Victorian Energy Networks Corporation

VENCorp Electricity Revenue Cap Proposal
1 July 2008 to 30 June 2014

Revised proposed pricing methodology

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1 Introduction

Regulatory framework

1.1 Under rule 6A.10.1(a) of the current NER[1] VENCorp must submit a proposed pricing methodology to the Australian Energy Regulator (AER) relating to transmission services provided by VENCorp.

1.2 Under rule 6A.24.1 of the Current NER a 'Pricing Methodology' is described as follows:

> 'a methodology, formula, process or approach that when applied by a *Transmission Service Provider*:
>
> (1) allocates the *aggregate annual revenue requirement* for *prescribed transmission services* provided by that provider to:
>
> (i) the *categories of prescribed transmission services* for that provider; and
>
> (ii) transmission network connection points of Transmission Network Users; and
>
> (2) determines the structure of the prices that a *Transmission Network Service Provider* may charge for each of the *categories of prescribed transmission services* for that provider.'

1.3 Under rule 6A.24.1 of the Current NER, a proposed pricing methodology must:

1.3.1 give effect to and be consistent with the Pricing Principles for Prescribed Transmission Services set out in rule 6A.23; and

1.3.2 comply with the requirements of, and contain or be accompanied by such information as is required by the Pricing Methodology Guidelines made by the AER for that purpose under rule 6A.25.

1.4 The AER was not required by the Rules to publish its final Pricing Methodology Guidelines until 31 October 2007. However, on 12 June 2007, VENCorp submitted to the AER its initial proposed pricing methodology (Initial Methodology).

1.5 The Current NER deals with this transitional issue by requiring VENCorp's pricing methodology for its 2008/09 transmission determination to comply with interim guidelines (Agreed Interim Requirements), which were published by the AER on 16 February 2007.

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[1] Chapter 6A of the Current NER provides the regulatory framework for regulating the pricing of Prescribed Transmission Services. Part A of Chapter 9 of the Current NER sets out the Victorian derogations to the Current NER.

1.6 However, clause 2.3 of the Agreed Interim Requirements permitted VENCorp to elect, within 10 business days of the publication by the AER of its final Pricing Methodology Guidelines to be subject to those final guidelines rather than the Agreed Interim Requirements. The AER published its final Pricing Methodology Guidelines on 29 October 2007 (Pricing Methodology Guidelines).

1.7 On 12 November 2007, VENCorp elected to be subject to the Pricing Methodology Guidelines. The Agreed Interim Requirements provided that, in this scenario, VENCorp would be required to submit a revised pricing methodology to the AER within 10 business days of the release of the AER's draft decision in respect of its determination entitled 'VENCorp transmission determination 2008-09 to 2013-14' (Draft Decision). The AER published its Draft Decision on 30 November 2007.

1.8 This VENCorp revised proposed pricing methodology submitted to the AER on 14 December 2007 (Revised Methodology) is drafted to comply with the Pricing Methodology Guidelines.

1.9 Rule 6A.25.1(d) of the Current NER specifies that, in the event of an inconsistency between the Current NER and the Pricing Methodology Guidelines, the Current NER will prevail to the extent of that inconsistency.

VENCorp's responsibilities under Victorian arrangements

1.10 Under the Victorian jurisdictional derogation in Chapter 9 of the Current NER, and the Electricity Industry Act 2000 (Vic) and VENCorp's transmission licence thereunder:

- the Victorian Transmission Network is owned and operated by SP AusNet and SP AusNet is responsible for providing VENCorp with the Prescribed TUOS Services and Prescribed Common Transmission Services supplied by means of that Network; and
- VENCorp is responsible for providing those Prescribed TUOS Services and Prescribed Common Transmission Services to Transmission Customers (see, in particular, rule 9.3.2(a)(1)(i)(B)).

1.11 Under rules 9.8.4 to 9.8.4F of the Current NER (which together comprise the Victorian transmission pricing derogation), VENCorp is also responsible for imposing charges on Transmission Customers for the Prescribed TUOS Services and Prescribed Common Transmission Services supplied by means of the Victorian Transmission Network. Under rule 6A.23.4 (as modified by rule 9.8.4F(e)(2)), which reads as follows, VENCorp must recover that part of SP AusNet's Aggregate Annual Revenue Requirement (AARR) referable to the Prescribed TUOS Services and Prescribed Common Transmission Services supplied by means of the Victorian Transmission Network and transfer that amount to SP AusNet:

> 'The portion of the *aggregate annual revenue requirement* referable to *shared network services* is recoverable by a *Regulated owner* from *VENCorp*'.

1.12 SP AusNet, as the owner and operator of the Victorian Transmission Network, remains responsible for the provision of Entry Services and Exit Services provided by means of that Network (see, in particular, rule 9.3.2(a)(1)(ii)).

1.13 The application of Chapter 6A of the Current NER in respect of the Victorian Transmission Network is subject to the modifications set out in rules 9.8.4B to 9.8.4F.[2] Rule 9.8.4F of the NER contains the Victorian derogations to the application of Part J of Chapter 6A, including in particular the rule 6A.23 Pricing Principles.

1.14 Under rule 9.8.4F(f), VENCorp is taken to be the Co-ordinating Network Service Provider responsible for the allocation of all relevant AARR relating to the provision of Prescribed TUOS Services or Prescribed Common Transmission Services within the Victorian region in accordance with Part J of Chapter 6A of the Current NER.

VENCorp's Revised Methodology

1.15 In accordance with rule 6A.10.1(a) of the Current NER, this document sets out VENCorp's Revised Methodology for the period commencing 1 July 2008 to 30 June 2014 (Regulatory Control Period).

1.16 The Revised Methodology sets out VENCorp's methodology for determining the prices payable by Transmission Customers in the Victorian region for the provision of Prescribed TUOS Services and Prescribed Common Transmission Services in this Regulatory Control Period. This would include, for example, the prices payable in respect of a net load at a generator connection point in the Victorian region behind which an energy user was also located, because such an 'embedded load' would mean that there was a 'customer' or 'non-registered customer', and so a 'Transmission Customer', located at that connection point.

1.17 In accordance with rule 6A.24.1 of the Current NER, the Revised Methodology gives effect to and is consistent with the Pricing Principles for Prescribed Transmission Services.

1.18 Unless otherwise expressly indicated, the Revised Methodology also complies with the AER's Pricing Methodology Guidelines.

1.19 In accordance with section 2.1(r) of the Pricing Methodology Guidelines, VENCorp sets out the main differences between the pricing methodology that it applied in Financial Years preceding the Regulatory Control Period (Previous Methodology) and the Revised Methodology below:

1.19.1 The Previous Methodology complied with the requirements of Chapter 6 of the Old NER. By contrast, the Revised Methodology complies with the requirements of Chapter 6A of the Current NER. Accordingly, the Revised Methodology will differ from the Previous Methodology to the extent that the requirements of Chapter 6A of the Current NER differ from the requirements of Chapter 6 of the Old NER.

[2] Rule 9.8.4A.

1.19.2 The Previous Methodology was not approved by the AER or any other regulator. As such, the Previous Methodology will differ from the Revised Methodology in that the latter has been reviewed and approved by a regulator.

1.19.3 In accordance with the requirements of rules 6.3 and 6.4.1 of Part C of Chapter 6 of the Old NER, the Previous Methodology allocated VENCorp's Maximum Aggregate Revenue (MAR) between the transmission use of system services and the common services classes of transmission services based on the allocation of each of the assets operated under its network services agreements with other TNSPs to those classes of transmission services in accordance with Schedule 6.2 of the Old NER. By contrast, the Revised Methodology allocates VENCorp's MAAR between the Prescribed TUOS Services and Prescribed Common Services categories of Prescribed Transmission Services based on an allocation of each of those assets to those categories in accordance with section 2.4 of the Pricing Methodology Guidelines and the Priority Ordering Rules set out in rule 6A.23.2(d) of the Current NER.

1.19.4 The methodology for allocating the adjusted locational component of the Annual Service Revenue Requirement (ASRR) for Prescribed TUOS Services to individual Transmission Customer's connection points set out in the Revised Methodology is substantively similar to the methodology for allocating the usage component of customer transmission use of system service costs to Transmission Customer's connection points utilised by the Previous Methodology. However, the Previous Methodology divided the allocated cost by the agreed or forecast average of the maximum demands for the connection point on each of the 10 days on which peak maximum demands in the period 1 November to 31 March in the Financial Year in which the usage prices are to apply are forecast for that connection point (Summer Average Maximum Demands) to determine usage prices. By contrast, the Revised Methodology divides the allocated cost by the average of the Transmission Customer's half-hourly maximum demand recorded at its connection point on the 10 weekdays when system demand was highest between the hours of 11:00 and 19:00 in the local time zone (Average Maximum Demands) during a previous Financial Year to determine locational prices.

1.19.5 Similarly, where the Previous Methodology applied usage prices to forecast or actual Summer Average Maximum Demands in the Financial Year in which those usage prices applied to determine usage charges, the Revised Methodology applies locational prices to Average Maximum Demands during a previous Financial Year to determine locational charges.

1.19.6 The methodology for determining prices and charges for the adjusted non-locational component of Prescribed TUOS Services and for Prescribed Common Transmission Services set out in the Revised Methodology is substantively similar to the methodology for determining general and common service prices and charges utilised by the Previous Methodology. One notable difference is, however, the use of metered

energy offtake at the connection point in the billing period (rather than metered energy offtake at that connection point in the analogous period in the Financial Year 2 years prior), in determining non-locational and Prescribed Common Transmission Services charges using the energy based price under the Revised Methodology in circumstances where the historic metered energy offtake significantly differs from the current metered energy offtake. Under the Previous Methodology, in these circumstances, the energy based price would nonetheless have been applied to historic metered energy offtake to determine general and common service charges.

1.20 The Previous Methodology and the Revised Methodology are substantively similar in respect of the making of the equalisation adjustment required by rules 9.8.4F(h) and 9.8.4(a)(3) of the Current NER, billing arrangements and financial transfers to other TNSPs.

1.21 In accordance with rule 6A.24.2 of the Current NER, a current copy of VENCorp's approved pricing methodology will be published on VENCorp's website. In addition, the prescribed TUOS prices for the following Financial Year will be published on the VENCorp website by 15 May in the preceding Financial Year and an individual copy of the prescribed TUOS prices will also be sent to each Transmission Customer.

1.22 VENCorp does not make any claim for confidentiality in respect of its Revised Methodology.

Interpretation

1.23 All terms in this Revised Methodology that are capitalised are given the meaning given to them in this document or, where no definition is provided in this document, the meaning given to them in the Current NER.

1.24 A reference to 'the Current NER' is taken to be a reference to the current version of the National Electricity Rules, version 17, which commenced operation on 25 October 2007.

1.25 A reference to 'the Old NER' is taken to be a reference to Version 9 of the National Electricity Rules which was operative between 27 July 2006 and 15 November 2006.

