



**PRELIMINARY DECISION  
SA Power Networks  
determination 2015–16 to  
2019–20**

**Attachment 18 – Connection  
policy**

April 2015

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Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Tel: (03) 9290 1444

Fax: (03) 9290 1457

Email: [AERInquiry@aer.gov.au](mailto:AERInquiry@aer.gov.au)

## Note

This attachment forms part of the AER's preliminary decision on SA Power Networks' 2015–20 distribution determination. It should be read with other parts of the preliminary decision.

The preliminary decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 7 – Operating expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

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## Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	aggregate service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
CPI-X	consumer price index minus X
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
expenditure assessment guideline	expenditure forecast assessment guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules

Shortened form	Extended form
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

# 18 Connection policy

We are required to approve a connection policy prepared by a distributor under the National Electricity Rules (NER).<sup>1</sup>

A connection policy sets out the nature of connection services offered by a distributor, when connection charges may be payable by retail customers and how those charges are calculated. A connection policy:<sup>2</sup>

- must be consistent with:
  - the connection charge principles set out in chapter 5A of the NER
  - the connection policy requirements set out in part DA of chapter 6 of the NER
  - our connection charge guidelines published under chapter 5A<sup>3</sup>, and
- must detail:
  - the categories of persons that may be required to pay a connection charge and the circumstances in which such a requirement may be imposed
  - the aspects of a connection service for which a connection charge may be made
  - the basis on which connection charges are determined
  - the manner in which connection charges are to be paid (or equivalent consideration is to be given)
  - a threshold (based on capacity or any other measure identified in the connection charge guidelines) below which a retail customer (not being non-registered embedded generator or a real estate developer) will not be liable for a connection charge for an augmentation other than an extension.

## The AER's connection charge guidelines for electricity retail customers

A connection policy must be consistent with our connection charge guidelines for electricity retail customers to ensure that connection charges:

- are reasonable and take into account the efficient costs of providing the connection services arising from the new connection or connection alteration
- provide, without undue administrative cost, a user-pays signal to reflect the efficient costs of providing the connection services

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<sup>1</sup> NER, Part DA of chapter 6.

<sup>2</sup> NER, cl. 6.7A.1(b).

<sup>3</sup> AER, *Connection charge guideline for electricity retail customers, Under chapter 5A of the National Electricity Rules Version 1.0*, June 2012.

- limit cross-subsidisation of connection costs between different classes (or subclasses) of retail customers
- are competitively neutral, if the connection services are contestable.

## 18.1 Preliminary decision

We do not approve SA Power Networks' connection policy because:

1. the upstream shared network asset augmentation charge rate<sup>4</sup> is not consistent with our connection charge guideline; and
2. certain terms and conditions need refinement to improve clarity to new customers.

## 18.2 SA Power Networks' proposal

SA Power Networks' connection policy provides an outline of its connection services, when connection charges may be payable by its retail customers and how those charges are calculated.<sup>5</sup>

## 18.3 AER's assessment approach

We examined the proposed connection policy against the requirements of Part DA of chapter 6 as stated above—whether it:

- is consistent with the connection charge principles set out in chapter 5A of the NER, and our connection charge guidelines
- contains all the information for new customers as prescribed by the NER.

In addition, we also examined whether:

- other connection related charges included in the connection policy, such as metering installation charges, are consistent with the service classification of this preliminary determination
- the connection policy contains terms that are not fair and reasonable.

## 18.4 Reasons for preliminary decision

We have not approved SA Power Networks' proposed connection policy because:

- While its proposed marginal cost per unit of network assets is reasonable, SA Power Networks' proposed shared network augmentation charge rate for customers above the threshold for paying upstream cost is based on the full marginal cost without taking into account the connection lives of new connections as required by our connection charge guideline.

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<sup>4</sup> This charge only applies to new customers above certain threshold levels specified in the connection policy, for such larger customers' share of use of the upstream network.

<sup>5</sup> SA Power Networks, *Attachment 12.1, Proposed connection policy for 2015-2020*, October 2014.



- While the proposed terms and conditions of the connection policy largely met the minimum requirements of the rules, we consider that the policy should be improved to provide clarity on how shared network augmentation charges are applied.

These reasons are explained below.

### 18.4.1 Marginal cost for shared network augmentation

SA Power Networks proposed a two-step marginal cost framework for shared network augmentation charges, similar to the current charging guideline published by ESCOSA.<sup>6</sup> The key differences from the current guideline are:

- a 180 per cent increase for LV connection to \$431 per kVA for those customers with no significant impact on system peak demand (which comprise less than 10 per cent of the zone substation capacity)
- a small increase to the additional capacity charge for those larger customers—using more than 10 per cent of the zone substation and sub-transmission line capacity—to:
  - \$326 and \$225 per kVA for zone substation and sub-transmission line capacity costs respectively for Metro users and
  - \$438 and \$684 per kVA for zone substation and sub-transmission line capacity costs respectively for Country users.
- relaxing the threshold level for the application of the additional capacity charge for those customers with significant impact on system peak demand—from 5 to 10 per cent of the zone substation and sub-transmission line capacity.

This represents a maximum charge rate of \$982/kVA for those Metro users and \$1553/kVA for those country users who take up more than 10% capacity of the relevant sub-transmission lines.

These rates are indexed to CPI for each subsequent regulatory year. This rate was calculated based on actual and historical costs.<sup>7</sup>

In order to verify whether these cost rates are reasonable, we compare the proposed marginal cost for shared network augmentation against a previous study by the Productivity Commission and SA Power Networks' historical cost.

#### 18.4.1.1 Compared with Productivity Commission's findings on long run marginal cost of network augmentation

- (1) In its report published in 2013, the Productivity Commission found that the long run marginal cost (LRMC) of distribution infrastructure costs for an additional kW per year to be between \$150 and \$220.<sup>8</sup>

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<sup>6</sup> ESCOSA, *Application of Chapter 3 of The Electricity Distribution Code Electricity Industry Guideline No. 13*

<sup>7</sup> AER SAPN 001

The above rate is equivalent to about \$2010-\$2950 per kVA based on 5.45% WACC and 50 years asset life and at unity (1.0) power factor.<sup>9,10</sup>

SA Power Networks' proposed cost rates—\$982/kVA for Metro users and \$1553/kVA for country users—are less than what is predicted by the Productivity Commission's findings.

#### 18.4.1.2 Comparison with historical cost

We calculated that SA Power Networks' historical average shared network cost to be about \$2450 per kVA based on its Benchmarking RIN report for 2013–14.<sup>11</sup> This historical cost is also higher than SA Power Networks' proposed marginal cost for shared network augmentation. Table 18.1 provides the details of our calculation.

**Table 18.1 assessment of SA Power Networks' historical cost**

Information from Benchmark RIN	
Depreciated RAB of relevant portion of network asset (\$000) (note a)	A= 3,136,964
Non-coincident Summated Raw System Annual Maximum Demand (MW)	3,066
AER assumed utilisation factor (note b)	60%
Optimal system capacity based on assumed utilisation factor based on the above utilisation factor (MW)	B= 5,110
Average depreciated system capacity cost, \$/kW	A/B = 614
Remaining asset life (note c)	35%
Average undepreciated network capacity cost (\$/kVA), adjusted for straight line depreciation of asset age, based on unity power factor	\$1,754

Notes to table

(a) The reset RIN does not have all the info that we need (in particular, the average asset life). So, we used the benchmarking RINs for 2013–14 instead. Only the following network asset values are included in the calculation, all non-network asset values are not counted:

- o overhead network assets less than 33kV
- o underground network assets less than 33kV
- o distribution substations and transformers
- o overhead network assets 33kV and above

<sup>8</sup> Productivity Commission, *The costs and benefits of demand management for households, Supplement to inquiry report on Electricity Network Regulatory Frameworks*, 9 April 2013, p.22.

