AEMC

Australian Energy Market Commission

Transmission Pricing For Prescribed Transmission Services: Rule Proposal Report

Proposed National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006

Signed: ....

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For and on behalf of
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About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy, established the Australian Energy Market Commission (AEMC) in July 2005 to be the Rule maker for national energy market. The AEMC is currently responsible for Rules and policy advice covering the National Electricity Market. It is a statutory authority. Our key responsibilities are to consider Rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on AEMC initiative.

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Abbreviations

AARR	Aggregate Annual Revenue Requirement
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AGL	Australian Gas Light Company
ASRR	Annual Service Revenue Requirement
CMR	Congestion Management Review
COAG	The Council of Australian Governments
Commission	See AEMC
CPI	Consumer Price Index
CRNP	Cost Reflective Network Pricing
DNSP	Distribution Network Service Provider
DORC	Depreciated Optimised Replacement Cost
DSM	Demand Side Management
EAG	Energy Action Group
ESCOSA	Essential Services Commission of South Australia
ETNOF	Electricity Transmission Network Owners' Forum
ETSA	ETSA Utilities
EUAA	Energy Users' Association of Australia
Gas Code	National Third Party Access Code for Natural Gas Pipelines
Gas Access Regime	National Gas Access Regime
IRSR	Inter Regional Settlement Residue
kVA	kilo Volt-ampere
kW	kilowatt
KWh	kilowatt hour
LRMC	Long Run Marginal Cost
MAR	Maximum Allowed Revenue
MCE	Ministerial Council on Energy
MEU	Major Energy Users Inc
MNSP	Market Network Service Provider
mVA	mega Volt-ampere
MW	Megawatt
MWh	Megawatt hour
NEL	National Electricity Law
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NER	National Electricity Rules
NGF	National Generators Forum

ORC	Optimised Replacement Cost
PC	Productivity Commission
PIAC	Public Interest Advocacy Centre
PTRM	Post Tax Revenue Model
RAB	Regulatory Asset Base
Rules	National Electricity Rules
SRA	Settlement Residue Auction
SRMC	Short Run Marginal Cost
TNO	Transmission Network Owner
TNSP	Transmission Network Service Provider
TUoS	Transmission Use of System

Preface

The National Electricity Law (NEL) requires the Australian Energy Market Commission (Commission) to amend the National Electricity Rules (NER) governing the regulation of electricity transmission revenue and prices before January 2007.

Publication of the Proposed National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 (Proposed Pricing Rule) and this Rule Proposal Report represents an important step in the Commission's Rule change process in relation to the pricing regulation aspects of the review of transmission revenue and pricing (the Review). In conducting the Review, the Commission has placed an emphasis on the role that the transmission network has in facilitating competition and efficient resource use in the electricity wholesale and retail markets. The interactions of the transmission network with the competitive sectors of the electricity system, together with the market power that can be associated with the supply of certain transmission services, are the principal reasons why the Commission has sought to ensure that the transmission regulatory arrangements are effective in promoting efficient behaviour and outcomes across the market.

This Review of the Rules for the economic regulation of electricity transmission is part of a broader program of reform of the arrangements governing investment in, and operation of the national electricity transmission grid and its contribution to the efficient performance of the National Electricity Market (NEM) as a whole.

The Commission is currently processing a number of related Rule change proposals submitted by the Ministerial Council on Energy (MCE) that are concerned with facilitating timely and efficient transmission investments[1]. The MCE has also directed the Commission to review and recommend options for improved management of congestion in the transmission network (the Congestion Management Review or CMR). Under the auspices of the Commission, the Reliability Panel is also conducting a review of the reliability standards and related arrangements, which influence investment and support the reliability and performance of the national electricity system.

In developing the Proposed Pricing Rule, the Commission has had careful regard to the work in the other related reviews, views expressed in submissions to the transmission pricing Issues Paper and to its review of transmission revenue rules. In particular:

- the CMR may have implications for the role of transmission pricing in the NEM; and

- the new arrangements proposed for negotiated transmission services in the Draft Revenue Rule[2] address issues surrounding the provision of, and pricing for, above or below standard services.

Taking all these matters into account, the Commission has developed a Proposed Pricing Rule that is based on three key propositions:

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[1] MCE, Regulatory Test Rule Change Proposal, 12 October 2005, and MCE, Last Resort Planning Power Rule Change Proposal, 12 October 2005.

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

- Subject to the outcomes of other reviews being undertaken, there is no need for substantive change to the general means by which Transmission Network Service Providers (TNSPs) set prices for prescribed transmission services under the current Rules;

- The existing pricing Rules specify excessively detailed requirements for the implementation and administration of pricing methodologies; and

- The procedural requirements for developing TNSPs' pricing methodologies should be clarified to reflect the degree of codification in the Rules.

In line with these propositions, the Commission has developed a Proposed Pricing Rule that confirms the continued operation of current pricing methodologies while also providing scope for innovation into the future. This has been achieved through a recasted regulatory framework incorporating codification in the Rules of the key design features of the regime including:

- Principles for prescribed transmission service pricing methodologies (arrangements for the pricing of negotiated services have been dealt with in the Draft Revenue Rule);

- The option or requirement for the Australian Energy Regulator (AER) to make guidelines in specific areas of pricing implementation and administration; and

- Clear procedural requirements for the development, implementation and administration of pricing methodologies.

The Commission considers that this approach is consistent with the Draft Revenue Rule and will further the NEM Objective.

The Commission is seeking views on the scope, construction and detailed drafting of the Proposed Pricing Rule and the reasons provided in support of the approach in this Rule Proposal Report.

After considering the views expressed in submissions and conducting its own further analysis, the Commission intends to publish a Draft Determination and Draft Rules in October/November 2006 for further consultation before making its Final Determination and Final Rule by 1 January 2007.

Interested stakeholders are invited to make comment on the issues outcomes in this Paper and Proposed Rule. Submissions should be received by 5pm on Monday 25th September 2006.

Submissions can be sent electronically to submissions@aemc.gov.au or by mail to:

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Overview of the Proposed Rule

In the context of the current reforms to the regulation of the national energy market, the Australian Energy Markets Commission (the Commission) has been required to conduct a review of the revenue and pricing rules to apply to the regulation of electricity transmission network services (the Review).[3] This Rule Proposal Report presents the Commission's reasons for its Proposed Pricing Rule, which is the second stage of the Review, following the recent release of its Draft Revenue Rule.[4]

Given the Commission's decision on the approach to regulation of the revenues of Transmission Network Service Providers (TNSPs), there is an initial question as to whether pricing to recover TNSPs' allowable revenues ought to be regulated at all. Based on stakeholder views in submissions and the Commission's analysis, the Commission is satisfied that there is a case for some continuing regulation of transmission pricing.

Transmission pricing methodology is fundamentally concerned with the question of 'who should pay how much' in order to recover the costs of providing Prescribed Transmission Service.[5] The determination of who pays and the amount they pay has implications for the achievement of the National Energy Market (NEM) Objective, particularly as it relates to promoting the efficient use of transmission services and investment by electricity consumers and producers.

Having considered submissions and conducted its own analysis, the Commission has reached the view that the current approach to recovering the costs of the provision of Prescribed Transmission Services is broadly appropriate. Therefore, at this stage, the Commission does not consider that there is a need to alter the substance of the current approach to pricing for Prescribed Transmission Services. However, this view is conditional on the outcomes of the other reviews currently being undertaken. In particular, the Congestion Management Review (CMR) may have implications for the appropriateness of the current broad allocation of Prescribed Transmission Services costs to electricity consumers.

Leaving aside the substantive issues around 'who pays how much', the Commission considers that the current Rules for transmission pricing incorporate an unnecessary level

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[3] The requirement is specified in Section 35(1) of the National Electricity Law.

[4] Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.

[5] A Prescribed Transmission Service is any of the following services:
(a) *shared transmission services* that meet (but do not exceed) the *network* performance requirements (both as to quality and quantity) (if any) which those *shared transmission services* are required to meet under any *jurisdictional electricity legislation*; and
(b) *shared transmission services* that meet (but do not exceed) the *network* performance requirements (both as to quality and quantity) set out in schedule 5.1a or 5.1, except to the extent that the *network* performance requirements which those *shared transmission services* are required to meet are rescribed under any *jurisdictional electricity legislation*; and
(c) services that are required by *NEMMCO* to be provided under the *Rules*, that are necessary to ensure the integrity of a *transmission network*, including through the maintenance of *power system security* and assisting in the planning of the *power system*; and
(d) *connection services* that are provided by one *Network Service Provider* to serve another *Network Service Provider*,
but does not include negotiated transmission services or market network services.

of detail regarding the implementation and administration of pricing methodologies. The Commission has therefore proposed a shift to a principles-based regulatory framework where the implementation elements of the regime are left to the guided discretion of TNSPs and the AER. This confirms the continuation of current pricing practices while providing scope for pricing innovations to be proposed in accordance with principles in the Rules. This rebalancing of the rules for pricing is consistent with the approach adopted by the Commission in the Draft Revenue Rule.

In addition to developing a principles-based regulatory framework in the Proposed Pricing Rule, the Commission has considered other matters such as whether discounts to particular directly-connected consumers should be permitted, the treatment of TUoS rebates and inter-regional TUoS arrangements.

Importantly, the Commission highlights the complementarity between the Pricing Rule Proposal and the approach adopted in Part D of the Draft Revenue Rule in relation to the pricing of Negotiated Transmission Services.[6] TNSPs can earn revenue from both the provision of Prescribed and Negotiated Transmission Services. The Pricing Rule Proposal deals only with the arrangements for the regulation of transmission pricing for Prescribed Transmission Services, while the Draft Revenue Rule sets out principles and processes for the pricing of Negotiated Transmission Services. The Commission seeks stakeholder views both on:

- the complementarity of these approaches for addressing the pricing issues relating to the different types of transmission service; as well as
- the overall appropriateness of the Proposed Pricing Rule given the proposed arrangements for Negotiated Transmission Services in the Draft Revenue Rule.

In developing the Proposed Pricing Rule, the Commission has undertaken an extensive public consultation process that included the issuing of an Initial Scoping Paper and a Transmission Pricing Issues Paper. The Commission has received and considered submissions from stakeholders in response to these papers.

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[6] A Negotiated Transmission Services is any of the following services:

(a) a shared transmission service that:
(1) exceeds the *network* performance requirements (both as to quality and quantity) (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; and
(2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not meet the *network* performance requirements (both as to quality and quantity) set out in schedule 5.1a or 5.1;
(b) *connection services* that:
(1) in the case of *entry services*, are provided to serve a *Generator* or group of *Generators* at a single *transmission network connection point*;
(2) in the case of *exit services*, are provided to serve a *Transmission Customer* or a group of *Transmission Customers*, at a single *transmission network connection point*;
other than *connection services* that are provided by one *Network Service Provider* to serve another *Network Service Provider;* or
(c) *use of system services* provided to a *Transmission Network User* and referred to in rule 5.4A(f)(3) in relation to *augmentations* or *extensions* required to be undertaken on a *transmission network* as described in rule 5.4A,
but does not include a market network service.

The remainder of this overview provides a summary of the key elements of the Commission's Proposed Pricing Rule and identifies areas where the Commission is seeking particular comment.

Promotion of the NEM Objective

The Commission's Proposed Rule for the regulation of transmission pricing seeks to promote the NEM Objective. The NEM Objective is focused on the provision of efficient, reliable and safe electricity services for the long term interests of consumers. The Commission believes that the NEM Objective is founded on the concept of serving the long term interests of consumers through the promotion of economic efficiency in the provision, use of, and investment in, electricity services. Efficiency refers to the maximisation of the total value consumers and producers jointly obtain from the market. In the context of this Proposed Rule, the Commission considers that the rules for transmission pricing should also promote good regulatory practice by enhancing:

- Stability and predictability – that is, transmission prices should be stable and predictable enough to enable market participants to make long term decisions; and

- Transparency – the process for setting prices should be as transparent as practicable to give participants confidence that pricing outcomes will be consistent with the NEM Objective and the Rules.

To achieve these aims, and consistent with the approach applied in the Draft Revenue Rule, the Commission has sought to develop a robust regulatory framework for transmission pricing. Such a framework requires the Rules to provide appropriate signals to avoid either under or over investment, address the potential for network operators to exercise market power and enhance transparency and predictability of the regulatory arrangements and approach.

The Commission considers that these outcomes can be best achieved by:

- clarifying that the 'causer pays' principle[7] is to be applied in linking the prices paid by consumers and producers of electricity to transmission costs ;

- permitting the recovery of the efficient costs of transmission service provision, including 'sunk costs'[8];

- ensuring that the transmission prices provide efficient locational and investment signals to participants; and

- ensuring the pricing rules take account of other aspects of the NEM arrangements, such as transmission investment regulatory arrangements, in order to avoid inefficient 'oversignalling' of the value or cost of transmission.

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[7] The principle that prices for transmission services should reflect the (incremental) costs incurred as a direct result of the decisions of a particular network user or potential user.

[8] Sunk costs refer to those costs that would not be recovered if the decision that caused those costs to be incurred were reversed.

Key transmission pricing issues

The Commission has examined the current basis for translating transmission costs to prices, as contained within the current Rules, and considered the submissions that commented on specific questions raised in the Issues Paper. These issues included:

- whether generators should pay the costs directly resulting from their connection decisions (known as 'shallow connection') or whether they should pay for downstream augmentations that may increase the transfer capability of the network from their connection point (known as 'deep connection');

- whether generators should contribute towards the costs of the shared network through prescribed generator TUoS charges;

- the appropriateness of the locational pricing methodologies of CRNP[9] and modified CRNP[10]; and

- whether price structures should be specified in the Rules.

The Commission considers that the current approach to these issues is generally consistent with the promotion of the NEM Objective and has not proposed substantive changes in relation to their current treatment in the Rules. However, this approach is conditional on the outcomes of other reviews underway. In particular, the Commission notes that the outcomes of the Congestion Management Review (CMR) may affect its present position on these matters.

Framework for regulation of transmission pricing for Prescribed Transmission Services

In light of its view that the approach to translating costs to prices in the current Rules is broadly consistent with the NEM Objective, the Commission has considered the appropriate regulatory framework for delivering these outcomes. The Commission believes that having specified a revenue regulation approach that permits the recovery of efficient costs while limiting the potential for TNSPs to exercise market power, maintaining the current detailed approach in the Rules to the implementation and administration of pricing methodologies is not warranted.

In developing the Draft Revenue Rule, the Commission has sought to ensure that fundamental principles and processes for the regulatory framework are codified in rules. However, more detailed aspects of the framework including the implementation and administration of principles and processes have been left to TNSPs and the regulator to resolve through guided discretion. The Commission considers that the regulatory framework for transmission pricing regulation should be consistent with the approach it has adopted for the regulation of transmission revenue.

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[9] Cost Reflective Network Pricing (CRNP) is defined in the Rules as "A cost allocation method which reflects the value of assets used to provide *transmission* or *distribution* services to *Network Users*". It is described in Schedule 6.4 of the existing Rules. Both CRNP and modified CRNP have also been given new definitions in the Proposed Rule.

[10] Modified CRNP is described in Schedule 6.4 of the existing Rules.

The Commission has therefore developed a principles-based approach for transmission pricing regulation. This approach ensures that transparency and certainty over the key design features of the regulatory regime for pricing remain in the Rules while providing for implementation and administration issues to be left to the guided discretion of the AER and the TNSPs. While confirming the ability for current pricing practices to continue, this approach provides scope for innovation in pricing methodologies in the future as appropriate.

The Commission considers that the principles-based approach should be supported by clear procedural arrangements incorporating the assessment of pricing methodologies by the AER in accordance with principles in the Rules. In addition, the Proposed Pricing Rule requires or allows the AER to develop guidelines in specific areas such as the attribution of specific transmission assets to Prescribed Transmission Service categories and the implementation of the CRNP (and modified CRNP) methodologies that are presently in the Rules. This is intended to enhance clarity and promote certainty over the implementation of the pricing arrangements for TNSPs and their customers.

The Commission's Proposed Pricing Principles for Prescribed Transmission Services

In developing the principles to be codified in the Proposed Pricing Rules for Prescribed Transmission Services, the Commission has confirmed the fundamental role of the causer pays principle in providing signals for efficient economic decision-making. The Commission has therefore adopted the concept of costs that are 'directly attributable (on a causation basis)' to capture this intent.

In light of these considerations, the principles in the Proposed Pricing Rule contain key elements that mirror, at a higher and more appropriate level of detail, the approach in the current Rule. These are:

- TNSPs' Aggregate Annual Revenue Requirement (AARR)[11] is to be allocated between categories of Prescribed Transmission Services based on the relative asset costs and operating and maintenance costs directly attributable (on a causation basis) to the provision of each service (this results in the annual service revenue requirement for each category of Prescribed Transmission Service (ASRR)[12]). This

[11] For the purposes of this Part J, the aggregate annual revenue requirement (AARR) for prescribed transmission services provided by a Transmission Network Service Provider, is the maximum allowed revenue for that provider for a regulatory year of a regulatory control period, adjusted:

(a) in accordance with the adjustments referred to in [draft] clause 6A.3.2;

(b) for any prudent discount under rule 6A.27;

(c) for any over-recovery amount or under-recovery amount; and

(d) by subtracting the following amounts:

(1) estimated revenues from *auction proceeds* distributed to the *Transmission Network Service Provider* under clause 3.18.4 and from *settlements* residue; and

(2) operating and maintenance costs incurred in the provision of *common transmission services*.

[12] For the purposes of this Part J, the annual service revenue requirement (ASRR) for a Transmission Network Service Provider is the portion of the AARR for prescribed transmission services provided by a Transmission Network Service Provider that is allocated to each category of prescribed transmission services for that

provides for allowable revenues to be allocated to services based on the costs caused by the provision of that service.

- The ASRRs for:
  - Prescribed Entry[13] and Exit[14] services are to be recovered from network users based on the relative asset and operating and maintenance costs directly attributable (on a causation basis) to the service to each connection point. This allocation basis recognises the relative simplicity of allocating these costs on a causer pays basis;
  - Prescribed Transmission Use of System (TUoS) Services[15] are to be recovered from consumer (load) connection points partly on a proportionate network asset use basis (the locational component) and partly on a postage-stamped basis (the non-locational component). This reflects the difficulty of allocating shared network costs to individual load connection points on a direct causation basis, but acknowledges that the shared network is developed primarily to serve the needs of consumers and hence, that in general, consumers should pay these costs; and
  - Common Transmission Service[16] is to be recovered from consumer (load) connection points on a postage-stamped basis. The rationale behind postage-stamping is that users in different locations do not make differential contributions to the incurring of these costs and hence should not be charged a differential rate;
- Development of price structures to enable recovery of the shares of the ASRRs allocated to each network user connection point, which include:
  - a fixed annual amount for Prescribed Entry and Exit services;
  - postage-stamped prices for Common Transmission Service and the non-locational component of Prescribed TUoS Services; and

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provider and that is calculated by the multiplication of the AARR by the attributable cost share for that category of services in accordance with the principles in clause 6A.24.2.

[13] Prescribed Entry Service means *entry services* that are *prescribed transmission services* by virtue of the operation of [draft] clause 11.5.11.

[14] Prescribed Exit Service means *exit services* that are *prescribed transmission services* by virtue of the operation of [draft] clause 11.5.11 and *exit services* provided to *Distribution Network Service Providers*.

[15] Prescribed Transmission Use of System Services (or Prescribed TUoS Services) means *prescribed transmission service* provided to a *Transmission Customer* for use of the *transmission network* for the conveyance of electricity that:

(a) provide different benefits to *Transmission Customers* who have a *connection point* with the relevant *transmission network* depending on their location within the *transmission system*; and

(b) are not common transmission services, prescribed entry services or prescribed exit services.

[16] Common Transmission Services means *prescribed transmission services* that ensure the integrity of a *transmission system* and provide equivalent benefits to all *Transmission Customers* who have a *connection point* with the relevant *transmission network* without any differentiation based on their location within the *transmission system.*

- o peak demand-or consumption-based prices for the locational component of Prescribed TUoS Services with a 2 per cent limit on changes to these prices compared to the average price in a region.

Multi-part tariffs of this kind are consistent with providing efficient locational and usage signals while helping to minimise the demand distortions in recovering fixed and common costs.

The Commission believes that this approach is largely consistent with the approach in the current Rules.

Process for regulatory oversight of pricing methodology

The Commission has sought to develop and codify regulatory procedures that correspond to those adopted in the Draft Revenue Rule. The Proposed Pricing Rule requires each TNSP to develop and submit a proposed pricing methodology to the AER that will apply during a regulatory control period. The AER is required to approve the proposed pricing methodology if it determines that it is consistent with the pricing principles and the Pricing Methodology Guidelines (as developed by the AER). It is only if the AER determines that the TNSP's proposed methodology is not consistent with the principles and Guidelines that it is empowered to substitute a different or modified methodology.

As part of a decision to approve the proposed pricing methodology, the AER is required to consult with, and take into consideration any comments received, from interested parties. The Commission considers that this increased level of consultation will promote greater transparency in the approach to transmission pricing.

Prudent Discounts

Under the existing transmission pricing regime[17], where a TNSP agrees to a lower Customer TUoS General Charge or Transmission Customer Common Service Charge, the TNSP may recover the foregone amount from other Transmission Customers, so long as the 'discount' complies with the AER's Guidelines.[18] The Commission agrees with the majority view contained in submissions that supported the continuation of a prudent discounts regime in the Rules.

The Commission considers that there are benefits from improving the degree of certainty and transparency of the regulatory framework for prudent discounts, particularly in view of the long term nature of many transmission service agreements. The Commission believes that benefits can be achieved by:

- elevating the AER Guidelines to the Rules;
- allowing (but not obliging) a TNSP to seek 'up-front' approval of a discount from the AER and for such an approval to remain effective for the duration of the TNSP's agreement with the relevant Transmission Customer; and

[17] See clause 6.5.8.

[18] Then the ACCC: ACCC, Guidelines for the Negotiation of Discounted Transmission Charges, 3 May 2002.

- providing a process to be followed by the AER in dealing with the up-front application for a prudent discount.

The Commission is seeking views from stakeholders on the appropriateness of its decision to elevate the AER Guidelines to the Rules and on the retention of the aspects of the existing Rules that restrict discounts to the Customer TUoS General Charge and the Transmission Customer Common Service Charge.

The Commission is also of the opinion that existing arrangements for prudent discounts should be grandfathered and has developed the Proposed Rule accordingly.

TUoS rebates to embedded generators

The Issues Paper sought views on whether changes should be made to the treatment of TUoS rebates for embedded generators. Most of the submissions received on this issue were in favour of retaining these rebates as they are provided for in the current Rules.[19] The Commission has therefore decided not to make any changes on this matter in the Proposed Rule. However, the Commission is interested in stakeholder views on whether some conditions on the existing regime should be implemented.

In particular, the Commission is seeking stakeholder feedback on three options that have arisen out of the consultation process:

- that TUoS rebates apply to generators up to 10 MW in capacity while larger generators remain eligible for network support payments; or

- that a minimum threshold be defined to account for the reasonable costs of administering the TUoS rebate; or

- maintain the existing arrangements but require any network support payments to an embedded generator reflect the expected TUoS rebates they would receive.

Inter-regional TUoS arrangements

The Issues Paper also sought views on whether changes should be made to the arrangements for inter-regional TUoS transfers. Most of the submissions received on this issue were in favour of minimal change only or for guidance to be sought from the MCE.

The Commission understands that the absence of effective inter-regional TUoS arrangements does not, in itself, reduce the ability of TNSPs to invest in interconnectors and recover the costs from network users. To the extent TNSPs are presently discouraged from interconnector investment, this may be due to the different regulatory arrangements for the recovery of market benefit investment compared with reliability-driven investment.

However, the Commission is aware that the limited effectiveness of the inter-regional TUoS arrangements may reduce the efficiency of the transmission prices applied in the NEM. Therefore, the Commission seeks further submissions on other potential approaches for the treatment of inter-regional TUoS.

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[19] See clause 5.5.

Some alternative approaches for inter-regional TUoS already proposed in submissions include:

- maintaining the existing arrangements but adding criteria for determining the inter-jurisdictional payment referred to in clause 3.6.5(a)(5);
- adopting a simplified 'rule of thumb' such as splitting the IRSR equally between the exporting and importing regions to reflect the benefit the importing region's consumers gain from the exporting TNSP's network;
- implementing an inter-regional TUoS pricing arrangement by obliging TNSPs to apply the Customer TUoS Usage Charge to interconnectors; or
- developing a full NEM-wide cost allocation approach for inter-regional TUoS pricing arrangements.

