, particularly where the same asset may be operating in the distribution system and transmission system at different times.
1 Introduction

EnergyAustralia owns a significant number of assets that, on the basis of the definitions in the Rules, form part of the transmission system. These assets represent a larger value than Transend’s transmission network and around 75% of Electranet’s. However they only represent around 12% of EnergyAustralia’s total regulated asset base. These assets support the main NSW transmission grid and carry a proportion of bulk power flows between generators and customers in NSW; however the primary function of the assets is to provide a reliable supply to the customers in EnergyAustralia’s area. In a sense their transmission function, whilst essential, is incidental to their distribution function.

In both the 2004 and 1999 IPART and ACCC determinations, EnergyAustralia was subjected to separate regulatory determinations for its transmission and distribution networks. These determinations employed very different regulatory processes and modelling requirements. Transmission and distribution networks are different in a number of operational ways but are both comprised in essence of long lived infrastructure assets that are indistinguishable at their interface. For the most part the regulatory principles and processes for determining revenue, under the current market design, should therefore be aligned. A significant level of duplication and redundancy has been evident in the undertaking of two concurrent reviews. This problem will be exacerbated when responsibility for the regulation of both networks rests with the same regulator.

EnergyAustralia has been exploring options aimed at streamlining regulatory processes for its distribution and transmission networks. Analysis to date has highlighted:

- There is no functional definition of assets in the Rules that would meet the requirements of the Rules and align with EnergyAustralia’s network boundary.
- This issue is not unique to EnergyAustralia. It would follow that this issue will arise for any distribution network that has the transmission network operating in close proximity to high density loads.
- The only way to ensure that EnergyAustralia’s distribution assets could be delineated from other transmission assets in NSW would be on the basis of ownership (Queensland’s DNSPs for example have a derogation which treats all 132 and 110 kV assets owned by them as distribution, regardless of whether they support the main 275 kV transmission network).
- Having all assets under the distribution banner would solve one problem but create others. Moving transmission assets back into the distribution business would remove the price signal for the use of these transmission assets by all of their users. This is likely to have a headline impact on EnergyAustralia’s distribution prices in the order of 2% (p-naught) and create difficulties with price changes to larger customers. Finally, a return to settlement calculation at the ownership boundary of EnergyAustralia’s network would degrade the accuracy of settlements and associated market price signals.

This analysis concluded that EnergyAustralia would be best served by:

- A single regulatory determination for its entire network business; and
- An apportionment of revenues (based on the cost allocation methodology) to yield a revenue amount for the purpose of the transmission pricing allocation.

The release of the Draft Rules for transmission revenue regulation provides a perfect opportunity to streamline the regulatory process with straightforward amendments to the Rules along the above lines. EnergyAustralia believes an amendment to the Chapter 6A Rules to reflect these outcomes would promote the market objective and align this aspect of the Rules with other changes the AEMC proposes to affect.
2 Current Rule

2.1 Current delineation of Transmission and Distribution Networks

2.1.1 Definitions

Chapter 10 (Glossary) of the National Electricity Rules (NER) defines the transmission network as follows:

"A network within any participating jurisdiction operating at nominal voltages of 220 kV and above plus:

(a) any part of a network operating at nominal voltages between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage transmission network

(b) any part of a network operating at nominal voltages between 66 kV and 220 kV that is not referred to in paragraph (a) but is deemed by the AER to be part of the transmission network."

Chapter 10 also conveniently applies the following definition to the distribution network as:

"A network which is not a transmission network"

The rationale for this definition is that the transmission network is uniquely "meshed". That is, a change in either the load or the generation at any location will change the flow in every line in the network. The transmission network is characterised by having "tidal" flows of electricity, as the generator and inter-connector inputs, and load off-take, varies.

Anything which does not have these characteristics can be classified as distribution.

The delineation of the electricity market exactly matches that of the transmission network, with marginal transmission loss factors used in the settlement to the transmission connection points (TCPs). Transmission loss factors are used to adjust the Regional Reference Price to each TCP. Settlement within the distribution networks uses volumes adjusted by the average distribution loss factors to each TCP.

Notwithstanding these definitions, there are three broad classes of network assets:

1. Interconnections and potential interconnections between market regions, for which the market effect of their availability is significant. These assets constitute a minor proportion of the transmission network;

2. The balance of the transmission networks, which supply electricity in bulk to major loads and to distribution networks. The market effect of these assets is less significant, their principal function being to provide reliable supply to loads. These assets do however carry the tidal flows of electricity between generators and loads and form the boundary of the existing NEM;

3. Distribution networks supply electricity to the majority of end users, again being required to meet acceptable levels of reliability.