<sup>9</sup> The Productivity Commission expressed the LRMC is \$/KW. The relationship between kW and kVA is expressed as "power factor". 1 kVA at 0.9 power factor equals 0.9 kW of real power.

<sup>10</sup> SA Power Networks advised that (AER SAPN 034) its network overall power factor is 0.988, very close to unity.

<sup>11</sup> <http://www.aer.gov.au/node/483?date%5Bvalue%5D%5Byear%5D=&sector=All&category=1495>

- underground network assets 33kV and above
- zone substations and transformers.

(b) Assumption on utilisation factor based on:

Darryl Somerville, Detailed Report of the Independent Panel for Electricity Distribution and Service Delivery for the 21st Century, [Queensland] – July 2004, p12 statement that: The Australian average [utilisation factor] is around 56% and the professional advice that the Panel obtained was that prudent practice dictates that utilisation should be around 60% to 65%.

(c) Based on the benchmarking RINs for 2013–14.

### 18.4.1.3 Conclusion

We conclude that SA Power Networks' proposed marginal cost rates for shared network augmentation are reasonable because, first, the rate is less than the actual historical cost and, second, it is consistent with the Productivity Commission's review findings on the LRMC for providing additional network capacity.

### 18.4.2 Shared network augmentation charge rate

SA Power Networks proposed to apply the full marginal cost per kVA for 2015-16 as the share network augmentation charge rates.

We consider that such proposal to charge new customers the full marginal cost is not consistent with our Connection Charge Guideline, because the rate has not taken new customers' connection life into consideration.<sup>12</sup> The need to take the connection life into consideration was explained in our *Explanatory Statement for the Proposed Connection Charge Guidelines: under chapter 5A of National Electricity Rules for retail customers accessing the electricity distribution network*. On pages 33-34, we explained as follows:

Where a customer will use an asset for less than its expected useful life, and where a DNSP would reasonably be expected to reuse some of this capacity once that customer leaves the network, each customer should only be charged for the period for which it is using the asset....To address this issue, the AER developed a calculation method under which, in total, the connection charges received by a DNSP would equal the marginal cost of reinforcement (MCR)-or the per unit rate charge. The AER considers DNSPs will need to either adopt a method similar to this, or an alternative method that achieves a similar outcome.

The rationale of our previously proposed MCR calculation method for CitiPower is that:

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<sup>12</sup> Clause 5.2.11 of the Connection Charge Guideline requires that: In calculating the applicable unit rate(s), a distribution network service provider must take account of the cost of augmenting each network component with reference to: (a) The proportion of each network component used by the connection applicant; and (b) The useful life of the network component and the assumed period for which the connection applicant will be using the network.

As upstream assets can be used by multiple customers and the same asset could be used by future new customers once the earlier customers stop using such assets at the end of their connection life, it is not equitable for the first new customer to fund the full cost of upstream augmentation...

The net present value of all connection charges received by CitiPower in respect to the augmentation of a particular asset should equal the MCR of that asset. A methodology that does not take this into account would result in CitiPower either over or under recovering its costs.

The charges paid (in respect of the augmentation of a given asset) by previous, current and future new customers should be equal in real terms. A methodology that does not take this into account would result in an intertemporal transfer of wealth and would be inequitable for some customers.

As SA Power Networks has not developed an alternative method to calculate the upstream charge rates based on the expected connection life, we consider that we should adopt the method previously published by us, as indicated in the Explanatory Note.

We calculated that an adjustment factor of 0.549 and 0.796 should be applied to the proposed full charge rates for business and residential customers respectively (representing a 45 and 20 per cent reduction respectively). These factors are based on the WACC of 5.45 per cent for SA Power Networks, and a connection life of 15 and 30 years for business and residential customers respectively.

### **18.4.3 SA Power Networks' proposed terms and conditions of the connection policy**

While the proposed terms and conditions of the connection policy largely met the minimum requirements of the rules, we identified that the policy does not contain definitions for zone substations and sub-transmission lines. We consider that the policy should contain such definitions to provide clarity on how shared network augmentation charges are applied.

## **18.5 AER approved connection policy**

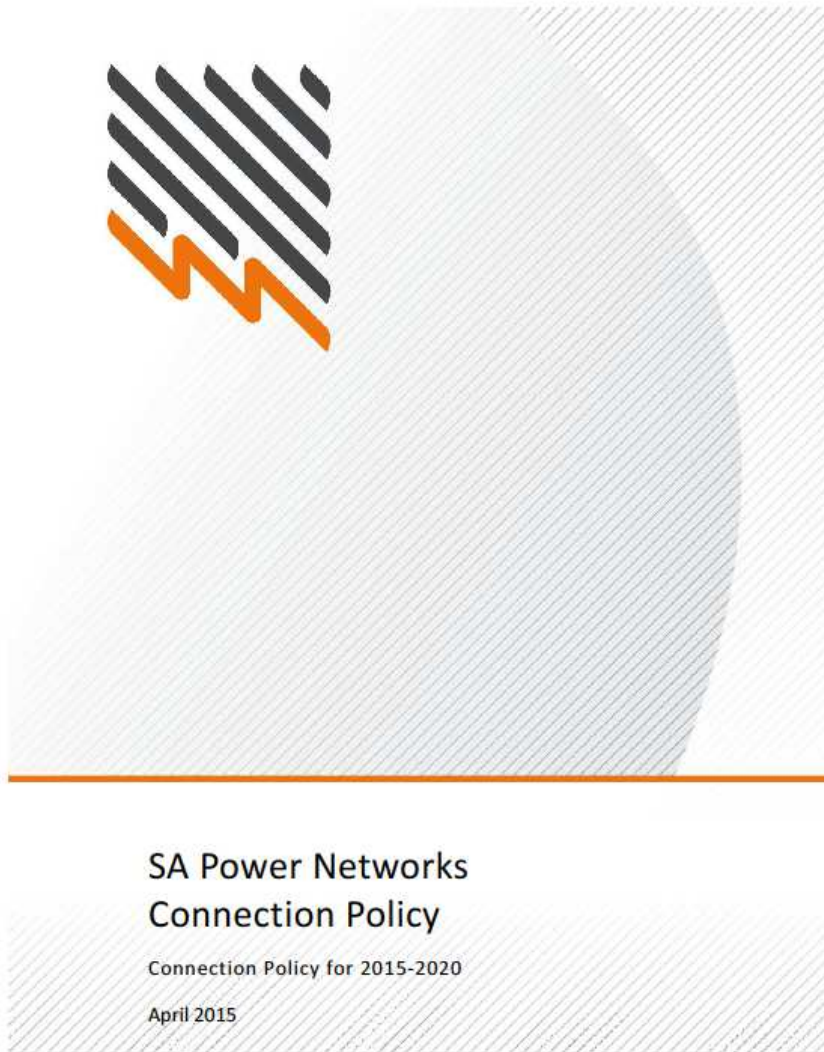
We have modified SA Power Networks' proposed connection policy to reflect the above preliminary decision on this matter.<sup>13</sup> This revised connection policy is appended to this chapter.

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<sup>13</sup> Rule 6.12.3(j) provides that we may amend the proposed connection policy to the extent necessary to enable it to be approved in accordance with the Rules.

**A Appendix: AER approved connection policy for SA Power Networks**

**Click on image below to view document**



[www.sapowernetworks.com.au](http://www.sapowernetworks.com.au)

This policy contains 33 pages



# SA Power Networks Connection Policy

Connection Policy for 2015-2020

April 2015

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# 1 Introduction

## 1.1 SA Power Networks role

SA Power Networks operates the electricity *distribution network* across South Australia and is licensed to provide customer connection services as specified in the National Energy Retail Law (**NERL**) and the National Electricity Law (**NEL**).

Customer connection services are defined as electricity services:

- (1) relating to the provision of a new physical link between the *distribution network* and a customer's premises
- (2) relating to an alteration, including upgrade, of the physical link between the *distribution network* and the customer's premises; and
- (3) for the ongoing supply to premises including, but limited to, the *energisation*, de-energisation or re-energisation of the *distribution network* to the premises.

