ELECTRICITY TRANSMISSION NETWORK owners

Pricing Methodology Guideline

Response to AER Proposed (Draft) Transmission Pricing Methodology Guideline

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Introduction

This submission is made on behalf of the Electricity Transmission Network Owners Forum (ETNOF) consisting of Powerlink, TransGrid, SP AusNet, ElectraNet and Transend.

The AER published a Proposed Pricing Methodology Guideline (the Proposed Guideline) on 25 July 2007. The Proposed Guideline relates to amendments to the Rules as a result of NER Amendment Rule #22[1] which commenced on 21 December 2006. This Rule introduced a New Part J and Chapter 6A "Prescribed Services – Regulation of Pricing". Clause 6A.25.1 of the Rules requires the AER to publish a Pricing Methodology Guideline (the Guideline) by 31 October 2007.

The requirements for the Proposed Guideline are set out in clause 6A.25.2 of the Rules and include the following five areas:

- information requirements;
- pricing structures (locational);
- pricing structures (postage stamped);
- attribution of system assets to categories of prescribed services; and
- disclosure of information.

The Proposed Guideline follows the above sequence. This submission sets out ETNOF's comments on each of the five areas.

ETNOF is willing to discuss these issues in further detail at the AER's convenience.

1 Information Requirements

Clause 6A.25.2(a) of the Rules requires the Guideline to specify or clarify the information that is to accompany a proposed pricing methodology, being information that is necessary to allow the AER to form a view as to whether the proposed methodology is consistent with and gives effect to, the Pricing Principles for Prescribed Transmission Services (outlined in clause 6A.23 of the Rules) and the requirements of Part J of the Rules.

ETNOF notes that the Proposed Guideline addresses a number of issues that had not previously been considered in detail, including:

- recognition that there may be more than one TNSP in a region and addressing the informational requirements that are required in these situations;

[1] AEMC 2006, National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, Rule Determination, 21 December 2006, Sydney.

- details of how the TNSP intends to maintain records of the application of the pricing methodology in order for the AER to monitor, report on and enforce the pricing methodology; and

- details of how the TNSP intends to monitor its compliance with its approved pricing methodology.

Further, the Proposed Guideline requires hypothetical worked examples to be provided in many instances, which will provide clarity and certainty to the AER, TNSPs and other interested parties.

In its submission to the AER's Pricing Methodology Issues Paper, ETNOF expressed a view that the general level of detail required in pricing methodologies should be similar to that provided in the former (codified) Rules.

ETNOF considers the amount of information (and level of detail) required by the Proposed Guideline to be greater than may be considered necessary to meet the requirements of the Rules.

2 Permitted (locational) pricing structures

Clause 6A.25.2(b) of the Rules requires the Guideline to specify or clarify the permitted pricing structures for recovery of the locational component of the prescribed TUOS services, having regard to:

- the desirability of consistent pricing structures across the NEM; and

- the role of pricing structures in signalling efficient investment decisions and network utilisation decisions.

As noted in its submission on the AER's Issues Paper, ETNOF considers that one of the very few areas which were open to TNSPs for innovation under the former Pricing Rules was the structure of locational charges. The pricing structures adopted showed differences in approach, reflecting TNSP's differing views about investment drivers, and also reflecting other factors such as maintaining pre-existing pricing structures which were familiar to customers.

ETNOF supports, in principle, the concept of moving to a consistent structure for TUOS locational prices. Nevertheless, such a move must be justified (and the net benefits must be demonstrated) rather than simply a pursuit of NEM-consistent pricing structures for the sake of it.

The ability of distribution businesses to 'pass through' transmission pricing structures is particularly important. In this regard ETNOF notes that this requirement may vary from one distribution business to another. Accordingly, at least during transition to final pricing structures, scope needs to be provided for preserving pricing structures that meet this objective.

2.1 Measures of Demand

ETNOF has concerns with the measure of demand proposed to be used to determine the locational price. A primary concern is that the Proposed Guideline appears to confuse the measure of demand used to determine the locational price and the level of demand used to calculate the locational charge.

Measures of demand are used on three separate occasions in the process to determine locational prices and then calculate a locational charge.

- Firstly, historical demand is used as an input to the TPRICE application to create the load file for the cost reflective network pricing (CRNP) calculation.
- Secondly, historical demand or contract demand[2] is applied to the output of TPRICE to calculate locational prices.
- Thirdly, actual demand, forecast demand or contract demand is applied to the locational price to determine the locational charge to be invoiced.