1.26 Unless the context otherwise requires, a reference to 'the NER' is taken to be a reference to the National Electricity Rules as amended from time to time.

2 Allocation of AARR (VENCorp's MAAR) to categories of Prescribed Transmission Services

Overview of the Rules and the Pricing Methodology Guidelines

2.1 As discussed in the Introduction, VENCorp's prices and charges for Prescribed TUOS Services and Prescribed Common Transmission Services must be determined in accordance with the Current NER (including Rules 9.8.4 to 9.8.4G).

2.2 Rule 6A.23.2 of the Current NER requires that VENCorp's MAAR for a Financial YearYear be allocated to the categories of Prescribed Transmission Services. The portion of the MAAR allocated to a particular category of Prescribed Transmission Services is referred to as the ASRR (Rules 6A.22.2).

2.3 Rule 6A.23.2 of the Current NER sets out the following principles for the allocation of the AARR (or MAAR in the case of VENCorp (see rule 9.8.4F(c)(2)(i)(C) of the Current NER)) to categories of prescribed transmission services[3]:

> '(a) The AARR for a *Transmission Network Service Provider* must be allocated to each *category of prescribed transmission services* in accordance with the *attributable cost share* for each such category of services.
>
> (b) This allocation results in the *annual service revenue requirement* (*ASRR*) for that category of services.
>
> (c) The allocation of the *AARR* must be such that:
>
> (1) every portion of the *AARR* is allocated; and
>
> (2) the same portion of the *AARR* is not allocated more than once.
>
> (d) Where, as a result of the application of the *attributable cost share*, a portion of the *AARR* would be attributable to more than one category of *prescribed transmission services*, that *attributable cost share* is to be adjusted and

[3] Under the Victorian derogation (rule 9.8.4F of the Current NER):

- a reference to 'prescribed transmission services' is to be read as a reference to 'shared network services' where applicable;
- a reference to a 'Transmission Network Service Provider' is to be read as a reference to 'the Regulated Owner' or 'VENCorp' as the case requires;
- a reference to 'prescribed TUOS services' or 'prescribed common transmissions services' is to be read as a reference to 'shared network services'; and
- a reference to the 'Aggregate Annual Revenue Requirement' (AARR), in the case of VENCorp, is to be read as a reference to 'Maximum Allowable Aggregate Revenue' (MAAR) (rule 9.8.4F(of the Current NER)).

applied such that any costs of a *transmission system* asset that would otherwise be attributed to the provision of more than one category of *prescribed transmission services*, is allocated as follows:

(1) to the provision of *prescribed TUOS services*, but only to the extent of the stand-alone amount for that *category of prescribed transmission services*;

(2) if any portion of the costs of a *transmission system* asset is not allocated to *prescribed TUOS services*, under subparagraph (1), that portion is to be allocated to *prescribed common transmission services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;

(3) if any portion of the costs of a *transmission system* asset is not attributed to *prescribed transmission services* under subparagraphs (1) and (2), that portion is to be attributed to *prescribed entry services* and *prescribed exit services*.'

2.4 For the purposes of rule 6A.23.3(d), 'stand alone amount' is defined as:

> For a *category of prescribed transmission services*, the costs of a *transmission system* asset that would have been incurred had that *transmission system* asset been developed exclusively to provide that *category of prescribed transmission services*.

2.5 The 'Attributable Cost Share' is defined in rule 6A.22.3 of the Current NER as follows:

'(a) For a *Transmission Network Service Provider* for a category of *prescribed transmission services*, the *attributable cost share* for that provider for that category of services must, subject to any adjustment required under the principles in rule 6A.23.2, substantially reflect the ratio of:

(1) the costs of the *transmission system* assets directly attributable to the provision of that *category of prescribed transmission services*; to

(2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed transmission services*.

(b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.'

2.6 VENCorp understands the requirements for allocation of the AARR / MAAR to each of the categories of Prescribed Transmission Services applicable to its Revised Methodology to be as follows:

2.6.1 For each asset directly attributable to the provision of Prescribed Transmission Services, a Transmission Network Service Provider (TNSP) must:

- determine the optimised replacement cost (ORC) of the asset; and
- determine the category of Prescribed Transmission Services to which the asset is 'directly attributable'.

2.6.2 The TNSP must determine whether an asset is 'directly attributable' to the provision of Prescribed Transmission Services, and the category of Prescribed Transmission Services to which that asset is 'directly attributable', in accordance with section 2.4 of the Pricing Methodology Guidelines.

2.6.3 The TNSP must then determine:

- the ORC of the transmission assets directly attributable to the provision of each category of Prescribed Transmission Services; and
- the total ORC of all assets directly attributable to the provision of Prescribed Transmission Services.

2.6.4 These figures must, in turn, be used by the TNSP to determine the Attributable Cost Share for each category of Prescribed Transmission Services. In doing so, the Priority Ordering Rules set out in rule 6A.23.2(d) must be used to adjust the Attributable Cost Share by allocating the costs of any asset that is 'directly attributable' to more than one category of Prescribed Transmission Services in accordance with these Rules.

2.6.5 Finally, the TNSP must multiply the Attributable Cost Share for each category of Prescribed Transmission Services by the AARR to determine the ASRR for each category of Prescribed Transmission Services.

2.7 As the Co-ordinating Network Service Provider for the Victorian region, VENCorp is responsible, under rule 9.8.4F(f)(1) of the Current NER, for the allocation of all relevant AARRs relating to the provision of Prescribed TUOS Services and Prescribed Common Transmission Services in the Victorian region. Rule 9.8.4F(f)(1) (which uses superseded terms, e.g. 'transmission use of system services' and 'common services') relevantly provides:

> '*VENCorp* is to be taken to be:
>
> (1) the *Co-ordinating Network Service Provider* appointed under rule 6A.29 responsible for the allocation of all relevant *aggregate annual revenue requirements* relating to the provision of *transmission services* which are

transmission use of system services or *common services* within the Victorian *region* in accordance with the relevant clauses of Part J of Chapter 6A'.

2.8 That is, as Co-ordinating Network Service Provider, VENCorp is responsible for allocating the aggregate ASRRs for each of the Prescribed TUOS Services and Prescribed Common Transmission Services categories of Prescribed Transmission Services.

2.9 While VENCorp is responsible for determining the MAAR referable to each of the Prescribed TUOS Services and Prescribed Common Transmission Services categories (see, for example, rule 9.8.4F(f)(1)), rule 9.8.4F(d) relevantly provides:

> 'A *Regulated owner* must, on allocating its *aggregate annual revenue requirement* amongst all of its assets utilised in the provision of *shared network services*, immediately notify *VENCorp* of the actual amount of the *aggregate annual revenue requirement* allocated in respect of each of its assets utilised in the provision of those services'.

2.10 Rule 9.8.4F(d) is expressed in terms that reflect the allocation process under the Old NER (e.g. it requires SP AusNet (as the relevant Regulated Owner) to notify VENCorp of the AARR allocated to each of its assets in the Prescribed TUOS Services' and Prescribed Common Transmission Services' asset classes). Despite this, however, VENCorp understands rule 9.8.4F(d) to operate (under the transmission pricing regime established by the Current NER) to require SP AusNet to notify VENCorp of:

2.10.1 the ORC of each of SP AusNet's assets 'directly attributable' to each of the Prescribed TUOS Services and Prescribed Common Transmission Services categories of Prescribed Transmission Services;

2.10.2 SP AusNet's ASRRs for each of the Prescribed TUOS Services and Prescribed Common Transmission Services categories (SP AusNet's ASRRs); and

2.10.3 SP AusNet's operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services to VENCorp, which were deducted from SP AusNet's Maximum Allowable Revenue in deriving its AARR in accordance with rule 6A.22.1 of the Current NER.

2.11 Rule 6A.29.3 of the Current NER also provides for the allocation of the AARRs of TNSPs across one or more inter-connected regions by agreement between those TNSPs. Rule 6A.29.3 relevantly provides:

> '(a) The *Transmission Network Service Providers* responsible for the allocation of the *AARR* within a *region* may agree with one or more other such providers for *interconnected regions* to undertake the allocations of *AARR* as one allocation over all of those *regions*.

(b) To make an allocation over several *regions*, the sum of the *AARR* of all *Transmission Network Service Providers* providing *prescribed transmission services* within those *regions* must be used.'

2.12 Where the TNSPs of one or more inter-connected region so agree, financial transfers between those TNSPs must occur in respect of the revenue collected by each from their Transmission Customers in respect of the Prescribed Transmission Services provided by the network of another of those TNSPs. These financial transfers occur under rule 6A.27.4(a) which relevantly provides:

> 'Each *Transmission Network Service Provider* must pay to each other relevant *Transmission Network Service Provider* the revenue which is estimated to be collected during the following year by the first provider as charges for *prescribed transmission services* for the use of *transmission systems* owned by those other *Transmission Network Service Providers*'.

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

2.13 Under rule 9.8.4F(d) of the Current NER, SP AusNet will notify VENCorp of SP AusNet's ASRRs. That is, SP AusNet is responsible for determining its Attributable Cost Shares, and its ASRRs, for each category of Shared Network Services and providing SP AusNet's ASRRs to VENCorp.

2.14 SP AusNet's methodology for deriving the data used to determine the Attributable Cost Shares for each category of Prescribed Transmission Services is set out in section 3.5 of its Proposed Pricing Methodology dated 31 March 2007.

2.15 VENCorp will separately determine the Attributable Cost Shares of certain assets directly attributable to the provision of Shared Network Services that are operated and maintained by SP AusNet under network service agreements with VENCorp (Additional Assets), the costs of which are not included in the determination of SP AusNet's AARR. In accordance with rule 6A.22.3(b), VENCorp will determine the cost of these Additional Assets using an ORC methodology, in consultation with SP AusNet or such other TNSP that owns and operates each of these Assets under a network services agreement with VENCorp. That is, VENCorp will:

- determine the ORC of each of these Additional Assets; and
- allocate each of these Additional Assets to either the Prescribed TUOS Services or the Prescribed Common Transmission Services categories of Prescribed Transmission Services.

2.16 VENCorp will allocate each of the Additional Assets to either the Prescribed TUOS Services or the Prescribed Common Transmission Services categories in accordance with section 2.4 of the Pricing Methodology Guidelines.

2.17 VENCorp will use the ORC of the Additional Assets and the allocation of the Additional Assets to the Prescribed TUOS Services and the Prescribed Common Transmission Services categories to determine VENCorp's own Attributable Cost Shares (VENCorp's Attributable Cost Shares).

2.18 Where one or more of the Additional Assets are 'directly attributable' to both the Prescribed TUOS Services and the Prescribed Common Transmission Services categories, VENCorp will adjust VENCorp's Attributable Cost Shares in accordance with the Priority Ordering Rules. VENCorp will attribute the costs of any Additional Asset in accordance with the Priority Ordering Rules in consultation with SP AusNet or such other TNSP that owns and operates each of these Assets under a network services agreement with VENCorp.