The provision of new or alterations to existing physical *connection services* are regulated under the **NEL** and the National Electricity Rules (**NER**). Ongoing supply is regulated by the **NERL** and the National Energy Retail Rules (**NERR**).

This Connection Policy sets out:

- (1) the regulatory timeframes and requirements for provision of customer *connection offers*; and
- (2) the methodology for determining *customer contributions* (charges) relating to the creation and alteration of customer *connections* to the electricity *distribution network*.

## 1.2 Rule requirements – Connection Policy

SA Power Networks must, in accordance with the **NER** Chapter 6 Rule 6.7A.1 (a), prepare a Connection Policy setting out the circumstances in which it may require a *retail customer* or *real estate developer* to pay a *connection charge*, for the provision of a *connection service* under the **NER** Chapter 5A.

In accordance with Rule 6.7A.1(b), this Connection Policy:

- (1) must be consistent with:
  - (a) the *connection charge principles*<sup>1</sup>; and
  - (b) the *connection charge guidelines*<sup>2</sup>
- (2) must specify:
  - (a) the categories of persons that may be required to pay a *connection charge* and the circumstances in which such a requirement may be imposed
  - (b) the aspects of a *connection service* for which a *connection charge* may be required

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<sup>1</sup> As detailed in Chapter 5A Rule 5A.E.1 or R5A.E.1 of the [NER](#)

<sup>2</sup> As published by the Australian Energy Regulator in accordance with the **NER** Chapter 5A Rule 5A.E.3. The **AER** Connection Charge Guidelines, published 20 June 2012, can be found at <http://www.aer.gov.au/node/7258>



- (c) the basis on which *connection charges* are determined
- (d) the manner in which *connection charges* are to be paid or equivalent consideration be given; and
- (e) a threshold, based on capacity or any other measure identified in the Australian Energy Regulator (**AER**) Connection Charge Guidelines, below which a *retail customer* (other than a non-registered *embedded generator* or a *real estate developer*) will not be liable for a *connection charge* for an *augmentation* other than an *extension*.

The SA Power Networks Connection Policy is approved by the **AER** in its distribution determination for the 2015-20 Regulatory Control Period (**2015-20 RCP**) being 1 July 2015 to 30 June 2020 inclusive. This Connection Policy consequently remains in force for the entirety of the **2015-20 RCP**.

## 2 Customer connection contracts and services

### 2.1 Types of connection contracts

Under the **NER** Chapter 5A there are two types of *connection* contracts:

- (1) *Connection contract* – associated with establishing or altering the physical *connection* to the *distribution network*.
- (2) *Customer connection contract* – associated with the ongoing supply of electricity to a *retail customer's* premises and is normally<sup>3</sup> deemed to apply (ie customer does not need to sign or agree to the contract). This contract commences on *energisation* or when a customer starts consuming energy.

#### 2.1.1 Connection contract – establishing or altering physical connection

There are two types of 2.1 (1) *connection contracts* for establishing or altering *connections*:

- (1) *Model standing offer (MSO)* – that must be approved by the **AER** and can be accepted by a *retail customer*, either by:
  - (a) accepting the terms and conditions of the **MSO** when they make application for a new or altered *connection* (ie an expedited process); or
  - (b) formally receiving and accepting a *connection offer*. It should be noted that both the offer and the acceptance must be in writing and can delay *connection* by up to 55 *business days*.
- (2) *Negotiated connection contract* – where a customer and SA Power Networks negotiate the terms and conditions including price of the *connection offer*. A formal offer and acceptance of the *connection contract* occurs via this process.

#### 2.1.2 Customer connection contract – ongoing supply

There are three types of 2.1 (2) *customer connection contracts* for the ongoing supply of electricity:

- (1) Deemed Standard Connection Contract<sup>4</sup> (**DSCC**) – applies to all small customers (ie electricity consumption less than 160MWh per annum) unless they have a negotiated *customer connection contract (NCCC* – see below). A **DSCC** commences when a customer's premise is energised or when a *customer* commences consuming electricity.
- (2) Deemed Large Connection Contract (**DLCC**) – terms and conditions must be approved by the **AER**. Where a **DLCC** has not been approved, the **DSCC** applies to a large customer (ie electricity consumption is 160MWh per annum or more) unless they have a **NCCC**. A **DLCC** commences when a customer's premise is energised or when a customer commences consuming electricity.
- (3) Negotiated customer connection contract (**NCCC**) – terms and conditions are negotiated between the customer and SA Power Networks and a fee to cover the costs of the negotiation will be charged in advance (refer Section 3.2.3).

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<sup>3</sup> These contracts are always deemed to apply unless they have been negotiated between SA Power Networks and the retail customer. If negotiated, they commence when signed by both parties.

<sup>4</sup> SA Power Networks **DSCC** is based on the Model terms and conditions detailed in the National Energy Retail Rules (**NERR**) Schedule 2

NOTE:

1. Copies of both deemed contracts are available on the SA Power Networks website ([www.sapowernetworks.com.au](http://www.sapowernetworks.com.au)).

## 2.2 Types of connection services

As noted in clause 2.1.1, the **NER** Chapter 5A defines the types of *connection services* for the creation or alteration of a physical *connection* between a *retail customer's* premises and the *distribution network*. The two types of *connection services* adopted by SA Power Networks are:

- (1) *Basic connection service*
- (2) *Negotiated connection service*

### 2.2.1 Model standing offer

SA Power Networks is permitted to develop **MSOs** that specify the terms and conditions for the provision of a *connection service*. The **NER** permits SA Power Networks to develop **MSOs** for the provision of *basic connection services* and such **MSOs** must be approved by the **AER**.

NOTE:

1. A **MSO** is subject to pre-conditions, including that SA Power Networks agrees that a connection applicant can be connected via a **MSO**.
2. A connection applicant is able to negotiate a connection offer, if they do not accept the terms and conditions of a **MSO**.
3. Where a connection applicant chooses to negotiate a connection offer, a fee is charged which is payable in advance. The negotiation fee is detailed in the SA Power Networks price list (see 'Network tariffs and negotiated services – Manual' at [www.sapowernetworks.com.au](http://www.sapowernetworks.com.au)).

#### 2.2.1.1 Preliminary enquiry

Where SA Power Networks receives a request about provision of a *connection service*, the enquirer will be provided with sufficient information to make an informed application, by either:

- (1) the date agreed with the person; or
- (2) within 5 *business days*, if no date is agreed.

NOTE:

1. Enquirers will be referred to the SA Power Networks website for the necessary information unless they request such information in writing.

EXCEPTION:

If an enquirer asks for a written reply to their enquiry or asks for specific advice about their particular situation, SA Power Networks will reply as soon as practicable.

#### 2.2.1.2 MSO for a basic connection service

SA Power Networks has **AER** approval for two **MSOs** for the provision of *basic connection services* to *retail customers* who are:

- (1) not *embedded generators*; and/or
- (2) small *embedded generators (SEG)*.

**NOTE:**

1. Where a *connection applicant* applies for both a new connection or a connection alteration and connection of a **SEG** there are two **MSOs** applicable.

Copies of SA Power Networks **MSOs**, detailing the terms and conditions associated with provision of a *basic connection service*, are available at the [SA Power Networks](#) website.

A *connection applicant* can expedite a *basic connection service* by accepting the **MSO** terms and conditions as published.

### **2.2.1.3 Timeframe to provide a MSO for a basic connection service**

SA Power Networks is required to provide a non-expedited *connection offer* to a customer within 10 *business days*<sup>5</sup> of the applicant submitting a completed application form that is to SA Power Networks satisfaction.

Where a *connection applicant* has elected to expedite a *connection*, SA Power Networks will advise the applicant within 10 *business days* if the *connection* is not suitable for a *basic connection service*, and then the application will be managed as a *negotiated connection offer* (see clause 2.2.2 below). If an applicant is not so advised, then a **MSO** applies.