Pricing for negotiated transmission services

The Commission highlights that TNSPs may earn revenue from the provision of both Prescribed and Negotiated Transmission Services. The Proposed Pricing Rule deals only with pricing for Prescribed Transmission Services. However, Part D of the Draft Revenue Rule proposes a regime for the pricing of Negotiated Transmission Services. This regime includes principles, negotiating frameworks, criteria, processes, confidentiality and dispute resolution. Therefore, to the extent that actual or potential network users seek to procure and/or TNSPs seek to provide, transmission services that fall outside the definition of Prescribed Transmission Service, the arrangements specified in the Draft Revenue Rule would, if confirmed, be applicable.

The Commission seeks stakeholder views on whether the proposed arrangements in the Proposed Pricing Rule and the Draft Revenue Rule complement each other suitably and also whether the pricing principles in clause 6A.9.1 of the Draft Revenue Rule are appropriate. These are:

(1) the price for a *negotiated transmission service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*;

(2) subject to subparagraphs (3) and (4), the price for a *negotiated transmission service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand alone basis;

(3) if the *negotiated transmission service* is the provision of a *shared transmission service* that:
> (i) exceeds the network performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
> (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1, then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service;

(4) if the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider*'s avoided cost of providing that service;

(5) the price for a *negotiated transmission service* must be the same for all *Transmission Network User*s unless there is a material difference in the costs of providing the *negotiated transmission service* to different *Transmission Network User*s or classes of *Transmission Network Users*;

(6) the price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person;

(7) the price for a *negotiated transmission service* should be based on terms and conditions which are consistent with the safe and reliable operation of the *power system* in accordance with the *Rules*;

(8) the price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations* associated with the provision of the *negotiated transmission service*; and

(9) the price for a *negotiated transmission service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and *reliable* operation of the *power system* in accordance with the *Rules*.

These principles must form the basis of the criteria to be applied:

- By a TNSP in negotiating prices for Negotiated Transmission Services; and
- By a commercial arbitrator in resolving disputes about prices for Negotiated Transmission Services.

The Commission seeks to develop these principles further in the Final Revenue Rule in light of its present intention to retain a 'shallow connection' approach to charges for Prescribed Entry Services in the Proposed Pricing Rule and stakeholders' comments on this intention.

1 Introduction to the Rule Proposal Report

In the context of the current reforms to the regulation of the national energy market, the Australian Energy Market Commission (the Commission) has been required to conduct a review of the revenue and pricing Rules (the Review) to apply to the regulation of electricity transmission network services.[20] The matters required to be reviewed are specified in items 15 to 24 of Schedule 1 of the National Electricity Law (see Appendix 1) and include, amongst other matters:

- the regulation of transmission revenues (item 15); and
- the regulation of transmission prices (item 16).

Due to the complex nature of the review task, the Commission decided to undertake the Review in two stages:

- First, the Commission has been reviewing the existing Rules applicable to the regulation of transmission revenue earned by TNSPs, and recently released a Draft Revenue Rule for further consultation;
- Second, the Commission has been reviewing the existing Rules to apply to the pricing of Prescribed Transmission Services by TNSPs. This report presents the Commission's rationale for its Proposed Pricing Rule.

There are important and strong linkages between the rules relating to the regulation of transmission revenues and pricing. At a high level, revenue rules seek to provide, in the absence of direct competitive pressures on TNSPs:

- incentives for the efficient investment in, and provision of, transmission services; and
- constraints on the aggregate revenues TNSPs can earn from their customers from the provision of Prescribed Transmission Services.

Pricing rules seek to ensure prices provide incentives for the efficient use of the various transmission services. They do this by providing signals for efficient electricity consumption and production decisions, as well as efficient investment decisions by actual and potential network users.

In considering its Proposed Pricing Rule, the Commission has been mindful of the interactions between the revenue and pricing rules, and has endeavoured to design an overall effective regulatory framework for electricity transmission regulation.

[20] The requirement is specified in Section 35(1) of the National Electricity Law.

1.1 The Commission's Approach

To develop its Proposed Pricing Rule, the Commission has undertaken an extensive investigation and public consultation process. This involved:

- the release of an initial Scoping Paper in July 2005, which identified various issues that the Commission believed to be important to these reviews, and invited submissions from stakeholders on the issues raised; and
- the release of a Pricing Issues Paper in November 2005, which presented the Commission's further analysis of the pricing issues identified earlier and raised in submissions to the Scoping Paper, and inviting further submissions.

The Commission has carefully considered stakeholder submissions made in response to these papers in developing the Proposed Pricing Rule (see listing in Appendix 2). The Commission has also taken into consideration the views and discussion raised during the development of the Draft Revenue Rule, which was released on 27 July 2006.

Another relevant consideration for the Review has been the wider debate on regulation in the energy market as reflected in recent reports by the Productivity Commission[21] and the Ministerial Council on Energy's Expert Panel[22].

In forming its views on the Proposed Pricing Rule, the Commission is also required to satisfy a number of legislative requirements including:

- meeting minimum content requirements for a Rule Proposal[23];
- ensuring the Rule Proposal satisfies the NEM Objective[24] and Rule-making test[25]; and
- ensuring the Proposed Rule is within the AEMC's Rule making powers.

The Commission is satisfied that it has met these requirements and additional details on how these requirements have been met are provided below.

The publication of the Proposed Pricing Rule is accompanied by this Rule Proposal Report, which provides the Commission's reasons for its decisions and represents the commencement of the formal Rule change process for the transmission pricing component of the Review.

The next stages for the transmission pricing component of the Review are as follows:

- submissions on the Proposed Pricing Rule and this Rule Proposal Report close on Monday 25th September 2006;

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[21] Productivity Commission, *Review of the National Access Regime*, Report no. 17, 2001, AusInfo, Canberra

[22] Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, 2006.

[23] Clause 8, National Electricity Regulation

[24] Section 7, NEL

[25] Section 88, NEL

- release of a Draft Pricing Rule in October/November 2006;
- submissions on the Draft Pricing Rule close on in early December 2006; and
- release of a Final Pricing Rule by 1 January 2007.

1.2 The Role of the NEM Objective

The National Energy Market (NEM) Objective requires the Commission to consider the promotion of efficient investment in, and use of, electricity services, when considering or developing Rule Proposals. Economic efficiency is commonly defined as having three elements and in the context of considering transmission pricing rules, these are:

- Productive efficiency – means the electricity system is operated on a 'least cost' basis given existing infrastructure and the status of the network. For example, generators should be dispatched in a manner that minimises the total system costs of meeting consumers' demands;
- Allocative efficiency – means electricity production and consumption decisions are based on prices that reflect the opportunity cost of the available resources; and
- Dynamic efficiency – means maximising ongoing productive and allocative efficiency over time, and is commonly linked to the promotion of efficient longer term investment decisions.

Most stakeholders believe that the Commission should focus on efficiency in the longer term, suggesting that dynamic efficiency should be given greater weight when considering Rule Proposals[26].

Further, the Commission has taken the view that the NEM Objective is not solely focussed on a technical approach to the promotion of efficiency. Rather, the NEM Objective has implications for the *means* by which regulatory arrangements operate as well as their intended *ends*. This means that the Rules for transmission pricing should also promote:

- stability and predictability – other things being equal, transmission prices should be sufficiently stable and predictable to enable participants to plan and make long term decisions without suffering price shocks; and
- transparency – the price-setting process should be as transparent as practicable so that participants retain confidence in the regulatory arrangements and are able to make locational and consumption decisions on an informed basis.

These requirements are founded in the good regulatory practice design principle, which the Commission believes is central to its task in furthering the NEM Objective.

In the Issues Paper, the Commission asked whether the NEM Objective should also encompass distributional concerns as well as economic efficiency, and if so, how these distributional concerns should be taken into account.

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[26] For example: PIAC, 6 January 2006, pp.1; EnergyAustralia, 23 December 2005, p.13; MEU, December 2005, p.24.

Stakeholders were divided as to whether distributional concerns were an appropriate consideration for the application of the NEM Objective to transmission pricing. Several considered that economic efficiency should be the sole focus of the Rules.[27] Others were satisfied that efficiency should be the key focus, while favouring the inclusion of options for minimising price shocks and radical rebalancing of transmission tariffs across geographic areas as part of that focus.[28] However, some stakeholders, including PIAC[29], considered that implications for consumer welfare should be an important criterion for developing pricing arrangements.

The Commission considers that the NEM Objective is primarily concerned with efficiency and good regulatory practice. These qualities will help ensure that the arrangements will benefit consumers in the long run. Rather than seeing distributional outcomes as a distinct limb or component of the NEM Objective, the Commission has taken the view that distributional outcomes have relevance in so far as they may negatively influence the stability and integrity of the pricing arrangements. Therefore, the Commission proposes to maintain or adopt measures that limit the extent of price shocks for transmission network users. However, basing fundamental decisions such as who pays how much primarily on distributional criteria rather than efficiency and good regulatory practice is likely to be counter-productive to the interests of consumers in the long run.

1.3 Structure of the Report

The remainder of this report is structured as follows:

- Chapter 2 outlines the Commission's framework and approach in developing the proposed pricing rules, providing an overview of the Commission's rationale;
- Chapter 3 discusses the Commission's views on a number of specific issues relating to the pricing rules, and provides a detailed rationale for the Commission's present intention to not fundamentally change the existing pricing arrangements in the Proposed Pricing Rule;
- Chapter 4 provides detailed reasons for the Commission's approach to the Proposed Pricing Rule, particularly its approach to the appropriate level of detail on implementation and administration matters;
- Chapter 5 specifies the Commission's approach to the process by which the Proposed Pricing Rule is implemented, including the role of the AER in approving pricing methodologies proposed by TNSPs;
- Chapter 6 discusses prudent discounts;
- Chapter 7 discusses TUoS rebates to embedded generators;
- Chapter 8 discusses inter-regional TUoS arrangements;

[27] AGL, 20 January 2006, p.A-1; MEU, December 2005, p.19; QR, 9 January 2006, pp.2-4.

[28] TNOs, December 2005, p.5; UED, December 2005, pp.5-6.

[29] PIAC, 6 January 2006, pp.1-2.

- Chapter 9 explains the implications of the approach to the pricing of Negotiated Transmission Services in the Draft Revenue Rule.

- In addition:

    - Appendix 1 reproduces Schedule 1, items 15-24, of the NEL;

    - Appendix 2 provides a list of stakeholders who made submissions to the Pricing Issues Paper; and

    - Appendix 3 provides a timeline for the transmission review process.

2 Framework and approach for the Proposed Pricing Rule

In the Draft Revenue Rule, the Commission specified a full revenue cap methodology that enables the recovery of efficient costs while managing TNSPs' potential for exercising market power. Matters of implementation detail were left to the guided discretion of the AER and TNSPs. In light of the proposed revenue regime, the Commission considers that a principles-based approach to pricing, supported by procedural requirements in the Rules, is appropriate. This means that TNSPs would be responsible for the implementation and administration of pricing methodologies in accordance with the Rules. The role of the regulator would be to assess the pricing methodology against the principles and to monitor pricing outcomes.

The aim of this chapter is to outline the rationale of the Commission for the approach taken in the Proposed Pricing Rule.

This chapter is structured as follows:

- Section 2.1 discusses a number of matters relating to the role of transmission pricing in the NEM. These are:
  - the importance of transmission pricing in providing signals to actual and potential network users;
  - issues arising in the setting of transmission prices to promote the NEM Objective; and
  - in light of the above matters, the need for regulation of pricing methodologies for Prescribed Transmission Services;
- Section 2.2 provides an overview of the recent debate on pricing issues in the context of infrastructure regulation, particularly the views of the Productivity Commission in its review of the National Access Regime[30] and the recent report by the Ministerial Council on Energy's Expert Panel on Energy Access Pricing[31];
- Section 2.3 briefly outlines the approach to transmission pricing contained in the existing Rules as the basis for considering the rationale underpinning the Commission's decisions regarding its proposed approach to transmission pricing; and
- Section 2.4 explains the reasons underlying:
  - the Commission's present view that existing pricing practices are broadly appropriate and should continue to be permitted;
  - the principles-based regulatory framework in the Proposed Pricing Rule; and
  - the proposed procedural framework for approving TNSPs' proposed pricing methodologies in the Proposed Pricing Rule.

[30] Productivity Commission, *Review of the National Access Regime*, Report no. 17, 2001, AusInfo, Canberra.

[31] Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, 2006.

2.1 Role of regulation for transmission prices

This section examines the role and significance of transmission pricing in promoting efficiency in the provision and use of electricity services. It also considers some of the key implications that transmission pricing has for the efficiency of the overall market.

2.2 The importance of transmission pricing

The Commission is required to ensure that the Rules are consistent with the NEM Objective, which is to promote the efficient investment in, and use of, electricity services for the long-term interests of consumers. The approach to regulating transmission prices and the resultant transmission prices can have a significant impact on the promotion of the NEM Objective in two fundamental ways.

First, because transmission prices determine how TNSPs' regulated revenues are recovered, they impact on the incentives faced by TNSPs to invest in transmission infrastructure.[32] If a TNSP is unable to recover the efficient cost of service provision through prices charged, there is little incentive to invest in maintenance or the expansion of operations, even when it is in the long term interests of consumers to do so.

Second, transmission prices provide signals to the electricity market, which influence the decisions of actual and/or potential electricity consumers and producers. On the demand side, because transmission prices directly affect the delivered electricity price paid by end users at a particular location, they may impact consumption decisions as well as locational investment decisions. Excessively high transmission charges could, for example, result in inefficient by-pass of the transmission network by new or existing consumers. On the supply side, transmission prices can influence both the timing and quantity of electricity production decisions as well as locational investment decisions by electricity generators. This includes investment by embedded generators, inset networks and alternative energy sources.

2.3 Issues in the setting of transmission prices

In addition to the broader issues outlined above, there are a number of specific issues regarding transmission pricing methodologies that may impact on the promotion of the NEM Objective. These include:

- the basis for charging;
- the approach to sunk cost recovery;
- the need to provide efficient longer term locational and investment signals; and
- the need to take account of other aspects of transmission regulation.

These issues are discussed below.

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[32] This means that the regulatory approach to transmission pricing should ensure that all efficient costs are recovered. The lack of a reasonable expectation that a TNSP will recover its efficient costs will significantly affect the incentives faced by TNSPs to invest in its infrastructure.

2.4 Basis for charging

Transmission pricing fundamentally involves consideration of 'who should pay how much' for transmission services. This requires an understanding of the drivers of costs and their links to services provided to network users and classes of users.

In order to promote allocative efficiency[33], transmission prices should be set on a 'causer pays' basis where possible. This means that where transmission costs are incurred following a direct request by (or agreement with) a particular network user or users, those user(s) should be required to pay the relevant costs. This is effectively a restatement of the marginal cost pricing principle – where prices equal the marginal or incremental costs of a network user's decision, network users will tend to make efficient decisions. This is because they will have incentives to use transmission services up to the point where their incremental benefits from use equal the incremental costs of provision.

In practice, however, it may not be possible to allocate transmission costs to individual network users solely on the basis of causation. This is especially the case for costs associated with the shared meshed network, which exhibits strong externalities (both positive and negative) associated with transmission use and relatively high transactions costs for internalising these externalities. In these circumstances, the causal link between *individual* network users' decisions and the incurring of transmission costs may not be clear.

However, the causer pays principle may at least guide whether, in general, consumers or producers of electricity should contribute towards the recovery of particular costs. This is because the majority of transmission investment in the shared meshed network is undertaken to meet the reliability obligations imposed to satisfy the requirements of consumers. Therefore, the Commission is of the view that the causer pays principle is a useful starting point for linking transmission costs to the respective prices paid by consumers and producers of electricity.

The causer pays principle, however, may also be difficult to apply when costs are incurred to serve multiple purposes; in other words, where there are several cost drivers. Such costs typically arise where economies of scale and scope exist: that is, situations where it is cheaper in an overall sense to provide services jointly rather than separately. In these cases, it is important to ensure that prices for each of the relevant services lie between the incremental and the standalone costs of providing each service. These requirements are known as the Baumol-Willig conditions.

An alternative basis for setting transmission prices is to apply the 'beneficiary pays' principle. The Commission, however, considers that the use of a 'beneficiary pays' principle for allocating network costs would not contribute to the NEM Objective in the same way as the 'causer pays' approach. This is because although in many cases the causers and beneficiaries of a given service cost are the same, the party that benefits from a particular transmission investment may not be the party whose requests or actions directly cause that investment to occur. In addition, the beneficiary of a Prescribed Transmission Service may

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[33] Allocative efficiency is a dimension element of economic efficiency and describes the benefits associated with linking costs to prices such that appropriate provision and use of services occurs. For example, if the price of a particular service is higher than the cost of providing the service, then, all other things being equal, there is likely to be higher than efficient provision and lower than efficient use of that particular service. Allocative efficiency benefits can therefore accrue by linking prices to incremental costs.

change over time as network conditions change, whereas the causer of a service involves a once-and-for-all judgment that is likely to result in consistent implementation. The Commission notes that in work undertaken by NECA in 2002 on the development of a 'beneficiary pays' method for the allocation of new network investment costs, NECA was not able to satisfactorily address these issues.[34]

2.5 Sunk cost recovery

Economic theory and competitive market experience demonstrate that economic efficiency, particularly allocative efficiency, is enhanced when prices are equal to the marginal (or incremental) cost of providing the relevant good or service. A key feature of services provided by infrastructure such as transmission networks is that if prices are set equal to marginal or incremental cost, a TNSP may be unable to recover its fixed capital investments.[35] A relevant issue in designing the transmission pricing regulatory framework is therefore how best to recover these historical expenditures while minimising disincentives to the use of existing infrastructure. In other words, the regime needs to balance allocative efficiency considerations with the need to enable recovery of efficient costs and provide enduring incentives for capital investment.

As has been previously noted by the Commission,[36] one approach to the recovery of sunk costs that seeks to minimise disincentives to the use of existing infrastructure is a two-part tariff. A two-part tariff refers to a tariff structure where fixed capital costs are recovered through a fixed charge component, while any immediate (short run) marginal costs of service provision are recovered through a variable charge component. This approach can serve to minimise potential distortions in the use of the transmission network because once the fixed fee is paid, decisions on service use relate entirely to the variable cost component. As this component is based on the marginal cost of service, consumption and production decisions should be consistent with efficient outcomes.

An alternative approach to using a two-part tariff is to set charges on the basis of Ramsay pricing principles. Ramsay pricing principles allocate sunk costs on the basis of relative willingness to pay between users of the particular services. While Ramsay pricing, in theory, provides correct signals to maximise efficiency in the use of infrastructure, it is rarely applied in practice because of the enormous informational requirements necessary to estimate individual customers' willingness to pay.

2.6 Transmission prices should provide efficient locational and investment signals to participants

A further consideration is the locational and investment signals provided to participants through transmission prices. The difficulty is that transmission prices can be orientated to maximise the use of the existing network, but this may conflict with minimising the cost of providing transmission services in the longer term.

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[34] The Commission notes that NECA's deliberations did not proceed beyond the publication of an Issues Paper: NECA, *Beneficiary Pays: A Framework for Implementation, Issues Paper*, March 2002 (available at: www.neca.com.au).

[35] Unless the reliability of service provision is allowed to degrade to levels below current requirements.

[36] AEMC, Review of Transmission Revenue and Pricing Rules, Transmission Pricing: Issues Paper, November 2005, p.60.

For example, if the price for transmission use is based on the short run marginal cost (SRMC) of transmission, this may encourage consumers to locate far from generation sources so long as spare transmission capacity exists. This scenario may particularly arise if transmission capacity is augmented according to non-market criteria (such as deterministic reliability standards) and through centralised processes (such as the Regulatory Test). Given these other arrangements, it might be more appropriate for transmission prices to seek to approximate the long run marginal cost (LRMC) of providing transmission services. Such prices should reflect the need for, and cost of, transmission augmentation at a particular location in the future. This should work to deter potential consumers (loads) from locating in areas that will require later costly augmentation.

However, the use of LRMC-based prices instead of SRMC-based prices may cause inefficient under-utilisation of spare transmission capacity in some cases. For example, a smelter located adjacent to a generator may have incentives to physically by-pass the regulated transmission network if it is charged a price that exceeds the immediate incremental cost of its network usage. Therefore, in cases where prices based on some estimate of LRMC are likely to lead to inefficient by-pass of the existing network, flexibility in the pricing regime to allow discounting or negotiation should be available to avoid such outcomes.

2.7 Transmission prices should take account of other aspects of the NEM arrangements

When considering the regulatory framework for transmission pricing, it is also necessary to be aware of any interactions with other aspects of the NEM regulatory arrangements, particularly how they impact on the achievement of the NEM Objective.

The elements of the regulatory framework that the Commission has taken into consideration when developing the pricing rules include:

- regional treatment of transmission losses and congestion;
- non-firm generator access to the market; and
- transmission investment regulatory arrangements (including in the Draft Revenue Rule and the Regulatory Test).

Some of these interactions were referred to above in the discussion of efficient locational signals to transmission network uses and potential users.

While these elements of the regulatory framework are not the subject of the current Review, the Commission is examining these through separate processes (for example, the CMR is dealing with transmission congestion). The Commission has taken care to ensure that the Proposed Pricing Rule it has developed would not result in inefficient 'oversignalling' of the value or cost of transmission, given the signals resulting from other aspects of the NEM regulatory arrangements. However, this issue would need to be revisited if substantial changes to the other arrangements emerged from the CMR or other reviews.

2.8 Need for regulation

The Commission's regulatory framework as outlined in the Draft Revenue Rule explicitly implements a CPI-X revenue cap form of control to Prescribed Transmission Services, through the application of a building blocks methodology. This regulatory approach has been adopted in recognition of the natural monopoly characteristics of transmission service provision and the resulting need to manage the potential for TNSPs to exercise market power. The revenue cap form of regulation enables TNSPs to recover the efficient costs of providing network services and also embodies incentives for efficient expenditure and service provision on the part of TNSPs. Given these constraints provided by the regulatory framework for revenue, the Commission has examined the need for specific regulatory guidance on pricing.

The two key *form of control* options for implementing a revenue cap *form of regulation* are:

- Price cap – in which prices are capped but not revenues; and

- Revenue cap – in which revenues are directly capped.

In general, a *price cap* form of control provides TNSPs with some incentive to set prices in a way that promotes the efficient use of the *existing* network.

This is because under a price cap form of control, increasing the utilisation of a TNSP's network may result in larger gross revenues than a lower level of utilisation. Assuming TNSPs' costs of service are largely fixed, TNSPs would generally find it profitable to set prices in a way that encouraged network utilisation. Further, given that at least the physical infrastructure costs of the existing network are fixed and sunk, such prices are likely to enhance productive and allocative efficiency. However, while price caps create this incentive to promote efficient use of the network in the short run, they do not necessarily promote efficiency in the longer run. This is because prices set in this manner may not take into account the cost of future network investment to meet higher levels of consumption and production at different locations in the grid.

By contrast, a *revenue cap* form of price control provides less incentive for a TNSP to maximise network utilisation in the short run. This is because a revenue cap allows for any under-recovery of allowable revenue by a TNSP in one year to be recovered in subsequent years. This provides benefits through greater revenue certainty for transmission businesses, which is important considering they incur costs that are largely fixed and have little capacity to influence final demand. If a revenue cap is accompanied with low risk of regulatory stranding of redundant assets, TNSPs will have relatively weak incentives to set prices to promote high network utilisation as a means of reducing the risk of redundancy.[37] If anything, under a revenue cap form of control, TNSPs have an incentive to formulate prices in a manner that is as mechanical and non-controversial as possible, in order to avoid payment disputes with their customers.

This discussion highlights that in the absence of pricing rules, regardless of the form of control adopted, a revenue cap form of regulation provides weak incentives for TNSPs to price services in a way that promotes the NEM Objective. Indeed, all 13 submissions received by the Commission in response to the question on the need for price regulation considered that some form of price regulation was required. In view of the importance of transmission prices for efficient utilisation and investment in both the network and electricity markets, and the weak commercial incentives of TNSPs to price efficiently, the

[37] On balance, as discussed in the Draft Determination on revenue, the Commission still believes that the relative advantages of a revenue cap form of control means that it is preferable to a price cap form of control.