Section 2.2(a) of the Proposed Guideline states that locational prices must be based on demand at times of greatest utilisation of the transmission network and for which network investment if most likely to be contemplated, which is interpreted as either (or both) of the first two steps above.

Sections 2.2(b) and 2.2(c) of the Proposed Guideline refer to applying a measure of demand to a price which suggests that this is to derive a locational charge, which is step three. Section 2.2(d) permits forecast demand to be used if historical data are not available, which suggests that actual data may not be available when this step would occur, implying that this is either (or both) of the first two steps.

Clearly, there is some conjecture as to when the measures of demand outlined in section 2.2(c) are to be employed. ETNOF suggests that the Guideline should clearly differentiate the measure of demand to be used at each step in the process to determine locational prices and then calculate a locational charge.

While section 2.2(f) of the Proposed Guideline would allow TNSPs to propose an alternative pricing structure, such as one based on a different measure of demand to those outlined in sections 2.2(c), the requirement to demonstrate that the structure gives effect to and is consistent with the pricing principles (clause 6A.23 of the Rules) is a significant burden.

2.2 Simple Price Signal

In its submission on the AER Issues Paper, ETNOF stated a preference for a locational price structure which includes a simple, easily identified price signal and simplicity of the calculation of charges for customers.

[2] The different measures of demand used in the second and third steps reflect the differences in approach for each TNSP referred to previously.

In regions where TNSPs calculate the locational charge using the maximum demand or contract demand of individual customers in the charging month, customers are aware how their behaviour will affect the charge and can react accordingly.

Whilst arguably simple to calculate, defining demand as a historical measure of actual demand (as it is in section 2.2(c) of the Proposed Guideline) would blunt the price signal introducing a significant discontinuity (24 months) between the action of a customer and the impact of this action on charges, require TNSPs to identify the 10 peak days to calculate the average demand and assume that all elements of a transmission network are equally stressed (over the 10 peak days).

2.3 Transitional Arrangements

The AER has confirmed the AEMC determination that the locational charge must be based on demand and not energy. Notwithstanding what measure of demand is to be used, some customers may face a material change to their locational charges as they move from (partially) energy-based to (fully) demand-based charges. Transitional arrangements are required to phase in the impact of such changes.

3 Permitted (postage stamp) pricing structures

Clause 6A.25.2(c) of the Rules requires the Guideline to specify or clarify permissible postage stamping pricing structures for recovery of the prescribed common transmission services and the non-locational component of the prescribed TUOS services, having regard to:

- the desirability of a consistent approach across the NEM, particularly for Transmission Customers that have operations in multiple participating jurisdictions; and

- the desirability of signalling to actual and potential Transmission Network Users efficient investment decisions and network utilisation decisions.

ETNOF notes that the proposed postage stamp pricing structures are virtually identical to those currently employed by TNSPs and ETNOF is, therefore, comfortable with the AER's proposal. The only identified change to the current charging regime is that TNSPs can only use current energy to calculate the charges for a connection point if the historical energy is not available – previously AER could approve the use of current energy to calculate the charges even if historical energy was available.

As a minor issue, ETNOF suggests that the wording in section 2.3(e)(1) is overly complex and could be simplified to:

> (1) multiplying the *energy based price* by the metered energy offtake at that *connection point* in the corresponding *billing period* two years earlier; or

4 Attribution of transmission system assets to categories of prescribed transmission services

Clause 6A.25.2(d) of the Rules requires the Guideline to specify or clarify the types of transmission system assets that are directly attributable to each category of prescribed transmission services, having regard to the desirability of consistency of cost allocation across the NEM.

ETNOF notes the asset listing provided in section 2.4 of the Proposed Guideline and welcomes the AER's decision to provide an asset listing. While the asset listing is based on Schedule 6.2 of the old Rules, ETNOF is concerned that it fails to provide sufficient direction to TNSPs to ensure that assets are allocated to the correct category of prescribed transmission service.

4.1 Clarification of Asset Listing

The asset listing contained in the Proposed Guideline identifies which assets may be attributed to each category of prescribed transmission service but no guidance is provided as to which category a specific asset type should be attributed. For example, the asset listing notes that substation establishment and building costs can be allocated to each of the four categories of service, but there is no guidance provided as to in which situations such costs should be attributed to each category.