## **2.2.2 Negotiated connection offer**

### **2.2.2.1 Time to make an offer**

SA Power Networks is required to use its 'best endeavours' to provide a *negotiated connection offer* within 65 *business days* of a *connection applicant* lodging an application. SA Power Networks is required to advise the applicant within 20 *business days* of receiving the application if there is any additional information that must be supplied prior to making an offer. Any time taken by the applicant to provide the additional information is excluded from the 65 *business day* period.

### **2.2.2.2 Statement of charges in a negotiated connection offer**

SA Power Networks *negotiated connection offer* will, where applicable, include the following details about the *connection charge*:

- (1) applicable *connection charge*
- (2) ancillary costs associated with providing the offer
- (3) cost of *connection assets*
- (4) cost of network *extension assets*
  - (a) *contestable component* (ie built-in isolation from the existing *distribution system* or as determined by SA Power Networks); and
  - (b) *non-contestable component* (ie work required to connect the contestable component to the existing *distribution system*)
- (5) details of the customer's *augmentation charge*

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<sup>5</sup> The date of receipt is day zero and, if not submitted on a *business day*, then day zero is the next *business day*.

- (6) details of the customer's cost allocation towards upstream *pioneer scheme(s)*
- (7) any other incidental costs and the basis of their calculation, including if relevant, costs of minor deviation from the standard specification for a *basic connection service*; and
- (8) the *incremental revenue rebate (IRR)*.

### 3 Methodology for determining a customer's connection charge

#### 3.1 Contribution towards the provision of a connection service

All *connection applicants* who require a new, altered or upgraded *connection service* to the *distribution network* will be required to contribute towards the provision of that service where:

- (1) for *basic connection services* – fees will apply as detailed in the *price list*; or
- (2) for *negotiated connection services* – the cost for provision of the least-cost technically-acceptable service exceeds the *incremental revenue rebate* that SA Power Networks determines is applicable for the customer's electrical installation; or
- (3) the customer requires a service in excess of the least-cost technically-acceptable service (as determined by SA Power Networks as being reasonable) that satisfies the customer's electrical requirements.

#### 3.2 Charges for negotiation of connection contracts

##### 3.2.1 Basic connection offer

No negotiated charge applies for the provision of a **MSO** for a *basic connection service*.

A charge will apply if a *connection applicant* elects to negotiate a **MSO's** terms and conditions (including price) for the provision of a *basic connection service*. In such case, the service requested ceases to be classified as a *basic connection service* and becomes a *negotiated connection service*.

##### 3.2.2 Negotiated connection offer

SA Power Networks may require an *offer fee* for negotiation and preparation of a *negotiated connection offer*, which must be paid prior to any negotiations and prior to SA Power Networks providing an offer to connect.

The list of fees is available in SA Power Networks published *price list*.

NOTE:

1. An *offer fee* is non-refundable but will be deducted from the total charges that form part of the offer.

##### 3.2.3 Negotiated connection contract for the ongoing provision of connection services

The minimum charge as published in the SA Power Networks *price list* will apply where a customer chooses to negotiate their *customer connection contract* (ie ongoing supply contract). Where the cost of the negotiations are likely to or have exceeded the minimum charge, the customer will be charged the cost of the negotiations.

NOTE:

1. Payment will be required upfront and where the cost exceed the payment an additional payment will be required prior to any further negotiations.

2. *This is the contract is for the ongoing supply of electricity that applies between a customer and SA Power Networks once the customer is taking supply or the connection is energised.*

### 3.3 Customer Payment

SA Power Networks may require a *connection applicant* to contribute towards the cost associated with establishing or modifying their *connection*.

The total amount that a *connection applicant* may be required to pay towards the cost of *non-contestable connection works, connection assets, connection applicant's contribution towards pioneer scheme(s), augmentation* and an *extension* is the greater of zero and the amount calculated using the following formula:

$$CP = ICCS + ICSN - IRR$$

Where:

- CP = Customer Payment -The *connection applicant's* payment under this clause
- ICCS = Incremental Cost Customer Specific, where  $ICCS = (EA + OC + CAC)$  - The incremental costs incurred by SAPN for *connection services*, which are solely used by the *connection applicant*.
- EA = Extension Assets – The costs of the works required for the connection of a connection applicant's premises outside the boundaries of the distribution network that existed when the connection applicant's application was lodged. Where the works are undertaken by a third party, it includes the costs incurred by SA Power Networks for the non-contestable connection works in connecting the contestable extension works to the existing distribution network
- OC = Other Costs – Including but not limited to administration, project management, design, easements, certification and inspection, carrying out a tender process or assisting a *connection applicant* conduct a tender process
- CAC = Connection Applicant's Contribution – The total amount payable to SA Power Networks to contribute towards any pioneer scheme(s) asset utilised in supplying electricity to connection applicant's premises, as calculated in accordance with clause 8
- ICSN = Incremental Cost Shared Network - The *connection applicant's augmentation charge*, as calculated under clause 5 and, where applicable, the equalisation cost for establishment of the high voltage *distribution network* for real estate developments

IRR = *incremental revenue rebate* – as calculated under clause 6.1.1

NOTE:

1. *The charges included in OC (other costs) necessary for the provision of a negotiated connection offer will be payable upfront and prior to a SA Power Networks offer being provided. These charges are non-refundable but will be deducted from the total charges that form part of the offer.*

2. *Where the connection applicant elects to utilise an accredited third party provider to build the contestable extension and connection assets, the incremental revenue rebate, less any other costs incurred by SA Power Networks (eg non-contestable connection works) as calculated under clause 6, will not be payable to the connection applicant until the assets are vested with SA Power Networks.*
3. *The incremental revenue rebate only applies to the minimum electricity infrastructure works required to meet a connection applicant's/customer's demand requirements, which does not include customer convenience works.*

## **3.4 Prepayment**

### **3.4.1 Customer contribution – \$5,000 or less**

Where a *connection applicant's* contribution is \$5,000 or less, including for *basic connection services* under a *MSO*, then at the discretion of SA Power Networks the *connection applicant's* charge may be payable on acceptance of the offer.

### **3.4.2 Customer contribution – greater than \$5,000**

Where a customer's contribution is greater than \$5,000, SA Power Networks will include a payment schedule in the offer letter indicating the amount and the due date for payments.

The payment schedule will be based on:

- (1) Full payment of the *connection charge* upon acceptance of the offer, if construction will commence within three months of acceptance; or
- (2) Initial payment of 20% of the total costs on acceptance of offer plus the pre-payment of any specialised or non-standard assets that need to be ordered, followed by the remainder one month prior to construction.

Where the construction is completed in stages, then the costs of each stage must be paid one month prior to construction of that stage.

In all instances, full payment must be received prior to final *connection* and *energisation* of the premises.

#### **NOTE:**

1. *Energisation will not take place until all monies are paid.*
2. *All costs are exclusive of Goods and Services Tax (GST).*



## 4 Contestability of parts of the connection service

### 4.1 Preparation of a specification for contestable works

#### 4.1.1 Customer request for specification

If requested by a *connection applicant*, SA Power Networks will prepare a specification for the *contestable portion*<sup>6</sup> of the *extension assets* to enable the *connection applicant* to call tenders for these works, provided that the *connection applicant*:

- (1) supplies the necessary information to allow SA Power Networks to prepare the specifications; and
- (2) Pays an appropriate fee, as detailed in the *price list*, for preparing the specifications.