There is no doubt that there are fundamental differences between distribution networks operating in the third class and interconnection assets operating in the first class. At the margin, however, there is very little that segregates the second and third limbs other than operational differences, and the assets are identical in construction. This causes an issue in EnergyAustralia’s case where its transmission assets (which operate at a voltage of 132 kV in parallel and in support of the higher voltage transmission network) have a predominantly supply function and are owned and operated, together with distribution, as a single integrated business. The transmission function is incidental to EnergyAustralia's predominantly distribution function.
2.1.2 Economic regulation of Transmission and Distribution networks

Problems occur when the asset related definitions of networks are imposed on a regulatory framework which is somewhat service-delivery based. This is particularly the case where owners of distribution assets invest in assets which may take on the characteristics of a transmission network as defined in the Rules.

The Rules attempt to provide some assistance in the delineation between the regulation of transmission and distribution networks under Clause 6A.1.5(b) which states:

“Subject to the agreement of the AER and the relevant Jurisdictional Regulator, those parts of a transmission network operating at nominal voltages between 66 kV and 220 kV that:

1. do not operate in parallel to; and
2. do not provide support to,

the higher voltage transmission network may be deemed by the relevant Transmission Network Service Provider to be subject to the regulatory arrangements for distribution service pricing set out in Parts D and E of this Chapter.”

This Clause provides little assistance for DNSPs who own assets characterised as part of the transmission network:

1. The Clause can effectively only apply to assets that are caught under part (b) of the definition of Transmission. That is, the only assets the TNSP can deem to be subject to distribution arrangements are distribution assets which the AER has previously deemed to be part of the transmission network.

2. There is no relief for assets that operate in parallel with and support the higher voltage transmission network, irrespective of the fact that they primarily form part of the distribution network.

3. The TNSP can only deem subject to agreement by the AER and the Jurisdictional Regulator, which by next year will be the AER itself.

Apart from the above clauses there is currently no clear functional definition of assets which would allow all assets whose primary function is to ensure reliable and secure supply to customers through the distribution network to be subject to distribution regulatory arrangements

2.2 Implications for regulated businesses

2.2.1 EnergyAustralia

EnergyAustralia’s transmission network is recognised as part of the main transmission grid, as a component of the tidal flows within the main interconnected TransGrid network is superimposed on the electricity delivered to the loads connected to this transmission network. The flows within EnergyAustralia’s network are generally unidirectional, but so too are those in the majority of TransGrid’s assets which provide bulk supply to load centres.

The operation of the National Electricity Code resulted in some of EnergyAustralia’s assets being categorised as part of the transmission network for the first time. EnergyAustralia was therefore established as both a DNSP and a TNSP subject to separate regulation for its Transmission assets and its distribution assets. The assets which come under the technical definition of transmission network for the Rules currently represent over 12% of the total network business.

As a consequence of EnergyAustralia having its transmission network recognised in the pricing arrangements in the Rules, a portion of its annual network revenue ($15-20 Million) is recovered through the transmission pricing arrangements. EnergyAustralia has 7 customers that are directly connected to the transmission network and almost 60 large customers with individually calculated prices, for whom the transmission cost is a major component of their network bill.
The establishment of transmission metering to connection points within the EnergyAustralia network is a major project which is now close to completion, with the Sydney and Central Coast areas slated for transfer into the market by the end of 2006. To facilitate this transfer, EnergyAustralia was successful in obtaining a derogation from the Rules in June 2006 to transfer metering installations where the primary equipment (Current and Voltage Transformers) does not comply with the testing requirements in the Rules.

Due to the legacy of the existing Rules, EnergyAustralia is therefore in an unenviable position of being subject to two regulatory regimes that are subject to reset at the same time. We consider this unnecessary and duplicative in the light of a fresh look at Rules relating to the regulation of Transmission revenue.

2.2.2 Ergon and Energex

Section 9.32.1 of the Rules defines the Queensland system as:

"The sum of the transmission network located in Queensland operating at a nominal voltage of 275 kV, the connection assets associated with that network and any transmission or distribution system connected to that network and also located in Queensland."

The effect of this definition is to classify all of the 132 and 110 kV assets in that jurisdiction as distribution assets, although their function in many cases is to operate in parallel with and support the 275 kV transmission network.