2.19 VENCorp will then use VENCorp's Attributable Cost Shares and its MAAR to calculate its ASRRs for the Prescribed TUOS Services and Prescribed Common Transmission Services categories (VENCorp's ASRRs).

2.20 Following this, in accordance with VENCorp's role as the Co-ordinating Network Service Provider for the Victorian region, VENCorp will determine the aggregate ASRR for each of the Prescribed TUOS Services and Prescribed Common Transmission Services categories for the Victorian region by summing:

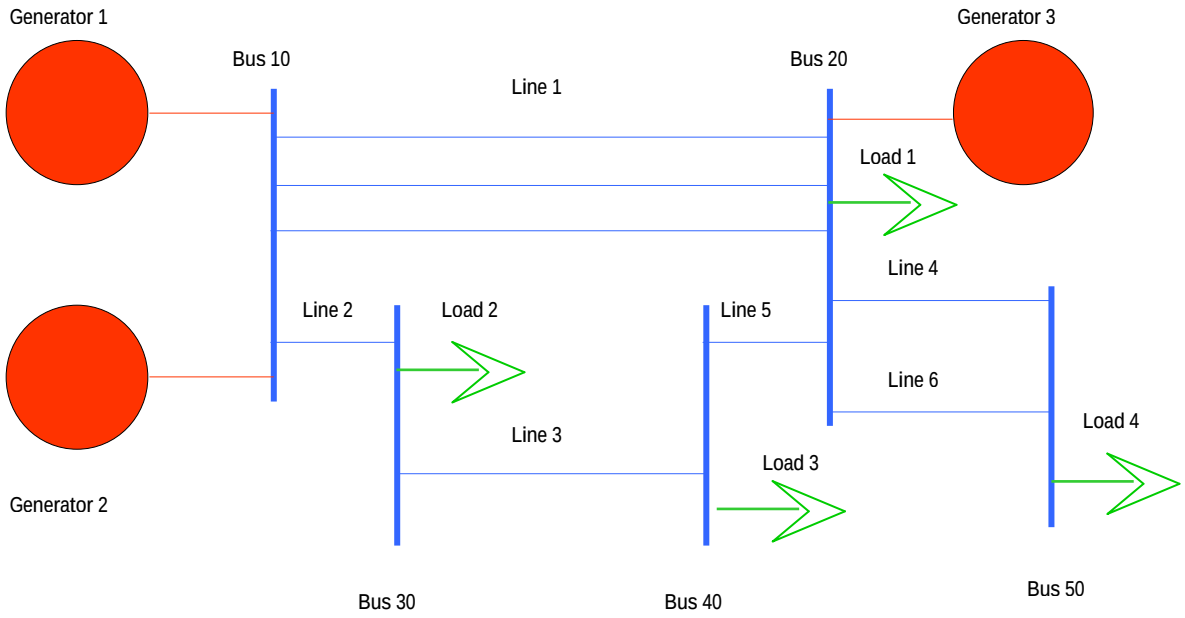
- SP AusNet's ASRR for each of the Prescribed TUOS Services and Prescribed Common Services categories; and
- VENCorp's ASRR for the Prescribed TUOS Services and Prescribed Common Transmission Services categories respectively.

Worked Examples of VENCorp's Application of the Rules and the Pricing Methodology Guidelines

Calculation of Total ASRRs for Victorian region for Prescribed TUOS Services and Prescribed Common Transmission Services

2.21 Assume that the Victorian Network is as depicted by Figure 1 below, which illustrates a small power system which has 3 generators and 4 load points.

Figure 1 – Sample Power System



2.22 For simplicity, assume also that the Victorian Network is not interconnected with the transmission network(s) of any other region.

2.23 Finally, assume that VENCorp's MAAR is $27.57m.

2.24 SP AusNet notifies VENCorp of SP AusNet's ASRRs and its operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services. Assume:

2.24.1 SP AusNet's ASRR for Prescribed TUOS Services is $20m; and

2.24.2 SP AusNet's ASRR for Prescribed Common Transmission Services is $5.18m.

2.25 In the sample power system depicted in Figure 1 above, the following network elements are Additional Assets - that is, they provide Shared Network Services that are operated and maintained by SP AusNet under network service agreements with VENCorp and the costs of which are not included in the determination of SP AusNet's AARR:

- line 1, between Bus 10 and Bus 20;
- line 3, between Bus 30 and Bus 40; and
- line 5, between Bus 40 and Bus 20.

2.26 As the costs of these network elements are not reflected in SP AusNet's AARR or SP AusNet's ASRRs, VENCorp will separately:

2.26.1 determine the ORC for each of these Additional Assets; and

2.26.2 allocate each of these Additional Assets to either the Prescribed TUOS Services or Prescribed Common Transmission Services categories of Prescribed Transmission Services (in accordance with the requirements of schedule 6.2 of the Old NER relating to the allocation of assets to the transmission use of system services and the common services classes of transmission services).

2.27 Assume:

Table 1 – ORC for Additional Assets

Additional Assets	Allocation to Category of Prescribed Transmission Services	ORC ($m)
Line 1	Prescribed TUOS Services	121.5
Line 3	Prescribed TUOS Services	44.8
Line 5	Prescribed Common Transmission Services	76.5
Total ORC for Additional Assets	All	242.8
Total ORC for Additional Assets	Prescribed TUOS Services	166.3
Total ORC for Additional Assets	Prescribed Common Transmission Services	76.5

2.28 VENCorp then calculates its Attributable Cost Shares for the Prescribed TUOS Services and Prescribed Common Transmission Services as follows.

Table 2 – Attributable Cost Shares

Category of Prescribed Transmission Services	Total ORC ($m) of Additional Assets	Attributable Cost Shares
Prescribed TUOS Services	166.3	0.68
Prescribed Common Transmission Services	76.5	0.32
Total	242.8	1.0

2.29 VENCorp then calculates its ASRRs for the Prescribed TUOS Services and Prescribed Common Transmission Services categories of Prescribed Transmission Services as follows:

$ASRR_{tuos}$ = MAAR x Attributable Cost $Share_{tuos}$

= $27.57 x 0.68

= $18.745

$ASRR_{pcts}$ = MAAR x Attributable Cost $Share_{pcts}$

= $27.57 x 0.32

= $8.82

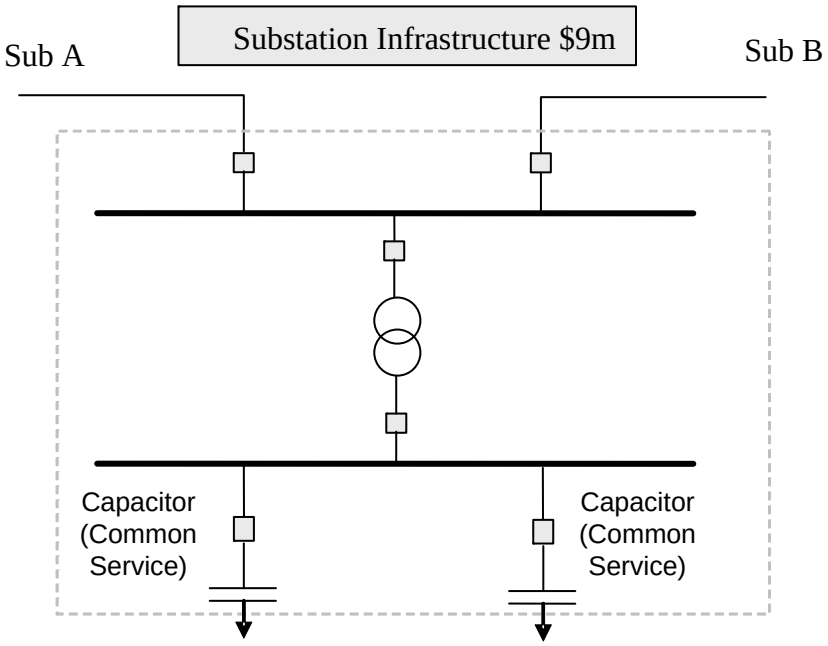
2.30 VENCorp then sums SP AusNet's ASRRs for the Prescribed TUOS Services and Prescribed Common Transmission Services categories and its ASRRs for the respective categories as follows:

Table 3 – Total ASRRs for Victorian region

Category of Prescribed Transmission Services	SP Aust Net's ASRRs ($m)	VENCorp's ASRRs ($m)	Total ASRRs for Victorian region ($m)
Prescribed TUOS Services	$20	$18.745	$38.745
Prescribed Common Transmission Services	$5.18	$8.82	$14

VENCorp's Application of the Priority Ordering Rules

2.31 In circumstances where one of VENCorp's Additional Assets was 'directly attributable' to more than one category of Prescribed Transmission Services, VENCorp would apply the Priority Ordering Rules. For example, a piece of substation infrastructure may have an ORC of $9.0m and be directly attributable to both Prescribed TUOS Services and Prescribed Common Transmission Services. The substation infrastructure is illustrated in the following diagram:



2.32 VENCorp would apply the Priority Ordering Rules as follows in calculating VENCorp's Attributable Cost Shares:

Step 1: Branch Identification

- Identify the branches in the substation, being the lines, transformers, major reactive devices being assets in the substation which provide Prescribed TUOS Services and Prescribed Common Transmission Services.
- In the diagram above, the branches are Sub A, Sub B, Tie Transformer and two Common Service branches.

Step 2: Allocation of Circuit Breakers to Branches

- For each high voltage circuit breaker in the substation identify the branches directly connected to it. Any circuit breaker that does not directly connect to a branch is excluded from allocation and all costs associated with it are added to the substation infrastructure and establishment cost.
- The total number of circuit breakers directly connected to branches is 6.

Step 3.1: Determination of Stand-alone arrangements for Prescribed TUOS Services

- With reference to the number of lines providing Prescribed TUOS Services, determine the number of circuit breakers required to provide Prescribed TUOS Services of an equivalent standard on a stand-alone basis. The stand-alone configuration is the simplest substation configuration (in the absence of development) had it been

developed to provide a Prescribed TUOS Service. This may be done by way of a look up of typical stand-alone configurations.

- The stand-alone arrangement for the provision of Prescribed TUOS Services to an equivalent standard consists of 2 circuit breakers.

Step 3.2: Determination of Stand-alone arrangements for Prescribed Common Transmission Services

- With reference to the number of lines providing Prescribed TUOS Services and the devices providing Prescribed Common Transmission Services, determine the number of circuit breakers required to provide Prescribed Common Transmission Services of an equivalent standard on a stand-alone basis. The stand-alone configuration is the simplest substation configuration (in the absence of development) had it been developed to provide a Prescribed Common Transmission Service. This may be done by way of a look up of typical stand-alone configurations.

- The stand-alone arrangement for the provision of Prescribed Common Transmission Services to an equivalent standard consists of 4 circuit breakers.