**NOTE:**

1. *Subject to SA Power Networks' agreement, the contestable works apply to the extension assets where those assets can be constructed in isolation from the distribution network and those assets will initially be used to supply the connection applicant.*

#### 4.1.2 Preparation of specification

The specifications will set out the general design parameters and operating requirements for *extension* to enable *connection* to the *distribution network* and will:

- (1) be sufficiently detailed to allow the *connection applicant* to call for tenders for the design and construction of the *contestable extension assets*
- (2) contain details of the voltage of the *connection*, required current rating, minimum transformer sizes, and other equipment requirements plus *After Diversity Maximum Demand (ADMD)* where applicable; and
- (3) contain details of the SA Power Networks technical and maintenance requirements, to ensure that the works, when designed and completed:
  - (a) are compatible with the *distribution network*
  - (b) are capable of being operated and maintained by SA Power Networks in accordance with its operations and maintenance procedures; and
  - (c) do not adversely affect the *distribution network* or others connected to the *distribution network*.
- (4) Inform the connection applicant of a reasonable timeframe for conducting the tender, given the nature of the works and the specifications.

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<sup>6</sup> The *contestable portion* of the *extension* is the works required to connect the *connection applicant's* premises to the existing *distribution network* that can be built in isolation from the network. The *non-contestable portion* of the *extension* is the works that must be performed by SA Power Networks to connect the contestable works to the existing *distribution network*.

### **4.1.3 Timeframe for preparation**

SA Power Networks will prepare the specifications, when requested by a *connection applicant* under clause 4.1.1, within:

- (1) a reasonable time, as agreed between SA Power Networks and the *connection applicant* where the specifications are complex, but no more than 20 *business days*; or
- (2) 10 *business days* in all other cases.

## **4.2 Tenders**

### **4.2.1 Call for tenders**

The *connection applicant* can call for tenders for the design and construction of the *contestable extension assets* based on the specifications prepared under clause 4.1.1.

### **4.2.2 Successful tender**

If, within the period specified in clause 4.1.2, the *connection applicant* notifies SA Power Networks that they have selected a successful tender, then SA Power Networks will, acting reasonably but subject to clause 4.2.3, liaise with the *connection applicant* and the successful suitably qualified tender concerning the following matters:

- (1) the design and construction of and *contestable portion* of the *extension*
- (2) payments from the *connection applicant* and payments to the successful tender
- (3) warranties in relation to the work performed and the equipment installed
- (4) the program for undertaking the works; and
- (5) vesting of the *contestable extension assets* to SA Power Networks on completion of the works.

### **4.2.3 Network compatibility**

Nothing in this clause 4.2 obliges SA Power Networks to accept the design and construction of the *contestable extension assets* by a successful tender if SA Power Networks, acting reasonably, forms the view that:

- (1) the successful tender does not have the requisite skill and competence to undertake the design and/or construction of the works in accordance with the specifications; or
- (2) the proposed design and/or construction does not meet the specification prepared under clause 4.1.2(3).

NOTE:

1. *Any dispute under this clause 4.2.3 can be referred to the Technical Regulator by the connection applicant or SA Power Networks.*

## 5 Customer's Augmentation Charge

### 5.1 Required augmentation

The *connection applicant* is required to pay an Incremental Cost Shared Networks (ICSN), or an *augmentation charge* for the *distribution network's* capacity to meet their electricity demand in excess of the applicable *augmentation* threshold, as defined in clause 5.2(4) below.

### 5.2 Customer demand subject to an augmentation charge

- (1) A *connection applicant's* maximum demand (in kVA) will be subject to an *augmentation charge* in accordance with this clause.
- (2) For new loads – a *connection applicant's* maximum demand (in kVA) subject to an *augmentation charge* is the value specified by the customer (which must reflect the maximum demand that would be expected to apply during network design conditions) minus the *augmentation allowance*, determined in accordance with clause 5.2(4).
- (3) For upgrades – a *connection applicant's* maximum demand (in kVA) subject to an *augmentation charge* is the lesser of:
  - (a) the total customer demand after the upgrade minus the applicable *augmentation* threshold, determined in accordance with clause 5.2(4); and
  - (b) the full increase in demand arising from the upgrade.
- (4) The *augmentation* threshold allowance is:
  - (a) 0kVA for a *real estate developer*
  - (b) 25kVA where a *connection applicant's* premises are supplied from the 19kV Single Wire Earth Return (SWER) network; and
  - (c) 70kVA for all other instances.

### 5.3 Calculation of an augmentation charge

SA Power Networks will determine a *connection applicant's augmentation charge* associated with the *connection* enquiry in accordance with the following and Table 5.3.1 below.

Table 5.3.1 displays amounts for both country and metro, with the boundary defined in accordance with the [Metropolitan Adelaide Boundary](#) which can be found at the Atlas of SA website, [www.atlas.sa.gov.au](http://www.atlas.sa.gov.au)

A customer's *augmentation charge* will be calculated by multiplying the customer's demand (as calculated in section 5.2 above) and the sum of the applicable *augmentation* rates (as detailed in Tables 5.3.1 and 5.3.2 below) For example, where a customer's applicable demand exceeds 10% of the *Zone sSubstation* capacity but not the *Ssub-transmission line* capacity, then the augmentation rate will include both the *Zone Substation* and Standard rates. Where a customer's applicable demand exceeds 10% of both the *Zone sSubstation* and *Ssub-transmission line* capacities, the augmentation rate will include the *Sub-transmission line*, *Zone Substation* and Standard rates.

**Table 5.3.1 – Augmentation Rates for new residential customers**

Network Element	Country (\$/kVA)	Metro (\$/kVA)	Comment
<b>Standard rates</b>			
Low Voltage	<del>343</del> 431	<del>343</del> 431	<i>Applies if connection is via shared low voltage mains, e.g. connected to the terminals of a low voltage service pillar.</i>
Distribution Transformer	<del>338</del> 425	<del>338</del> 425	<i>Applies if connection is supplied via the low voltage transformer terminals of a shared transformer.</i>
Feeder High Voltage	<del>223</del> 280	<del>223</del> 280	<i>Applies if supplied via a connection to a shared high voltage feeder or via a dedicated transformer.</i>
<b>Additional applicable rates</b>			
<u>Zone</u> Substation	<del>349</del> 438	<del>259</del> 326	<i>Additional to the above amounts and applies if the demand exceeds the <u>Zone</u> sSubstation capacity by &gt;10%</i>
Sub-transmission <u>line</u>	<del>544</del> 684	<del>179</del> 225	<i>Additional to the above amounts and applies if the demand exceeds the sSub-transmission <u>line</u> capacity by &gt;10%</i>

**Table 5.3.2 – Augmentation Rates for new business customers**

<u>Network Element</u>	<u>Country (\$/kVA)</u>	<u>Metro (\$/kVA)</u>	<u>Comment</u>
<b><u>Standard rates</u></b>			
<u>Low Voltage</u>	<u>237</u>	<u>237</u>	<i><u>Applies if connection is via shared low voltage mains, e.g. connected to the terminals of a low voltage service pillar.</u></i>
<u>Distribution Transformer</u>	<u>233</u>	<u>233</u>	<i><u>Applies if connection is supplied via the low voltage transformer terminals of a shared transformer.</u></i>
<u>Feeder High Voltage</u>	<u>154</u>	<u>154</u>	<i><u>Applies if supplied via a connection to a shared high voltage feeder or via a dedicated transformer.</u></i>
<b><u>Additional applicable rates</u></b>			
<u>Zone Substation</u>	<u>240</u>	<u>179</u>	<i><u>Additional to the above amounts and applies if the demand exceeds the Zone Substation capacity by &gt;10%</u></i>
<u>Sub-transmission line</u>	<u>376</u>	<u>124</u>	<i><u>Additional to the above amounts and applies if the demand exceeds the Sub-transmission line capacity by &gt;10%</u></i>

## 5.4 Information to be published

- (1) For each *Zone sSubstation* and *sSub-transmission line*, the following information will be published annually:
  - (a) the total name-plate capacity of each *Zone sSubstation* and the 10% threshold; and
  - (b) the total capacity under peak load design conditions for each *sSub-transmission line*.
- (2) The rates used in Table 5.3.1 will be published annually and will increase in-line with the annual **CPI** increase as published by the Australian Bureau of Statistics (ABS) for All Groups, CPI, Australia, Weighted Average of Eight Capital Cities for the (Dec) quarter.

