

# Jemena Electricity Networks (Vic) Ltd

## Connection Policy

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## TABLE OF CONTENTS

Glossary .....	iii
Abbreviations .....	vii
<b>1. Introduction .....</b>	<b>1</b>
1.1 Purpose of this document .....	1
1.2 Connecting to Jemena's distribution network .....	2
1.3 How to use this policy .....	2
<b>2. Basic connection services .....</b>	<b>4</b>
2.1 Fee-based basic connection services .....	4
2.2 Fees and charges .....	6
<b>3. Negotiated connection services for load connection .....</b>	<b>8</b>
3.1 Quoted connection services .....	8
3.2 Connections requiring network augmentation .....	10
3.3 Methodology for calculating connection charges for large negotiated connection services .....	10
3.4 Description of cost-revenue test .....	11
3.5 Principles for determining the incremental cost .....	11
3.6 Incremental cost of shared network (ICSN) .....	12
3.7 Incremental cost of customer-specific connection assets .....	13
3.8 Incremental revenue calculation .....	14
3.9 Estimating customers' energy consumption and demand for calculating incremental revenue .....	16
3.10 Reserve feeder construction .....	17
<b>4. Pioneer schemes .....</b>	<b>18</b>
4.1 Pioneer scheme charge .....	18
4.2 High voltage equalisation scheme for real estate developers .....	19
4.3 Connection charges for real estate developments .....	19
4.4 Charges for new public lighting in real estate developments .....	20
<b>5. Negotiated connection services for embedded generator connection .....</b>	<b>21</b>
<b>6. Connection payments .....</b>	<b>22</b>
6.1 Prepayments .....	22
6.2 Security fee .....	22
<b>7. Process for updating this policy .....</b>	<b>24</b>

## GLOSSARY

**augmentation**

works undertaken to enlarge the *distribution system* or to increase its capacity to distribute electricity.

**basic connection service(s)**

means a *connection* which meets the following criteria:

- a) a new *connection* involving the establishment of a permanent or temporary *connection* (single or three-phase) with a total capacity of less than 100 Amps per phase that is either:
  - i) a physical *connection* between an agreed *connection* point at the *supply address* and the distribution network that comprises an overhead single span service cable from an existing pole where the length of the service cable does not exceed 45 meters in total and does not exceed 20 metres over the property at the *supply address*; or
  - ii) a physical *connection* between the *supply address* and the distribution network via an underground electricity cable where the *connection* point is in an existing service pit located at the property boundary at the *supply address*.
- b) a *connection alteration*;
- c) the new *connection* or *connection alteration* involves no *augmentation*, replacement or *extension* of the distribution network;
- d) an adequate capacity of electricity is available at the required voltage at the boundary of the property at the *supply address*;
- e) the required overhead clearances (as detailed in section 7—Connecting to the Low Voltage (LV) Network of the *Service Installations Rules*) must be able to be achieved and maintained for an overhead *connection* and there must be no excessive property crossing;
- f) the *connection* must be metered;
- g) the *connection* must not be subject to a *pioneer scheme*;
- h) the *connection* does not include *basic micro embedded generator connection services* or *connection* of a *micro embedded generator*.

**basic micro embedded generator connection service**

means a *connection* which meets the following criteria:

- a) a *connection* between a *micro embedded generator* with a maximum capacity of less than 10 kVA per phase (or 30 kVA three-phase) and the distribution network;
- b) the *micro embedded generator* must be connected via an inverter which is compliant with AS4777 – Grid Connection of Energy Systems via Inverters;
- c) the provision of the basic micro embedded generator connection services must involve no *augmentation*, replacement or *extension* of our distribution network.