Step 4.1: Allocation of costs to Prescribed TUOS Services

- Allocate a portion of substation infrastructure and establishment costs to Prescribed TUOS Services according to the ratio of the high voltage circuit breakers identified in step 3.1 to the total number of high voltage circuit breakers connected to branches in the substation identified in step 2.

- Costs are allocated to Prescribed TUOS Services in the ratio of the circuit breakers in the stand-alone arrangement to the total circuit breakers.

- Infrastructure Cost Allocated to Prescribed TUOS Services = (2/6) x $9m = $3m

Step 4.2: Calculate the Unallocated Substation Infrastructure Costs after TUOS Allocation

- Calculate the unallocated substation infrastructure cost by subtracting the amount calculated in step 4.1 from the total substation infrastructure amount.

- Unallocated = $9m - $3m = $6m

Step 4.3: Allocation of costs to Prescribed Common Transmission Services

- Allocate a portion of the substation infrastructure and establishment costs to Prescribed Common Transmission Services based on to the ratio of the high voltage circuit breakers providing Prescribed Common Transmission Services identified in step 3.2 to the total number of high voltage circuit breakers connected to branches in the substation. If the Prescribed Common Transmission Service portion of substation infrastructure is greater than the unallocated costs, then the unallocated portion only

is attributed to Prescribed Common Transmission Services. In this instance, nothing will be attributed to Prescribed Entry Services or Prescribed Exit Services.

- Costs are allocated to Prescribed Common Transmission Services in the ratio of the circuit breakers in the stand-alone arrangement to the total circuit breakers.
- Infrastructure Cost allocated to Common Service = (4/6) x $9m = $6m

Step 4.4: Calculate the Unallocated Substation Infrastructure Costs after Common Service Allocation

- Calculate the unallocated substation infrastructure cost by subtracting the amount calculated in step 4.3 from the amount calculated in step 4.2.
- Unallocated = $6m - $6m = $0

3 Allocation of the ASRR for Prescribed TUOS Services to Connection Points

Overview of the Rules and the Pricing Methodology Guidelines

3.1 Rules 6A.23.3(c), (d) & (e) of the Current NER set out the following principles for the allocation of the ASRR for Prescribed TUOS Services to connection points with Transmission Customers:

> '(c) Subject to paragraph (e), the *ASRR* for *prescribed TUOS services* is to be allocated to transmission network connection points of Transmission Customers in the following manner:
>
> (1) a share of the ASRR (the locational component) is to be adjusted by subtracting the estimated auction amounts expected to be distributed to the Transmission Network Service Provider under rule 3.18.4 from the connection points for each relevant directional interconnector and this adjusted share is to be allocated as between such connection points on the basis of the estimated proportionate use of the relevant transmission system assets by each of those customers, and the CRNP methodology and modified CRNP methodology represent two permitted means of estimating proportionate use;
>
> (2) the remainder of the ASRR (the pre-adjusted non-locational component) is to be adjusted:
>
> (i) by subtracting the amount (if any) referred to in paragraph (e);
>
> (ii) by subtracting or adding any remaining settlements residue (not being settlements residue referred to in sub paragraph (1) but including the portion of settlements residue due to intraregional loss factors) which is expected to be distributed or recovered (as the case may be) to or from the Transmission Network Service Provider in accordance with rule 3.6.5(a);
>
> (iii) for any over-recovery amount or under-recovery amount;
>
> (iv) for any amount arising as a result of the application of rule 6A.23.4(h) and (i); and

(v) for any amount arising as a result of the application of prudent discounts in rule 6A.26.1(d)-(g),

(the **adjusted non-locational component**) and this adjusted non-locational component is to be recovered in accordance with rule 6A.23.4.

(d) The shares of the *ASRR* referred to in paragraph (c) are to be either:

(1) a 50% share allocated to the locational component referred to in subparagraph (c)(1) and a 50% share allocated to the pre-adjusted non-locational component referred to in subparagraph (c)(2); or

(2) an alternative allocation to each component, that is based on a reasonable estimate of future network utilisation and the likely need for future transmission investment, and that has the objective of providing more efficient locational signals to Market Participants, Intending Participants and end-users.

(e) If the result of the adjustment referred to in paragraph (c)(1) would be a negative locational component for the connection points of the relevant directional interconnector then the locational component will be deemed to be zero and the absolute value of that negative amount is to be subtracted from the pre-adjusted non-locational component under paragraph (c)(2)(i)."

3.2 Section 2.2(f) of the Pricing Methodology Guidelines provides that, if historical data is unavailable for a connection point for use in the allocation of the locational component to connection points using the cost reflective network pricing (CRNP) or modified CRNP methodology, an estimate of demand must be used instead.

3.3 The principles for the allocation of the ASRR for Prescribed TUOS Services can be summarised into four steps, as follows:

3.3.1 Determine the locational component of the ASRR for Prescribed TUOS Services, either 50% of the ASRR for Prescribed TUOS Services or based on future network utilisation.

3.3.2 Adjust the locational component of the ASRR by auction amounts.

3.3.3 Allocate the adjusted locational component of the ASRR to connection points with Transmission Customers on the basis of the estimated proportionate use of the relevant transmission system assets by each of those Customers - the CRNP methodology and modified CRNP methodology are two permitted means for performing this allocation.

3.3.4 Adjust the non-locational component of the ASRR for:

- any remaining settlement residues;
- the amount of any over- or under-recovery of the AARR in previous years;
- the amount of any anticipated under-recovery in the relevant Financial Year by reason of application of the 2% cap on the annual change in prices for the recovery of the locational component of the ASRR in accordance with rule 6A.23.4(f); and
- the amount of any anticipated under-recovery in the relevant Financial Year by reason of prudent discounts applied in accordance with rule 6A.26.1(d)-(g).

Transmission Customer Transmission CustomerVENCorp's Application of the Rules and the Pricing Methodology Guidelines

3.4 In accordance with rule 9.8.4F(c)(3), VENCorp is responsible for allocating the ASRR for Prescribed TUOS Services and Prescribed Common Transmission Services and SP AusNet is responsible for allocating the ASRR for Prescribed Entry Services and Prescribed Exit Services.

3.5 VENCorp will use the CRNP methodology in respect of the ASRR for Prescribed TUOS Services to:

3.5.1 determine the locational component of the ASRR (i.e. 50% of the total ASRR);

3.5.2 allocate the locational component of the ASRR for Prescribed TUOS Services to connection points with Transmission Customers. In particular, VENCorp will use the software package TPRICE to estimate the proportionate use of the relevant transmission system assets by each Transmission Customer, and so allocate the locational component of the ASRR for Prescribed TUOS Services to connection points.

3.6 TPRICE is the CRNP software given interim approval by NECA under rule 6.8.1 of the then National Electricity Code.

3.7 The locational component, determined using the CRNP method, is a 50% share of the ASRR for Prescribed TUOS Services. As discussed in paragraph 5 of schedule 6.4 of the Old NER:

> 'This method is used to determine the usage component of *transmission use of system service* costs for a *connection point* for each relevant *connection point* by implementing the *cost reflective network pricing* method described in paragraphs 2 to 5 of this schedule 6.4, with the costs of the *transmission network* elements determined as 50% of the full cost which is allocated to each by the relevant calculations'.

3.8 The AEMC recognised that the CRNP methodology provides for a 50-50 split of Prescribed TUOS Services into the locational and non-locational components as follows:

'… 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.

….

The Proposed Rule also provides for a default split of 50 percent 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 amore efficient locational price signals.'[4]

3.9 After VENCorp has determined the locational component allocated to each connection point with a Transmission Customer using TPRICE, VENCorp will then:

3.9.1 determine the adjusted locational component by subtracting the estimated Auction Amounts referred to in clause 6A.23.3(c)(1) of the Current NER from the locational component; and

3.9.2 adjust the locational component allocated to each connection point by a proportion equivalent to the ratio of the adjusted locational component to the locational component.

3.10 VENCorp will make the adjustments to the non-locational component of the ASRR for Prescribed TUOS Services set out in rule 6A.23.3(c)(2) of the Current NER. VENCorp observes that, as one of these adjustments relates to the application of the cap on the annual percentage change in prices for the locational component of the ASRR for Prescribed TUOS Services under rules 6A.23.4(h) & (i), determination of the adjusted non-locational component will necessarily occur *after* the calculation of prices for recovery of the locational component.

3.11 In respect of the adjustment in relation to the application of prudent discounts, VENCorp notes that none of its customers currently receive prudent discounts and it does not currently expect that it will submit any to the AER within the Regulatory Control Period. However, in the event that a customer does receive prudent discounts in the future, VENCorp will adjust, in accordance with rule 6A.26.1(d)-(g), the non-locational component of the ASRR for Prescribed TUOS Services for the amount of any anticipated under-recovery arising from prudent discounts applied.

Worked Example of VENCorp's Application of the Rules and the Pricing Methodology Guidelines

3.12 The allocation of the ASRR for Prescribed TUOS Services between the locational component and the non-locational component occurs in applying the CRNP methodology, using TPRICE.

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[4] AEMC 2006 *Proposed National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006,* Rule Proposal Report, 24 August 2006, Sydney.

The CRNP methodology simultaneously allocates the locational component of the ASRR for Prescribed TUOS Services to Transmission Customers' connection points with the Victorian Network.

3.13 VENCorp notes at the outset that, while TPRICE utilises cost inputs and produces cost allocation outputs for the Financial Year in which the transmission prices being calculated are to apply (i.e. year t), the operating conditions utilised by TPRICE to produce its cost allocation outputs relate to the previous full Financial Year (i.e. year t-2).

3.14 In order to allocate the ASRR for Prescribed TUOS Services between the locational and the non-locational components, and to allocate the locational component to Transmission Customers' connection points, TPRICE requires the following input data:

3.14.1 a static model of the Victorian Network in year t;

3.14.2 an electrical loadflow model of the Victorian Network in year t;

3.14.3 a cost model detailing the ORC for each network element in the static model of the Victorian Network in year t; and

3.14.4 load and generation data for the 10 weekdays when system demand was highest between the hours of 11:00 and 19:00 in the local time zone during Financial Year t-2.

3.15 If historical load and generation data is unavailable, VENCorp will use an estimate of demand for the Financial Year t-2 in accordance with section 2.2(f) of the Pricing Methodology Guidelines.

3.16 Assume the static model of the Victorian Network utilised by TPRICE is as set out in Figure 1 above. Assume also that the ORC for each of the Additional Assets in year t are as set out in Table 1 in the section 2 worked example (reproduced in Table 4 below) and that the ORC for the remaining assets in the Victorian network in year t, notified by SP AusNet to VENCorp in accordance with rule 9.8.4F(d) of the Current NER, are as set out in Table 4 below.