## 5.5 Augmentation when a supply is disconnected/reconnected

The *connection applicant's* demand, for determining the *connection applicant's augmentation charge* (ICSN) under clause 3.3, will be taken as zero for electricity supply at a *connection point* that has been disconnected and subsequently reconnected, provided that:

- (1) the period between disconnection and subsequent reconnection of that *connection point* is more than 24 months; and
- (2) there is no major change in the electricity demand profile of the business on the site.

## 6 Rebate towards a customer’s connection

### 6.1 Application of Incremental Revenue Rebate (IRR)

The rebate in this clause applies only to the extent that the *connection applicant* does not request *connection assets, extension and augmentation* in excess of the least cost-technically-feasible solution<sup>7</sup> to meet the *connection applicant’s* electrical requirements and any expected increased load – generally in the next five year period.

#### 6.1.1 Incremental revenue rebate

The rebate resulting from *incremental revenue (IR)* from SA Power Networks to a *connection applicant* towards the cost of the *connection assets, extension and augmentation* is set out in Table 6.6.1 (below) according to the customer’s tariff class:

**Table 6.1.1**

Tariff Class	Connection establishment or upgrade
Residential	IRR = the NPV of 30 years of annual IR
Non-residential	IRR = the NPV of 15 years of annual IR

Where:

- IRR = SA Power Networks *incremental revenue rebate*
- annual IR = the forecast annual *incremental revenue* SA Power Networks expects to receive
- NPV = Net Present Value for the number of years specified in Table 6.1.1 at the pre-tax real Weight Average Cost of Capital (**WACC**) as specified in the SA Power Networks Distribution Determination for the 2015-20 **RCP**. The *incremental revenue* will exclude:
  - the operations and maintenance (**O&M**) component of the Distribution Use of System (**DUoS**), as the *connection applicant’s* cost for *connection* does not include any future **O&M** costs; and
  - any revenue from the *connection applicant’s* future **DUoS** charges that is for any part of the shared *distribution network* that is not included in the customer’s network *augmentation cost (ICSN)*, as calculated under clause 5.

NOTE:

1. *Incremental revenue for non-residential connections with a defined life (eg supply to a quarry or for a temporary building supply etc) can be considered for a shorter period than the nominal 15 year period as shown in Table 6.1.1 above.*

### 6.2 Rebates for real estate developments

A *real estate developer* is treated as a single customer for the purposes of calculating the *incremental revenue* for a development.

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<sup>7</sup> From an SA Power Networks *distribution network* infrastructure consideration.

Rebates for real estate developments will be determined by SA Power Networks and include the total amount of *incremental revenue* expected to be received from all of the sites/*connection services* within a real estate development.

In calculating the *incremental revenue* for a development, consideration will be given to the specified design **ADMD** to be applied to the individual residential sites in the development, the use of alternative energy sources, the expected revenue from non-residential sites and the expected take-up rate for *connection services* within a development.



## 7 Security Fee

In accordance with Chapter 5A of the **NER** and the **AER** Connection Charge Guidelines for electricity *retail customers*, SA Power Networks may require a customer to provide a guarantee of revenue (**GoR**) in the form of a financial guarantee, where SA Power Networks substantially funds the *connection applicant's extension, connection and/or augmentation costs*.

A **GoR** will only be requested for *connections* arising from a *negotiated connection offer* where SA Power Networks believes that there is a high risk of it not receiving the estimated *incremental revenue* calculated as part of the offer.

If applicable, a **GoR** will be included as a condition of acceptance of the offer.

A **GoR** is a legally binding agreement between SA Power Networks and the *connection applicant*, where the applicant guarantees to provide SA Power Networks a minimum level of revenue each year for the duration of the **GoR** agreement. The term will be for a nominated period (normally 5 years) but may be adjusted on a case-by-case basis. It will only be used to make up the *incremental revenue* shortfall that SA Power Networks expects to incur on a yearly basis. The **GoR** amount will not exceed the amount of *incremental revenue* calculated as part of the *connection offer*.

The **GoR** will be secured by a bank guarantee or other financial instrument acceptable to SA Power Networks.

The **GoR** will only be used to guarantee any shortfall in *incremental revenue* and will not be used for any other purpose.

## 8 Pioneer Schemes

Under Chapter 5A of the **NER**, SA Power Networks is required to operate a *pioneer scheme*. Such a scheme requires SA Power Networks to refund a portion of a *retail customer's connection charge* contributed towards *extension assets*, which are subsequently used (or shared) by a new *connection applicant(s)*.

Under a *pioneer scheme*, refunds will only be provided where another *connection* is supplied using those assets within seven (7) years of the construction and energisation of the *pioneer scheme*. The cost of those *pioneer scheme* assets and, consequently, the applicable refund will be depreciated using a straight-line method over 20 years.

In addition, a *retail customer's* refund will take into account the portion of the shared *pioneer scheme* assets (or *extension*) and the respective electricity demand used by the initial and subsequent customer(s).

**NOTE:**

1. *As a customer's existing augmentation charge is based on an individual customer's demand, there will be no refund applicable to this component of the charge.*

A refund will be provided by SA Power Networks to the current property owner at the premises and this is incorporated into the total cost of *connection* for the new *connection applicant*. A refund is only provided to a *retail customer* if it is \$1,000 (GST exclusive) or more.

If an original customer requests a *connection* to be constructed to a higher standard or capacity than the least-cost technically-acceptable standard, then only the cost of constructing the *connection* to the least-cost acceptable standard or capacity will be subject to the *pioneer scheme*.

If an *extension* is constructed for a *connection applicant* by a third party service provider, that *extension* is subject to a *pioneer scheme* using an estimate of the cost for SA Power Networks to construct the assets.

*Real estate developers* total cost for *connection* will include *pioneer scheme* upstream refunds. However, neither *retail customers* connected to the *real estate developer's* network nor *real estate developers* will be eligible to receive a refund towards future *connections* to the *pioneer scheme*, as *real estate developers* participate in an equalisation payment scheme (if applicable). The total electricity maximum demand expected for the real estate development will be used in calculating the rebate to *upstream customers*.

### 8.1 Downstream customer contribution

#### 8.1.1 Purpose of this clause

The purpose of this clause is to establish the procedures for calculating the *customer contribution* by a *connection applicant* towards amounts paid by *upstream customers* for their *pioneer scheme extension*.

#### 8.1.2 Application of clauses

This clause and clause 8.3 – Payment to *upstream customers*, apply only if each of the following is satisfied:

- (1) a *connection applicant's* premises is or will be supplied by that part of the *distribution network* that was extended for an *upstream customer* and is part of a *pioneer scheme*
- (2) the *connection* of the *connection applicant's* premises occurs within seven (7) years after the *pioneer scheme's extension* was constructed; and
- (3) the *upstream customer's extension component* (as determined in clause 8.1.3, below) is greater than zero.

### 8.1.3 Customers demand

Customers demand for the purpose of determining the *connection applicants* contribution is the greater of:

- (1) The following demand, which is
  - (a) 25 KVA for connection to a SWER network; and
  - (b) 70kVA for all other connections; or
- (2) The customer's agreed maximum demand.