NEM Objective is likely to be best served by some form of regulatory oversight of transmission pricing.

2.9 Recent debate on pricing regulation

During the course of the Commission's review of transmission pricing rules, there has been ongoing public policy debate on a range of issues relating to the regulation of infrastructure in Australia. This has led to the publication of a number of reports relevant to the Commission's review including, amongst others:

- the Productivity Commission's Review of the National Access Regime;[38]
- the Productivity Commission's Review of the Gas Code;[39] and
- the Ministerial Council on Energy's Expert Panel Review of Energy Access Pricing.[40]

The Productivity Commission's (PC) Review of the National Access Regime considered the relevant pricing principles to apply to Part IIIA of the *Trade Practices Act* 1974. Regarding the level of prices, the PC recommended that prices for all services provided by an access provider should generate revenues that are at least sufficient to meet the efficient long-run costs of providing access, and include a return commensurate with the commercial and regulatory risks involved. In addition, the PC indicated that prices should at least cover the incremental cost of infrastructure service provision[41]. The PC, in its Review of the Gas Access Regime considered there would be benefits in making the reference tariff principles in the Gas Code consistent with the pricing principles that were agreed for the national access regime[42].

Regarding the structure of prices, the PC expressed a view in favour of allowing multi-part pricing and price discrimination where it aids efficiency. The PC also recommended that vertically integrated service providers should not discriminate in favour of its downstream operations unless this can be justified on the basis of cost.

The Expert Panel delivered its report on energy access pricing to the MCE in April 2006. The Expert Panel's report made a number of observations on the appropriate principles for price-setting. The report noted that network prices ought to consider allocative efficiency as well as productive and dynamic efficiency[43]. Importantly, the report recognised that there may be trade-offs in using prices to promote different dimensions of efficiency and that it is necessary to consider the optimal balance of incentives for the achievement of the various aspects of efficiency. For example, prices that promote operational cost efficiencies (productive efficiency) may not maximise allocative efficiency (because under traditional incentive regulation, prices are allowed to exceed actual costs).

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[38] Productivity Commission, *Review of the National Access Regime*, Report no. 17, 2001, AusInfo, Canberra.

[39] Productivity Commission, *Review of the Gas Access Regime*, Report no. 31, 2004, Canberra.

[40] Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, 2006.

[41] Productivity Commission, *Review of the National Access Regime*, Report no. 17, 2001, AusInfo, Canberra, pp.338-339.

[42] Productivity Commission, *Review of the Gas Access Regime*, Report no. 31, 2004, Canberra, p.262.

[43] Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, 2006, p.111.

To give effect to these views, the Expert Panel recommended that the NEL and NGL include common network pricing principles based on section 35 of the NEL. The Expert Panel recommended that the AEMC be required to make Rules that[44]:

- provide a reasonable opportunity for the recovery of efficient costs of providing services that are the subject of the network pricing determination and complying with a regulatory obligation;
- provide effective incentives to promote economic efficiency in the provision of network services, including for efficient investments and efficient provision of services;
- make allowance for the value of assets and the value of proposed new assets that form part of the network owned, controlled or operated by a network operator used to provide services that are the subject of a network pricing determination;
- have regard to any valuation of assets forming part of a transmission or distribution system, owned, controlled or operated by a network operator applied in any relevant determination or decision; and
- have regard to the economic costs and risks of potential under and over investment in assets and under and over utilisation of the capacity of assets.

The Commission has considered these reports and notes that they generally deal with the *level* of revenues or prices infrastructure providers are able to earn or charge, rather than the *methodologies* for determining prices. However, to the extent that these reports specifically considered pricing methodology, in particular the pricing principles in the Expert Panel report –, the Commission believes that the approach adopted in the Rule Proposal is consistent with the observations and recommendations made in those reports.

2.10 The approach in the existing Rules

Part C of Chapter 6 of the existing Rules for transmission pricing provides a highly detailed framework for the determination and implementation of prices for Prescribed Transmission Services.

In summary the existing transmission pricing approach involves the following steps:

- Assets are categorised according to the services they deliver (for example, entry service asset, transmission use of system asset, etc);
- The aggregate annual revenue requirement (AARR) is allocated to categories of Prescribed Transmission Services as follows:
  - First, by subtracting non-asset related Common Service costs and allocating these to the Common Service category;
  - Second, by allocating the remainder of the AARR to Prescribed Transmission Service categories based on the optimised replacement cost (ORC) of the assets

[44] Expert Panel on Energy Access Pricing 2006, 'Report to the Ministerial Council on Energy', pp.116-117.

that provide that service as a share of the ORC of all the assets in the TNSP's regulated asset base;

- The AARR for each Prescribed Transmission Service is allocated to each asset based on its ORC as a share of the ORC of all the assets that provide that service. The amounts allocated to each asset in this manner are referred to as the 'annual cost' of those assets;

- The AARR for each Prescribed Transmission Service is allocated to connection points based on the annual costs of the network assets deemed to be used to provide the service to that connection point. For example, for Entry Services,[45] the cost allocated to the connected generator is the annual cost of the relevant entry assets; and

- The prices for using a particular Prescribed Transmission Service at a connection point are set in order to recover the relevant shares of the annual costs of assets allocated to that connection point.[46]

The Rules refer to this process as 'cost allocation' even though in practice there may be no direct relationship between the incurring of economic costs (such as expenditure on new assets) to provide a particular category of Prescribed Transmission Service, and the quantum of revenue recovered through charges for that service or at a particular connection point.

The existing Rules also employ a confusing mix of user pays, beneficiary pays and causer pays approaches to implement the cost allocation exercise. The primary means of allocation appears to be based on the *usage* of the relevant assets and operating expenditures incurred in providing the service. [47] In some cases, this appears in turn to be based on the identity of the *presumed beneficiary/ies* of the service. [48]

An additional requirement under the existing Rules is that the AARR cannot exceed the TNSP's maximum allowed revenue (MAR) from the provision of Prescribed Transmission Services for a given year.[49] Transmission prices for Prescribed Transmission Services are intended to recover TNSPs' AARRs as well as to provide appropriate signals for electricity consumption, production and investment decisions at various locations in the grid.

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[45] A service provided to serve a *Generator* or group of *Generators* at a single *connection point*.

[46] See clauses 6.3 and 6.4 and Schedule 6.2. Also see Chapter 4.

[47] The body of Part C of Chapter 6 appears to base the allocation of TNSPs' AARR to categories of prescribed service on the *use* of particular assets in the provision of the relevant prescribed service. For example, clause 6.4 states:

This clause sets out the procedure to be used for allocation of the [AARR] amongst all the assets of the [TNSP] utilised in the provision of transmission services which will then provide a figure estimating the cost of providing those transmission services. This process is called 'cost allocation'.

The focus on use of infrastructure is supported by the National Grid Management Council's (NGMC's) document entitled "National Electricity Code, Outline and Rationale V1.0, 1 March 1996", which says:

Agreements reached by COAG required that network pricing be carried out in a cost reflective manner. The cost allocation process results in cost sharing between network services and locations in a manner which as far as possible reflects the actual costs involved in providing network services to each participant.

[48] For example, section 2 of Schedule 6.2 of the existing Rules describes 'entry and exit costs' as being recovered from the users "who benefit from them". This suggests that the allocation of these costs to connection points is currently based on presumed benefit.

[49] See clause 6.3.

One of the more complicated aspects of this process is the allocation of allowable revenues relating to Prescribed TUoS Services to Transmission Customer connection points on a locational basis (part of the third step above). The CRNP or 'modified' CRNP methodologies are presently used for this purpose. Both of these methodologies seek to allocate the annual costs of particular network assets to Transmission Customer (load) connection points based on an engineering assessment of the transmission assets 'used' to convey electricity to those points.

The existing Rules also provide for ancillary matters such as the publication dates for transmission prices, requirements for the publication of negotiating framework by each TNSP, prudential requirements, billing and settlements process, pricing software and data and information requirements.

2.11 The approach in the Commission's Pricing Rule Proposal

The fundamental consideration underlying the Commission's Proposed Pricing Rule is a view that the NEM Objective, particularly efficiency in the use of, and investment in, electricity services, is best promoted by transmission prices being based, wherever feasible, on the costs of providing the services to those users who 'cause' the costs to be incurred.

The Commission's Proposed Pricing Rule is based on three key propositions:

- Confirming the broad acceptability of the approach to pricing in the existing Rules (Chapter 3 provides greater detail on the Commission's reasons supporting this view);

- Recasting the pricing rules to a principles-based form by removing unnecessary detail on implementation and administration matters, while confirming that existing arrangements may continue to apply and providing certainty regarding pricing outcomes. The pricing principles have also been designed to allow innovation for alternative pricing methodologies to emerge over time subject to constraints in the Rules (Chapter 4 provides greater detail of the Commission's reasons for its approach to the Proposed Pricing Rule); and

- Making the procedural approach to pricing consistent with the approach taken by the Commission in its Draft Revenue Rule (Chapter 5 provides greater detail on the Commission's reasons for its approach to the procedural requirements in the Proposed Pricing Rule).

The remainder of this chapter provides a brief overview of each of these propositions.

2.11.1 Confirming the broad approach to pricing

The Issues Paper raised a number of issues that fundamentally relate to the question of *who should pay how much* for Prescribed Transmission Services. Having considered submissions, the Commission has reached the view that the arrangements in the existing Rules for determining how TNSPs' allowable revenues are recovered are broadly appropriate. That is, given the NEM Objective and the high-level economic efficiency considerations that flow from it, the Commission believes that the current Rules broadly ensure that the appropriate parties are paying the appropriate amount for transmission services. Chapter 3 discusses submissions on these matters and provides the Commission's detailed rationale for its position.

2.11.2 Recasting the pricing rules to a principles-based form

The Commission has considered whether the existing Rules provide an unnecessarily detailed framework for the development, implementation and administration of prices for Prescribed Transmission Services, taking account of the views of stakeholders and the Commission's own analysis.

A number of submissions commented on the level of detail that should be included in the pricing rules. While some[50] were supportive of the current level of detail in the Rules, others considered that a less detailed approach was appropriate.[51] At the same time, one[52] supported some discretion for TNSPs but less discretion for the regulator, while another[53] was in favour of discretion for the regulator but not for TNSPs.

The Commission believes that the regulatory framework for pricing should reflect the Commission's approach to the framework for revenue regulation. In the Draft Revenue Rule, the Commission codified the key elements of a revenue-cap methodology. However, the Draft Revenue Rule delegated a number of more detailed *implementation elements* of the regime to the AER, including the form of the post-tax revenue model (PTRM) and the precise design and implementation of the incentive mechanisms to encourage efficiency in expenditure and service delivery.

This approach recognises the distinction between the key design features of the regulatory regime – such as methodologies and processes – that should be codified in Rules and the implementation elements that should not be codified in any level of detail. The codification of key design features is intended to provide a greater degree of certainty regarding the recovery of the efficient costs of service provision and the management of the potential for TNSPs to exercise market power. However, the provision of guided discretion on implementation elements of the regime to TNSPs and the AER has the benefit of enabling current practices to continue while allowing innovation to occur where appropriate.

In light of the proposed approach to revenue regulation and the views in submissions, the Commission believes that the current approach to the implementation and administration of pricing methodologies is inappropriately detailed. Therefore, the Proposed Pricing Rule embodies a shift to a principles-based regulatory framework. This means that the Rules should be confined to setting out pricing principles and requiring the implementation of the principles through pricing methodologies proposed by TNSPs for the approval of the AER in accordance with the Rules. This approach ensures consistency between the regulatory frameworks for transmission pricing and revenue.

The Commission's reasons for the specific principles adopted for the Proposed Pricing Rule are described in further detail in Chapter 4 below.

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[50] TNOs, December 2005, p.4; TransGrid, 30 December 2005, pp.4-5; MEU, December 2005, p.17.

[51] Ergon Energy (Distribution), 30 December 2005, p.2; Citipower/Powercor, 25 January 2006, p.2; UED, December 2005, p.5.

[52] AGL, 20 January 2006, pp.3 and A-1.

[53] PIAC, 6 January 2006, pp.2-3.

2.11.3 Development of the procedural framework for the Proposed Pricing Rule

The proposed procedural approach involves:

- the TNSP proposing a pricing methodology prior to each regulatory control period;
- the AER is being required by the Rules to approve the proposed methodology so long as it conforms to the principles in the Rules and the AER's guidelines (if applicable);
- the AER being able to substitute its own methodology where the proposed methodology does not conform to the Rules and the guidelines;
- the AER monitoring the TNSP's prices to ensure they are consistent with the approved pricing methodology.

This approach aims to harness TNSPs' superior information about their physical networks and business operations in promoting the development of methodologies that satisfy the pricing principles in the Rules while minimising their implementation costs. More detail on the rationale for this approach is contained in Chapter 5.

Overall, the Commission considers that the approach embodied in the Proposed Rule advances the NEM Objective by providing for a principles-based approach that facilitates efficiency in pricing, removing unnecessary prescription in Rules and allowing flexibility for innovative pricing methodologies to develop over time.

3 Key network pricing issues

In reviewing the transmission pricing rules, the Commission has examined the pricing methodology contained in the existing rules, and various problems with it as raised in submissions. Consistent with the views in submissions from EnergyAustralia,[54] Macquarie Generation,[55] Powerlink,[56] TransGrid[57] and the TNOs,[58] the Commission does not presently believe there is a case for substantive changes to the existing arrangements for transmission pricing at the present time. However, as discussed below, this position is conditional on the outcomes of other reviews presently underway, particularly the CMR.

This chapter examines the various problems identified in submissions with the existing application of the pricing methodology and provides the Commission's detailed reasons for its view on these issues.

Prices for Prescribed Transmission Services are the means by which TNSPs are able to recover their regulated revenues (ie their AARRs). Therefore, any given set of transmission prices represents a response to the question of *who pays how much* towards the cost of providing Prescribed Transmission Services between:

- Different types of network user – consumer network users and generator network users (and NSPs in their capacity as parties that inject or withdraw from the network);
- Different locations of network user – network users located in different parts of a TNSP's network may be required to pay different amounts; and
- Different consumption and generation patterns – network users with different consumption or production volumes or profiles may be required to pay different amounts.

The discussion below is structured around these three dimensions, and explains why the Commission believes that the current approach is consistent with the NEM Objective.

3.1 Transmission pricing between types of network users

3.1.1 Current approach in the Rules

As noted in the Pricing Issues Paper, under the current Rules, directly-connected electricity consumers (Transmission Customers) pay the majority of TNSPs' allowable revenues through charges for Prescribed Transmission Services. Generators pay only 'shallow' connection costs, being the costs of those assets specifically required to connect the generator to the existing shared network. Under the alternative, a 'deep' connection charging approach, the connecting party may be required to pay for any incremental investment elsewhere in the shared transmission network required to accommodate the new connection. Generators in the NEM also do not pay charges (known as use of system charges) in respect of the recovery of the costs of the existing shared network.

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[54] EnergyAustralia, 23 December 2005, pp.3 and 9.

[55] Macquarie Generation, 3 January 2006, p.1.

[56] Powerlink, p.2.

[57] TransGrid, letter, 30 December 2005, p.1.

[58] TNOs, December 2005, pp.1 and 7.

3.1.2 Submissions

Submissions were mixed on the question as to whether generators should pay more than they currently do in relation to the shared transmission network. One of the key issues raised was whether generators should pay 'deep connection' charges and, if so, whether they should be granted some form of firm access right in return. The issue of the appropriateness of generators paying shared network charges (not based on connection) was also raised in several submissions (see further below).

Shallow versus deep connection charges

On the issue of deep versus shallow connection, Macquarie Generation,[59] NSPMA,[60] Origin Energy,[61] Citipower/Powercor[62] and UED[63] supported the current shallow connection regime, in which generators do not contribute to downstream network augmentation costs that follow from their connection.

On the other hand, AGL[64] and The Group[65] supported a deep connection regime in which generators are required to pay for downstream network costs arising from their connection. This was presented as a move to a more refined causer pays regime than exists presently. Under the AGL and The Group's proposal, existing generators would not have to pay deep connection charges because, by definition, their decisions could not cause new investment to be required.[66] The Group also proposed a regime of access rights to promote voluntary augmentations, prevent free-riding and facilitate congestion management.[67] Combining all of these measures would, in The Group's view, help ensure efficient locational decisions for new generation investment because generators would face the cost consequences of their actions.[68] The Group also considered that there was no incompatibility between access rights and open access, referring to the gas transportation regime as an example,[69] and that access rights would promote investment certainty.[70] The Group pointed out specific examples where, in its view, the lack of such a regime has led to inefficient generator locational decisions.[71]

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[59] Macquarie Generation, 3 January 2006, pp.1-2.

[60] NSPMA, 12 December 2005, p.4.

[61] Origin, 6 January 2006, pp.5-6.

[62] Citipower/Powercor, 25 January 2006, p.4.

[63] UED, December 2005, pp.12-13.

[64] AGL, 20 January 2006, pp.2 and B-1.

[65] The Group, December 2005, pp.1, 13 and 24.

[66] AGL, 20 January 2006, p.2; The Group, December 2005, p.22.

[67] The Group, December 2005, p.18.

[68] The Group, December 2005, p.24.

[69] The Group, December 2005, p.16.

[70] The Group, December 2005, p.15.

[71] The Group, December 2005, pp.19-21.

TRUenergy also supported the development of an access rights regime based on the existing CSP/CSC trial to produce efficient locational signals for generators and also pointed out some examples of what it regarded as inefficient investments.[72]

Powerlink, while not opining on deep versus shallow connection, sought to refute The Group's argument that new generators could 'cause' transmission investment to be triggered under the Regulatory Test. In its supplementary submission, Powerlink noted that:

> *"…the arrival (impending or actual) of a new generator does NOT trigger a Regulatory test nor cause a TNSP to undertake an augmentation."*[73]

Rather, according to Powerlink, it is the need to serve load growth that 'causes' transmission investment to be undertaken. Powerlink also sought to refute The Group's and AGL's claim that recent generation investments in south-east Queensland were inefficient.[74]

TransGrid's submissions made some similar points to those made by Powerlink. TransGrid argued that under the current regime, transmission is built to serve the needs of loads rather than generators.[75] If generators seek investment additional to what can be justified under the Regulatory Test, they are required to pay for it. In TransGrid's view, this creates a 'hybrid' shallow and deep connection regime.[76] It also implies that generators receive "clear and appropriate signals regarding current and future network congestion", due to regional price differentials and regulatory arrangements such as the Regulatory Test.[77] TransGrid noted that one advantage of the existing shallow connection approach was that there was a broad correspondence between 'radial' assets (which are relatively easy to assign on a user pays basis) and shared network assets (which are difficult to assign in a cost-reflective manner).[78] A deep connection policy could risk deterring some generation investment.[79] However, TransGrid acknowledged that pragmatic solutions to overcome these issues may be available and would not necessary conflict with an open access regime.[80]

Macquarie Generation did not support a deep connection regime, arguing that such a regime:

- was not necessary to ensure generators made efficient locational decisions, given the other signals generators faced such as the impact of the likelihood of future constraints on the ability to secure finance and the availability of fuel and water;
- would increase complexity; and

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72 TRUenergy, pp.3-5.

73 Powerlink supplementary submission, 13 January 2006, pp.1-2.

74 Powerlink supplementary submission, 13 January 2006, pp.3-4.

75 TransGrid, 30 December 2005, p.18.

76 TransGrid, 30 December 2005, p.15.

77 TransGrid, 30 December 2005, p, pp.2 and 17.

78 TransGrid, 30 December 2005, p.6.

79 TransGrid, 30 December 2005, p.16.

80 TransGrid, 30 December 2005, pp.16-17.

- would implicitly create a form of access rights for incumbent generators.[81]

Similarly, Origin considered that deep connection charges were inappropriate because, in its view, the Regulatory Test provides efficient locational signals to generators, and consumers should pay for the shared network because they ultimately benefit from it.[82]

EnergyAustralia also did not support a deep connection charging regime for generators in most cases. It expressed the view argued that:

> *The introduction of a deep connection policy funded via capital contributions could potentially stifle much needed investment in the electricity market, thereby undermining a core NEM objective. This would act as a significant barrier to entry for new generators, further fuelling the current transmission cost inequity with existing generators.*[83]

<u>Prescribed Generator TUoS charges</u>

Despite not supporting a deep connection regime, EnergyAustralia did support a regime modelled on the British arrangements where generators are obliged to pay use of system charges, based on their location in the network.[84] These charges would apply to both new and existing generators and bear no direct relation to downstream augmentation costs that may follow from their connection. At the same time, however, EnergyAustralia noted that a TUoS charging regime for generators would represent a "seismic shift in the cost allocation arrangements" and would have distributional and implementation consequences.[85]

Submissions from several other parties also appeared to support the notion that generators should contribute towards the costs of the shared network. For example, although MEU argued that requiring new generators (only) to pay deep connection charges could create a barrier to new investment, it submitted that all generators should contribute to the costs of the shared network based on the extent to which they use the network to deliver their output to the regional reference node.[86] MEU said that the current system has failed because the lack of locational signals has resulted in new generation not being developed near load centres.[87] Energex supported generators paying a contribution to shared network costs on the basis that this would provide efficient locational signals.[88] The EAG and EUAA recommended that the Commission address the material deficiencies in the current pricing arrangements – particularly the 'first instance' allocation of all shared network costs to energy end-users.[89] The EAG and EUAA submission also put forward a case for a beneficiary pays form of charging in respect of the shared network, perhaps with higher charges in generation-rich

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[81] Macquarie Generation, 3 January 2006, pp.1-2.

[82] Origin, 6 January 2006, pp.5-6.

[83] EnergyAustralia, 23 December 2005, p.18.

[84] EnergyAustralia, 23 December 2005, pp.18-19.

[85] EnergyAustralia, 23 December 2005, p.19.

[86] MEU, December 2005, pp.38-40.

[87] MEU, December 2005, p.39.

[88] Energex, 21 December 2005, p.4.

[89] EAG and EUAA, January 2006, Executive Summary p.i.

zones than generation-poor zones, on the basis that this would promote efficient investment decisions in transmission and generation.[90]

The TEC considered that some form of charging generators "for more than just the costs associated with their connection into the system…" would be appropriate. However the TEC's main concern lay with embedded generator charging:

> *What is particularly inappropriate, however, is the differential in charging for major generators and embedded generators; the charges should be based on the same principles.*[91]

Finally, the NGF supported the current regime whereby consumers paid sunk network costs on the basis that:

> *Application of the sunk costs to consumers is unlikely to impact consumption and utilisation of the network whereas the same charge applied to generators would distort efficient energy consumption and dispatch.*[92]

3.1.3 Commission's assessment

Having considered all of the submissions, and subject to the outcomes of other reviews presently underway (see below), the Commission does not consider there is a strong case at this time to move away from the existing allocation of allowable transmission revenues principally to loads (as opposed to generators). Given other signals operating in the market, the Commission does not believe that requiring generators to either pay deep connection charges or to contribute towards the recovery of shared network costs would materially improve the efficiency of generator locational investment decisions or otherwise promote the NEM Objective.

<u>Shallow versus deep connection charges</u>

On the issue of deep connection charges, the Commission agrees with the views of TransGrid, Macquarie Generation, EnergyAustralia and Origin that deep connection charges may create additional regulatory complexity and deter new generation investment, thereby harming competition and the long-term interests of end-use consumers. Further, as noted by Powerlink, generation investment does not 'cause' new transmission investment to be undertaken. Shared transmission investment is primarily undertaken to serve the needs of reliable supply to loads. Therefore, in keeping with the high-level 'causer pays' principle[93], the Commission does not believe that a move to deep connection charges for generators is justified.

However, this position is conditional on the outcomes of other reviews presently underway – particularly, the CMR. The Commission understands that while generators do not 'cause' transmission investment, the siting of new generators in particular locations can contribute to transmission congestion such that the ability of existing generators to evacuate power is adversely affected. The CMR is currently examining this issue and if it concludes that there

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[90] EAG and EUAA, January 2006, p.11.

[91] TEC, 30 December 2005, p.10.

[92] NGF, 3 January 2006, p.2.

[93] As discussed in Chapter 2 above.

is a role for transmission pricing to facilitate more efficient generator decision-making, the Commission will take this into account in finalising the transmission pricing arrangements. The Commission expects to publish a Draft Report on the CMR before the end of 2006 and a Final Report by the end of March 2007. The Commission will ensure that its Final Pricing Rule (which must be published by 1 January 2007) is consistent with the position it reaches in the Draft Report on the CMR.