Table 4 – ORC of network elements in Victorian Network in year t

Assets	ORC ($m)
Line 1	121.5
Line 2	58.5
Line 3	44.8
Line 4	100.0
Line 5	76.5
Line 6	173.6

3.17 TPRICE utilises the ORC for each of the assets attributable to the provision of Prescribed TUOS Services in allocating a locational component to each connection point. As discussed in section 2, line 5 is attributable to the provision of Prescribed Common Transmission Services. Assume also that of SP AusNet's assets, line 2 is attributable to the provision of Prescribed Common

Transmission Services. Accordingly, the ORC input data required by TPRICE would not include the ORC for lines 2 and 5.

3.18 An example of TPRICE's resultant data output for year t is set out in Table 5 below.

Table 5 – TPRICE Output Data in year t

Load	Bus Name	Cost ($m)
1	Bus 20	6.720
2	Bus 30	1.138
3	Bus 40	1.823
4	Bus 50	9.692
Total		19.373

3.19 That is, TPRICE produces a locational cost allocation for each connection point in the Victorian Network in year t. The sum of all these locational cost allocations is the locational component of the ASRR for Prescribed TUOS Services, which is $19.373m for year t.

3.20 Assuming that the ASRR for the Victorian region for Prescribed TUOS Services is as derived in the worked example in section 2 above, namely $38.745m, the non-locational component of the ASRR for Prescribed TUOS Services is also $19.373m (i.e. $38.745m - $19.373m). The CRNP methodology allocates 50% of the ASRR for Prescribed TUOS Services to the locational component and 50% to the non-locational component.

3.21 The non-locational component is to be adjusted in accordance with rule 6A.23.3(c)(2). However, as one of the required adjustments relates to the application of the cap on the annual percentage change in prices for the locational component of the ASRR for Prescribed TUOS Services under rules 6A.23.4(h) & (i), determination of the adjusted non-locational component will necessarily occur *after* the calculation of prices for recovery of the locational component.

4 Development of Prices for Recovery of ASRR

Overview of the Rules and Pricing Methodology Guidelines

4.1 Rule 6A.23.4 of the Current NER sets out the following principles for the development of prices for recovery of the ASRR for Prescribed TUOS Services and Prescribed Common Transmission Services:

'(a) A Transmission Network Service Provider is to develop separate prices for the recovery of the ASRR in accordance with the principles set out in paragraphs (b)-(i).

(b) Separate prices are to be developed for each category of prescribed transmission services, being:

(1) prescribed entry services;

(2) prescribed exit services;

(3) prescribed common transmission services;

(4) prescribed TUOS services – locational component; and

(5) prescribed TUOS services – the adjusted non-locational component.

(d) Prices for prescribed common transmission services must be on a postage stamp basis.

(e) Prices for recovering the locational component of providing prescribed TUOS services must be based on demand at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated.

(f) Subject to paragraphs (g), (h), and (i), prices for recovering the locational component of the ASRR for the provision of prescribed TUOS services must not change by more than 2 per cent per annum compared with the load weighted average price for this component for the relevant region.

(g) The change in price referred to in paragraph (f) may exceed 2 per cent per annum if, since the last time prices were set:

(1) the load at the connection point has materially changed;

(2) in connection with that change, the Transmission Customer requested a renegotiation of its connection agreement with the Transmission Network Service Provider; and

(3) the AER has approved the change of more than 2 per cent per annum.

(h) If, in the case of an increase in price, the application of paragraph (f) would result in the under-recovery of part of the locational component of the ASRR in charges for prescribed TUOS services, any shortfall may be recovered by adjusting upward the charges that would otherwise apply in respect of the adjusted non-locational component of prescribed TUOS services.

(i) If, in the case of a decrease in price, the application of paragraph (f) would result in over-recovery of the locational component of the ASRR through charges for prescribed TUOS services, any over-recovery must be offset by adjusting downward the charges that would otherwise apply in respect of the adjusted non-locational component of prescribed TUOS services.

(j) Prices for recovering the adjusted non-locational component of prescribed TUOS services must be on a postage-stamp basis.'

4.2 The rule 6A.23.4 principles for the development of prices for the Prescribed TUOS Services and the Prescribed Common Transmission Services can be summarised as follows:

4.2.1 Prices for Prescribed Common Transmission Services and the adjusted non-locational component of the ASRR for Prescribed TUOS Services must be developed on a postage stamp basis.

4.2.2 Prices for Prescribed Common Transmission Services must recover both the ASRR for Prescribed Common Transmission Services and the operating and maintenance costs incurred in the provision of those Services.

4.2.3 Prices for the locational component of Prescribed TUOS Services must:

- be based on demand 'at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated'; and
- must not change by more than 2% per annum compared with the load weighted average price for this component for the relevant region, here the Victorian region.

Pricing for locational component of the ASRR for Prescribed TUOS Services

4.3 Rule 6A.23.4(e) of the Current NER provides that:

> 'Prices for recovering the locational component of providing prescribed TUOS services must be based on demand at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated.'

4.4 Section 2.2 of the Pricing Methodology Guidelines provides that the following measures of demand may be applied to the lump sum dollar amount allocated to each connection point in respect of the adjusted locational component of the ASRR for Prescribed TUOS Services:

4.4.1 the current Contract Agreed Maximum Demand (CAMD) (prevailing at the time transmission prices are published) as negotiated in a Transmission Customer's connection agreement or the Transmission Customer's maximum demand in the previous 12 months if the Transmission Customer has exceeded its current CAMD, expressed as $/MW/day; or

4.4.2 the average of the Transmission Customer's half-hourly maximum demand recorded at its connection point on the 10 weekdays when system demand was highest between the hours of 11:00 and 19:00 in the local time zone (Average Maximum Demand) during the previous 12 months, expressed as $/MW/day.

4.5 VENCorp will use the latter (i.e. Average Maximum Demand during 'the previous 12 months') to determine locational TUOS prices.

4.6 If historical data for 'the previous 12 months' is unavailable in respect of any connection point, then section 2.2(f) of the Pricing Methodology Guidelines requires the use of an estimate of the Average Maximum Demand to determine locational TUOS prices for that connection point.

4.7 Section 2.2(g) of the Pricing Methodology Guidelines, in turn, requires a TNSP to detail how it intends to set the Prescribed TUOS Services locational prices at new connection points and at connection points where the load has changed significantly after those prices have been determined and published by the TNSP.

4.8 Rules 6A.23.4(f)-(i) operate to limit the percentage change in locational prices from one year to another. Rule 6A.23.4(f) provides that, subject to rules 6A.23.4(g)-(j), prices for recovering the locational component of the ASRR for Prescribed TUOS Services must not change by no more than 2% per annum compared with the load weighted average price for this component for the relevant region.

4.9 The Pricing Methodology Guidelines provide that a TNSP may propose alterative pricing structures to those set out in the Guidelines for the recovery of the locational component of Prescribed TUOS Services. However, VENCorp does not propose such an alternative pricing structure.

Pricing for adjusted non-locational component of the ASRR for Prescribed TUOS Services and for Prescribed Common Transmission Services

4.10 Section 2.3(b) of the Pricing Methodology Guidelines provides that permissible postage stamp pricing structures for either the non-locational component of Prescribed TUOS Services or Prescribed Common Transmission Services must be based on any one of the following:

4.10.1 either CAMD or historical energy;

4.10.2 maximum demand; or

4.10.3 an alternative pricing structure proposed by a TNSP.

4.11 VENCorp's pricing structure is based on the first of these 3 options (i.e. either CAMD or historical energy). VENCorp does not propose an alternative pricing structure.

4.12 Section 2.3(c) of the Pricing Methodology Guidelines provides that, in these circumstances, the prices based on CAMD and historical energy must be calculated as follows:

4.12.1 Two prices must be derived for the recovery of the adjusted non-locational component of the ASRR for Prescribed TUOS Services or the ASRR for Prescribed Common Transmission Services, namely:

- a price based on energy ($/MWh) (Energy Based Price); and
- a price based on CAMD ($/MW) (CAMD Price).

4.12.2 Either the Energy Based Price or the CAMD Price will apply to each connection point with a Transmission Customer.

4.12.3 The Energy Based Price is a price per unit of:

- historical metered energy offtake at a connection point in the Financial Year 2 years prior to that in which the Energy Price applies (Historical Metered Energy Offtake); or
- if Historical Metered Energy Offtake is not available or Historical Metered Energy Offtake is significantly different to actual metered energy offtake in the Financial Year in which the Energy Price applies (Current Metered Energy Offtake), Current Metered Energy Offtake at the connection point in the Financial Year in which the Energy Based Price applies.

4.12.4 The CAMD Price is a price per unit of CAMD for a connection point

4.12.5 The value of the Energy Based and CAMD Prices must be determined so as to ensure that:

(a) a Transmission Customer with a load factor in relation to its connection point which is equal to the median load factor across all connection points with Transmission Customers connected to the transmission network in the relevant region or regions (Median Load Factor Customer) is indifferent between the use of the Energy Based Price and the CAMD Price to determine its charges in respect of the adjusted non-locational component or the ASRR for the Prescribed Common Transmission Services (as the case may be); and

(b) the total amount to be recovered by charges for Prescribed Common Transmission Services or the adjusted non-locational component of Prescribed TUOS Services (as the case may be) does not exceed the *ASRR* plus relevant operating and maintenance costs or the adjusted non-locational component (respectively).

4.12.6 The CAMD Price may only apply in relation to a connection point if the relevant Transmission Customer's connection or use of system agreement specifies:

- a CAMD for the connection point; and
- penalties for exceeding the nominated CAMD.

4.12.7 Subject to this requirement, the price that applies in relation to a connection point is the price that results in the lower estimated recovery from the charges for the adjusted non-locational component or Prescribed Common Transmission Service (as the case may be) for that connection point.

4.13 In respect of Prescribed Common Transmission Services, VENCorp must calculate and apply the two prices, the Energy Based Price and CAMD Price so as to recover both:

4.13.1 the ASRR for Prescribed Common Transmission Services; and

4.13.2 the operating and maintenance costs incurred in the provision of those Services.

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

Prices for locational component of Prescribed TUOS Services

4.14 In accordance with section 2.2(c)(2) of the Pricing Methodology Guidelines, VENCorp will use the Average Maximum Demand during 'the previous 12 months' to determine locational TUOS prices.

4.15 The phrase 'the previous 12 months' is not defined in the Pricing Methodology Guidelines. VENCorp interprets this phrase in section 2.2(c)(2) to mean the most recently completed full Financial Year, as determined at the time transmission prices are calculated by VENCorp (i.e. Financial Year t-2), as this is the most recent historic Financial Year for which a full Year's data will be available for pricing purposes.

4.16 Thus, the prices for the locational component of Prescribed TUOS Services (previously described as the TUOS usage price) for a connection point is calculated using the Average Maximum Demand at the relevant connection point in the Financial Year that ends prior to the Financial Year in which the prices are being calculated (i.e. t-2).