### 8.1.4 Connection applicant's contribution - extension 'i'.

The *connection applicant's contribution* to extension 'i' is the amount calculated as follows:

$$CACE_i = EA_i \times \frac{20 - Y_i}{20} \times \frac{L_a}{LE_i} \times \frac{D_a}{\sum_{j=1}^n D_j}$$

Where:

- $D_a$  = the agreed maximum demand requested by the connection applicant as determined in accordance with clause 8.1.3 above
- $D_j$  = the agreed maximum demand as determined in accordance with clause 8.1.3 above for all customers 'j' supplied via extension 'i' including the connection applicant
- $EA_i$  = the *extension asset cost* for extension 'i'
- $L_a$  = the length (metres) of *extension 'i'* used to supply the *connection applicant*
- $LE_i$  = the length (metres) of *extension 'i'*; and
- $Y_i$  = number of completed years that have elapsed since *extension 'i'* was constructed (eg if 11 months have elapsed since *extension 'i'* was constructed,  $Y_i$  is zero)

### 8.1.5 Connection applicant's customer contribution

A *connection applicant's contribution* (refer **CAC** clause 3.3) will include the connection applicant's contribution for each *pioneer scheme 'i' extension assets* and is calculated as follows:

$$CAC_c = \sum_{i=1}^n (CACE_i)$$

Where:

- $CAC$  = *Connection applicant's contribution* (\$) used in clause 3.3

$CACE_i$  = Connection applicant's contribution towards pioneer scheme 'i' extension assets, as determined from clause 3.3 for customer 'i' (ie not the connection applicant)

## 8.2 Connection applicant's customer contribution

The upstream refund included in the total cost for a new or upgraded customer connection for use of a pioneer scheme(s) will be the sum of the total rebates applicable to eligible upstream customers.

SA Power Networks will include the upstream customer refund(s) a part of the connection applicant's negotiated offer and, subsequently, will refund the upstream customer(s) after payment and connection and energisation of the connection applicant's premises.

## 8.3 Payment to upstream customers

Payments made to upstream customer 'j', once the connection applicant is taking supply, will be determined in accordance with the following formula, provided that the upstream customer payment exceeds \$1,000 (incl GST):

$$P_j = \sum_{i=1}^n CACE_i * \frac{E_i P_j}{\sum_{j=1}^n E_i P_j}$$

Where:

$P_j$  = payment to upstream customer 'j'

$CACE_i$  = connection applicant's contribution calculated in accordance with clause 8.1.4 for extension 'i'

$E_i P_j$  = the extension component for an upstream customer 'j' for extension 'i'

### NOTE:

1. Payments are not made to an upstream customer where the payment is less than \$1,000 (GST exclusive).

## 8.4 Limits on payment

A customer is not entitled to receive payment from SA Power Networks, whether by way of rebate or by allocation of contribution from customers, if that payment will result in the customer receiving more than, in total, the depreciated amount the customer was required to pay under clause 3.3.

The sum of all payments received by customer 'j' as required by clause 8.3 and adjusted in accordance with the equation below cannot exceed that customer's payment CP for connection to the network as determined in accordance with clause 3.3.

$$C_j R = \sum_{i=1}^n P_i \times \frac{20}{20 - Y_{ki}} \leq CP_j$$

Where:

- $C_jR$  = total refunds for customer 'j' connection to the *network*.
- $P_i$  = payments made to upstream customer 'j' from connection of customer 'i' to an extension subject to a pioneer scheme extension.
- $Y_{ki}$  = the number of completed years since the pioneer scheme 'k' extension assets were constructed, which result in payment 'i' to upstream customer 'j'.

No refunds are made by SA Power Networks to customers who take supply from electricity infrastructure funded by a *real estate developer*.

## 9 Real Estate Developments

A real estate development can be defined as a development where:

- (1) three or more property titles are created from one or more allotments. They may be classified in various forms but, typically, will be Torrens title, community title or strata title; or
- (2) multi-tenanted sites with three or more metered *retail customers*.

For the purposes of this Connection Policy:

- (3) SA Power Networks will deal with a party (*'the real estate developer'*) that is seeking to develop a site for future use by *retail customers* or *real estate developers* and that has made a *connection* enquiry in relation to that site, as if that party were a single customer for the purpose of calculating a capital contribution; and
- (4) where a development is to proceed in stages, each stage will be considered as a separate project for *augmentation* purposes provided the *connection* of that stage occurs more than five (5) years after the *connection* of the previous stage.

A *real estate developer* will make application for real estate developments in the same manner as for a *negotiated connection service* for a *retail customer*.

A *real estate developer* will only receive an *incremental revenue rebate (IRR)* and be required to make a *customer contribution to augmentation*, where such *real estate developer* provides *connections* to individual customer *connection* points (ie serviced allotments – see clause 9.1.1 below). The calculation of charges and rebates will be based on the estimated combined maximum demand of the staged development and resulting *incremental revenue* for all of the relevant end-use customers.

*Real estate developers* will generally fall into three main categories, being serviced allotments (see clause 9.1.1), serviceable allotments (see clause 9.1.2) and multi-tenanted allotments (see clause 9.1.3).

### 9.1.1 Serviced allotments

Serviced allotments will include residential, commercial and land re-development sites. These will generally be supplied via underground electricity infrastructure but could be supplied from overhead electricity infrastructure, subject to specific stakeholder requirements. Land re-development sites will be treated in the same manner as if for a new development.

In some developments, provision is made by a *real estate developer* for commercial tenancies such as shops, medical centres, schools, hotels and the like as well as some high medium/high density residential living. In most of these instances, the *real estate developer* will only provide a basic supply point, if any, and it will be the responsibility of individual customers to arrange for their own *connection* in accordance with this Connection Policy.

Electricity maximum demands for real estate developments will be in accordance with the SA Power Networks **ADMD** schedule (as published at [www.sapowernetworks.com.au](http://www.sapowernetworks.com.au)) plus any known spot-loads attributable to the development.

Rebates for serviced real estate developments will be the forecast *incremental revenue* based on the following factors:

- (1) specified **ADMD**
- (2) known spot-loads
- (3) possibility of alternative energy sources (eg **PV** or gas); and
- (4) likely take-up rate of the development for the period used to determine the **IR**.

### **9.1.2 Serviceable allotments**

In some instances a *real estate developer* will not provide *connection services* to each property title/customer, and will only provides a backbone electrical infrastructure comprising the high voltage cables or overhead lines, associated infrastructure and public lighting in accordance with local council requirements and any SA Power Networks specific requirements. In these instances, the developer will not pay any *augmentation charges* or receive any associated rebates. Each *retail customer* will need to make an individual application to the distributor for a *connection service* to satisfy the specific electrical demand required for the *connection* as per the requirements under this Connection Policy for a *connection service*.

### **9.1.3 Multi-tenanted allotments**

These developments include apartment blocks, mixed use multi-levelled property, retirement villages and the like where a strata title corporation, community corporation or similar is created and will generally be responsible for the low voltage service mains from the service point(s) to the individual residences. In these instances, *augmentation* and *incremental revenue* will be calculated in accordance with a total maximum demand for the site supplied by the developer in the same manner as for an individual *retail customer's negotiated connection service*.

### **9.1.4 Equalisation payment**

Where SA Power Networks require infrastructure to be installed to a greater capacity than that required for a specific development or stage of a development, the *real estate developer* will only be required to fund the infrastructure required for that development. This will typically occur where future development is likely beyond the boundaries of the current development or stage of the development and it is prudent to install larger cables, switching cubicles, additional conduits etc. as part of the high voltage network. In these instances, SA Power Networks will require the *real estate developer* to fund the high voltage (**HV**) network costs, other than that required for the development, via an equalisation charge in accordance with SA Power Networks equalisation charge schedule.

Should a developer request a contestable option for their project, the developer will be required to arrange for the design and installation of the **HV** network as part of the offer. SA Power Networks will provide a rebate for this part of the network and this, in-turn, will be offset by an equalisation payment.

The equalisation payment will be calculated based on the estimated cost of the high voltage infrastructure required for all stages of a development, divided by the number of blocks estimated as part of the development. Each stage of the development will then incur an equalisation charge on a per allotment basis.

### **9.1.5 Upstream refunds for Real Estate Developments**

Real estate developments will not be eligible to participate in a pioneer scheme, as this has been replaced by the equalisation payment (if applicable) as outlined in clause 9.1.4. However, for any real estate development that is to connect to an existing pioneer scheme, the real estate developer must contribute towards the upstream refund(s) to the original pioneer scheme customer. Upstream contributions to a pioneer scheme will be calculated in accordance with clause 6 of this Policy.