In addition, Part D of the Draft Revenue Rule sets out a new framework for the pricing of Negotiated Transmission Services. This framework clarifies that generators (or load network users) may negotiate with TNSPs for the provision on services that vary from or are additional to Prescribed Transmission Services. For example, a generator may seek a higher level of *potential* power transfer capability and be willing to fund a downstream transmission augmentation to help provide this Negotiated Transmission Service. If and when this occurs, the Proposed Pricing Rule will not govern the prices charged – this will be a matter for the Negotiated Transmission Pricing arrangements under the Draft Revenue Rule. Hence, the Commission's position on the maintenance of a shallow connection charging approach for generators relies on the implementation of its proposals for Negotiated Transmission Service pricing in the Draft Revenue Rule. The Commission seeks stakeholder comment on whether this division of roles between the pricing rules and revenue rules is complementary and appropriate, with a view to finalising the principles and processes for Negotiated Transmission Services in its Final Revenue Rule.

In this context, the Commission is aware of guidelines published by VENCorp that seek to clarify the dividing line between costs that connecting parties should be obliged to pay for, and costs that should be passed on to transmission network users at large.[94] In general, the guidelines provide for connecting parties to pay for the costs of augmentations necessary to enable their connection to meet an automatic, minimum or negotiated access standard. However, where a connection applicant seeks an increase in power transfer capability, VENCorp may undertake a preliminary analysis of the relevant augmentation using the Regulatory Test. If the augmentation is likely to satisfy the Regulatory Test, the costs of the augmentation will be recovered from Prescribed Transmission Service charges. However, if the augmentation is not likely to satisfy the Regulatory Test, the connection applicant has the option of funding the augmentation itself (but without receiving any access rights over the increase power transfer capacity). The guidelines also provide for reimbursement where a connecting party pays for an augmentation and another party later seeks to use the relevant assets in order to connect to the transmission network.

The Commission considers that VENCorp's guidelines make a valuable contribution to the debate on the appropriate delineation between assets that provide Prescribed Transmission Services and those that provide Negotiated Transmission Services. The Commission notes that the approach it has adopted for Negotiated Transmission Services in the Draft Revenue Rule and its proposed approach to the pricing of Prescribed Transmission Services is generally consistent with the approach taken in VENCorp's guidelines. The Commission seeks stakeholder views on VENCorp's guidelines and their consistency with the Commission's approach to Negotiated and Prescribed Transmission Services.

The Commission will give further attention to this issue in its work on the Rules for regulating transmission revenues.

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[94] VENCorp, Victorian Electricity Transmission Network Connection Augmentation Guidelines, August 2005.

Prescribed Generator TUoS charges

The Commission also does not presently believe there is a case for requiring generators to pay ongoing charges in respect of Prescribed TUoS Services, as suggested in some submissions. Even an advocate for this proposal, EnergyAustralia, noted that such a move would represent a profound shift from the existing arrangements and, in the Commission's view, it is far from clear whether it would be worthwhile. Generator TUoS charges would most likely be ultimately passed on to loads, potentially distorting bidding and dispatch in the process. While the British electricity market and several others do apply generator locational use of system charges, as noted in the Pricing Issues Paper, these markets generally have fewer (or one) pricing regions and different regulatory arrangements governing transmission investment. Further, the Commission again emphasises the intended role of the framework for Negotiated Transmission Services pricing in the Draft Revenue Rule. This allows for Generators to agree to pay TNSPs for services that fall outside the definition of Prescribed Transmission Services.

For these reasons, and because the Commission is not aware of generator TUoS charges actually in operation anywhere in the NEM, the Commission has proposed to remove the scope for prescribed Generator TUoS charges in the Rules. This should help simplify the pricing Rules and promote improved certainty in the regulatory framework.

3.2 Transmission pricing between different network user locations

3.2.1 Current approach in the Rules

Under the current Rules, a share of TNSPs' allowable revenues allocated to Prescribed Use of System Services is recovered on a locational basis and the remainder on a postage-stamped basis. The locational share is allocated to Transmission Customer connection points based on the CRNP or modified CRNP methodologies contained in Schedule 6.4 of the Rules and is recovered through the Customer TUoS Usage Charge. The postage-stamped share is recovered through the Customer TUoS General Charge, which also applies only to Transmission Customers.

3.2.2 Submissions

A number of submissions discussed CRNP and modified CRNP. EnergyAustralia, Ergon Energy (Distribution), Powercor/Citipower and TransGrid considered CRNP to be a workable compromise between the degree of complexity and accuracy in pricing.[95]

The MEU submission disagreed with this view, arguing that, "current methodologies are distortionary and do not follow economic efficiency principles."[96] The MEU proposed the following cost allocation for use of the transmission network:

> *1. Allocate 100% of the use of system costs, not 50%*
>
> *2. Should be forward looking rather than up to 2 years behind reality*

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[95] EnergyAustralia, 23 December 2005, p.9; Ergon Energy (Distribution), 30 December 2005, p.4; Citipower/Powercor, 25 January 2006, p.3; TransGrid, 30 December 2005, p.9.

[96] MEU, December 2005, p.29.

3. *Should recognize that the cost of oversized assets should be optimized to the demand actually to be incurred (using forward looking techniques)*

4. *Should be allocated on demand and not on consumption*[97]

Various submissions addressed the question of whether the CRNP is clearly explained in the existing Rules. The MEU submission considered that the Rules should specify how the cost allocation is derived and the AER should be required to verify that the TNSP has followed the Rules.[98] Ergon Energy (Distribution) wanted the AER to have adequate discretion to approve alternative pricing methods. UED considered that transparency would be enhanced if the Rules required the TNSP's to publish:

> *… the rationale for their tariff structures (in so far as such matters are not prescribed in the Rules) so as to demonstrate how those tariff structures accord with the pricing principles in the Rules.*[99]

EnergyAustralia proposed that the AER convene a meeting of TNSP pricing practitioners to ascertain areas of pricing that could be better defined in the Rules and the Commission to make no changes to the 'fine detail' of the Rules without consulting with the TNSPs.[100]

By contrast, TransGrid was of the view that the CRNP methodology is explained well in the Rules.[101]

The Issues Paper also raised the question of the 'modified CRNP' option provided for in the Rules and the criteria that should be met before it can be implemented. On this issue, many submissions were in favour of the Rules prescribing the criteria for the AER to approve a modified CRNP methodology (or other alternative methodologies).[102] One submission proposed that TNSPs should have access to merits review of AER decisions on this matter.[103] Another respondent argued that the bias in the Rules towards CRNP over modified CRNP ought to be removed and that the best way to achieve this would be to make the approval processes for both methodologies the same.[104]

As to whether only the TNSP or any transmission network user should be able to request the use of modified CRNP, responses were generally divided between NSPs and large directly-connected consumers. Large consumers and one DNSP supported non-TNSPs proposing

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[97] MEU, December 2005, p.29.

[98] MEU, December 2005, p.29.

[99] UED, December 2005, p.9.

[100] EnergyAustralia, 23 December 2005, p.9.

[101] TransGrid, 30 December 2005, p.10

[102] Ergon Energy (Distribution), 30 December 2005, p.4; Ergon Energy (Retail), 3 January 2006, p.2; Energex, 21 December 2005, p.2; MEU, December 2005, p.28; NSPMA, 12 December 2005, p.2; TransGrid, 30 December 2005, p.9; TNOs, December 2005, p.6.

[103] Ergon Energy (Distribution), 30 December 2005, p 4.

[104] EnergyAustralia, 23 December 2005, p 8.

modified CRNP methodologies[105], but the remaining submissions from TNSPs and DNSPs were against this proposition.[106]

3.2.3 Commission's assessment

As noted above, transmission investment in the shared network is typically undertaken in order to meet the needs of electricity consumers. However, as discussed in the Issues Paper, it is usually difficult to identify individual electricity consumers that directly trigger the need for any given investment in the shared network. This is because investments in the shared network – unlike most investments in connection assets – exhibit significant externalities as well as economies of scale and scope. Consequently, the causation principle used to recover the costs of Prescribed Entry and Exit Services cannot easily be applied to allocating the costs of shared network investments to individual network user connection points. The principle that prices must be subsidy-free (between incremental and standalone costs – the Baumol-Willig conditions) are also of little help in allocating these costs because economies of scale and scope tend to be very large with these types of services, allowing a wide range of permissible prices.

Rather, reflecting the requirements of high-level economic efficiency principles, the regulated revenues attributed to the provision of Prescribed TUoS and Common Transmission Services should be recovered in a way that provides appropriate long term locational and investment incentives while minimising disincentives to utilise the existing sunk network.

The costs of providing Common Transmission Services are not influenced by differences in service usage (i.e. by different classes of Transmission Customer, their locations or their levels of service). Therefore, the prices to recover revenues attributable to Common Transmission Services should be set so as to minimise their impact on participants' investment, operating and usage decisions.

However, the allocation of revenues attributed to Prescribed TUoS Services should reflect the potential future cost implications of various locational and operating decisions. This is a long term, less direct, application of the causer pays principle than the application to Prescribed Entry and Exit services. As discussed in the Issues Paper, the CRNP and modified CRNP methodologies are just two approaches for approximating the true LRMC that a Transmission Customer may indirectly impose on the network through its demand or consumption at a particular point.

Most submissions that commented on CRNP argued that it was an imperfect but well-accepted allocation methodology that provided some beneficial locational signals. However, MEU suggested a number of changes to CRNP, including the recovery of 100% Prescribed TUoS Services revenues via CRNP rather than 50%, the use of optimised asset values and use of a forward-looking allocation rather than historical.

As with the broader 'who pays' question, the Commission has not been persuaded that there is likely to be a material benefit in *mandating* a move away from the existing CRNP methodology. Rather, the Commission's preference is to set out principles in the Rules for

[105] MEU, December 2005, p.28; NSPMA, 12 December 2005, p.2; UED, December 2005, p.8.

[106] Ergon Energy (Distribution) p 4; TNO, December 2005, p.6; TransGrid, 30 December 2005, p.9; Citipower/Powercor, 25 January 2006, p.3.

the allocation of allowable revenues relating to Prescribed TUoS Services and allow TNSPs the flexibility to use CRNP, modified CRNP or some alternative that conforms to those principles. The AER would be responsible both for developing guidelines that clarified the implementation of CRNP (and modified CRNP) and for ensuring any methodology proposed by a TNSP accorded with the Rules.

3.3 Transmission pricing for different consumption and production patterns

3.3.1 Current approach in the Rules

The existing Rules are, on the whole, less prescriptive about the basis upon which allowable transmission revenues are recovered than they are about the methodology for 'cost allocation'. While the Rules prescribe the pricing structures for Prescribed Entry and Exit charges, the Common Service Charge and the Customer TUoS General Charge, they provide a substantial degree of freedom to TNSPs to sculpt price structures for the Customer TUoS Usage Charge (the locational CRNP element).[107]

3.3.2 Submissions

An issue identified by the Commission in the Issues Paper was whether the Rules should prescribe pricing structures given that most consumers are connected to DNSPs and may not face the transmission pricing structure imposed under the Rules.

The submissions from the EAG and EUAA emphasised this point, noting that very few distributors in the NEM impose any fixed charge components in their 'TUoS' tariffs and none impose a demand element in their residential tariffs.[108] Even for network users at the subtransmission level, the structure of tariffs relating to TUoS is often substantially different from the tariffs imposed by the TNSP.[109] Consequently, the EAG and EUAA considered that while there is little value in the Rules prescribing transmission pricing structures to smaller consumers, there is likely to be benefit in prescribing structures for large directly-connected consumers and Generators.

In the view of the EAG and EUAA:

> *If the AEMC decides not to implement an effective and reasonable 'beneficiary pays' arrangement, and make only minimal changes to the Rules affecting transmission pricing, serious consideration should be given to setting transmission charges applying to all distribution-connected end-users with:*
>
> - *the price linked entirely to energy consumption (i.e. set on a $/MWh or $/MVA basis);*
> - *no fixed charges;*
> - *no demand or capacity charges; and*
> - *no distinction between energy time-of-use.*[110]

[107] See existing clauses 6.5.1-6.5.6.

[108] EAG and EUAA, January 2006, pp.13-14.

[109] EAG and EUAA, January 2006, p.14.

[110] EAG and EUAA, January 2006, p.18.

The TEC and MEU were in favour of prescribing transmission pricing structures in the Rules rather than leaving the price structure to principles. The MEU said that principles would:

> *...leave the potential for different interpretations as to how each TNSP will structure its pricing. Pricing signals are too important to leave to a party which does not necessarily have maximizing efficiency of the NEM as its core driver.*[111]

The TEC considered that as distribution pricing arrangements may eventually change, it was important to consider what is most appropriate for transmission pricing regardless of the current distribution arrangements. Over time, as more smaller consumers receive interval meters, it may be more feasible to pass-through efficient transmission tariffs. Therefore, the Rules should not discriminate between pricing structures for different types of user.[112] TransGrid also suggested that the Rules should not set pricing structures for some, but not other, network users. However, unlike the TEC, TransGrid suggested that there was little point in prescribing transmission pricing structures at all, even for larger directly-connected consumers and generators.[113]

3.3.3 Commission's assessment

After considering the submissions, the Commission believes it is important for the Rules to provide principles for transmission pricing structure. Its reasons are:

- First, directly-connected consumers make up a substantial share of total electricity demand and consumption, suggesting that there are significant market benefits at stake in ensuring appropriate transmission pricing structures apply to (at least) this group; and
- Second, as pointed out by the TEC submission, the Rules for distribution pricing may be reviewed in the light of metering and other developments providing an opportunity for consideration of alternate network pricing structures to smaller consumers, including the preservation of transmission pricing structures.

However, the Commission remains reluctant to prescribe actual transmission pricing structures in the Rules and instead proposes to set out principles for their implementation by TNSPs as they develop pricing methodologies. The AER would then be obliged to assess whether the methodologies conformed to the principles. This approach recognises that regulatory prescription of price structures would be unnecessarily restrictive given the diversity in network conditions throughout the NEM while providing the scope for innovation in pricing methodologies and structures that promote efficiency and are therefore likely to promote the NEM Objective.

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[111] MEU, December 2005, p.46.

[112] TEC, 30 December 2005, p.9.

[113] TransGrid, 30 December 2005, pp.14-15.

4 Principles for cost allocation and price structure

The previous chapter dealt with the Commission's approach to the overarching question of *who should pay how much* for the costs of providing Prescribed Transmission Services. This chapter focuses on the Commission's proposed specific pricing principles for the annual setting of maximum prices for Prescribed Transmission Services.

The existing Rules require TNSPs to allocate (and ultimately recover) their AARRs to prices by undertaking the following three steps:

- Step 1: Cost allocation *between* Prescribed Transmission Services – this involves principles for allocating TNSPs' AARRs between different types of Prescribed Transmission Services;
- Step 2: Cost allocation *within* Prescribed Transmission Service categories – this involves principles for allocating the AARR for each Prescribed Transmission Service to individual network user connection points; and
- Step 3: Determination of prices to recover the costs of providing Prescribed Transmission Services – this involves principles for developing pricing structures that are applied to recover the allowable revenues allocated to each connection point.

The approach adopted by the Commission has been to develop a transmission pricing regulatory framework that supports the allocation methodology as currently contained in the Rules. This chapter is therefore structured to explain how the Commission Proposed Pricing Rule allows the continuance of the three-step approach outlined above.

This chapter:

- Describes the existing Rules in detail using the three-step process outlined above;
- Describes the Commission's Proposed Pricing Rule in a three-step manner that mirrors the approach in the existing Rules. In some cases, this involves providing brief stylised examples of how the Rules are intended to apply; and
- Explains and analyses the Proposed Rule with reference to relevant similarities and differences to arrangements under the existing Rules. A key objective of this discussion is to demonstrate how the Proposed Pricing Rule works to accommodate existing arrangements. In general, it is the Commission's intention to confirm that under the Proposed Rule, TNSPs can continue applying existing pricing methodologies but that appropriate modifications consistent with the principles can also be made.

As discussed in Chapter 2, the key differences between the Proposed Pricing Rule and the existing Rules in Part C are that the Commission has sought to:

- move away from detailed cost allocation Rules and towards a principles-based regulatory framework; and
- oblige the AER to develop guidelines in certain areas in order to enhance the certainty and clarity of the arrangements for TNSPs and their customers.

4.1 Principles for Allocation of the AARR to Prescribed Transmission Service categories

4.1.1 Current approach in the Rules

The first step in Part C of Chapter 6 of the Rules is to allocate a TNSP's AARR to the classes of Prescribed Transmission Services.[114] This yields an AARR for each class of Prescribed Transmission Service:

- Entry Service;[115]
- Exit Service;[116]
- Transmission Use of System Service;[117] and
- Common Service.[118]

This process of allocation involves:

- the delineation between network assets that provide the different classes of services;
- classification of operating and maintenance costs associated with the provision of each of the classes of Prescribed Transmission Services; and
- the allocation of the AARR to Prescribed Transmission Service categories based on the assets and non-asset related costs of providing those services. This is broadly based on the ORCs of the relevant assets that provide each type of service compared with the ORCs of all assets in a TNSP's regulated asset base.[119]

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[114] See clause 6.3.1

[115] A service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single connection point.

[116] A service provided to serve a Transmission Customer or Distribution Customer or a group of Transmission Customers or Distribution Customers, or a Network Service Provider or a group of Network Service Providers, at a single connection point.

[117] A *Generator transmission use of system service* or a *Customer transmission use of system service*.

A *Generator transmission use of system service* is a service provided to a *Generator* for:

(a) use of the *transmission network* which has been negotiated in accordance with clause 5.5(f)(2); or

(b) use of a *new transmission network investment* asset for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

A *Customer transmission use of system service is a* service provided to a *Transmission Customer* for use of the *transmission network* for the conveyance of electricity that can be reasonably allocated to a *Network User* on a locational basis, but does not include *Generator transmission use of system services*.

[118] A service that ensures the integrity of a *transmission* or *distribution* system and benefits all *Transmission Customers* or *Distribution Customers* (as the case may be) and cannot reasonably be allocated on a locational basis.

[119] Note Schedule 6.2 requires that non-asset common service costs are allocated directly to common service costs before this ORC-based allocation takes place. However, this step is not referred to in the body of Part C.

Clauses 6.3.1(b) and (c) both refer to Schedule 6.2 as providing guidance as to how this allocation should occur. Schedule 6.2 sets out a detailed description of various network assets and non-asset related expenditures that belong to various service categories. However, it is inconsistent in parts. For example, 'static reactive plant' is included under the headings for both 'Common Service Costs' and 'Transmission Network Assets'. In addition, Schedule 6.2 provides that non-asset related costs incurred to provide Common Service should be allocated to the provision of Common Service, but does not explain how other non-asset related costs should be recovered. The implication appears to be that non-asset related costs that are not incurred to provide Common Service should be allocated on the basis of relevant asset costs (see the Step 2 description below).

In general, the basis or rationale for the allocation in Schedule 6.2 appears to be a mixture of:

- how the assets are *used* (eg. entry and exit assets);
- *who benefits* from an asset (eg. Common Service costs, Entry and Exit assets and transmission network assets for generators); and
- whose behaviour *causes* an expense to be incurred (eg. common service reactive plant).

As discussed in Chapter 2, in many situations, a causer pays, beneficiary pays and user pays approach will lead to similar allocations. However, particularly where network users and flows change over time, beneficiary pays and user pays are likely to produce less stable and consistent allocations.

The Issues Paper asked whether the existing delineation of assets and expenditures between the shared network and connection categories was appropriate. Submissions generally expressed broad support for the current allocation of network costs between the connection and shared network categories in the Rules.[120] Nevertheless, a number of submissions proposed changes to the current arrangements, including:

- Assets should be optimised before the costings of the entry and exit charges are developed;[121]
- Clarification of who controls a connection asset when it becomes essential for the system as a whole is required. The TNSP should control assets when they become essential for the network's reliability;[122]
- The definition of entry and exit services should provide clarity on how radial lines to connecting generators are to be treated; [123] and
- The method for converting 'connection asset costs' to connection charges needs to be clarified.[124]

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120 AGL 20 January 2006, p.1; EnergyAustralia, 23 December 2005, p.7; Ergon Energy (Distribution), 30 December 2005; p.3, MEU, December 2005, p.22; NSPMA, 12 December 2005, p.2; TEC, 30 December 2005, p.9; TransGrid, 30 December 2005; p.6, Citipower/Powercor, 25 January 2006, p.6; UED, December 2005, p.6.

121 MEU, December 2005, p.22.

122 TransGrid, 30 December 2005, p. 6.

123 Transend, 23 December 2005, p.2.

124 Transend, 23 December 2005, p.2.

Stanwell was concerned with the existing delineation between common service and connection assets and in its submission expressed concern that a TNSP has the ability to reconfigure the network to the detriment of a generator by defining a Common Service asset as an Entry asset. To mitigate this they proposed that:

> *"An asset that has previously been categorised as an asset which provided a common service and/or as a transmission network asset must not be re-categorised as an entry asset."*[125]

4.1.2 The Commission's proposed Step 1 principles

Proposed Principles[126]

The AARR for a given year is to be allocated as follows:

- in accordance with the *attributable cost share* for each pricing category of Prescribed Transmission Services;
- so that the same portion of AARR cannot be allocated more than once;
- where a portion of the AARR can be allocated to more than one pricing category of Prescribed Transmission Service, it is to be allocated according to the priority ordering outlined in the Rules.

There are two key elements of the Commission's proposed step 1 principles being:

- allocating the AARR to Prescribed Transmission Services on the basis of *attributable cost share;* and
- providing guidance on the priority of the AARRs allocation where a portion could be allocated to more than one pricing category of Prescribed Transmission Services.

In addition to explaining each of these elements is in greater detail, a consequential change arising from the Draft Revenue Rule is also discussed below.

4.1.3 The meaning of "attributable cost share"[127]

The Proposed Rule requires the AARR to be allocated to categories of Prescribed Transmission Services based on the "*attributable cost share* "for each class of service. The attributable cost share is to be based on either or both of:

- the relative cost (or value) of the assets directly attributable (on a causation basis) to that class of service compared to the costs or values of all the TNSP's assets that are directly attributable (on a causation basis) to the provision of Prescribed Transmission Services;
- the relative cost of operations and maintenance expenditures directly attributable (on a causation basis) to that class of service compared to the costs of all the TNSP's

[125] Stanwell, 12 December 2005, p.5.

[126] Proposed Revenue Rule clause 6A.24.2

[127] Proposed Revenue Rule clause 6A.22.5

operations and maintenance expenditures directly attributable (on a causation basis) to the provision of Prescribed Transmission Services,

The Proposed Rule also requires that 'cost' be referable to values contained in the TNSP's accounts.[128]

For example, assume that a TNSP has an AARR of $200 million, a RAB of $1 billion and the cost of the assets directly attributable to the provision of common services is $100 million. Further assume that the TNSP has incurred no non-asset related costs in the relevant period. The TNSP could therefore propose an allocation methodology that assigned one-tenth ($100m/$1b) of its AARR ($200m) to Common Transmission Services (ie 1/10 x $200m = $20m). The definition of cost is intentionally broad to accommodate TNSPs' existing practice as well as allow for appropriate alternative methodologies (see below on 'Comparison to existing arrangements').

Where both a TNSP's assets and operations and maintenance costs are 'directly attributable (on a causation basis)' to the provision of Prescribed Transmission Services (as is normally the case), the Proposed Pricing Rule allows a TNSP to propose a methodology that takes account of the relative size of both types of cost attributable to each service.

Extending the above example by way of illustration, assume that a TNSP incurred $30 million in operations and maintenance costs in providing Common Transmission Services and had total operations and maintenance costs of $90 million. This implies that one-third of operations and maintenance costs were attributable to Common Transmission Services. The TNSP could then allocate between one-tenth ($20m) and one-third ($67m) of its AARR to Common Transmission Services, depending on how its methodology took account of both of its asset and operations and maintenance cost ratios.

Therefore, the Commission's proposed principles allow for a proportion of a TNSP's AARR allocated to a particular Prescribed Transmission Service, to be some function (proposed by the TNSP) of the relative costs of providing that service.

The term 'directly attributable (on a causation basis)' used in the definition of attributable cost share is intended by the Commission to implement its preference for a causation-based cost allocation.