4.17 If historical data is unavailable, VENCorp will use an estimate of Average Maximum Demand for Financial Year t-2 in accordance with section 2.2(f) of the Pricing Methodology Guidelines. If, however, historical data is unavailable because the relevant connection point is a new connection point, VENCorp will use an estimate of Average Maximum Demand for the Financial

Year in which the locational prices will apply (i.e. year t). This estimate of Average Maximum Demand for the Financial Year in which the locational prices will apply will be determined by VENCorp in consultation with the relevant Transmission Customer and may be either a forecast of the Average Maximum Demand for that Financial Year at the new connection point or may involve the use of CAMD as a proxy for that Average Maximum Demand.

4.18 VENCorp does not propose to revisit its locational prices for Financial Year t in circumstances where load at a connection point or connection points changes significantly after the locational prices for Transmission Customers in the Victorian region have been determined and published by VENCorp for Financial Year t. Rather, VENCorp proposes that the change in load would be reflected in the locational prices for Financial Year t+1 and any over- or under-recovery in Financial Year t as a result of the change in load would be addressed through non-locational prices in Financial Year t+1. In adopting this approach, VENCorp observes that it does not anticipate any significant change in load at a connection point or connection points during the Regulatory Control Period.***]***

4.19 VENCorp interprets rule 6A.23.4(f) as requiring it to cap the percentage increase in the load weighted average locational prices across all connection points with Transmission Customers in the Victorian region at 2% per annum.

Prices for adjusted non-locational component of Prescribed TUOS Services

4.20 Prices for the non-locational component of Prescribed TUOS Services will be developed by VENCorp as follows:

4.20.1 VENCorp will calculate two non-locational component prices, one based on CAMD and the other based on energy.

4.20.2 These two prices will be calculated in such a way that the Median Load Factor Customer would be indifferent to which of the two prices applies. The non-locational component prices will be the same for each exit point on the Victorian Network and will be determined so that the total amount VENCorp expects to recover from charges for the adjusted non-locational component do not exceed the adjusted non-locational component of the ASRR for Prescribed TUOS Services.

Prices for Prescribed Common Transmission Services

4.21 VENCorp will develop prices for Prescribed Common Transmission Services in a substantively similar method to that used to develop prices for the adjusted non-locational component of the ASRR for Prescribed TUOS Services. In accordance with rule 6A.23.3(f) of the Current NER, these prices will recover:

4.21.1 the aggregate ASRR for Prescribed Common Transmission Services for the Victorian region determined by VENCorp as the Co-ordinating Network Service Provider for the region;

4.21.2 SP AusNet's operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services to VENCorp, which were deducted by SP AusNet from its Maximum Allowable Revenue in deriving its AARR in accordance with rule 6A.22.1 of the Current NER and were notified to VENCorp in accordance with rule 9.8.4F(d) of the Current NER (as discussed in section 2 above); and

4.21.3 VENCorp's additional operating and maintenance costs incurred in the provision of those Prescribed Common Transmission Services to Transmission Customers (if any), which were deducted by VENCorp from its MAAR analogous to the Maximum Allowable Revenue of other TNSPs in deriving its MAAR analogous to the AARR of other TNSPs.[5]

4.22 VENCorp will levy two Prescribed Common Transmission Service prices, an Energy Based Price and a CAMD Price. These two prices will be calculated in the same way as prices for the adjusted non-locational component of the ASRR for Prescribed TUOS Services.

Prudential requirements

4.23 VENCorp has not required any Transmission Network User to establish prudential requirements for the provision of Prescribed TUOS Services. Accordingly, there are no capital contributions made by Users, in accordance with such prudential requirements, that would need to be taken into account in the determination by VENCorp of its transmission prices.

Worked Example of VENCorp's Application of the Rules and the Pricing Methodology Guidelines

4.24 The worked example in section 2 derived the following ASRRs for the Victorian region:

4.24.1 an ASRR for Prescribed TUOS Services of $38.745m; and

4.24.2 an ASRR for Prescribed Common Transmission Services of $14m.

4.25 The worked example in section 3 derived:

4.25.1 the following allocation of the ASRR for Prescribed TUOS Services between the locational component and the non-locational component:

- a locational component of the ASRR for Prescribed TUOS Services in the amount of $19.3725m; and
- a non-locational component of the ASRR for Prescribed TUOS Services in the amount of $19.3725m; and

[5] The Victorian transmission pricing derogation requires that, in relation to Prescribed Transmission Services provided by VENCorp, both the term Maximum Allowable Revenue and the term AARR are to be read as a reference to the MAAR (see rules 9.8.4B(a)(2)(ii) & 9.8.4F(c)(2)(i)(C) of the Current NER).

4.25.2 the following allocation of the locational component of the ASRR for Prescribed TUOS Services to each of the connection points in the Victorian Network depicted in Figure 1 above:

Table 6 – TPRICE Output Data in year t

Load	Bus Name	Cost ($m)
1	Bus 20	6.720
2	Bus 30	1.138
3	Bus 40	1.823
4	Bus 50	9.692
Total		19.373

4.26 Set out below is a worked example of how this data for year t, derived in the worked examples in sections 2 and 3, would be used by VENCorp to develop prices in year t for recovery of:

4.26.1 recovery of the locational component of the ASRR for Prescribed TUOS Services;

4.26.2 the ASRR for Prescribed Common Transmission Services; and

4.26.3 the adjusted non-locational component of the ASRR for Prescribed TUOS Services.

Prices for Locational Component of providing Prescribed TUOS Services

4.27 The following data is required for calculation of prices for recovery of the locational component of the ASRR for Prescribed TUOS Services in year t:

4.27.1 The locational cost allocation for each connection point with a Transmission Customer in the Victorian Network for year t generated by TPRICE, reproduced in Table 7 below; and

4.27.2 the Average Maximum Demands for each of those connection points in year t-2 set out in Table 7 below.

Table 7 – Allocated Locational Cost and Average Maximum Demand

Load	Bus Name	Allocated Cost ($M) in year t	Average Maximum Demand (MW) in year t-2
1	Bus 20	6.720	686.27
2	Bus 30	1.138	245.10
3	Bus 40	1.823	245.10
4	Bus 50	9.692	294.12

4.28 The uncapped price for each connection point for recovery of the locational component can now be calculated. This is done by dividing the allocated cost in year t for each connection point by

the Average Maximum Demand in year t-2 for that connection point. For example, the uncapped price for load 1 in year t ($/MW) is calculated as follows:

$$UCL_{i,t} = AL_{i,t} \div AD_{i,t-2}$$

where:

$UCL_{i,t}$ = uncapped price for locational component for Load i in year t

$AL_{i,t}$ = Allocated Cost for Load i in year t

$AD_{i,t-2}$ = Average Maximum Demand for Load i in year t-2

$$UCL_{1,t} = 6{,}720{,}000 \div 686.27$$

$$= 9{,}792.$$

4.29 The resultant uncapped prices in year t for recovery of the locational component of the ASRR for Prescribed TUOS Services are set out in Table 8 below.

Table 8 – Uncapped prices for locational component in year t

Load	Bus Name	Allocated Cost ($M) in year t	Average Maximum Demand (MW) in year t-2	Uncapped Price ($/MW) in year t
1	Bus 20	6.720	686.27	9,792
2	Bus 30	1.138	245.10	4,643
3	Bus 40	1.823	245.10	7,438
4	Bus 50	9.692	294.12	32,953

4.30 Finally, it is necessary to apply the cap on annual changes in prices for the locational component established by rule 6A.23.4(f) of the Current NER (Cap) to determine capped prices for the locational component. The Cap requires that the load-weighted average price for the locational component in year t does not represent an increase of more than 2% on the load-weighted average price for the locational component in year t-1. The sample pricing model set out in the Appendix to this Revised Methodology provides a worked example of the application of the 2% cap on annual changes in prices for the locational component.

Prices for Prescribed Common Transmission Services

4.31 Prices for Prescribed Common Transmission Services recover both the ASRR for Prescribed Common Transmission Services and the operating and maintenance costs incurred in the provision of those Services (see rule 6A.23.3(f) of the Current NER). Accordingly, the first step in calculating prices for Prescribed Common Transmission Services is to calculate the costs to be recovered. That is, it is necessary to sum:

4.31.1 the ASRR for the Victorian region for Prescribed Common Transmission Services;

4.31.2 SP AusNet's operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services (notified to VENCorp in accordance with rule 9.8.4F(d) of the Current NER); and

4.31.3 VENCorp's operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services.

4.32 As noted at the outset, in the worked example in section 2, VENCorp derived an ASRR for Prescribed Common Transmission Services of $14m. Assume that SP AusNet notified VENCorp that its operating and maintenance costs incurred in the provision of Prescribed Common Transmission Services are in the amount of $600,000, while VENCorp's analogous costs are in the amount of $400,000. The total costs to be recovered for Prescribed Common Transmission Services is $15m.

4.33 In order to calculate the two prices for Prescribed Common Transmission Services in year t, namely the Energy Based Price and the CAMD Price, the CAMD and Historical Metered Energy Offtake data for each Transmission Customer's connection point set out in Table 10 below is required.

Table 10 – Individual Connection Point CAMD and Historical Metered Energy Offtake

Load	Bus Name	Contract Agreed Maximum Demand (MW) in year t	Historical Metered Energy Offtake (GWh) in year t-2
1	Bus 20	730.0	3250.0
2	Bus 30	265.0	1100.0
3	Bus 40	260.0	1090.0
4	Bus 50	315.0	1400.0
Total			6840.0

4.34 For the purpose of calculating the Energy Based Price and the CAMD Price for Prescribed Common Transmission Services, it is necessary to identify the Median Load Factor Customer and its CAMD. Assume the Median Load Factor Customer is Load 3, with a CAMD of 260 in year t. Assume also that the energy factor for this Median Load Factor Customer (i.e. the Historical Metered Energy Offtake of the Median Load Factor Customer in year t-2 divided by the sum of all customers' Historical Metered Energy Offtake for that year) is 15.9%.[6] Finally, for simplicity, assume that there are no new connection points or connection points in respect of which Historical Metered Energy Offtake differs significantly from Current Metered Energy Offtake.

[6] In the 'real world', in which there are a far greater number of connection points than the 4 depicted in the simplified model of the power system illustrated in Figure 1 and assumed for the purposes of this worked example, the energy factor for the Median Load Factor Customer would be significantly smaller, e.g. 2.5%.