2.2.3 Other DNSPs

Other DNSPs are also likely own and operate assets that should be categorised as part of the Transmission network. In NSW, both Country Energy and Integral’s networks currently comprise no more than a few 132 kV circuits that are likely to meet the transmission definition either now or in the future. We understand that these assets are currently treated with their other assets which are subject to distribution regulation. While this makes practical sense, there is no formal mechanism or instrument that allows this to take place should any part of their network be deemed, now or in the future, to be part of the transmission network.

3 Revised Rule

The AEMC’s Draft Determination and accompanying draft Rule have attempted to reflect the new governance structure which separates Rule making and Rule enforcement functions between the AEMC and AER respectively. Features of the new Rules include:

- Clearer definitions and classifications to remove ambiguity of what is being regulated;
- A shift in regulatory classification from an asset based approach to a services based approach;
- Codification of process and methodology to assist with certainty and transparency;
- The principle of guided discretion which dictates that where the Rules confer discretion on the AER to make a decision, they will also provide some level of guidance on how to make that decision.

These features are evident in the structure and content of the new Chapter 6A, but absent from the Clause relating to national regulatory arrangements (6A.1.5) which is a straight carry-over from the old Rule.

EnergyAustralia is now seeking amendment to this Clause in order for it to be consistent with the common themes mentioned above.

4 Recommended changes to the Second Draft Rule

4.1 Revenue Arrangements
EnergyAustralia proposes a change to the existing Rules that focuses on the underlying characteristics of the services provided by the network operator so as to determine as to whether any benefits accrue from assets at the margin being subject to a different regulatory regime. The above clause could be re-worded along the following lines:

6A.1.5 National Regulatory Arrangements

Regulatory Arrangements for Transmission Services incidental to the Provision of Distribution Services

(b) A Distribution Network Service Provider who is also a Transmission Network Service Provider because it provides Transmission Services which are incidental to or as a consequence of its provision of distribution services, may apply to the AER to have those transmission services subject to the economic regulatory arrangements under Part B of Chapter 6 (old Part D).

(c) The AER must determine to accept the Distribution Network Service Provider’s application unless it can establish that:
   1) The Transmission services provided are not incidental to or a consequence of the provision of distribution services;
   2) The Transmission services identified materially impact the operation of the wholesale market;
   3) There are material implications for the technical operation of the transmission system or the distribution system; or
   4) Customers would be materially adversely impacted if the application is approved.

Pricing Arrangements for Transmission Services incidental to the Provision of Distribution Services

(d) Where:
   1) the AER has made a determination to accept an application from a Distribution Network Service Provider under (c), and
   2) the Distribution Network Service Provider would provide transmission services to customers within and outside its distribution network.

The Distribution Network Service Provider may also apply to the AER to have Regulatory Arrangements for Pricing of Prescribed Transmission services apply to revenues related to the provision of transmission services through a cost allocation methodology under Part G of this Section.

(e) The AER must accept the Distribution Network Service Provider’s application if, after consultation with the relevant TNSP and DNSP, it is satisfied that:
   1) Transmission revenues are significant enough to justify a pricing method under (d); and
   2) There are no regulatory impediments to implementing a method under (d);

4.2 Transitional Arrangements

Should the AEMC agree to make amendments to the existing Rule it is likely that current arrangements would continue to apply until the next review. As this affects the economic regulation of the services provided and not the technical aspects, the Rule change would have no flow on affect to other parts of the Rules. For example provisions surrounding consent authorisation and the regulatory test would continue to operate as normal.
Other transitional arrangements surrounding the existing determination would also need to be submitted including:

- The roll forward of the asset base;
- Contingent projects;
- Carry-forward mechanisms;
- Service standards incentives.

Further arrangements may be necessary with regard to pricing arrangements in the Rules.

5 How the changes promote the NEM objective

EnergyAustralia believes the changes to Clause 6A.1.5 promotes the NEM Objective for the following reasons:

- It reflects the new governance arrangements for economic regulation of Transmission services and the future economic regulation of Distribution services;
- For EnergyAustralia and the AER it would dramatically reduce the regulatory obligations associated with two regimes for effectively similar assets, with minimal (if any) impact on customers.
- For many other DNSPs it clarifies in the Rules current regulatory practice and would have minimal impact on customers;
- It promotes the characteristics of the Chapter 6A Rules by ensuring that the AER is provided guidance in its decision-making for this Clause. It also clarifies existing ambiguity about the delineation between distribution and transmission services and regulation;
- It overcomes the classification of the regulatory framework based on a technical definition of the asset and focuses more on the service provided, particularly where the same asset may be operating in the distribution system and transmission system at different times.