The Commission believes that as all of a TNSP's investments or O&M expenditures must be directly attributable to (ie they must all be 'caused by' the provision of) one or more categories of Prescribed Transmission Services, it should be possible to rely solely on this principle to allocate its AARR. In addition, the Proposed Rule allows the AER to develop guidelines to clarify the meaning of 'directly attributable' in order to assist TNSPs to allocate their AARRs to Prescribed Transmission Service categories.[129]

In comparing the Proposed Rule definition of *"attributable cost share"* to existing arrangements it allows for both innovation and the continuation of existing practice:

- 'Attributable cost share' refers to both the costs of assets *and* O&M expenditures directly attributable (on a causation basis) to the provision of the service. This means

[128] See definition of Attributable Cost Share in the Proposed Pricing Rule.

[129] See clause 6A.25.2 (f) of the Proposed Pricing Rule

that TNSPs who wish to continue allocating their AARRs solely on the basis of relative asset costs or values are able to do so. However, TNSPs may also wish to allocate their AARRs by taking account of the relative O&M costs directly attributable (on a causation basis) to provide a Prescribed Transmission Service. The current approach of basing the allocation solely on asset costs implicitly assumes that the O&M costs of a Prescribed Transmission Service are equi-proportionate to asset costs across the range of Prescribed Transmission services. This may not be the case in reality. For example, if assets providing Prescribed TUoS Services require systematically lower O&M expenditure per dollar of asset cost than assets providing Prescribed Entry and Exit Services, an allocation of the AARR based only on asset costs would lead to over-allocation to the Prescribed TUoS Services category and an under-allocation to the Prescribed Entry and Exit Service categories; and

- The lack of definition for asset 'costs' allows TNSPs to continue to use asset ORC values if they wish. The Commission understands that a number of TNSPs maintain ORC accounts precisely in order to facilitate the allocation of their AARRs (less non-asset related common service costs) in this (Rule-compliant) manner. However, the Commission does not believe that it is appropriate for the Rules to effectively require each TNSP to maintain an asset register that provides the ORC for all of their assets in an environment where ORCs are no longer required to establish TNSPs' allowable revenues.

It is the Commission's view that, taken together, the Proposed Rules will safely accommodate the existing arrangements where the AARR allocation is based on the relative ORC of the assets developed to provide a particular Prescribed Transmission Service. However, the Proposed Rule provisions will also allow alternative approaches so long as they are based on a well-accepted conception of the relative cost or value of the relevant asset and other expenditures directly attributable (on a causation basis) to the provision of a service. That is, the Commission does not wish to require TNSPs to maintain ORC asset accounts purely for the sake of developing transmission prices, so long as they maintain databases of other suitable measures of asset cost. The purpose of allowing TNSPs to propose alternative allocation approaches is to potentially improve at least the long-term cost-reflectivity of the charges for Prescribed Transmission services.

As the Proposed Rule emphasises attribution to the service that causes the development of the relevant asset or the incurring of the relevant O&M expenditure, it should also avoid the issue raised by Stanwell of common service assets being reclassified as entry assets at a later point in time. Attribution based on causation implies that attribution does not change if and when the use of the asset (or subject of the expenditure) changes.

Finally, the Proposed Rule allows for the AER to make guidelines to clarify the meaning of 'attributable cost share' in order to provide greater certainty to TNSPs and other stakeholders that a proposed pricing methodology is likely to be approved.[130]

[130] See clause 6A.25.2(f) of the Proposed Pricing Rule

4.1.4 The meaning of "priority ordering"[131] to services

The Proposed Pricing Rule sets out priority principles for adjusting the attributable cost share where a particular asset or O&M expenditure could potentially be attributed to more than one Prescribed Transmission Service category. The intention is that the asset or expenditure should be:

- first, allocated to Prescribed Entry or Exit Services, to the extent that the relevant asset or expense is necessary to provide these services on a standalone basis; and
- then, if there is any remainder, allocated to Prescribed TUoS Services, to the extent that the relevant asset or expense is necessary to provide these services on a standalone basis;
- ultimately, if there is any remainder, allocated to Common Transmission Services.

For example, consider a substation costing $30 million that was developed:

- partly in order to provide Prescribed Exit Services;
- partly in order to provide Prescribed Transmission Use of System Services; and
- partly in order to provide Common Transmission Services.

The priority ordering principles require that the cost of the asset is attributed based on the costs that would have been incurred had the asset been developed to provide one category of Prescribed Transmission Service only, starting with Prescribed Entry/Exit Services, and then moving through Prescribed TUoS Services and ending with Common Transmission Services.

To illustrate these principles in practice, assume that had the substation been developed solely to provide Prescribed Entry Services, it could have been much smaller and would have cost only $8m. Had the substation been developed solely in order to provide Prescribed TUoS Services, it would have cost $20 million. Finally, had the substation been developed solely in order to provide Common Transmission Services, it would have cost $15 million.

The application of the principle would then lead to the $30 million cost of the substation being attributed to Prescribed Transmission Service categories as follows:

- $8m to the Prescribed Exit Service ASRR;
- $20m to the Prescribed TUoS Services ASRR; and
- the remaining $2 million to the Common Transmission Service ASRR.

If the cost of a substation developed solely to provide Prescribed TUoS Services was more than $22 million, the application of the principle would require that $22 million of the cost be attributed to Prescribed TUoS Services resulting in no remaining costs being allocated to the Common Transmission Service category.

In comparing the proposed approach to priority ordering with the existing Schedule 6.2 in the Rules, the Commission considers that its approach should improve the clarity of the cost allocation process. The current Rules do not provide clear guidance on how a TNSP is to

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131 See clause 6A.24 (2)(c) of the Proposed Pricing Rules

attribute assets or O&M expenditures (and hence allocate their AARRs) where the relevant asset or expenditure is developed or incurred, respectively, to provide more than one category of Prescribed Transmission Service. Instead, TNSPs are faced with interpreting the ambiguous and confusing provisions of Schedule 6.2. The priority ordering principles developed by the Commission seek to provide clearer guidance to the TNSPs.

The rationale applied by the Commission for the particular ranking approach adopted, is that costs should be allocated to clearly defined services first, with the Common Transmission Service category used as a means of recovering residual costs that cannot reasonably be allocated elsewhere. Whilst this is the Commission's current rationale, it is seeking further stakeholder views on whether the proposed priority ordering is appropriate.

In addition, the Proposed Rule requires the AER to make guidelines that substitute for the existing Schedule 6.2 requirements (which are proposed to be removed). The AER is required to clarify the assets and expenditures that are *typically* directly attributable to a given Prescribed Transmission Service, to assist TNSPs to undertake their AARR allocations. However, there may be certain classes of assets or expenditures where it is not be appropriate to apply the guidelines, and the AER will need to be guided by the principles in the Rules in deciding whether to approve a TNSP's methodology.

4.1.5 Definition of the Prescribed Transmission Service categories and the AARR

As the Draft Revenue Rule changes the definition of Prescribed Transmission Services and creates the new category of Negotiated Transmission Services, *new* connection (Entry and Exit) services will be Negotiated Transmission Services under the new regime. This means that new connection services are no longer services the subject of the Proposed Pricing Rule for Prescribed Transmission Services.[132]

There are however two categories of connection services that remain within the scope of any new pricing Rules for Prescribed Transmission Services. These categories of connection services are:

- existing Entry and Exit Services that are "legacy" services and have been grandfathered [133]; and
- Entry and Exit services provided to DNSPs.[134]

The AARR in the Proposed Rule is based on the TNSP's MAR and is adjusted for a number of variables including rewards and penalties from the TNSP's service target incentive scheme, previous over- and under-recovery of allowable revenue, expected IRSR proceeds and a range of cost pass-through items.

This approach to defining the AARR differs from current practice in the existing Rules. Under the present Rules, adjustments to the amount of revenue that TNSPs are entitled to

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[132] The definition of Prescribed Transmission Services excludes connection services other than NSP-NSP connection services.

[133] See Savings and Transitional Rule, clause 11.5.11.

[134] See definitions of Prescribed Entry Service and Prescribed Exit Service in Part J of the Proposed Pricing Rule.

recover in a particular year through charges for Prescribed Transmission Services are reflected only in the magnitude of the Customer TUoS General Charge.

The Commission considers that it is more appropriate for all adjustments to the amount of revenue that may be recovered from Prescribed Transmission Service charges are made at the outset, directly to the AARR, rather than through the Customer TUoS General Charge. Although the Commission understands that this will involve a degree of rebalancing of charges, it should improve the clarity of the price-setting process. The Commission seeks stakeholder views on whether any rebalancing of charges is likely to result in significant undesirable implications for particular types or locations of network users.

4.1.6 Allocation of the ASRR to connection points

A TNSP allocates the AARR amongst different Prescribed Transmission Services and so allocated is called the annual service revenue requirement (ASRR) in the Proposed Pricing Rule.[135] This section discusses how the ASRR is subsequently allocated amongst network user connection points.

4.1.7 Current approach in the Rules

The second step in the existing Part C[136] is the allocation of the AARR for each category of Prescribed Transmission Service to:

- particular transmission assets; and from there to
- individual network user connection points.

The aggregate amount a network user pays for Prescribed Transmission Services is therefore based on the amount allocated to that network user's connection point, with reference to each Prescribed Transmission Service provided to the network user.

Allocation to particular transmission assets

The existing Rules[137] require a TNSP's AARR for a category of Prescribed Transmission Service to be allocated to each network asset that provides that service (as determined by the Schedule 6.2 delineation) based on a ratio of:

- the ORC of that asset

  to

- the ORC of all network assets that provide that category of Prescribed Transmission Service.

The Commission understands that, notwithstanding the shift away from periodic depreciated optimised replacement cost (DORC) valuations at regulatory revenue resets, it appears that at least some TNSPs maintain databases that include the ORC or at least the

135 Clause 6A.24.3 of the Proposed Pricing Rule

136 While the Rules set them out separately, the Commission understands that, in practice, steps 1& 2 are often collapsed into a single step.

137 Clause 6.4

replacement cost of their assets specifically to facilitate the development of prices in accordance with the existing Rules.

Once a share of a TNSP's AARR for a Prescribed Transmission Service is allocated to a particular asset in this way, that amount is referred to as the 'annual revenue requirement' (ARR) or 'cost' of that asset.

Clause 6.19 in Part F of Chapter 6 of the existing Rules adjusts the ARR of regulated interconnector assets by the amount of proceeds distributed to it from settlement residue auctions (SRAs) (and the actual settlement residues (IRSRs)) in respect of that interconnector.

Allocation to network user connection points

The next part to Step 2 is to allocate the AARR of a Prescribed Transmission Service to network user connection points, according to the kind of service as follows:

- for **Entry and Exit** Services, so long as there are no contractual provisions allocating the costs of these services, the entire amount of the ARRs of the assets that provide the relevant Entry or Exit Service is allocated to the network user at the relevant connection point unless a connection agreement otherwise allocates these 'costs';[138]
- for **Transmission Use of System Services**:
  - o partly using the cost reflective network pricing (CRNP) or modified CRNP (if approved by the AER) methodologies as a proxy for usage of the relevant assets.[139] The CRNP and modified CRNP methodologies are described in more detail in Schedule 6.4 of the Rules. Under the CRNP approach, 50% of the Prescribed TUoS Service AARR is recovered in this way from Transmission Customers while under modified CRNP, a greater or lesser share of the TUoS AARR may be recovered in this way; and
  - o partly through postage-stamped prices (ie the same $/MWh or $/MW price throughout the region) to Transmission Customers.[140] This implies that connection points with high consumption or demand tend to pay more than those with low consumption or demand. This charge also currently reflects adjustments for previous years' under or over-recovery of the TNSP's AARR, estimated SRA proceeds and IRSRs and any payments made by generators or MNSPs for use of system services;[141] and
  - o potentially, partly to generators based on the methodology outlined in Schedule 6.8.[142] The Commission is unaware of this methodology (based on a 'beneficiary pays' philosophy) being used. Importantly, generators and MNSPs may agree

[138] Clause 6.4.2(a) and (b) respectively. Some connection contracts may deal with technical matters but leave pricing to the Rules or some other external document.

[139] Clauses 6.4.3 and 6.4.3B.

[140] Clauses 6.4.3 and 6.4.3C.

[141] Clause 6.4.3C. It is unclear how the treatment of SRA proceeds and IRSRs in this clause was intended to operate in conjunction with clause 6.19, which suggests these amounts are used to adjust (ie reduce) the ARR of regulated interconnector assets.

[142] Clause 6.4.3.

with TNSPs to pay negotiated use of system charges, but there is no mandatory allocation of the overall AARR to these categories;

- for **Common Services,** through postage-stamped prices to Transmission Customers. Once again, this implies that connection points with high consumption or demand tend to pay more than those with low consumption or demand.

Submissions on the relative merits of CRNP and modified CRNP were discussed in Chapter 3. On the question of whether the Common Service Charge should be retained, most submissions supported its retention with some suggesting modifications to the current system.[143] Some of these suggestions were as follows:

- A capacity (maximum demand) approach to charging should be applied, instead of an energy (consumption) approach, with one submission suggesting it be made mandatory subject to transitional arrangements to prevent price shocks;[144]
- It should be based on forward looking as opposed to historical data;[145]
- One submission requested the Review to examine the assets and resources that are grouped under the Transmission Customer Common Service Charge;[146]
- Assets should be classified as common service assets unless specifically required for a network user;[147] and
- The Rules should be clarified as to whether reactive plant is a connection or common service asset.[148]

4.2 The Commission's proposed Step 2 principles

The intention of Step 1 is to allocate a TNSP's AARR amongst different Prescribed Transmission Services. This allocated revenue is known in the Proposed Rule as the annual service revenue requirement (ASRR). This section discusses how the ASRR allocated to each Prescribed Transmission Service should be further allocated amongst network user connection points.

Proposed Principles for Allocation of ASRR to Connection Points[149]

The ASRR is to be allocated in accordance with the following principles:

- The ASRR allocated to Prescribed Exit or Entry Services is to be allocated to Transmission Customers or Generators (as the case may be) on the basis of the attributable connection point cost share of the individual Prescribed Exit or Entry

143 AGL, 20 January 2006, p.A-2; Citipower/Powercor, 25 January 2006, pp.2-3; UED, December 2005, p.6; TransGrid, 30 December 2005, p.7; Energex, 21 December 2005, p.2.

144 EnergyAustralia, 23 December 2005, p.7; MEU, December 2005, p.24.

145 MEU, December 2005, p.24 and Ergon Energy (Distribution) p 3.

146 NSPMA p 2.

147 TransGrid, 30 December 2005, p.7.

148 TransGrid, 30 December 2005, p.7.

149 Clause 6A.24.3 of the Proposed Pricing Rule

Service provided to each Transmission Customer or Generator;

- The ASRR allocated to Prescribed TUoS Services is to be allocated to Transmission Customer connection points in the following manner:
    - a portion is to be allocated on the basis of the 'estimated proportionate use' of the relevant network assets by each of those Transmission Customers with CRNP or modified CRNP being two permitted means of making this estimation; and
    - the remainder is to be allocated by the application of a postage-stamped price;
- For the ASRR allocated to Prescribed TUoS Services, the shares of the locational and non-locational components must be either a 50% share allocated to each component or an alternative allocation based on a reasonable estimate of future network utilisation and the likely need for future transmission investment with the objective of providing more efficient locational price signals;
- The ASRR allocated to Common Transmission Services for Transmission Customers is to be allocated by the application of a postage-stamped price.

'Postage stamped' price refers to an identical unit price applied to connection points throughout the relevant region(s).

For Prescribed Entry and Exit Services

Description of Proposed Rule

The Proposed Rule requires the ASRR for Prescribed Entry Services and Prescribed Exit Services to be allocated to individual connection points in a similar way to how the AARR is allocated to different Prescribed Transmission Service categories.[150]

That is, the allocation is based on the 'attributable cost share' of each individual Prescribed Entry and Exit Service. The attributable connection point cost share is, in turn, based on the relative asset costs and/or O&M costs directly attributable (on a causation basis) to provide the service *to that network user* as a proportion of *total* asset costs and/or O&M costs directly attributable (on a causation basis) to provide *all* Prescribed Entry and Exit Services. The emphasis to be given to relative asset costs as compared to relative O&M costs is a matter for the TNSP to determine.

Comparison to existing arrangements

As with the allocation of the AARR to categories of Prescribed Transmission Services, the Proposed Rule accommodates existing practice by allowing TNSPs to continue allocating the ASRR based on the relative ORCs of the assets that provide each Prescribed Entry/Exit Service. Allocation based on relative ORCs of the relevant assets is simply *one way* for the TNSP to undertake the cost allocation exercise as part of formulating its pricing methodology. However, the TNSP may wish to take account of relative O&M costs in allocating the Prescribed Entry and Exit Service ASRRs to connection points. Again referring to the allocation of the AARR to Prescribed Transmission Service categories, taking account

[150] Clause 6A.24.3 (a) and (b)

of relative O&M costs incurred in order to provide a particular service may improve the cost reflectivity of the ultimate charges for these Prescribed Transmission Services.

For Prescribed Transmission Use of System Services[151]

Description of Proposed Rule

The Proposed Rule requires a portion of the ASRR for Prescribed TUoS Services to be allocated to Transmission Customer connection points on a locational basis and the remainder to be allocated on a postage-stamped basis. The locational component must be based on the 'estimated proportionate use' of the relevant network assets by each of those Transmission Customers, with CRNP and modified CRNP explicitly referred to as permitted means of estimating proportionate use.

The Proposed Rule also contains new definitions of CRNP and modified CRNP that replace the lengthy descriptions in Schedule 6.4 of the existing Rules. In order to promote certainty, the Proposed Rule allows the AER to make guidelines to clarify the requirements of these allocation methodologies. This should address the concerns raised in submission about a move away from prescriptive rules for CRNP and should also promote transparency of the methodology as sought by the MEU.

Comparison to existing arrangements

Currently, the AARR is currently allocated to Prescribed TUoS services partly to connection points on a locational basis using the CRNP or modified CRNP methodology, and partly recovered through a postage-stamped price. The split between the CRNP and postage-stamped components is currently 50/50, but this can vary under the modified CRNP.

As noted in the previous chapter, while CRNP is widely acknowledged to represent a compromise between simplicity/familiarity and efficiency, the Commission does not believe that mandating a move away from CRNP is presently justified.

The Proposed Rule implements principles for the allocation of the ASRR for Prescribed TUoS Services to connection points in a way that can accommodate CRNP and modified CRNP, as well as other innovative approaches that may emerge over time. It does this by referring to allocation on the basis of a Transmission Customer's 'proportionate use' of the network, where proportionate use may – but is not required to be – based on CRNP or modified CRNP. The definitions of CRNP and modified CRNP in the Proposed Rules summarise the existing Schedule 6.4 in a way designed to allow current CRNP and modified CRNP methodologies to continue.

The Proposed Rule also provides for a default split of 50 per cent between locational and postage-stamped portions of the ASRR, unless the TNSP can demonstrate that a methodology with an alternative split is warranted to provide more efficient locational price signals. It is not necessarily true that a larger locational portion provides more efficient locational signals. For example, in a network experiencing little load growth, there is little need to send locational signals and efficient transmission pricing effectively translates to recovering sunk cost in a least-distortionary manner. This could mean that an appropriate split of the Prescribed TUoS Services ASRR is 20% recovered through the locational element and 80% is recovered through postage-stamped prices.

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[151] Clause 6A.24.3 (c) and (d)

As part of approving a TNSP's proposed pricing methodology, the AER is required in the proposed pricing rule to consider whether any alternative split proposed by a TNSP is likely to provide efficient locational price signals. However, any change to the Customer TUoS Usage Charge is subject to the annual 2 per cent side constraint.

Common Transmission Service

The Proposed Rule requires the ASRR allocated to Common Transmission Services to be recovered through a postage-stamped price[152] (see also price structure below). This is intended to limit any rebalancing of Prescribed Transmission Service charges to Transmission Customers in different locations and help maintain the stability and predictability of the pricing arrangements. As to the more specific issues relating to the Common Service Charge that arose in submissions, the Commission is of the view that these are matters that should be left to the TNSP to propose as part of their proposed pricing methodology.

4.3 Price structure principles

This section develops and discusses the principles for pricing structures used to recover the portions of the ASRRs allocated to each connection point for each Prescribed Transmission Service category.

4.3.1 Current approach in the Rules

The final step in the existing pricing process is the development of price structures for recovering the share of each Prescribed Transmission Service AARR allocated to each Transmission Customer connection point.

Under the current Rules, prices must be set for:

- Common Services – the Transmission Customer Common Service Price;[153]
- Entry Services – Entry Charges;[154]
- Exit Services – Exit Charges;[155] and
- Use of System Services:
  - Customer TUoS Usage Prices;[156]
  - Customer TUoS General Prices;[157] and
  - Negotiated Use of System Charges (to generators and MNSPs, which are not widely utilised to the Commission's knowledge).[158]

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[152] Clause 6A.24.3(e) of the Proposed Pricing Rule

[153] Clause 6.5.6.

[154] Clause 6.5.1.

[155] Clause 6.5.2.

[156] Clause 6.5.4.

[157] Clause 6.5.4A.

[158] Clause 6.5.3.

The current Rules allow TNSPs a substantial amount of flexibility to determine price structures in relation to the Customer TUoS Usage Charge. TNSPs may recover the Customer TUoS Usage Charge using any combination of energy-based (c/kWh or c/kVAh), demand-based ($ per maximum kW or kVA) and fixed charges.[159]

In deciding on a particular price structure for the Customer TUoS Usage Price, a TNSP is required to set prices "in such a way as to reflect the conditions in the transmission network which influence transmission investment".[160] Prices recovering the Customer TUoS Usage Charge must also be applied to actual metered use of the transmission system, unless otherwise agreed.[161] In practice, it appears that TNSPs base prices on peak demand or consumption at peak demand times.[162]

In addition, the current Rules cap the rate of change of Customer TUoS Usage Prices,[163] so that price at an individual connection point cannot change by more than 2 per cent relative to the average Customer TUoS Usage Price for the relevant region(s). If this constraint would be exceeded, any additional revenue must be recovered through the Customer TUoS General Charge.

In contrast to the Customer TUoS Usage Charge, the Rules are relatively prescriptive on the price structures applicable to the:

- Customer TUoS General Charge – this must be recovered through a postage-stamped energy (c/kWh) or capacity (c/kW) price;[164]
- Transmission Customer Common Service Price – this must be recovered through a postage-stamped energy (c/kWh) or capacity (c/kW) price;[165] and
- Entry and Exit Charges – these must be recovered through fixed ($) annual charges.[166]

The Rules also contain provisions for negotiation of prudent discounts, TUoS rebates to embedded generators and inter-regional TUoS arrangements. These are dealt with Chapters 6, 7 and 8, respectively.

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[159] Clause 6.5.4(c).

[160] Clause 6.5.4(b).

[161] Clause 6.5.4(d).

[162] VENCorp, *Electricity TUoS Prices 2006-07*, p.1:

http://www.vencorp.com.au/docs/About_VENCorp/Electricity_TUOS_Prices_2006_07_Web_Document_Final.pdf

TransGrid, *Transmission Prices 2006-07*, p.3: http://www.transgrid.com.au/Transmission_Charges.htm

Powerlink, *Regulated Transmission Pricing*", p.3:
http://www.powerlink.com.au/asp/index.asp?sid=5056&page=network/pricing

[163] Clause 6.5.5.

[164] Clause 6.5.4A.

[165] Clause 6.5.6.

[166] Clauses 6.5.1 and 6.5.2.

4.3.2 The Commission's proposed Step 3 principles[167]

This section develops and discusses the principles for pricing structures used to recover the portions of the ASRRs allocated to each connection point for each Prescribed Transmission Service category.

Proposed Principles

- For the recovery of the ASRR, a TNSP is to develop separate prices for each category of Prescribed Transmission Service in accordance with the following principles;
  - prices for Prescribed Entry and Exit Services must be a fixed annual amount;
  - prices for Common Transmission Service must be postage-stamped;
  - prices to recover the location component of Prescribed TUoS Services ASRR must be based on levels of demand or consumption at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated and not change by more than 2% per annum compared to the load-weighted average price for this component for the relevant region(s);
  - prices to recover the non-locational component of Prescribed TUoS Services ASRR must also be postage-stamped.