4.35 The Energy Based Price and the CAMD Price for recovery of the costs of providing Prescribed Common Transmission Services are then calculated by solving the following simultaneous equations:

$$(AB_{t-2} \times CSe_t) + (CCMD_t \times CSc_t) = CSC_t \quad (1)$$

and

$$(ME_{t-2} \times CSe_t) = (MCMD_t \times CSc_t) \quad (2)$$

where:

AB_{t-2} = total annual billable energy (MWh) in year t-2 for all connection points at which the Energy Based Price for Prescribed Common Transmission Services applies in year t

CSe_t = Prescribed Common Transmission Services Energy Based Price in year t

$CCMD_t$ = sum of CAMDs for all connection points at which the CAMD Price for Prescribed Common Transmission Services applies in year t

CSc_t = Prescribed Common Transmission Services CAMD Price in year t

CSC_t = total costs of providing Prescribed Common Transmission Services in year t

ME_{t-2} = Median Load Factor Customer's Historical Metered Energy Offtake in year t-2

$MCMD_t$ = Median Load Factor Customer's CAMD in year t

4.36 Using the known values of CSC_t, ME_{t-2} and $MCMD_t$, the equations set out in paragraph 4.32 above are solved simultaneously and iteratively to determine:

- the Energy Based Price, i.e. CSe_t;
- the CAMD Price, i.e. CSc_t;
- the sum of the CAMDs for all connection points at which the CAMD Price applies in year t, i.e. $CCMD_t$; and
- the total annual billable energy (MWh) in year t-2 for all connection points at which the Energy Based Price for Prescribed Common Transmission Services applies in year t, i.e. AB_{t-2}

Prices for Adjusted Non-locational Component of providing Prescribed TUOS Services

4.37 As set out above, the non-locational component for provision of Prescribed TUOS Services is $19.373m. Following the calculation of prices for recovery of the locational component of the ASRR for Prescribed TUOS Services, it is necessary to determine the adjusted non-locational component. In this worked example, VENCorp must adjust the non-locational component for:

4.37.1 the amount of any over- or under-recovery of the ASRRs for the Victorian region for Prescribed TUOS Services and Prescribed Common Transmission Services in previous years;[7] and

4.37.2 the amount of any anticipated under-recovery by reason of the cap on the annual change in prices for the recovery of the locational component.

4.38 In this example, no adjustments are required for any remaining settlement residues because the assumed simplified Victorian Network set out in Figure 1 above is not interconnected with the transmission network in any other region (see paragraph 2.22 above). No adjustments are made for any anticipated under-recovery arising from prudent discounts because VENCorp does not have any current, or currently anticipated, prudent discounts.

4.39 Assume that the resultant adjusted non-locational component of the ASRR for Prescribed TUOS Services is $15.373m.

4.40 For the purpose of calculating the Energy Based Price and the CAMD Price for the recovery of this adjusted non-locational component in year t, it is necessary to identify the Median Load Factor Customer and its CAMD. As discussed in paragraph 4.31 above, the Median Load Factor Customer is Load 3, with a CAMD of 260 in year t. Again, assume that the energy factor for this Median Load Factor Customer is 15.9% in year t. Finally, for simplicity, assume that there are no new connection points or connection points in respect of which Historical Metered Energy Offtake differs significantly from Current Metered Energy Offtake.

4.41 The Energy Based Price and the CAMD Price for the recovery of the adjusted non-locational component of the ASRR for Prescribed TUOS Services are then calculated by solving the following simultaneous equations:

$$(AB_{t-2} \times NLe_t) + (CCMD_t \times NLc_t) = NLC_t \quad (1)$$

and

$$(ME_{t-2} \times NLe_t) = (MCMD_t \times NLc_t) \quad (2)$$

[7] To date, SP AusNet has not under- or over-recovered its ASRR for Prescribed Entry Services or its ASRR for Prescribed Exit Services. If it was to do so, however, the amount of this under- or over-recovery would have to be notified by SP AusNet to VENCorp in accordance with rule 9.8.4F(d) of the Current NER and VENCorp would have to adjust the non-locational component for this amount also in deriving the adjusted non-locational component.

where:

AB_{t-2} = total annual billable energy (MWh) in year t-2 for all connection points at which the Energy Based Price for recovery of the adjusted non-locational component applies in year t

CSc_t = Prescribed Common Transmission Services CAMD Price in year t

NLe_t= adjusted non-locational component Energy Based Price in year t

$CCMD_t$ = sum of CAMDs for all connection points at which the CAMD Price for recovery of the adjusted non-locational component applies in year t

NLc_t = adjusted non-locational component CAMD Price in year t

NLC_t = adjusted non-locational component in year t

ME_{t-2} = Median Load Factor Customer's Historical Metered Energy Offtake in year t-2

$MCMD_t$ = Median Load Factor Customer's CAMD in year t

4.42 Once again, using the known values of NLC_t, ME_{t-2} and $MCMD_t$, the equations set out in paragraph 4.41 above are solved simultaneously and iteratively to determine:

- the Energy Based Price, i.e. NLe_t;
- the CAMD Price, i.e. NLc_t;
- the sum of the CAMDs for all connection points at which the CAMD Price for recovery of the adjusted non-locational component applies in year t, i.e. $CCMD_t$; and
- the total annual billable energy (MWh) in year t-2 for all connection points at which the Energy Based Price for recovery of the adjusted non-locational component applies in year t, i.e. AB_{t-2}.

5 Determination of Charges for Prescribed TUOS Services and Prescribed Common Transmission Services

Overview of the Rules and the Pricing Methodology Guidelines

Charges for adjusted locational component of Prescribed TUOS Services

5.1 Section 2.2(h) of the Pricing Methodology Guidelines requires that the prices for the adjusted locational component of the ASRR for Prescribed TUOS Services must be applied to 'a measure of actual, forecast or contract demand' to derive the locational charge.

5.2 While the words 'actual' and 'forecast' in section 2.2(h) of the Pricing Methodology Guidelines would suggest that locational charges are to be derived by applying actual or forecast Average Maximum Demand in the Financial Year in which the locational prices apply to those prices, the AER stated as follows in its Final Decision on the Pricing Methodology Guidelines (at p.16) in respect of deriving locational charges:

> 'In deriving the locational charge, the locational price must be applied to a measure of actual, forecast or contract demand over the same time period as that used to determine the locational price'.

5.3 Accordingly, locational charges are to be calculated by applying the locational price to actual or forecast Average Maximum Demand 'in the previous 12 months' (as referred to in section 2.2(c)(2) of the Pricing Methodology Guidelines).

Charges for non-locational component of Prescribed TUOS Services and Prescribed Common Transmission Services

5.4 Sections 2.3(c)(4) & (5) of the Pricing Methodology Guidelines provide that, if the pricing structure used for the recovery of the non-locational component of the ASRR for Prescribed TUOS Services and the ASRR for Prescribed Common Transmission Services is based on either CAMD or historical energy, then the charges for the non-locational component and Prescribed Common Transmission Services must be calculated as follows:

5.4.1 Where the Energy Based Price is applicable to a connection point, charges for a billing period must be calculated by either:

- multiplying the Energy Based Price by the Historical Metered Energy Offtake at that *connection point* in the analogous billing period in the Financial Year 2 years prior; or
- multiplying the Energy Based Price by the Current Metered Energy Offtake at that *connection point* in the billing period if Historical Metered Energy Offtake is not available; or

- multiplying the Energy Based Price by the Current Metered Energy Offtake if the Historical Metered Energy Offtake is significantly different to the Current Metered Energy Offtake.

5.4.2 Where the CAMD Price is applicable, charges for a billing period must be calculated by multiplying the CAMD Price by the CAMD for the connection point in that Financial Year and dividing this amount by the number of billing periods in the Financial Year in which the CAMD Price applies.

5.5 In addition, section 2.1(h) of the Pricing Methodology Guidelines requires that, if a TNSP expects to calculate a postage stamped charge in accordance with either section 2.3(c)(4)(C) of those Guidelines, then it must explain the likely circumstances surrounding the use of Current Metered Energy Offtake in its proposed pricing methodology.

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

Charges for locational component of Prescribed TUOS Services

5.6 For the reasons discussed in section 4 above, VENCorp uses Average Maximum Demand in the most recent fully completed Financial Year at the time prices for year t are to be determined (i.e. Financial Year t-2).

5.7 Accordingly, Transmission Customers will be billed for the adjusted locational component based on the actual Average Maximum Demands for the Financial Year t-2 for their respective connection points. In this way, the charges for the locational component ultimately paid by the Transmission Customer for the Financial Year are based on the actual Average Maximum Demands over the same time period as that used to determine the locational prices as required by the Pricing Methodology Guidelines.

Charges for adjusted non-locational component of Prescribed TUOS Services and Prescribed Common Transmission Services

5.8 Charges for the adjusted non-locational component of Prescribed TUOS Services will be calculated as follows:

5.8.1 Transmission Customers will be charged at each exit point or group of exit points on the basis of the price, that is the Energy Based Price or the CAMD Price, that results in the lower estimated recovery from charges for the non-locational component at that connection point. However, the CAMD Price will only be available to the handful of Transmission Customers that are then party to a use of system agreement with VENCorp which specifies a CAMD.

5.8.2 Where charges for the non-locational component are to be calculated using the CAMD Price, the charges will be determined by multiplying the CAMD Price by the CAMD determined in accordance with the Transmission Customer's connection agreement and dividing this number by 12 to determine the monthly charge.

5.8.3 Where the charges are billed on the basis of energy, the monthly charge will be determined by multiplying the Energy Based Price by the Historical Metered Energy Offtake at that exit point in the equivalent billing period in the Financial Year two years prior to that in which the non-locational component charge is to apply.

5.8.4 Where Historical Metered Energy Offtake is not available or the Historical Metered Energy Offtake is significantly different to the Current Metered Energy Offtake, Current Metered Energy Offtake at the connection point within the current billing period will be used. VENCorp will advise customers when Current Metered Energy Offtake rather than Historical Metered Energy Offtake is to be used.

5.9 Charges for Prescribed Common Transmission Services will be calculated using a substantively similar method to that set out directly above in respect of charges for the adjusted non-locational component of Prescribed TUOS Services.

5.10 VENCorp does not have any connection points with Transmission Customers in respect of which it has negotiated reduced charges for Prescribed Common Transmission Services or the adjusted non-locational component of Prescribed TUOS Services. Accordingly, VENCorp expects to apply either the relevant Energy Based Price of the relevant CAMD Price in calculating the charges for Prescribed Common Transmission Services or the adjusted non-locational component of Prescribed TUOS Services for each connection point with a Transmission Customer during the Regulatory Control Period.

5.11 VENCorp does not expect to calculate the charges for either the adjusted non-locational component of Prescribed TUOS Services or Prescribed Common Transmission Services by applying the Energy Based Price to Current Metered Energy Offtake for the reason that the Historical Metered Energy Offtake is significantly different to the Current Metered Energy Offtake (in accordance with the requirements of section 2.3(c)(4)(C) of the Pricing Methodology Guidelines). This is because VENCorp does not currently expect the Historical Metered Energy Offtake to be significantly different to the Current Metered Energy Offtake at any connection point of a Transmission Customer in the Victorian region during the Regulatory Control Period.

6 Equalisation Adjustment

Overview of the Rules and the Pricing Methodology Guidelines

6.1 VENCorp's Shared Transmission Network Use Charges must be consistent with rule 9.8.4F of the Current NER.

6.2 Rule 9.8.4F(h) of the Current NER relevantly provides that:

> '*VENCorp* must, in allocating the portion of its *shared transmission network use charges* that is to be recovered from each *Distributor* to which it provides *prescribed TUOS services* and *prescribed transmission common services* in each *Financial Year* of a *relevant regulatory period*, adjust that portion in accordance with rule 9.8.4(a)(3)'.