The priority ordering process outlined in clause 6A.23.2(d) of the Rules would inform such direction as to when specific assets are attributed to each service category. In the above example, the substation establishment and building costs attributable to prescribed entry services should be amended to note that it is only those costs not allocated to prescribed TUOS services or prescribed common transmission services.

It may be argued that the additional information is available in the priority ordering process in the Rules, but it may be preferable if this process were written into the Guideline to make it a self-contained document, which can be read, interpreted and applied without the need to reference other material. This issue is discussed more fully in sections 4.2 and 4.3 of this submission.

Clarification of this asset prioritisation in the asset listing would greatly enhance the asset allocation process and remove the uncertainty that currently exists.

Since transmission lines owned by a TNSP are part of that TNSP's assets, it is suggested that the word "assets" in section 2.4(a)(1)(iv) be replaced with "transmission network" so that the section reads:

> (iv) *transmission lines* owned by *TNSPs* connecting generators to the TNSP's *transmission network*;

4.2 Directly Attributable Assets

A key issue for ETNOF is that "directly attributable" is defined in the Guideline differently to what we understand the intent of the AEMC Rule Determination[3] #22. The lists provided in sections 2.4(a)-(d) of the Guideline are clearly intended to provide guidance but imply that an asset can only be attributed to one and only one category of prescribed transmission service. Clause 6A.23.2(d) of the Rules indicates that the priority ordering approach applies to assets that are not directly attributable to a single prescribed transmission service.

ETNOF recommends that the AER provide a clear definition of directly attributable, including examples of how it is expected to be applied.

4.3 Priority Ordering Approach

The AEMC[4] noted in its determination that:

> "….ETNOF identified that some TNSPs may undertake the cost allocation approach at different levels of granularity. Such differences in allocation will lead to different outcomes across the NEM without a clear basis for difference. While the Commission considers that Approach 1 from the ETNOF's supplementary submission is likely to be the most appropriate, in order to promote consistency across the NEM the Commission has decided to require the AER to develop guidelines on this issue."

The only reference the Guideline makes to the priority ordering approach detailed under clause 6A.23.2(d) of the Rules requires the TNSPs methodology to detail how the process will be applied and include a hypothetical worked example. In this respect, ETNOF does not believe that the Guideline has satisfied the AEMC request that the Guideline provides sufficient detail to promote consistency across the NEM.

ETNOF emphasises that TNSPs are still determining the practical application of the priority ordering process and the overall effect and impact of it application on customer charges. To assist in clarification of the priority ordering process, ETNOF has provided an example in Appendix 1. ETNOF would appreciate an opportunity to discuss with the AER this and other potential examples to be incorporated into the AER Guideline with the objective to improve consistency of the process across the NEM.

5 Disclosure of information

Clause 6A.25.2(e) of the Rules requires the Guideline to specify or clarify those parts (if any) of a proposed pricing methodology or the information accompanying it, that will not be publicly disclosed without the consent of the TNSP.

[3] AEMC 2006, National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, Rule Determination, 21 December 2006, Sydney, Page 34.

[4] AEMC 2006, National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, Rule Determination, 21 December 2006, Sydney, Page 38.

ETNOF members have not identified any material issues with how the AER defines confidential or commercially sensitive information in section 2.5 of the Proposed Guideline. With this in mind, it would appear to be appropriate that any such information may be included in a confidential version of a TNSP's proposed pricing methodology, noting that a version of the proposed pricing methodology without the confidential information must also be provided to the AER for public release.

Summary

In general ETNOF supports the overall direction the AER is pursuing. The following specific responses are provided by ETNOF:

- measures of demand are used three times in developing locational prices and locational charges and, where the AER is to mandate permissible measures to be used, clear guidance should be provided as to in which step in the process these measures are to be applied;

- transition issues must be recognised, including having regard to the ability of DNSPs to pass through locational transmission pricing structures/ signals to end-use customers;

- the attribution of transmission system assets to categories of prescribed transmission services should be more "user friendly" by providing clear direction as to the priority in which assets are attributed to each category;

- AER should provide a clear definition of what is meant by the term "directly attributable", including examples of how it is expected to be applied; and

- AER should prepare guidelines on the priority ordering process, as directed in the AEMC Rule Determination #22, including examples of how it is expected to be applied.

ETNOF members would welcome the opportunity to engage with AER to assist in clarifying these issues.