The Commission approach to developing pricing principles to guide price structures are as follows:

- For Prescribed Entry and Exit Services - TNSPs must determine a fixed annual price at each connection point that recovers the share of the Prescribed Entry or Exit ASRR allocated to that connection point;[168]
- For:
  - Common Transmission Service ASRR; and the
  - Non-locational component of the Prescribed TUoS Services ASRR,

  prices must be postage-stamped;[169]
- For charges recovering the locational component of Prescribed TUoS Services ASRR, the Commission believes that the price should be structured to signal the potential long term consequences of actual or potential Transmission Customers' use of the network. This is because it is the locational component that is intended to reflect the LRMC of future network usage at various points in the grid. Therefore, the Proposed Rule provides that the pricing structure must be based on demand or consumption at times

167 Clause 6A.24.4

168 This approach is consistent with the current requirements in Part C of Chapter 6.

169 This approach is also consistent with the current requirements in Part C of Chapter 6.

that result in the highest levels of network utilisation and for which investment is most likely to be contemplated.

In addition, the Commission has decided to retain the current 2 per cent 'side constraint' on any given locational price compared with the average load-weighted locational price for the relevant region(s), due to concerns about the potential impact on charges if this constraint was removed. Compared with the existing Rules – which simply refer to 'average' price – the addition of the 'load-weighted' prefix should clarify the intended operation of this principle.

While the Commission's proposed pricing principles are consistent with the existing requirements in Part C, the Commission has not provided a detailed methodology for determining whether the postage-stamped prices for Common Transmission Services and Customer TUoS General Charges should be energy-based (ie $/MWh) or capacity-based (ie $/MW). Rather, the Commission believes that TNSPs should be able to propose the basis for postage stamp pricing that they consider is most appropriate to their circumstances.

Finally, the Commission highlights that where pricing for Prescribed Entry and Exit Services is currently determined under the terms of connection agreements entered into on or before 24 August 2006, these Rules do not apply.[170] This and other transitional issues will be implemented as savings and transitional measures and the Commission seeks comment form interested parties as to any other arrangements that may need transitional support.

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[170] See Rule 6A.33.

5 Procedural framework

An important element of the Commission's Proposed Pricing Rule is the specification of rules to provide a transparent and timely process for the making of transmission pricing decisions. By clarifying the obligations of parties involved in the regulatory process, greater certainty can be provided to market participants, with associated reductions in the time necessary for regulatory decisions making.

This chapter describes the procedural requirements that the Commission is proposing to support the proposed transmission pricing principles outlined in Chapter 4.

Section 5.1 provides a brief summary of the procedural requirements contained in the existing rules. Section 5.2 provides an overview of the procedural issues raised in submissions and section 5.3 provides the Commission's assessment of those issues. Section 5.4 concludes with a discussion of the key procedural elements of the Commission's Proposed Rule, including requirements for a proposed pricing methodology, TNSP obligations regarding consultation and information disclosure and the AER's responsibilities.

The key features of the Commission's proposed procedural framework are:

- an obligation on the AER to develop Pricing Methodology Guidelines in a number of specified areas;
- aligning the obligations and timeframes for approval of a proposed pricing methodology with the process proposed in the Draft Revenue Rule for approval of a Revenue Proposal and proposed negotiating framework.

5.1 Current approach in the Rules

The existing Rules require TNSPs to apply the step-by-step cost allocation and pricing methodology as set out in Part C of Chapter 6 of the Rules. The role of the AER in the current pricing rules is limited to:

- approving the use of a 'modified CRNP' pricing methodology, if put forward by a TNSP (clause 6.4.3B(c)(2));
- approving an annual interest rate to be used for the 'grossing-up' of previous over-or under-recovery of a TNSP's revenue requirement (clause 6.4.3C(b)(5) and (c)(1));
- approving a recalculation of a TNSP's cost allocation where that TNSP considers that a significant change in the use or configuration of the network warrants this (clause 6.4.6(b);
- approving the use of the current year's metered energy offtake to calculate the Customer TUoS General Charge (clause 6.5.4A(e)(1)) or the Transmission Customer Common Service Charge (clause 6.5.6(e)(1)); and
- publishing guidelines for the negotiation of discounted transmission charges (clause 6.5.8(c) and (e)) and adjusting a TNSP's revenue cap if a TNSP has not complied with those guidelines (clause 6.5.8(e)).

The current Part C also includes a number of provisions that support the implementation of TNSPs' price-setting and billing. These provisions include:

- publication of prices (clause 6.5.7) –TNSPs are required to publish prices and related service standards for the following financial year by the 15 May, in order to allow time for DNSPs to determine distribution prices;
- prudential requirements for network service (clause 6.6) – provides scope for negotiation between TNSPs and network users regarding capital contributions, pre-payments and capital guarantees, in exchange for the provision of certain network services. Where any of these arrangements are in place, the associated revenues must be taken into account in the determination of prices so that users are not made to pay twice for the same service;
- billing and settlements (clause 6.7) – describes the manner in which network users are billed for transmission services, including the basis of charging, minimum information to be included in bills, arrangements for settlement between different TNSPs and an obligation on network users to pay for transmission services;
- transmission pricing software (clause 6.8) – sets out the responsibility for developing appropriate software for implementing the transmission pricing methodology; and
- data requirements (clause 6.9) – sets out the network and forecast data requirements necessary to enable the determination of transmission prices, including confidentiality provisions.

The role of the AER within these rules is limited to:

- dealing with disputes concerning capital contributions made prior to 13 December 1998 where no contract is in place (clause 6.6.3); and
- approving standard pricing software (clause 6.8.1), and arranging for the development and approval of pricing software to implement the CRNP methodology (clause 6.8.2).

5.2 Submissions

A number of submissions commented on the manner in which a pricing methodology should be approved. UED supported an approach where the Rules included high-level principles that TNSPs must comply with in the submission of a price proposal. Citipower/Powercor agreed with the adoption of a 'propose-respond' approach and suggested that the Rules should prescribe criteria for approval of the 'CRNP approach' but leave the TNSPs to develop the actual methodology and prices.[171]

AGL suggested that TNSPs should have some discretion in setting transmission prices "so that connected parties are charged in the most efficient way."[172] However, AGL considered that the AER should also have a limited role in determining the nature and form of transmission price regulation. To the extent they need to provide guidance to TNSPs on specific aspects of pricing, the AER should be able to develop and public guidelines using the Rule Consultation processes, however:

> *Such guidelines should not be allowed to extend the powers of the AER, which should be fully defined in the Rules.*[173]

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[171] Citipower/Powercor, 25 January 2006, p.2.

[172] AGL, 20 January 2006, p.A-1.

[173] AGL, 20 January 2006, pp.3 and A-1.

Finally, PIAC took an opposing view to AGL. While PIAC supported some degree of discretion:

> *We wish to make it clear this is intended to apply to the regulator and not to the regulated businesses. That is, while we think it unwise for too many statutory constraints to be placed on regulatory decision making we do not support a wide discretion to be granted to monopoly network providers.*
>
> *Even the largest energy users can have difficulty engaging with the network operators in seeking appropriate pricing outcomes. What we have observed in NSW is that the discretion allowed by the regulator provides little real check that the pricing decisions of the distribution businesses are achieving the best balance of the needs of consumers beyond that established by side constraints. If a case can be made that different methodologies are appropriate to be used for different networks or pricing of different assets PIAC believes strongly this should be a matter for determination by the regulator.*[174]

The importance of transparency in the price setting process was also identified as a key concern, as raised in the submissions of EAG and EUAA.[175] These submissions argued that there was currently insufficient public information about transmission tariffs, particularly in Queensland and Tasmania, and that DNSPs in Queensland and NSW do not publish details of TUoS charges included in their (distribution) network tariffs. The EAG and EUAA highlighted that there is inconsistency regarding the nature and quality of transmission pricing information available across jurisdictions and recommended that:

> *The AEMC should also amend the Rules to require publication, in a precisely specified and simple common format, by all NSPs of their pricing policies, including a credible explanation of their procedures and pricing practices.*[176]

AGL also supported greater transparency in the publication of transmission prices, suggesting that charges should be unbundled to all but the smallest customers so that parties are able to examine whether they are appropriate.[177]

On the other hand, TransGrid contended that:

> *The process of determining transmission pricing in the NEM is already relatively transparent. Transmission prices are published each year, providing a reasonable degree of transparency and allowing customers the opportunity to track price changes over time. Where customers consider charges to be commercially sensitive, TransGrid does not publish some specific prices.*[178]

5.3 Commission's assessment

The Commission considers it appropriate that the consultation and approval process that will apply to a revenue cap determination and a proposed negotiating framework, as detailed in the Draft Revenue Rule, should also apply to approval of a proposed pricing methodology. This integration of processes allows for a streamlined and efficient regime for

[174] PIAC, 6 January 2006, pp.2-3.

[175] EAG and EUAA, January 2006, pp.8-9.

[176] EAG and EUAA, January 2006, pp.8-9.

[177] AGL, 20 January 2006, p.A-1.

[178] TransGrid, 30 December 2005, p.5.

the TNSP to propose its pricing methodology, and at the same time will allow market participants and the regulator to obtain a better overall understanding of the links between revenue and pricing and the overall impact of the transmission determination.

The AER's role in the approval process is to be satisfied that the proposed pricing methodology gives effect to the Pricing principles. On this basis the Proposed Rule provides for a framework that includes:

- Pricing Principles contained in the Rules, as outlined in the Chapter 4;
- the development of Pricing Methodology Guidelines by the AER to facilitate TNSP decision making in relation to the preparation of a proposed pricing methodology;
- a consultation and approval process that starts with a requirement for TNSPs to submit a proposed pricing methodology that conforms to the Pricing Principles in the Rules and the AER's Guidelines;
- a requirement for the AER to approve a proposed pricing methodology if it is consistent with, and gives effect to, the Pricing Principles and the Guidelines, meaning that the AER cannot substitute its "best" pricing methodology unless the TNSP's proposed methodology does not satisfy the requirements of the Rules and Guidelines;
- a requirement for TNSPs to calculate and set prices for Prescribed Transmission Services in accordance with an (approved) pricing methodology;
- a requirement for TNSPs' approved Pricing Methodologies to be published on the website of the TNSP;
- a requirement for TNSPs to publish prices annually;
- the maintenance of most existing obligations regarding prudential requirements and billing and settlement.

With the removal of existing detailed requirements from the Rules for transmission pricing, the Commission wishes to ensure that transmission network users have the opportunity to be well informed on the price-setting process. The Commission believes that by requiring approval and publication of a pricing methodology as the basis for setting prices during a regulatory control period, the TNSP's pricing decision making is more transparent and therefore, more robust.

The Proposed Rule provides transmission users with two key opportunities to become familiar with, and contribute to, the development of the pricing methodology through the:

- Consultation and approval process for the TNSPs' pricing methodologies – TNSPs' proposed methodologies must be reviewed by the AER and are subject to several rounds of public consultation. The AER will be required to set information requirements (as it must under the Draft Revenue Rule) to ensure both it, and the market, are fully informed about the TNSP's proposed methodology; and
- Establishment of the AER's guidelines in areas where more detail is required for the application of the principles – the AER's guidelines on matters such as:
    - CRNP and modified CRNP;
    - the allocation of assets and non-asset related costs to Prescribed Transmission Service categories; and

must be transparently developed in accordance with the consultation procedures provided in the Rules.[179]

The Commission considers that the proposed arrangements should significantly improve transparency, and the level of participant understanding, of transmission price-setting.

Implementation and enforcement of pricing outcomes will be the responsibility of the AER, relying on its general monitoring and enforcement powers under the NEL. This is the proposed mechanism by which the AER would monitor TNSPs' prices to ensure they are consistent with the approved pricing methodology. The Commission seeks stakeholder views on whether this regime is likely to provide a sufficiently robust framework to deal with the issues of concern to both TNSPs and network users.

5.4 Proposed Pricing Rule – procedural matters

The Commission's Proposed Pricing Rule has been drafted as a "stand-alone" amending Rule for the pricing of Prescribed Transmission Services. The Commission is aware that, in developing the Final Rules for both transmission revenue regulation and transmission pricing, there will be a need to integrate the two Draft Rules. At the final stage of developing the final Rules for transmission revenue and pricing the Commission will prepare an integrated package of rules.

As previously noted, the main features of the proposed pricing procedures are:

- the role of AER Pricing Methodology Guidelines; and
- procedures for approving a TNSPs pricing methodology.

5.4.1 Requirement in the Rules for the AER to develop Pricing Methodology Guidelines[180]

The Proposed Rule requires the AER to develop Pricing Methodology Guidelines (the Guidelines). The Guidelines:

- must be consistent with and give effect to the Pricing Principles in the Rules;
- will only contain those matters for which the Rules provides for Guidelines to be made;
- must be developed in accordance with the Transmission Consultation Procedure;
- must be published for the first time and be in place by a stipulated date; and
- may be amended by the AER, applying the Transmission Consultation Procedures. The intention will be that amendments should not have retrospective effect in their operation for existing approved pricing methodologies.

[179] Proposed Rule, clause 6A.25.1.

[180] Proposed Rule, clause 6A.25.

5.4.2 Process for approval of a TNSP's proposed Pricing Methodology[181]

The Commission's proposed process for approving a TNSP's proposed pricing methodology includes the following elements:

- each TNSP must submit its proposed Pricing Methodology to the AER at the same time as it submits a Revenue Proposal and a proposed negotiating framework in accordance with Part E of the new Chapter 6A of the Rules;
- the requirements on form, information requirements and confidentiality ;
- application of the new process proposed in the Draft Revenue Rule for a revenue cap determination and a proposed negotiating framework under Part E, which includes:
  - preliminary examination by the AER of a TNSP's proposed Pricing Methodology to determine if it complies with the relevant principles and guidelines, notifying the TNSP of its conclusions and reasons;
  - the TNSP must resubmit a revised proposed methodology that complies with the requirements;
  - consultation, draft and final decisions;
  - the AER making and publishing a draft decision on the TNSP's proposed Pricing Methodology and further consultation, and the TNSP may submit a further revised Pricing Methodology;
- the AER must approve a TNSP's proposed Pricing Methodology unless the AER determines that the methodology is inconsistent with:
  - the Pricing Principles in the Rules; or
  - the AER's Pricing Methodology Guidelines;
- the AER must provide reasons for its decision;
- where the AER is making a final decision, and the AER is of the view that the proposed Pricing Methodology does not comply with the Rules and guidelines, it must:
  - include in its final decision an amended Pricing Methodology;
  - determine any amendment on the basis of the current proposed methodology put forward by the TNSP;
  - only amend that methodology to the extent necessary to enable it to be approved in accordance with the Rules;
- the TNSP must determine and publish prices for Prescribed Transmission Services by 15 May each year through the application of the approved Pricing Methodology;

5.4.3 Other pricing provisions

The Proposed Rule retains a number of existing pricing rules and the Commission invites comment from interested persons, as to the approach to be adopted in relation to these matters, in light of the Commission's proposed approach to pricing more generally. These supporting provisions include:

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[181] Proposed Rule, clause 6A.26.

- prudential requirements including the treatment of past capital contributions: these rules are proposed to be maintained as under the existing clause 6.6, recognising that TNSPs are able to negotiate prudential arrangements with network users;
- billing and settlement are to be retained but modified from the existing clause 6.7 in the following ways:
  - o to allow for the removal of billing arrangements relating to generator negotiated UoS charges, generator access charges and generator charges for new investment (see clauses 6.7.1(b)(1) and 6.7.4(c)); and
  - o references to the existing cost allocation and pricing arrangements in clauses 6.4 and 6.5 refer to "a pricing methodology";

  Minimum information requirements in bills are retained as are transmission network users' obligations to pay their bills;
- software requirements (see existing rule 6.8) are proposed to be removed. To the extent that software makes up part of a TNSP's proposed pricing methodology, it will require the approval of the AER;
- information requirements generally in relation to pricing in the existing clause 6.9.1) are proposed for inclusion in the information guidelines that form part of the Draft Revenue Rule.
- confidentiality provisions contained in the existing clause 6.9 have been flagged for comment from interested parties, as to the appropriate arrangements for dealing with confidential pricing information in the context of the altered pricing regime.

6 Prudent discounts

A feature of the existing Rules (clause 6.5.8) is that TNSPs are allowed (but not obliged) to negotiate a lower price for Prescribed Transmission Services than what is provided for in clauses 6.5.1 to 6.5.6. Where a TNSP agrees to a lower Customer TUoS General Charge or Transmission Customer Common Service Charge, the TNSP may recover the foregone amount from other Transmission Customers, so long as the TNSP has complied with the AER's "Guidelines for the Negotiation of Discounted Transmission Charges" (AER Guidelines)[182].

The rationale for allowing these 'prudent discounts' is to prevent *inefficient by-pass* of the transmission network. 'By-pass' in this context refers to:

- Technical by-pass – such as the development of a duplicate transmission line from a power station to a large load; as well as
- Economic by-pass – such as a decision to not invest in or expand a load or to shut down an existing operation.

By-passing the existing transmission network can in some instances be efficient as a lower cost option may be available. This would occur where an alternative option has a lower cost compared to transmission charges based on the incremental cost of using the network. However, if the alternative option is only lower cost because transmission charges are greater than the incremental costs, then by-pass will be inefficient.

Under the Draft Revenue Rule, TNSPs will only face the risk of regulatory optimisation of assets within their RABs if:

- those assets no longer contribute to the provision of Prescribed Transmission Services;
- those assets are worth more than $20 million (indexed) and are dedicated to a single network user; and
- the TNSP has not sought to negotiate a discount or enter arrangements to manage the risk of the assets being commercially stranded.[183]

This provides TNSPs with a strong incentive to negotiate prudent discounts in respect of services provided by certain dedicated assets. The question then is, how should the Rules minimise the risk of inefficient by-pass occurring. This question is addressed in the remainder of this chapter.

6.1 Current approach in the Rules

The Rules currently allow TNSPs that agree to discount a Transmission Customer's Customer TUoS General and/or Transmission Customer Common Service Charges to recover all or part of the amount of the reduction from other Transmission Customers, provided that the TNSP can demonstrate that the discount complies with the AER Guidelines (see clauses 6.5.8(b) to (d)). Consequently, the minimum charge that a

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[182] Then the ACCC: ACCC, Guidelines for the Negotiation of Discounted Transmission Charges, 3 May 2002.

[183] Clause 6A.2.3 of the Draft Revenue Rule.

Transmission Customer can pay is the applicable Customer TUoS Usage Charge (which is intended to reflect the incremental cost of that customer's use of the network).

6.1.1 Existing AER Guidelines for the negotiation of prudent discounts

Guideline 1 requires a TNSP to set the discount at a level sufficient to ensure that a discount recipient does not adopt alternative options that bypass the TNSP/network inefficiently.

To demonstrate compliance with this guideline, it is sufficient for the TNSP to:

- prove alternative scenarios are technically and commercially credible; and
- provide information to the AER on the costs and benefits of the proposed course of action and the most technically and commercially viable alternative, sufficient to demonstrate that the negotiated discount is no larger than required to prevent adoption of the alternative.

Guideline 2 requires that no other network users will be worse off as a result of the discount being offered. In order to comply with the guideline, it is sufficient for the TNSP to demonstrate to the AER that by offering the discount:

- its revenue cap will not increase; or
- that the increase in its revenue cap will be less than the increase in network charges payable by the beneficiary of the discount.

If the discount does not meet the criteria in Guidelines 1 and 2, Guideline 3 provides what is commonly referred to as the 'safe harbour' provisions. This allows 70% of the discount to be recovered by the TNSP from other loads. Compliance with this guideline alone is sufficient for the discount to be accepted by the AER.

Guideline 4 provides for the continuation of discounts that were negotiated prior to the release of the AER Guidelines (ie before 10 October 2001) so long as the agreement remains in effect and is not renegotiated.

The Guidelines do not specify the potential length of a negotiated discount, other than requiring the AER to review discounts at each regulatory reset, though the AER has indicated that a greater degree of scrutiny will be applied to longer discount arrangements compared with those of a shorter duration.

6.1.2 Application of the Guidelines

The current Rules (clause 6.5.8(e)) allow the AER to formally consider discounts granted at each regulatory reset. If at the regulatory reset the TNSP does not demonstrate to the satisfaction of the AER that the discount satisfies the Guidelines, the AER may reduce the TNSP's revenue cap for the next regulatory control period to take into account the discount amount that has been recovered from other Transmission Customers during the preceding regulatory control period.

The onus is therefore on the TNSP to ensure that the negotiated discount complies with the guidelines, though a request for the AER to assess a proposed discount can be made. This assessment is not a formal approval, and is not binding; however, the AER would not anticipate departing from this opinion, except where information provided to the AER or the TNSP's forecasts proves to be incorrect or insufficient. The AER's formal assessment is conducted on the basis of information available at the time of the negotiation.

Similar arrangements for the negotiation of prudent discounts exist under the Gas Code. The *Gas Code Reference Tariff Principles* set out broad principles for determining the proportion of total revenue that should be recovered from each user of a particular service. Much like the AER guidelines, the Gas Code requires that the discount be demonstrably necessary to avoid the loss of a user of a service, but that the discount is no greater than necessary to remove this possibility. These principles require that the charge paid by any user of a 'reference service' be cost reflective, although substantial flexibility is provided. The principles contained in the Gas Code differ from those arising out of the Rules in that the regulator has greater discretion in approving the implementation of a negotiated discount under the Gas Code, and, notably, the absence of a 'safe harbour' provision, such as exists under the AER guidelines.

6.1.3 Negotiating framework

The provision of a prescribed transmission service at a discounted price is referred to as a 'negotiable service' in the existing Rules.[184] This means that a TNSP's negotiating framework established under clause 6.5.9 applies to the negotiation of prudent discounts, with the caveat that the publication requirements for discount outcomes is more limited than for other negotiable services.[185] However, it is worth noting that under clause 6.5.8, the TNSP is not obliged to offer any Transmission Customer a discounted charge. The intended commercial driver for TNSPs offering discounts in the current regime is to avoid asset optimisation or attract asset expansion and revaluation.[186]

6.2 Submissions

The retention of 'TUoS discounts' in the Rules was supported by all submissions to the Pricing Issues Paper that commented on this issue, although there were a variety of opinions regarding the precise criteria to be applied and how discounts should be implemented.

6.2.1 Criteria for prudent discounts

Several submissions argued for the removal of the 'safe harbour' provision (guideline 3) for prudent discounts, on the basis that such discounts may not actually be necessary to avoid inefficient by-pass from occurring.[187] The MEU considered that where a discount possibility exists, analysis should be undertaken to confirm that the likely loss in revenue after allowing for the optimisation of the assets will be greater than the discount needed to prevent the bypass where the TNSP must incur any loss due to optimisation.[188] NSPMA considered that

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184 National Electricity Rules, Chapter 10, definition of "negotiable service".

185 National Electricity Rules, clause 6.5.9(b)(7).

186 See AER Guidelines, p.18.

187 Energex, 21 December 2005, pp.2-3; MEU, December 2005, p.30.

188 MEU, December 2005, pp.29-30.

TNSPs should be exposed to optimisation for the relevant assets if they do not negotiate to promote utilisation of their networks.[189]

According to Ergon Energy (Distribution) and Queensland Rail's submissions, the existing discount arrangements excessively restrict Transmission Customers' ability to access discounts.[190] Both argued that it should not be necessary to demonstrate that inefficient by-pass would result without the discount. Rather, discounts should be allowed wherever the TNSP or the dispute resolution body considers the discount is necessary to attract a load and the charge levied at least covers the (long run) incremental cost imposed by the load.[191] Ergon Energy (Distribution) and Queensland Rail also considered that under a revenue cap form of regulation, TNSPs may not have sufficient incentives to negotiate discounts.[192]

Citipower/Powercor disagreed with the adoption of guidelines that constrained TNSPs from recovering discounts form other network users. Citipower/Powercor proposed that TNSPs should have:

> *"…the discretion to discount charges to avoid inefficient bypass as long as the prices are efficient, i.e. equal to or above the avoidable cost of serving the customer."*[193]

Ergon Retail said that the Gas Code approach to 'prudent discounts' could be incorporated in the Rules,[194] while Macquarie Generation believe that the Commission should recognise the AER's current guidelines as providing a reasonable framework for negotiating discount in the development of revised rules.[195] Tomago also strongly supported the existing AER guidelines as being appropriate and equitable.[196]

AGL supported limiting TUoS discounts to the point where no other customer is made worse off, but noted that this may be difficult to enforce. AGL thus supported, at a minimum, a discount that only applies to a Transmission Customer's Customer TUoS Usage Charge. [197]

6.2.2 Procedure for discounts

Submissions from EnergyAustralia and the TNOs supported more clarity in the Rules with regard to the procedural requirements for having a discount approved by the AER and greater certainty as to full cost recovery.[198] EnergyAustralia, for example, sought clarity on matters such as who is responsible (the TNSP or the Transmission Customer) for undertaking the required preparation for the discount application, requirements for

[189] NSPMA, 12 December 2005, p.5.