## **10 Dispute Resolution**

As set out in the **NER** Chapter 5A, Part G, a customer is entitled to seek to have a dispute determined by the **AER**.

SA Power Networks asks that a customer first attempt to resolve the dispute in accordance with its complaints resolution policy – [details](#) of which can be found on the SA Power Networks website at [www.sapowernetworks.com.au](http://www.sapowernetworks.com.au)

If a customer is not satisfied with the SA Power Networks response to their complaint then, prior to taking the matter to the **AER**, the customer should contact the Energy and Water Ombudsman SA:

Energy and Water Ombudsman SA  
Level 11, 50 Pirie Street  
ADELAIDE SA 5000

GPO Box 2947  
ADELAIDE SA 5001

Telephone: 1800 665 565 (free call)

Facsimile: 1800 665 165 (free fax)

Email: [contact@ewosa.com.au](mailto:contact@ewosa.com.au)

## 11 Definitions

**After Diversity Maximum Demand** – the hypothetical electricity demand in kVA of a single customer in a large group.

**applicant** – see: *connection applicant*

**augmentation** – works to enlarge the capability of the *distributor's distribution network* to distribute electricity.

**augmentation allowance** – first referenced at clause 5.2(b)

**augmentation charge(s)** – SAPN nominated at clause 5.1

**basic connection service** – a *connection service* related to a *connection* or a proposed *connection* between a *distribution system* and a *retail customer's* premises (excluding a non-registered *embedded generator's* premises) in the following circumstances:

- (1) either:
  - (a) the *retail customer* is typical of a significant class of *retail customers* that has sought, or is likely to seek, the service; or
  - (b) the *retail customer* is, or proposes to become, a micro-embedded generator; and
- (2) the provision of the service involves minimal or no *augmentation* of the *distribution network*; and
- (3) a *model standing offer (MSO)* has been approved by the **AER** for providing that service as a *basic connection service*.

**business day** – a day on which banks are open for general banking business in Adelaide, other than a Saturday or Sunday.

**connection(s)** – a physical link between a *distribution network* and a *retail customer's* premises to allow the flow of energy.

**connection alteration** – any kind of alteration to an existing *connection* including, but not limited to, an addition, upgrade, *extension*, expansion or *augmentation*.

**connection applicant** – an applicant for a *connection service* of one of the following categories:

- (1) *retail customer*
- (2) *retailer* or other person acting on behalf of the customer
- (3) *real estate developer*.

**connection applicant's contribution** – first referenced at clause 3.3 and SAPN nominated at clause 8.1.4

**connection assets** – those assets that are used to provide *connection services* to a *connection applicant* at a *connection point*.

**connection charge** – SAPN nominated at clause 1.2

**connection contract(s)** – SAPN nominated at clause 2.1

**connection offer(s)** – first referenced at clause 1.1(1)

**connection service(s)** – SAPN nominated at clause 1.2

**contestable extension assets** – SAPN nominated at clause 4.2.1

**contestable extension works** – SAPN nominated at clause 3.3

**contestable component** – SAPN nominated at clause 2.2.2.2(4)(a)

**contestable portion** – SAPN nominated at clause 4.1.1

**customer contribution(s)** – the amount a *connection applicant* contributes to the cost of a *pioneering scheme* paid for by *upstream customers*, as calculated in clause 8.

**distribution network** – the distribution network operated by SA Power Networks that forms part of the National Electricity Grid

**distribution system** – SAPN nominated within Definitions: basic connection service

**distributor's distribution network** – SAPN nominated within Definitions: augmentation

**downstream customer** – SAPN nominated within Definitions: upstream customer

**Electricity Distribution Price Determination** – SAPN nominated within Definitions: SA Power Networks

**embedded generator** – SAPN nominated at clause 2.2.1.2

**energisation** – first referenced at clause 1.1(3)

**equalisation charge** – referenced at clause 9.1.4

**extension** or **extended** – works required for the *connection* of a *customer's premises* that, at the time of the customer's connection enquiry, was outside the boundaries of the *distributor's distribution network*

**extension assets** – first referenced at clause 2.2.2.2(4); SAPN nominated at clause 4.1.1

**extension component** – see: clause 8.1.3

**good electricity industry practice** – as defined in the *National Electricity Code*

**GST** – means any goods and services tax or similar value added tax levied or imposed by the Commonwealth of Australia, which is defined in the *A New Tax System (Goods and Services Tax) Act 1999 (Cth)*

**incremental revenue rebate** – the rebate from SA Power Networks to a *connection applicant* towards the cost of the *connection assets*, *augmentation* and *extension(s)*, as calculated in clause 6.1.1.

**model standing offer(s)** – first reference at clause 2.1.1; SAPN nominated within Definitions: basic connection service

**negotiated connection contract** – a customer and SA Power Networks negotiate the terms and conditions including price of a *connection offer*, with a formal offer and acceptance of a *connection contract* occurring.

**negotiated connection offer** – SAPN nominated at clause 2.2.2.1

**negotiated connection service(s)** – first referenced at clause 2.2(b); SAPN nominated at clause 3.1(2)

**non-contestable component** – SAPN nominated at clause 2.2.2.2(4)(b)

**non-contestable connection works** – works to connect an *extension* into the existing *distribution networks* and any other works or activities required to effect the *connection* of the *applicant* (eg easements etc)

**non-contestable portion** – referenced in footnote #6

**offer fee** – the fee required to be paid a *connection offer* to cover the costs associated with a provision of a written offer to connect the applicant’s premises to the *distribution networks*.

**pioneer scheme(s)** – SAPN nominated at clause 2.2.2.2(6)

**price list** – the indicative price list as detailed in the ‘Network tariffs and negotiated services’ manual located on the [Network tariffs page](#) of the [SA Power Networks](#) website.

**property** – a continuous parcel of land (may be more than one title) under the same ownership or control, or separate parcel of land connected by privately owned infrastructure common to both parcels of land.

**residential customer** – a customer who acquires electricity for domestic use

**real estate developer** – see *connection applicant*

**retail customer** – see *connection applicant*

**retailer** – see *connection applicant*

**SA Power Networks** – as defined in the Electricity Distribution Price Determination

**Sub-transmission line** – means a power line connecting a sub-transmission asset to either the *transmission system* or another sub-transmission asset which for SA Power Networks operate at 66kV or 33kV.

**Technical Regulator** – referenced at 4.2.3

**upstream customer** – a customer:

- (1) whose *connection* required an *extension* to the *distributor’s distribution network*; and
- (2) a *downstream customer* will use the *extension* within the time period specified under clause 8.

**Zone Substation** – means a substation for the purpose of connecting a *distribution network* to a *sub-transmission network*.

## 12 Acronyms

**ADMD** – see: After Diversity Maximum Demand (ie the hypothetical electricity demand in kVA of a single customer in a large group)

**AER** – Australian Energy Regulator

**CPI** – Consumer Price Index

**DLCC** – Deemed Standard Connection Contract

**DSCC** – Deemed Large Connection Contract

**DUoS** – distribution use of system revenue (ie the component of a customer’s electricity account that SA Power Networks receives, excluding TUoS)

**GoR** – guarantee of revenue

**IR** – incremental revenue

**IRR** – incremental revenue rebate

**kV** – kilovolt

**kVA** – kilovolt-amp

**MISO** – see: model standing offer(s)

**NA** – network augmentation

**NCCC** – negotiated customer connection contract

**NEL** – National Electricity Law

**NER** – National Electricity Rules

**NERL** – National Energy Retail Law

**NERR** – National Energy Retail Rules

**NPV** – the net present value of future applicable DUoS revenue streams

**O&M** – operations and maintenance component

**PV** – \*\*referenced at 9.1.1\*\*

**RCP** – Regulatory Control Period

**SEG** – small embedded generators

**SWER** – \*\*referenced at 5.2(4)(b)\*\*

**TUoS** – transmission use of system charges

**WACC** – Weighted Average Cost of Capital