6.3 Rule 9.8.4(a)(3), in turn, provides that:

> 'each *Distributor* has the benefit or burden of an equalisation adjustment for each *Financial Year* equal to the amount of the adjustment specified for that *Distributor* in the column headed "Equalisation Adjustment" in the following table

TABLE	
Business	Equalisation Adjustment ($'000) Note 2)
TXU Electricity Ltd	(4,939)
Powercor Australia Ltd	(19,011)
AGL Electricity Limited	5,171
CitiPower Pty Ltd	5,920
United Energy Ltd	12,859

> multiplied by the relevant factor determined in accordance with the following table:

TABLE	
If the Financial Year falls within the period:	then the relevant factor is:
1 July 2001 – 30 June 2005	.80
1 July 2005 – 30 June 2010	.60
1 July 2010 – 30 June 2015	.40
1 July 2015 – 30 June 2020	.20
thereafter	0

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

6.4 In accordance with the requirements of rules 9.8.4F(h) and 9.8.4(a)(3) of the Current NER, VENCorp will apply a one-twelfth share of each distributor's equalisation adjustment for the relevant Financial Year to that distributor's aggregate monthly Shared Transmission Network Use Charges. Accordingly, the equalisation adjustment will in no way affect VENCorp's determination of the Prescribed TUOS Service and Prescribed Common Transmission Service prices and charges for the use of the Shared Transmission Network.

6.5 More specifically, VENCorp will calculate the equalisation adjustment for each distributor for the relevant Financial Year by multiplying:

- the equalisation adjustment for that distributor set out in the first table appearing in rule 9.8.4(a)(3) of the Current NER; by
- the relevant factor for the relevant Financial Year set out in the second table appearing in rule 9.8.4(a)(3).

6.6 Once VENCorp has calculated the equalisation adjustment for a distributor for the relevant Financial Year, it will divide the amount of that equalisation adjustment by twelve to determine the amount of the monthly equalisation adjustment for that distributor in that Financial Year. It will then gross up or reduce (as the case may be) the amount of the distributor's aggregate Prescribed TUOS Service and Prescribed Common Transmission Service charges for each month in the relevant Financial Year by the distributor's monthly equalisation adjustment in that Year.

6.7 In the Financial Year 2008/09, the relevant factor set out in the second table appearing in rule 9.8.4(a)(3) of the Current NER is 0.6. Accordingly, to determine the equalisation adjustment for each distributor for the 2008/09 Financial Year, VENCorp will multiply the equalisation adjustment amount set out in the first table appearing in rule 9.8.4(a)(3) for that distributor by the figure of 0.6. For example, for TXU Electricity Ltd, the equalisation adjustment for Financial Year 2008/09 is calculated as follows: ($4,939,000) x 0.6 = ($2,963,400).

6.8 The resultant equalisation adjustments for each distributor for the 2008/09 Financial Year are set out in Table 11 below.

Table 11 – Equalisation adjustments for 2008/09

Distribution Business	Equalisation Adjustment ($ per annum)		
	Exclusive of GST	GST	Total
TXU (SPI Networks)	-$2,963,400	-$296,340	-$3,259,740
Powercor Australia	-$11,406,600	-$1,140,660	-$12,547,260
AGL Electricity	$3,102,600	$310,260	$3,412,860
CitiPower	$3,552,000	$355,200	$3,907,200
United Energy	$7,715,400	$771,540	$8,486,940

6.9 The equalisation adjustments set out in Table 11 above are then divided by 12 to determine the monthly equalisation adjustment for 2008/09 for each distributor. For example, for TXU Electricity Ltd, the monthly equalisation adjustment for the 2008/09 Financial Year is calculated as follows: ($2,963,400) / 12 = ($246,950).

6.10 Each distributor's aggregate Prescribed TUOS Service and Prescribed Common Transmission Service charges in each month of the 2008/09 Financial Year will then be grossed up or reduced by that distributor's monthly equalisation adjustment for that Financial Year. For example, TXU Electricity Ltd's monthly aggregate Prescribed TUOS Service and Prescribed Common Transmission Service charges in each month of the 2008/09 Financial Year will be reduced by $246,950.

7 Billing and Financial Transfers

Overview of the Rules and the Pricing Methodology Guidelines

7.1 Section 2.1(l) requires a TNSP to include in its proposed pricing methodology details of its billing arrangements with Transmission Network Users and transfers between TNSPs conducted in accordance with rule 6A.27 of the NER.

7.2 Under rule 6A.27.1, a TNSP must issue a bill to Transmission Network Users for Prescribed Transmission Services. The TNSP must include in a bill for a connection point issued directly to a Transmission Network User the minimum information prescribed by rule 6A.27.2. Where charges are to be determined for Prescribed Transmission Services using Metering Data, rule 6A.27.1(d) requires that these charges be based on kW or kWh obtained from the Metering Data managed by NEMMCO.

7.3 Rule 6A.27.1(c) requires that, where billing for a particular Financial Year is based on quantities which are undefined until after the commencement of the Financial Year, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known. Where previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

7.4 Rule 6A.27.4 requires each TNSP to pay to each other relevant TNSP the revenue which is estimated to be collected during the following year by the first mentioned TNSP through its charged for Prescribed Transmission Services for the use of Transmission Systems owned by those other TNSPs, as determined by the Co-ordinating Network Service Provider for the region. The financial transfers payable must be paid in equal monthly instalments.

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

Billing Arrangements

7.5 VENCorp will issue a bill to Transmission Network Users for Prescribed Transmission Services.

7.6 Where charges are to be determined from Metering Data, these charges will be based on kW or kWh obtained from the Metering Data managed by NEMMCO.

7.7 VENCorp will include in any bill provided to a Transmission Network User:

7.7.1 The connection point identifier;

7.7.2 The dates on which the billing period starts and ends;

7.7.3 The identifier of the published transmission service price from which the connection point charges are calculated; and

7.7.4 Measured quantities, billed quantities, agreed quantities, prices and amounts charged for each component of the total transmission service account.

7.8 VENCorp will include in any bill provided to a Transmission Customer separate identification of:

7.8.1 Charges for the locational and the adjusted non-locational component of Prescribed TUOS Services; and

7.8.2 Charges for Prescribed Common Transmission Services.

7.9 Given the methodology for determining prices and charges set out in this Revised Methodology, VENCorp does not anticipate that it will be required to bill for a Financial Year based on quantities which are undefined at the time of billing, such that it would be required by rule 6A.27.1(c) to use the previous year's billing quantities and make a later reconciliation, at any time during the Regulatory Control Period.

Financial Transfers

7.10 Neither VENCorp nor SP AusNet are party to any agreement under rule 6A.29.3 of the Current NER in respect of the joint allocation of their AARRs and those of TNSPs in one or more inter-connected regions. Accordingly, the only financial transfers occurring under rule 6A.27.4 of the Current NER are those occurring between TNSPs within the Victorian region, namely VENCorp and SP AusNet, in accordance with rule 6A.23.4 (as modified by rule 9.8.4F(e)(2)), which provides:

> 'The portion of the *aggregate annual revenue requirement* referable to *shared network services* is recoverable by a *Regulated owner* from *VENCorp*'.

7.11 Under rule 3.6.5(a)(5)(ii) of the Current NER, charges are:

- payable by VENCorp, if the Victorian region is the importing region, that reflect the extent of use of a network located in the exporting region to transfer electricity from the exporting region to the Victorian region; and
- receivable by VENCorp, if the Victorian region is the exporting region, that reflect the extent of use of the Victorian region to transfer electricity from the Victorian region to the importing region.

7.12 The amount of these charges must be agreed by the jurisdictions in which the importing and exporting regions are located and must not exceed the Settlements Residue relating to the transferred electricity which is allocated to the importing region under rule 3.6.5(a)(5)(i) (see rule 3.6.5(a)(5)(iii) of the Current NER).

7.13 The Victorian and South Australian jurisdictions have in place an agreement under rule 3.6.5(a)(5)(iii) of the Current NER, under which VENCorp either pays a charge to, or receives a charge from, ElectraNet if the Victorian region is the importing region or exporting region respectively. VENCorp will take any amounts received or payable into account under this agreement in making the adjustment to the non-locational component of the ASRR for Prescribed TUOS Services in respect of 'any remaining *settlements residue* … which is expected to be distributed or recovered (as the case may be) to or from the *Transmission*

Network Service Provider in accordance with clause 3.6.5(a)' (see rule 6A.23.3(2)(ii) of the Current NER). (The adjustments to the non-locational component of the ASRR for Prescribed TUOS Services are discussed in greater detail in section 3 above.)

7.14 The Victorian and New South Wales jurisdictions do not currently have in place any agreement under rule 3.6.5(a)(5)(iii) of the Current NER. Accordingly, no payments are currently made or received by VENCorp under rule 3.6.5(a)(5)(ii) in respect of the interconnection of the Victorian and Snowy regions. If such an agreement were entered into during the period in which this Revised Methodology is to apply, any resultant payments made or received by VENCorp would be treated in the same manner as those payments made or received by VENCorp in relation to the interconnection of the Victorian and South Australian regions.

8 Monitoring and Compliance

Overview of the Rules and the Pricing Methodology Guidelines

8.1 Section 2.1(s) of the Pricing Methodology Guidelines requires a TNSP to detail how it intends to monitor, and develop records of, its compliance with its approved pricing methodology, the Pricing Principles for Prescribed Transmission Services and Part J of the NER.

VENCorp's Application of the Rules and the Pricing Methodology Guidelines

8.2 Consistent with VENCorp's established practices, VENCorp will prepare and maintain a step-by-step procedure for the preparation of VENCorp's pricing for Prescribed TUOS Services and Prescribed Common Transmission Services consistent with the methodology detailed in VENCorp's approved pricing methodology (which will be compliant with the Pricing Principles for Prescribed Transmission Services and Part J of the NER).

8.3 VENCorp will prepare draft pricing for Prescribed TUOS Services and Prescribed Common Transmission Services in accordance with this procedure. Once this draft pricing has been prepared, VENCorp will perform a review of the draft pricing to ensure it has been prepared in accordance with the procedure and the approved pricing methodology. VENCorp will create a file note of this review, including an express statement on whether the draft pricing is consistent with the approved pricing methodology.

8.4 In addition, VENCorp will monitor the compliance of its charges and billing for Prescribed TUOS Services and Prescribed Common Transmission Services with its approved pricing methodology, the Pricing Principles for Prescribed Transmission Services and Part J of the NER and perform an annual audit of the bills issued to an appropriate sample of its Transmission Customers in the preceding 6 month period. VENCorp will create a file note of this review, including an express statement on whether the charges and bills are consistent with the approved pricing methodology, the Pricing Principles for Prescribed Transmission Services and Part J of the NER.