[190] Ergon Energy (Distribution), 30 December 2005, p.5; Queensland Rail, 9 January 2006, pp.1-3.

[191] Ergon Energy (Distribution), 30 December 2005, p.5; Queensland Rail, 9 January 2006, pp.1-3.

[192] Ergon Energy (Distribution), 30 December 2005, p.5; Queensland Rail, 9 January 2006, p.2.

[193] Citipower/Powercor, 25 January 2006, p.4.

[194] Ergon Retail, 3 January 2006, p.3.

[195] Macquarie Generation, 3 January 2006, pp.2-3.

[196] Tomago, p.2.

[197] AGL, 20 January 2006, p.A-2.

[198] EnergyAustralia, 23 December 2005, p.10; TNOs, December 2005, p.6.

disclosure of the by-pass option, requirements for the technical and economic feasibility of the by-pass option and deadlines for the AER to consider the discount application.[199] The TNOs proposed that:

- the key discounting criteria in the guidelines be elevated to the Rules;
- an AER decision on a discount be binding for the duration of the 'discount period'; and
- the Rules contain timeframes and processes for consulting on and approving the discount.[200]

TransGrid and Tomago supported the AER having the power to approve a discount at the time it is proposed (rather than at the revenue reset) and, like the TNOs' submission, argued that discounts should be approved for the life of the relevant Transmission Customer contract (for example, 20 to 25 years).[201]

Tomago also argued that if there were to be changes to the regime for TUoS discounts:

> *"… existing discounts must be 'grandfathered' …"*[202]

The TEC supported TUoS discounts but under the following conditions.

> *"… the user investigate energy efficiency and time of use alternatives to avoid contributing to the base load and/or peak demand on the system. A discount could be offered on condition that the user implements the alternative/s if found to be cost-effective. … These considerations should be set out in the Rules, not left to the discretion of the AER."*[203]

6.3 Commission's assessment

The Commission agrees with the position expressed in the majority of submissions that the Rules should provide scope for the negotiation of prudent discounts, where appropriate. However, the Commission is also of the view that the workability of the discounting arrangements could be enhanced in a number of ways. These include:

- elevating the AER's existing negotiation guidelines into the Rules;
- allowing (but not obliging) a TNSP to seek 'up front' approval from the AER for recovery of a discount and where such approval is granted, for it to be effective for the duration of the TNSP's (original) agreement with the relevant Transmission Customer; and
- providing a process in the Rules to apply to the AER's consideration of a TNSP's up front application for approval of a proposed recovery amount.

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199 EnergyAustralia, 23 December 2005, p.10.

200 TNOs, December 2005, p.6.

201 TransGrid, 30 December 2005, p.11; Tomago, p.2.

202 Tomago, p. 2.

203 TEC, 30 December 2005, p.12.

The Commission also agrees that the recovery from other Transmission Customers of discounts given under the pre-AER regime should be "grandfathered" and the Proposed Rule includes this provision[204].

Finally, the Commission does not believe that prudent discounts, which relate to prescribed transmission services, ought to be the subject of a negotiating framework that applies to negotiated transmission services.

6.3.1 Elevation of the AER's Guidelines

The AER's guidelines provide two pathways for the recovery of discounts from a TNSP's other Transmission Customers. The first pathway is where the discount is the minimum necessary to avoid inefficient by-pass and must not result in any other Transmission Customer being made worse off compared to the situation if no discount were given. The second pathway is the 'safe harbour' provision in Guideline 3, whereby 70% of a discount can be recovered from other Transmission Customers without having to demonstrate satisfaction of the criteria required for the first path.

Several participants questioned whether Guideline 3 should remain,[205] as it offers no guarantee that where a discount is granted it is actually necessary to win or retain the relevant Transmission Customer. The Commission acknowledges this concern but has decided to retain the equivalent of Guideline 3 in the Proposed Rule as a basis for consultation. The Commission is interested in stakeholders' views specifically on the question of whether the continuation of the safe harbour provision can be justified and on what basis.

An alternative approach to granting discounts is to remove the emphasis on ensuring that a discount is the minimum necessary (or even necessary at all) to retain or attract a Transmission Customer. So long as the customer still pays at least the incremental cost it imposes on the network, the price to the customer will satisfy the Baumol-Willig conditions and there is no cross-subsidy in favour of that customer. In this context, the Commission notes the views of several parties who argued in favour of relaxing the AER's discount criteria in Guidelines 1 and 2 so that the only requirement would be that Transmission Customers are charged at least the incremental costs they impose on the network.[206] Under this approach, there would be no need to ensure that either:

- the discount was the minimum necessary to avoid by-pass (similar to the AER's existing Guideline 1); or
- the discount did not make other Transmission Customers worse off (similar to the AER's existing Guideline 2 – but note that due to the limited scope for asset optimisation in the Draft Revenue Rule, it would be rare for this requirement to be relevant in the future).

Relaxation of the criteria in this way would significantly simplify the assessment and approval of discounts and avoid the need for a safe harbour provision, but may lead to

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[204] Clause 6A.27.2(l)

[205] Energex, 21 December 2005, pp.2-3; MEU, December 2005, p.30.

[206] Ergon Energy (Distribution), 30 December 2005, p.5; Queensland Rail, 9 January 2006, pp.1-3; Citipower/Powercor, 25 January 2006, p.4.

undesirable distributional outcomes if smaller end-use consumers ended up effectively paying for discounts granted freely to large directly-connected consumers. Therefore, the Commission has decided to retain the equivalent of Guidelines 1 and 2 in the Proposed Rule, but welcomes stakeholder comment on whether a more relaxed set of criteria is appropriate to apply in their place.

Finally, the Proposed Rule retains the provision in the existing Rule as it relates to discounts only being recoverable from other Transmission Customers if the discount relates to the Customer TUoS General Charge or the Transmission Customer Common Service Charge (ie the Transmission Customer must at least pay the applicable Customer TUoS Usage Charge). This limits the maximum size of the discount that can be provided to a Transmission Customer. However, there may be cases where the true incremental cost of serving a load is less than the Customer TUoS Usage Charge, due to imperfections in the use of CRNP and similar methodologies as proxies for long-run marginal cost. Therefore, the existing arrangements may result in inefficient by-pass where TNSPs are restrained from discounting enough to retain or attract a particular Transmission Customer by the obligation to charge at least the Customer TUoS Usage Charge.

The Commission therefore seeks submissions on whether the minimum price payable by a Transmission Customer should be some measure of 'incremental cost' and if so, how should that measure be described in the Rules.

6.3.2 Procedure for up-front approval of prudent discounts

The Commission has noted the concerns of many participants surrounding the process of accessing a TUoS discount.[207]

Up-front approvals and their duration

The Commission believes that TNSPs should be able to apply for upfront approval of a discount from the AER and that such approval, if granted, should be effective for the duration of the TNSP's (original) agreement with the relevant Transmission Customer. It is the Commission's intent that if the duration or scope of the agreement between the TNSP and the Transmission Customer receiving the discount changes, the AER's previous approval will no longer apply and, subject to a fresh discount application, the AER will be obliged to review the proposed discount's compliance with the Rules at subsequent regulatory resets.

On the other hand, if a TNSP does not wish to undergo the effort and expense of upfront regulatory approval, it may decide to grant the discount and recover it from its other Transmission Customers as under the current Rules, taking the risk that the AER may choose, at a subsequent regulatory reset, to adjust the TNSP's AARR if the discount does not comply with the Rules.

Process for Discount Applications

The Commission acknowledges participants' views on the need to clearly define the process for the submission and evaluation of a TNSP's upfront discount application. The Proposed

[207] EnergyAustralia, 23 December 2005, p.10; TNOs, December 2005, p.6; TransGrid, 30 December 2005, p.11; Tomago, p.2.

Rule puts forward a regime that involves the AER developing (as part of the information guidelines already referred to in the Draft Revenue Rule) the information requirements for assessing the proposed discount against the Rule criteria. Once a TNSP has submitted a discount application that complies with the requirements of the guidelines, the AER has up to 3 months to approve or reject the proposed discount in accordance with the requirements in the Rules. If the AER does not notify the TNSP of a decision within the specified time period, the discount is deemed to be approved for the submitted duration of the agreement.

6.3.3 Negotiating framework

As noted above, prudent discounts are currently subject to each TNSP's negotiating framework for negotiable services. However, the Commission notes that clause 6.5.8 of the existing Rules provides that TNSPs are under no obligation to offer Transmission Customers a discount. Rather, TNSPs have incentives to offer discounts because of the threat of assets being treated as redundant and subsequently removed from the asset base for revenue purposes. The Commission has confirmed the Statement of Regulatory Principle's removal of periodic DORC revaluations in the Draft Revenue Rule. However, the asset redundancy incentive is retained at least for large dedicated transmission assets (see clause 6A.2.3).

At this stage, the Commission does not intend to change the Rules to require TNSPs to offer prudent discounts where there is a risk of network by-pass. As there does not appear to be a good reason to retain the obligation for prudent discounts to be subject to the TNSP's negotiating framework, the Commission proposes to abolish this requirement. However, the Commission would welcome stakeholders' comments on this issue.

6.4 Commission's Proposed Rule for Prudent Discounts[208]

After considering the issues raised in submissions relating to prudent discounts, the Commission has decided to include the following elements in the Proposed Rule to provide for prudent discounts:

- a TNSP may agree with a Transmission Customer to a lower charge (reduced charges) for Prescribed TUoS Services and/or Common Transmission Services than the maximum charge determined in accordance with clauses 6.5.1 to 6.5.6;
- a TNSP may recover the difference between the maximum permitted and the agreed reduced charge (the discount amount) from:
  - Customer TUoS General Charge; and/or
  - Common Transmission Service Charge

  (the 'discount') to a particular Transmission Customer through the equivalent charge to its other Transmission Customers if:
  - the discount is the minimum necessary to avoid a credible risk of by-pass of the TNSP's existing network; and
  - the discount would not result in any of the TNSP's other Transmission Customers being made worse off compared to the situation where the discount was not offered;

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208 Rule 6A.27, Draft Revenue Rule.

- in the event that the previous clause is not satisfied, the TNSP may recover up to 70 per cent of the discount through the equivalent charge(s) to its other Transmission Customers;
- the TNSP may submit an application for a discount ("Discount Application") to the AER prior to agreeing the discount with a Transmission Customer;
- the AER must develop and publish guidelines ("Discount Guidelines") in accordance with the Transmission Consultation Procedures regarding the type of information required to be included in a Discount Application;
- if and when a TNSP's Discount Application complies with the requirements of the Discount Guidelines, the AER must notify the TNSP that made the Discount Application of whether or not the discount is approved within 3 months from the date that a Discount Application that complied with the Discount Guidelines was submitted. If the AER does not notify the TNSP that the discount is not approved within that period, the discount is deemed to be approved;
- if the AER approves or is deemed to approve a discount proposed as part of a Discount Application, that approval must remain valid for the proposed duration of the TNSP's contract with the Transmission Customer, as at the time of the Discount Application, unless the TNSP provided information as part of the Discount Application that was materially false or misleading;
- if a TNSP does not submit a Discount Application, the AER must review the discount at each regulatory reset in accordance with the Rules and if the discount does not comply with the Rules, the AER may adjust the TNSP's AARRs for the following regulatory control period accordingly; and
- a TNSP may continue to recover discounts from other network users that were negotiated prior to the release of the AER Guidelines (ie before 10 October 2001) so long as the agreement remains in effect and is not renegotiated.

7 TUoS rebates to embedded generators

The current Rules allow rebates of Customer TUoS usage charges to be provided to embedded generators, arising from savings made by DNSPs when an embedded generator locates in their network. At present, 100 per cent of this saving is required to be passed through to the embedded generator. The rationale for this mandated approach is twofold. First, embedded generators are considered to create savings in future transmission augmentation costs. Therefore, the rebate is intended to provide an incentive for generators to locate in load-rich areas to help defer or avoid the need for future transmission investment. Second, DNSPs are considered to be in a superior bargaining position so that negotiation between the DNSP and the embedded generator proponent is not expected to result in appropriate outcomes.

The key question that the Commission has considered is whether the existing rebate arrangements should continue, or whether it is appropriate to modify the existing arrangements in some way. Some approaches for modifying the existing arrangements considered by the Commission include:

- allowing the rebate to reflect only the Customer TUoS Usage Charge (currently based on CRNP or modified CRNP) or alternatively both the Customer TUoS Usage and General Charges (which are currently a postage-stamped charge that recovers the remaining revenue requirement allocated to prescribed TUoS Services);
- allowing the rebate to apply to demand side management and non-electricity alternatives as well as embedded generation, as these other options may also help defer or avoid the need for transmission investment; and
- allowing the rebate to equal the full TUoS saving accruing to DNSPs (as is currently the case) or whether it should be a matter for negotiation between the parties.

Another issue that is relevant given the Commission's Draft Revenue Rule is the interaction between TUoS rebates and network support payments that can be offered to embedded generators through the application of the Regulatory Test. The question is whether embedded generators should be able to claim both TUoS rebates as well as network support payments.

In general, the Commission's approach to the Proposed Pricing Rule is to not radically change the existing transmission pricing arrangements. Nevertheless, there is a case for aligning the greater emphasis placed by the Commission on negotiation in the Draft Revenue Rule and the determination of remuneration provided to embedded generators.

7.1 Current approach in the Rules

Clause 5.5 of the current Rules require DNSPs to pay embedded generators the difference between the Customer TUoS Usage Charge that would have otherwise been payable by the DNSP to the TNSP had the embedded generator not been connected to the DNSP's network, and what the DNSP actually does pay.[209]

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[209] TUoS Usage Charges may be calculated as energy or demand. ElectraNet only uses demand charging for TUoS charges whereas TransGrid applies both demand and energy based charging.

Clause 5.5(h) imposes the obligation on DNSPs to pay the 'avoided' TUoS amount and clause 5.5(i) deals with how the rebate is calculated.

A key point to note is that the rebate represents 100 per cent of any savings made by the DNSP as a result of the output of the embedded generator. Further, the ACCC saw TUoS rebates as providing a partial substitute for a locational charge for generators.

Another further point is that clause 5.5(j) of the existing Rules requires any payments made to an embedded generator under clause 5.5(h) to be included in the AARR of the relevant DNSP. This means that consumers should be indifferent, at least in the short term, between an embedded generator locating in their area or not.

Finally, under the current Rules (clause 5.6.2(m)), both transmission-connected generators and embedded generators are eligible to receive a Network Support Payment where the relevant network service provider decides to implement a generation option instead of a network augmentation. This payment is separate to the provisions for TUoS rebates under Clause 5.5 and enables the generator to directly capture the benefit of deferring augmentation.

7.2 Submissions

Most submissions that commented on this issue were broadly in favour of retaining TUoS rebates in the Rules, but several pointed out what they perceived to be inadequacies with the current arrangements.

A number of submissions commented that the existing arrangements underestimated the benefits provided by embedded generators. For example, MEU suggested that the current arrangements actively discriminated against embedded generation and demand side management by not providing the 'full value of benefits' in the TUoS rebate (NB the rebate only relates to the avoided TUoS usage charge rather than the usage charge *and* the TUoS general charge).[210] MEU argued that the Rules should set the maximum rebate as:

> "*..the full change in the usage charges* [sic – intent appears to be the usage and general charges] *resulting from the embedded generator or demand side response.*"[211]

To calculate the rebate, the AER (or another independent party) would need to assess each project on its merits.

Similarly, the TEC commented that embedded generation:

> "*…offers a range of benefits not entirely reflected in the current method of calculating avoided TUoS rebates.*"[212]

These benefits include the deferral of transmission investment, potentially a reduction in greenhouse gas emissions, and even system cost-effectiveness and reliability.[213] Therefore,

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210 MEU, December 2005, pp.30-31.

211 MEU, December 2005, p.31.

212 Total Environment Centre, p.11.

the TEC said that the TUoS 'rebate' should include the value of deferral of new network augmentations as well as:

- annual operating costs of the deferred augmentation;
- total annual net cost of servicing the capital expenditure of the deferred augmentation including:
  - financing charges; and
  - capital depreciation.[214]

According to the TEC:

> *"Including the full value of deferral of network augmentations in the calculation of TUoS rebates would provide more accurate price signals across the NEM."*[215]

Ergon Energy (Distribution) suggested that TUoS rebates should be based on the savings on future network expansion and any other incremental cost savings derived from a cost benefit analysis that considers a world with or without the embedded generator.[216]

UED considered that the TUoS rebates should reflect the long run avoided transmission costs attributed to the actions of the embedded generator and suggested that similar rebates should be available to demand side management or non-electricity options.[217]

AGL noted that TUoS rebates exist for "true network savings" and "to compensate for shallow connection charges to remote generators" and that the current TUoS rebate method in the Rules was introduced to address the bargaining power imbalance between NSPs and connecting parties when negotiating a rebate for the 'true avoided costs' due to the operation of an embedded generator or demand side response.[218]

The current TUoS rebate arrangements were also criticised by EnergyAustralia as creating perverse incentives.[219] EnergyAustralia commented that the current arrangement encourage prospective embedded generators to connect to a DNSP's network rather than connecting to a transmission system even if the latter option is more efficient for the power system as a whole.[220] Its submission cited an example of an embedded generator that has the capacity to satisfy most of the demand in the portion of the DNSP it is connected to. EnergyAustralia referred to potential problems with the way in which the rebate is calculated that could lead

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[213] Total Environment Centre, pp.11-12.

[214] Total Environment Centre, p.12.

[215] Total Environment Centre, p.11.

[216] Ergon Energy Distribution, 30 December 2005, p.9

[217] United Energy, December 2005, pp.9-10.

[218] AGL, 20 January 2006, p.A-3.

[219] EnergyAustralia, 23 December 2005, p.11.

[220] EnergyAustralia, 23 December 2005, p.11.

to the rebate being much higher than the 'true' saving to the DNSP.[221] While EnergyAustralia supported a comprehensive scheme of generator TUoS charges (something the Commission does not propose to implement), it also suggested that within the current TUoS arrangements, TUoS rebates were reasonably appropriate for smaller embedded generators (up to 10MW).[222] For larger generators, any rebate should be based on the actual transmission investment avoided as informed by proper network planning studies.[223]

ETSA Utilities stated that its connection agreements with ElectraNet are billed on an agreed capacity basis and the operation of an embedded generator is unlikely to impact on the TUoS paid by ETSA.[224] This makes it difficult for an embedded generator to qualify for a payment under the existing clause 5.5(i) of the Rules unless the embedded generator contracts to guarantee capacity.[225] There are currently no embedded generators in ETSA's network that receive TUoS discounts.[226]

Other submissions proposed that the Rules should specify a minimum generator size threshold to qualify for a TUoS rebate that ensures the cost of administering the rebate does not negate the benefits.[227]

On the issue of whether TUoS rebates should be prescribed in the Rules or left as a matter for negotiation between the DNSP and the embedded generator, most respondents on this issue favoured addressing it in the Rules.[228] However, Ergon Energy (Distribution) argued that:

> *"… the treatment of TUoS rebates should be consistent with TUoS discounts. That is, such discounts should be the subject of negotiation between the DNSP and the connected party, with the Rules establishing high level principles to guide such negotiation and with access to dispute resolution by the AER where an agreement cannot be reached."*[229]

TransGrid noted that the current Rules do not currently provide a fully coherent framework for network support arrangements and for their interaction with TUoS rebates. TransGrid's submission noted that the Rules allow for the recovery of the costs of generation alternatives to transmission augmentation, through the TUoS general charge.[230] TransGrid also noted that the approach to recovering the costs of a demand side option are not specified, but suggested that the Transmission Customer Common Service Charge is the most likely option.[231] Both the Customer TUoS General Charge and the Transmission Customer

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221 EnergyAustralia, 23 December 2005, p.11.

222 EnergyAustralia, 23 December 2005, p.12.

223 EnergyAustralia, 23 December 2005, p.12.

224 There are severe financial penalties enforced on ETSA Utilities if the agreed capacity is exceeded. ElectraNet SA, 'Transmission Pricing Methodology', 15 May 2003, p.9

225 ETSA Utilities, 12 January 2006, pp.1-2

226 Telephone discussion with ETSA Utilities, 9 August 2006

227 Citipower/Powercor, 25 January 2006, p.3; Energex, 21 December 2005, p.3

228 EnergyAustralia, 23 December 2005, p.20; MEU, December 2005, p.45; NSPMA, 12 December 2005, p.5; Citipower/Powercor, 25 January 2006, p.3.

229 Ergon Energy Distribution, 30 December 2005, pp.8-9.

230 TransGrid, 30 December 2005, pp.11-12.

231 TransGrid, 30 December 2005, pp.11-12.

Common Service Charge are postage-stamped. However, TransGrid said that because both of these activities support the network at specific locations, it is more appropriate to recoup their costs through location-based charges.[232] TransGrid also said that additional clarification is necessary in the Rules to ensure that the operational and funding responsibilities of TNSPs and DNSPs are coordinated so as to minimise the costs of network support services to consumers overall.[233]

No submissions supported the proposition that TUoS rebates should be contingent on whether generators paid use of system charges.[234] EnergyAustralia and AGL reiterated their views that generators should pay a portion of TUoS and if implemented avoided TUoS provisions would be unnecessary.[235]

Powerlink noted that network support payments for the deferral of specific investment are generally larger than avoided TUoS rebates and considered that grid support payments should be offset by avoided TUoS rebates.[236]

7.3 Commission's assessment

The issue of TUoS rebates (and network support payments for that matter) strikes at the boundary between the regulated and non-regulated sectors of the NEM. While transmission and distribution network service providers face economic regulation of their revenues and prices due to their natural monopoly characteristics, generators face prices determined in the competitive electricity market and are not subject to such regulation. From this perspective, it is arguable that generators (embedded or otherwise) should not receive regulated payments such as TUoS rebates. However, TUoS rebates can also be viewed as an adjustment to prevent a regulated DNSP from receiving windfall gains because of the actions of an embedded generator in its network.

While generation often complements networks in supplying consumers, it can also substitute for network augmentation. This is the rationale for allowing TUoS rebates and network support payments in the Rules. It may be more efficient and consistent with the NEM Objective for embedded generators to locate in a particular area if this can avoid the need for transmission investment. This reinforces the case for basing any TUoS rebate on the Customer TUoS Usage Charge, which is intended to reflect the LRMC of using the network, rather than both the Customer TUoS Usage Charge and the Customer TUoS General Charge.

The Commission believes that care must be taken to ensure that the Rules relating to TUoS rebates do not 'over-reward' embedded generators for their investments and also do not discriminate in favour of embedded generation over demand side management and other such options. After all, while embedded generators may defer transmission investment, so does an electricity consumer's willingness to reduce consumption at peak times. Yet the

[232] TransGrid, 30 December 2005, pp.11-12.

[233] TransGrid, 30 December 2005, pp.11-12.

[234] NSPMA, 12 December 2005, p.5; MEU, December 2005, p.45; Ergon Energy Distribution, 30 December 2005, p.9.

[235] EnergyAustralia, 23 December 2005, p.20; AGL, 20 January 2006, p.A-6.

[236] Powerlink, 23 December 2005, p.3

Commission does not believe it is straightforward to extend TUoS rebates to the providers of demand side management and non-electricity alternatives in this manner.

For the Proposed Pricing Rule, the Commission has maintained the existing arrangements for TUoS rebates. However, the Commission is seeking submissions on three options that have arisen during consultations to date.

The first option is EnergyAustralia's suggestion that TUoS rebates apply to generators up to 10 MW in capacity, while proponents of larger generators would only qualify for network support payments if their proposal was found by the network service provider to be the least-cost, or most net beneficial, alternative to network augmentation. This would ensure that smaller embedded generators, with little bargaining power in comparison to the network service provider and that contributed in an incremental way to avoiding future network spending, would receive some benefit. But it also means that larger embedded generators would receive a regulated payment if, and only if, they provided the best net benefit available. This would help maintain a 'level playing field' in the choice between network, generation and DSM options. This approach would also tend to reduce the perverse incentives for larger generators to connect to a distribution network rather than the transmission network, as identified by EnergyAustralia.