Appendix 1

Hypothetical Example - Breaker and Half Substation with Generator and DNSP connection

Consider a substation consisting of two breaker and half diameters (in total six circuit breakers), with one generator, one DNSP load connection, two shared network feeders (shown in Figure 1 below).

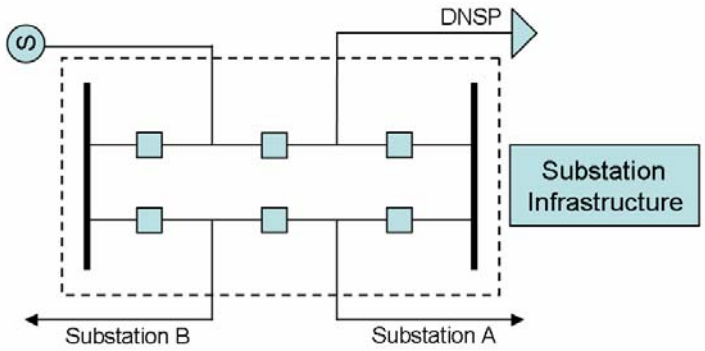

Figure 1 – Breaker and Half Substation

Previous Application

Under the old chapter 6, any combined used assets, such as the substation infrastructure (representing fencing, earthworks, amenities buildings etc) would be allocated equally between the four connections, i.e.:

- ¼ of Substation Infrastructure costs to the shared substation B bay,
- ¼ of Substation Infrastructure costs to the shared substation A bay,
- ¼ of Substation Infrastructure costs to exit connection DNSP bay and
- ¼ of Substation Infrastructure costs to entry connection generator.

Current Application

The first step in the process requires the direct allocation of the AARR to single categories of transmission system assets. The direct allocation process requires a mechanism by which to allocate transmission system. For this worked example within a substation, ETNOF has chosen to use the *Circuit Breakers* as the allocating mechanism and where this is not applicable, *Demand* to provide this allocation mechanism.

Applying this method to the substation in Figure 1 will provide the direct allocation of transmission assets costs shown in Figure 2.

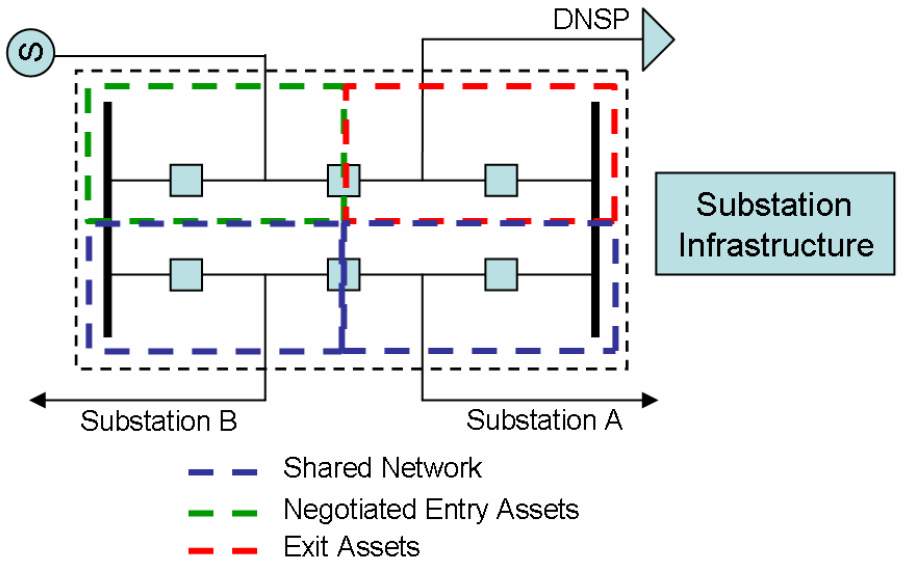

Figure 2 – Direct Allocation to the transmission system

The substation infrastructure box in Figure 2 has not been allocated as the substation infrastructure can be attributed to more than one category of prescribed transmission service and must therefore be allocated on the priority ordering process detailed under clause 6A.23.2(d) of the Rules.

The process detailed in Rules clause 6A.23.2(d) requires attributable cost shares that can be allocated to more than one category of transmission service to be allocated in the following manner:

(1) to the provision of prescribed TUOS services, but only to the extent of the stand-alone amount….

Clause 6A.23.2(d)(1) of the Rules requires the determination of a 'stand alone amount'. ETNOF would consider this to be the bottom diameter (including 3 circuit breakers) in Figure 1 and 2, as shown in Figure 3.