The second option is proposed by Citipower/Powercor's and Energex's and involves defining a minimum threshold with regard to the reasonable costs of administering the TUoS rebate. Due to the counterfactual calculations required, there may be material costs in calculating TUoS rebates for small plants, which may not have a material benefit in terms of deferring the underlying need for transmission augmentation. As noted by TransGrid:

> *"Avoided TUOS rebates are intended as a (fairly crude) locational price signal for embedded generators. Their rationale is that they encourage generation to locate in the vicinity of loads, and may, at some future time, result in a network investment being avoided. However, it should be clarified that there is no direct linkage between the avoided TUOS payments and any particular network augmentation. In some circumstances, no augmentation may be needed for many years, and the generator simply reduces load on an unconstrained system. In effect, the avoided TUOS payment reflects an act of faith in a reduction in costs at some future time."*[237]

Finally, a third option is to maintain the existing arrangements, but require any network support payments to an embedded generator to be reflected in the expected TUoS rebates they receive. This may help integrate the arrangements for TUoS rebates and network support arrangements, which TransGrid identified as an issue requiring review, and help level the playing field between embedded generation, demand side management and other alternatives to transmission augmentation.

Due to the nature of TUoS rebates the Commission believes that this is a relevant issue for the initial consultation process of this review in order to ascertain if there are any serious issues that need to be addressed and where they impact on transmission pricing. In the absence of such problems being identified in submissions, the Commission has decided to retain the current arrangements until a more appropriate opportunity for a full review occurs.

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[237] TransGrid, 30 December 2005, p.11.

7.4 Proposed Rule as it relates to TUoS rebates

The Proposed Pricing Rule does not contain any amendments that relate to TUoS rebates. This issue is, however, retained unchanged via the Draft Revenue Rule changes to clause 5.5. That Draft Rule makes amendments to clauses 5.5 and 5.5A that are consequential on the separation of prescribed and negotiated transmissions services. The effect of these changes is to preserve the status quo in relation to TUoS rebates.

8 Inter-regional TUoS

8.1 Current approach in the Rules

The current Rules allow TNSPs in regions that import electricity, to receive inter-regional settlement residues (IRSRs) attributed to regulated interconnectors (clause 3.6.5(a)(5)). These amounts must be used by the importing region TNSP to reduce the Customer TUoS General Charge payable by its customers. In return, TNSPs in importing regions are required to pay a negotiated charge to the exporting region's TNSP that reflects the use of the exporting TNSP's network in effectively contributing to the creation of these residues (and benefits to the importing region). Clause 3.6.5(a)(5) of the existing Rules provide for the negotiation of these inter-regional TUoS payments to be undertaken by the respective jurisdictional governments. However, in practice only Victoria and South Australia have negotiated inter-regional TUoS payments.[238]

Subsequent to the release of the Issues Paper, the Commission received a Rule change request from the Victorian Department of Infrastructure, which among other matters sought to extend clause 3.6.5(a)(5)(i) until 1 July 2009. The Rule change was approved by the Commission and came into effect on 13 July 2006.[239]

Overall, the current Rules do not prevent a TNSP from recovering the costs of transmission interconnector investments. However, apart from the Victorian and South Australia case, TNSP's present practice is to recover the costs of such investments solely from their own customers.

The Issues Paper raised the question of whether the existing arrangements for IRSRs and inter-regional TUoS charges should continue or be modified in some way. A number of options for change were identified:

- providing for inter-TNSP payments to be negotiated between TNSPs rather than jurisdictional governments;

- amending the Rules to provide criteria for how inter-jurisdictional payments must be determined and paid but without altering the existing allocation of TNSPs' regulated revenues to connection points; and

- replacing the existing inter-regional regime with a NEM-wide transmission pricing regime that accounted for inter-regional flows and IRSRs.

The Issues Paper also noted that the ACCC considered a proposal for change by NECA in 2001 as part of the Transmission and Distribution Pricing Review. [240] That proposal involved TNSPs computing Customer TUoS Usage Charges that applied to interconnections with other regions. The ACCC had rejected this because it believed superior and more comprehensive options were feasible.

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[238] ESCOSA, Settlement Residue Auctions and Network rebates, April 2002, p.4

[239] AEMC, Extension of the Inter-regional Settlements Agreement, Final Determination, 13 July 2006.

[240] See Issues Paper, p.67 and ACCC, Applications for Authorisation – Amendment to the National Electricity Code – Interregional transfer of TUoS, treatment of losses, improvements to PASA, pricing under extreme conditions, demand-side participation and end-user advocacy, 19 September 2001, pp.59-61.

8.2 Submissions

Most submissions on this issue supported the extension of the existing inter-TNSP payment provisions in clause 3.6.5(a)(5) of the Rules. Submissions from Energex, the MEU and NSPMA suggested that the existing provisions should be clarified to avoid the present ambiguities.[241]

Many submissions did not support radical change from the existing arrangements, at least without further guidance from the MCE.[242] For example, TransGrid considered that the existing arrangements should not be replaced with a comprehensive TUoS pricing approach without policy guidance from the MCE in favour of a universal inter-regional TUoS payments regime.[243] The submissions from the TNOs[244], UED[245] and EnergyAustralia[246] also suggested that the issue should be resolved by the MCE due to its inter-jurisdictional nature. Several of these submissions observed that, so long as transmission investment incentives were in general sufficient, no particular problems were associated with encouraging investment in regulated interconnectors.[247]

Some submissions put forward suggestions or proposals for reform or modification of inter-regional transmission pricing arrangements. Powerlink suggested the following options:

- redistribution of IRSRs based on inter-regional flows;
- a multi-region Tprice model (presently used for the CRNP allocation process) taking account of asset values and load flows across the NEM; and
- a combination of the above approaches.248

The use of a multi-region Tprice model, if it could be implemented, would address the inadequacies that the ACCC had identified in its decision on the Transmission and Distribution Pricing Review changes for inter-regional TUoS. However, it would require cooperation across the relevant TNSPs.

Energex proposed that that the Rules prescribe a pricing methodology that accommodates inter-regional pricing and recognises the benefits provided to network users from a transmission network in another region.[249] In a similar vein, Ergon Energy (Distribution)[250]

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241 Energex, 21 December 2005, p.4; NSPMA, 12 December 2005, p.6; Major Energy Users Association, December 2005, p.51

242 Electricity Transmission Network Owners Forum, December 2005, p.9; TransGrid, 30 December 2005, p.22; EnergyAustralia, 23 December 2005, p.24

243 TransGrid, 30 December 2005, p.22

244 Electricity Transmission Network Owners, December 2005, p.9.

245 United Energy Distribution, December 2005, p.18

246 EnergyAustralia, 23 December 2005, p.24

247 UED, December 2005, p.18, MEU, December 2005, p.53. The Commission notes that TransGrid raised the issue of TNSPs being permitted to recover proposal preparation costs for investigating interconnectors (p.23). The Commission considers this to be a matter for the AER.

248 Powerlink, 23 December 2005, p.4.

249 Energex, 21 December 2005, pp.4-5.

argued that the importing region should at least pay the exporting region the incremental costs associated with use of the exporting network and the MEU suggested that at a minimum, the IRSRs should be allocated to the exporting region's TNSP, although more comprehensive and complex approaches are possible.[251] Queensland Rail stated that the importer should at least cover the incremental network costs.[252] The MEU submission also questioned why payments in respect of inter-regional TUoS are left to jurisdictional governments to resolve.[253]

8.3 Commission's assessment

The resolution of inter-regional TUoS arrangements has eluded policy-makers since the start of the NEM. The Commission has noted views expressed in a number of submissions that inter-regional TUoS raises policy issues that require guidance from the MCE. Putting this question to one side for the moment, the options that were identified in submissions include:

- maintaining the existing arrangements;
- maintaining the existing arrangements while adding criteria for determining the inter-jurisdictional payment referred to in clause 3.6.5(a)(5). However, it appears to the Commission that without any obligation to pay a specific sum, it is unclear whether this option takes the issue any further compared with the status quo.
- adopting a simplified 'rule of thumb' such as splitting the IRSR equally between the exporting and importing regions to reflect the benefit the importing region's network users gain from the exporting TNSP's network. This option appears to the Commission to be primarily a distributional measure because it is unlikely to significantly affect what transmission assets gets built to serve load;
- implementing an inter-regional TUoS pricing arrangements by obliging TNSPs to apply the Customer TUoS Usage Charge to interconnectors; and
- undertaking a full NEM-wide cost allocation exercise for inter-regional TUoS pricing arrangements.

The Commission is aware that there are concerns about the lack of appropriate incentives within the regulatory framework for TNSPs to invest in inter-regional transmission investments.[254] These concerns arise because existing reliability standards are considered to provide incentives for TNSPs to focus on investments orientated to maintaining reliability within their own networks, rather than to consider the benefits arising from possible interconnection between jurisdictions, and because transmission network planning is conducted on a jurisdiction-by-jurisdiction basis.

The Commission notes that TNSPs are able to recover the costs of inter-regional transmission investments, albeit from its own customers, so long as the Regulatory Test is satisfied. This means that there is no *financial* disincentive on TNSPs investing in inter-regional

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[250] Ergon Energy (Distribution), 30 December 2005, p.10.

[251] MEU, December 2005, pp.50-52.

[252] Queensland Rail, 9 January 2006, p.5.

[253] MEU, December 2005, p.50.

[254] See for example page 9, Energy Reform Implementation Group Issues Paper, July 2006.

transmission assets flowing from the TUoS charging arrangements. At the same time, the Commission is aware that the *process* for receiving regulatory approval for interconnector investments may be more complex and open to dispute and delay than for reliability-driven investments.

However, since inter-regional transmission investments are likely to produce benefits to network users outside of a particular TNSP's network, the recovery of the costs of inter-regional investments solely from one TNSP's customers creates a substantial pricing issue that should be addressed. The issue arises because, to maximise efficiency in the use of inter-regional transmission infrastructure, users of the infrastructure – which are, in the long term, causers of further interconnector investment – should pay costs associated with their use.

The Commission considers that an effective NEM-wide regime that provides for appropriate payments between TNSPs may be a necessary component of the regulatory framework for transmission pricing. However, relatively few stakeholders commented on this issue in their submissions on the Pricing Issues Paper. The Commission again invites stakeholder comment on possible options for inter-regional TUoS, to provide a basis for preparing a Draft Rule on this issue.

Recognising the inter-jurisdictional nature of this issue and the views of submitters that the MCE should be consulted, the Commission proposes to consult with the MCE regarding its view on the options for addressing this matter.

8.4 Proposed Rule

The Commission has already extended the current provisions in clause 3.6.5(a)(5) until 1 July 2009.

9 Pricing for negotiated transmission services

The Commission, in the review of the transmission revenue and pricing Rules, has sought to clarify the delineation of services provided by TNSPs. The Draft Revenue Rule adopts two classifications for transmission services - Prescribed Transmission Services and Negotiated Transmission Services. The Commission's Draft Revenue Determination establishes a revenue cap form of regulation for Prescribed Transmission Services. For Negotiated Transmission Services, the Commission has created a commercial negotiation framework that is supported by an effective dispute resolution regime under which disputes in relation to price are decided by a commercial arbitrator.[255]

Therefore, to the extent that actual or potential network users seek to procure and/or TNSPs seek to provide, transmission services that fall outside the definition of Prescribed Transmission Service, the arrangements specified in the Draft Revenue Rule would, if accepted, be applicable.

The Commission seeks stakeholder views on whether the proposed arrangements in the Proposed Pricing Rule and the Draft Revenue Rule complement each other suitably and also whether the pricing principles in clause 6A.9.1 of the Draft Revenue Rule are appropriate. The Commission seeks to develop these principles further in the Final Revenue Rule in light of its present intention to retain a 'shallow connection' approach to charges for Prescribed Entry Services in the Proposed Pricing Rule and stakeholders' comments on this intention.

The existing Rules contain no criteria regarding how prices for negotiated services should be determined. In the Issues Paper, the Commission sought comment on the following questions:

- Are the negotiation provisions for Negotiated Transmission Services appropriate?
- Should the Rules provide pricing criteria for Negotiated Transmission Services?
- Should price monitoring be considered as an option for these services?
- Are the current dispute resolution provisions in Chapter 8 of the Rules appropriate for disputes over Negotiated Transmission Services?

The purpose of this chapter is to consider these issues, having regard to the key decisions already made by the Commission and reflected in the Draft Revenue Rule in relation to pricing for Negotiated Transmission Services.

9.1 Current approach in the Rules

The existing Rules specify that some non-contestable transmission services fall outside the operation of the revenue cap. These are:

- Negotiated generator and MNSP access charges[256];

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[255] See Draft Revenue Rule, Part D.

[256] Clause 6.5.3(b), National Electricity Rules.

- A part of a prescribed transmission service which is provided to a standard which is higher or lower than the standard described in schedule 5.1 of the Rules;

- Excluded transmission services[257].

In the existing Rules these services are negotiated, with mediation and arbitration provisions included in the Rules under the general Chapter 8 dispute resolution regime. Prices for such excluded non-contestable services are therefore determined from the outcome of this negotiation, and the dispute resolution regime.

9.2 Submissions

The majority of submissions indicated that the negotiating provisions in the Rules are appropriate.[258] While supporting the current arrangements, TransGrid commented that more guidance in the Rules as to what services are non-contestable but non-prescribed, would improve the operation of a negotiation framework (clause 6.5.9). Both elaborated on the imbalance of power between parties wishing to connect and the TNSP's because the TNSP's can "monopolise" the negotiations. Furthermore, it was suggested that participants should have recourse to an independent arbitrator, as this can ensure the negotiation process moves in a timely manner. It was also observed that the provision in the Rules for a third party to construct small augmentations is unrealistic because the constraint of operating a small inset network will preclude such work being undertaken.[259]

Two submissions indicated that they did not support criteria in the Rules relating to pricing outcomes for the contestable components of non-prescribed services with ETNOF arguing that by their nature contestable services will be negotiated in the market place and they should not even be within the scope of the Review.[260] With respect to non-contestable services, the TNO claimed they are only sought by large "large, financially astute and sophisticated entities, with the protection of the National Electricity Law and Rules, Trade Practices Act, Corporations and other laws".[261]

A number of responses indicated qualified support for no pricing criteria in the Rules for negotiated services.[262] These qualifications were along the lines that the Rules should contain high level principles and the need for recourse to adequate dispute resolution. Another submission stated that "the Rules should only relate to prescribed services" and that "the regulation of non-prescribed services should be the subject of guidance by the AER." [263]

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257 Ch 10, glossary 'Excluded transmission services', National Electricity Rules

258 TransGrid, 30 December 2005, p.21; Powerlink 23 December 2005, p.3; Powercor/Citipower, 25 January 2006, p.4, EnergyAustralia, 23 December 2005, p.22; Ergon Energy (Distribution), 30 December 2005, p.9; United Energy Distribution, December 2005, p.16

259 Major Energy Users, December 2005, p.50

260 Electricity Transmission Network Owners, December 2005, p. 9; United Energy Distribution, December 2005, p.17

261 Electricity Transmission Network Owners, December 2005, p. 9

262 Ergon Energy (Distribution), 30 December 2005, p.9; AGL, 20 January 2006, p.7; Queensland Rail, 9 January 2006, p.5

263 EnergyAustralia, 23 December 2005, p.22

The MEU stated a preference for non-prescribed transmission service pricing criteria in the Rules.[264] In its view the monopoly characteristics of non-prescribed but non-contestable transmission services require pricing criteria in the Rules that can be implemented by a mediator/arbiter if dispute resolution is required.

The majority of submissions did not support a price monitoring regime for non-prescribed services[265] though some submissions qualified their responses. AGL does not support price monitoring under the condition that adequate dispute resolution is in place[266]. The MEU does not support price monitoring because its proposed model allows the AER to mediate/arbitrate on behalf of consumers when a non-prescribed agreement is being struck, thereby negating the need for ongoing monitoring.[267]

EnergyAustralia believes that the Rules should only relate to prescribed services however services subject to varying degrees of competition may require some form of light handed regulation and it is for the TNSP to propose this not the AER.[268] The MEU observed "that there is likely to be variation of requirements for continuing oversight between differing non-prescribed services." [269] In its view the AER should have the discretion to determine the extent of any continuing oversight of a non-prescribed service agreement.

Two submissions consider the dispute resolution provisions in Chapter 8 to be sufficient and one states that they are "working satisfactorily".[270] In contrast, the MEU claims that most consumers "are prevented from accessing the mediation and arbitration elements of the Rules".[271] To overcome this it is suggested that the AER be empowered to mediate/arbitrate on issues between TNSP's and consumers where the consumer is not a Participant.

9.3 Commission's assessment

The Commission believes there are benefits to be gained through TNSPs and directly connected users negotiating with each other to resolve the amount and form of charges to be paid by users for these services.

The Draft Revenue Rule includes the Commission's decisions in relation to the new regime for Negotiated Transmission Services. Those services are defined[272] as follows:

- Shared transmission services that exceed network performance requirements;
- Connection services, other than NSP-NSP connections; and

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264 Major Energy Users, December 2005, p.50

265 Electricity Transmission Network Owners, December 2005, p. 9; TransGrid, 30 December 2005, p.21; Powerlink 23 December 2005, p.3; Ergon Energy (Distribution), 30 December 2005, p.10

266 AGL, 20 January 2006, p.7

267 Major Energy Users, December 2005, p.50

268 EnergyAustralia p 22.

269 Major Energy Users, December 2005, p.50

270 Ergon Energy (Distribution), 30 December 2005, p.10; TransGrid, 30 December 2005, p.22; EnergyAustralia, 23 December 2005, pp.22-23

271 Major Energy Users, December 2005, p.50

272 Draft Revenue Rule, Schedule 3 (Definitions)

- Use of system services provided to a network user (referred to in the new clause 5.4A(f)(3)) in relation to augmentations or extensions required to be undertaken on a transmission network.

The Draft Revenue Rule[273], provides for:

- Pricing principles for negotiated services, which guide the AER in specifying pricing criteria for a TNSP;[274]

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[273] Clause 6A.9.

[274] These are:
(1) the price for a *negotiated transmission service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*;

(2) subject to subparagraphs (3) and (4), the price for a *negotiated transmission service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand alone basis;

(3) if the *negotiated transmission service* is the provision of a *shared transmission service* that:
(i) exceeds the network performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
(ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1, then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service;

(4) if the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider*'s avoided cost of providing that service;

(5) the price for a *negotiated transmission service* must be the same for all *Transmission Network User*s unless there is a material difference in the costs of providing the *negotiated transmission service* to different *Transmission Network User*s or classes of *Transmission Network Users*;

(6) the price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person;

(7) the price for a *negotiated transmission service* should be based on terms and conditions which are consistent with the safe and reliable operation of the *power system* in accordance with the *Rules*;

(8) the price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations* associated with the provision of the *negotiated transmission service*; and

(9) the price for a *negotiated transmission service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and *reliable* operation of the *power system* in accordance with the *Rules*.

- The pricing criteria to be applied by a TNSP in negotiating (and by a commercial arbitrator in resolving disputes about) the prices that are to be charged for provision of negotiated services and access charges;

- The requirements for the preparation of a negotiating framework (equivalent to the existing clause 6.5.9);

- Referral of a dispute to a commercial arbitrator who may make a determination that is binding on the TNSP and on the Applicant for services; so that failure to comply with its terms is a breach of the Rules[275].

- The commercial arbitrator is a "dispute resolution panel" under the NEL, and this means that the procedures under the uniform Commercial Arbitration Acts of the participating jurisdictions are available for appeals on questions of law[276]such that

The Commission considers that this regime, and in particular, the commercial arbitration regime, is consistent with the nature of the services provided as Negotiated Transmission Services. The Commission seeks to develop the principles further in the Final Revenue Rule in light of its present intention to retain a 'shallow connection' approach to charges for Prescribed Entry Services in the Proposed Pricing Rule and stakeholders' comments on this intention.

Another issue on which the Commission seeks comment, that arises from the further review of the pricing-related rules in existing Part C of Chapter 6, is the question as to whether the model for commercial dispute resolution for price for Negotiated Transmission Services should be extended to permit consideration of the terms and conditions of the connection agreements under which those prices are charged, and to which the price is inextricably linked. Some comment has been noted that a single dispute resolution regime, ie a commercial arbitration regime, should apply not only in relation to the price and charges under negotiation, but to be meaningful and efficient, should also apply to the terms and conditions under negotiation that drive those prices.

In effect, this would mean a consequential amendment to clause 8.2 of the Rules to exclude disputes under clause 5.3 from referral to the Chapter 8 dispute resolution regime. The Commission seeks comment from interested parties in relation to the issues relating to the adoption of this approach.

These principles must form the basis of the criteria to be applied:

- By a TNSP in negotiating prices for Negotiated Transmission Services; and

- By a commercial arbitrator in resolving disputes about prices for Negotiated Transmission Services.

The Commission seeks to develop these principles further in the Final Revenue Rule in light of its present intention to retain a 'shallow connection' approach to charges for Prescribed Entry Services in the Proposed Pricing Rule and stakeholders' comments on this intention.

[275] The Draft Revenue Rule expressly excludes a dispute under clause 6A.9.8 from the Chapter 8 dispute resolution regime.

[276] See sections 58 & 71 of the NEL.

Appendix 1: Schedule 1 to NEL items 15-24

15 The regulation of revenues earned or that may be earned by owners, controllers or operators of transmission systems from the provision by them of services that are the subject of a transmission determination.

16 The regulation of prices charged or that may be charged by owners, controllers or operators of transmissions systems for the provision by them of services that are the subject of a transmission determination, and the methodology for the determination of those prices.

17 Principles to be applied, and procedure to be followed, by the AER exercising or performing an AER economic regulatory function power.

18 The assessment, or treatment by the AER, of investment in transmission systems for the purposes of making a transmission determination.

19 The economic framework and methodologies to be applied by the AER for the purposes of item 18.

20 The mechanisms or methodologies for the derivation of the maximum allowable revenue or prices to be applied by the AER in making a transmission determination.

21 The valuation, for the purposes of making a transmission determination, of assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator, and of proposed new assets to form part of a transmission system owned, controlled or operated by a regulated transmission system operator, that are, or are to be, used in the provision of services that are the subject of a transmission determination.

22 The determination by the AER, for the purpose of making a transmission determination with respect to services that are the subject of such a determination, of:

a. a depreciation allowance for a regulated transmission system operator; and

b. operating costs of a regulated transmission system operator; and

c. an allowable rate of return on assets forming part of a transmission system owned, controlled or operated by a regulated transmission system operator.

23 Incentives for regulated transmission system operators to make efficient operating and investment decisions.

24 The procedure for the making of a transmission determination by the AER, including

a. the publication of notices by the AER; and

b. the making of submissions, including by the regulated transmission system operator to whom the transmission will apply and by affected Registered participants (within the meaning of section 16 (3); and

c. the publication of draft and final determinations and the giving of reasons: and

d. the holding of pre-determined conferences.

Appendix 2: List of Submissions

AGL

CitiPower & Powercor

Directlink Joint Ventures

Electricity Transmission Network Owners Forum

Energex

Energy Users Association of Australia and Energy Action Group

EnergyAustralia

Ergon Energy Distribution

Ergon Energy Retail

ETSA Utilities

Macquarie Generation

National Generators Forum

Norske Skog Paper Mills (Australia)

Origin Energy

Powerlink

Public Interest Advocacy Centre

Queensland Rail

Stanwell Corporation

The Group

The Major Energy Users Inc and Major Employers Group of Tasmania

Tomago Aluminium Company

Total Environment Centre

Transend

TransGrid

TRUenergy

United Energy Distribution

VENCorp

Appendix 3: Timeline

Scoping Paper

Released: 29 July 2005

Revenue Requirements

Issues Paper

Rule Change Process
Rule Proposal (s.95 notice): 16 February 2006

Public Hearing: 8 March 2006
Submissions due: 20 March 2006
Draft Determination: 27 July 2006
Submissions: 11 September 2006
Final Determination: October 2006

Rules Commence

Pricing

Issues Paper

Rule Change Process
Rule Proposal (s.95 notice): 24 August 2006
Submissions: 25 September 2006
Draft Determination: Oct/Nov 2006
Submissions: November 2006
Final Determination: December 2006

Rules Commence

January 2007