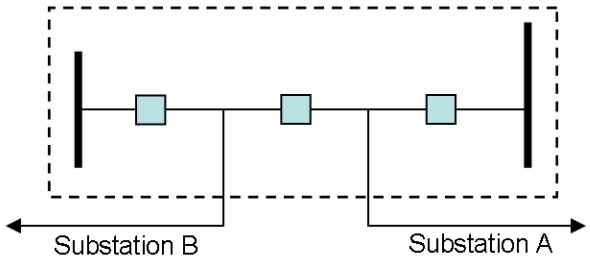

Figure 3 – Breaker and Half Substation

Using the circuit breakers as an allocator in Figure 3 above,

- $\frac{1\frac{1}{2}\text{ circuit breakers}}{6\text{ circuit breakers}} = \frac{1}{4}$ of the substation infrastructure costs will be allocated to the shared transmission network of Substation A and
- $\frac{1\frac{1}{2}\text{ circuit breakers}}{6\text{ circuit breakers}} = \frac{1}{4}$ of the substation infrastructure costs will be allocated to the shared transmission network of Substation B.

(2) to the provision of prescribed common transmission services, but only to the extent of the stand-alone amount….

No prescribed common transmission services are present in this example, therefore no allocation is required.

(3) Any remaining portion to the prescribed entry and prescribed exit services.

The remaining unallocated portion of the substation infrastructure must therefore be allocated to the prescribed entry and prescribed exit services. Again, using the circuit breakers as an allocating mechanism, we refer the top diameter from in the substation in Figure 1 and apply the following proportions :

- $\frac{1\frac{1}{2}\text{ circuit breakers}}{6\text{ circuit breakers}} = \frac{1}{4}$ of the substation infrastructure costs will be allocated to the prescribed exit service of the DNSP and
- $\frac{1\frac{1}{2}\text{ circuit breakers}}{6\text{ circuit breakers}} = \frac{1}{4}$ of the substation infrastructure costs will be allocated to the prescribed entry costs of the generator.

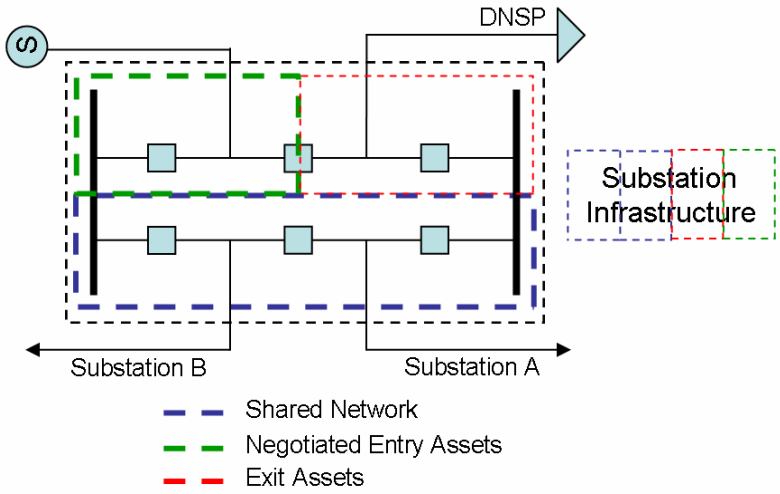

Figure 4 – Allocated Substation

Service	*Portion*
Prescribed TUOS – Substation A	¼
Prescribed TUOS – Substation B	¼
Prescribed Common	0
Negotiated Entry Service	¼
Prescribed Exit Service	¼

Table 4 - Attributable cost shares for substation infrastructure.

Conclusion

The application of the priority ordering process under clause 6A.23.2(d) of the Rules has not resulted in costs being transferred from Prescribed TUOS to Prescribed Entry / Exit Services.

The above example of using priority ordering to allocate the substation infrastructure costs highlights the difficulty of implementing the AEMC's intent detailed in the Rule Determination[5]. The AEMC Rule Determination states that '*transmission services should not be based on a simplistic pro-rata basis'* when allocating between multiple categories*,* however, alternative allocative methods are considered more subjective. It is believed this approach, provides a balance between providing clarity to customers, ease of implementation and the Rules.

ETNOF would appreciate the AER's comments on the Appendix 1 example.

[5] AEMC 2006, National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, Rule Determination, 21 December 2006, Sydney, Pages 36-38.