**business customer**

a *retail customer* whose connection service is used for business purposes but

	not including residential homes from which business is conducted.
<b><i>coincident peak demand</i></b>	a connection service's electricity demand at times when the network or relevant segment is experiencing its maximum demand.
<b><i>connection</i></b>	a physical link between a <i>distribution system</i> and a <i>retail customer's</i> premises to allow the flow of electricity.
<b><i>connection alteration</i></b>	means an alteration to an existing <i>connection</i> including; <ul style="list-style-type: none"> <li>a) a <i>connection</i> upgrade from single phase to three phase supply of less than 100 Amps;</li> <li>b) a <i>connection</i> upgrade of the service fuse of less than 100 Amps;</li> <li>c) relocation of existing <i>premises connection assets</i>;</li> <li>d) which involves no <i>augmentation</i>, replacement or <i>extension</i> of our distribution network;</li> <li>e) where adequate capacity of electricity is available at the required voltage at the boundary of the property at the <i>supply address</i> to accommodate the alteration;</li> <li>f) the required overhead clearances (as detailed in section 7—Connecting to the Low Voltage (LV) Network of the Service Installations Rules) must be able to be achieved and maintained for an overhead connection and there must be no excessive property crossing.</li> </ul>
<b><i>connection applicant</i></b>	an applicant for a <i>connection service</i> of one of the following categories: <ul style="list-style-type: none"> <li>(a) <i>retail customer</i>;</li> <li>(b) retailer or other person acting on behalf of a <i>retail customer</i>; or</li> <li>(c) <i>real estate developer</i>.</li> </ul>
<b><i>connection assets</i></b>	those components of a transmission or <i>distribution system</i> which are used to provide <i>connection services</i> .
<b><i>connection charge(s)</i></b>	a charge imposed by Jemena for a <i>connection service</i> in accordance with this Connection Policy.
<b><i>connection offer</i></b>	an offer by a Jemena to enter into a connection contract with: <ul style="list-style-type: none"> <li>(a) a retail customer; or</li> <li>(b) a real estate developer.</li> </ul>
<b><i>connection service(s)</i></b>	either or both of the following: <ul style="list-style-type: none"> <li>(a) a service relating to a new <i>connection</i> for premises;</li> <li>(b) a service relating to a <i>connection alteration</i> for premises.</li> </ul>
<b><i>distribution system</i></b>	a distribution network, together with the <i>connection assets</i> associated with the distribution network, which is connected to another transmission or distribution system. Connection assets alone do not constitute a distribution system.

<b><i>embedded generator</i></b>	a person that owns, controls or operates an <i>embedded generating unit</i> .
<b><i>embedded generator connection service</i></b>	a <i>connection service</i> for the connection of an <i>embedded generating unit</i> .
<b><i>embedded generating unit</i></b>	a generating unit connected within a distribution network and not having direct access to the transmission network.
<b><i>extension</i></b>	an extension of the distribution network (owned, controlled and operated by Jemena) to provide a <i>connection</i> .
<b><i>least cost technically acceptable</i></b>	a connection that is designed and constructed to Jemena's technical and safety standards that is of the lowest cost.
<b><i>Micro embedded generator alteration(s)</i></b>	any alteration to a micro embedded generator (including a change to the inverter manufacturer or model or an increase or decrease in the maximum allocated generating capacity up to 10kVA per phase).
<b><i>micro embedded generator connection</i></b>	means a <i>connection</i> which meets the following criteria: <ul style="list-style-type: none"> <li>a) a <i>connection</i> between a <i>micro embedded generator</i> with a maximum capacity of less than 10 kVA per phase (or 30 kVA three-phase) and the distribution network;</li> <li>b) the <i>micro embedded generator</i> must be connected via an inverter which is compliant with AS4777 – Grid Connection of Energy Systems via Inverters;</li> <li>c) the provision of the <i>micro embedded generator connection service</i> must involve no augmentation, replacement or extension of <i>our</i> distribution network.</li> </ul>
<b><i>micro embedded generator</i></b>	a <i>retail customer</i> who operates, or proposes to operate, an embedded generating unit for which a <i>micro embedded generator connection</i> is appropriate.
<b><i>model standing offer</i></b>	a <i>model standing offer</i> to provide <i>basic connection services</i> as required under the NER.
<b><i>negotiated connection contract</i></b>	a connection contract negotiated between Jemena and a <i>connection applicant</i> under rule 5A.C of the NER.
<b><i>new connection</i></b>	a <i>connection</i> established or to be established, in accordance with Chapter 5A of the NER and applicable energy laws, where there is no existing connection.
<b><i>non-registered embedded generator</i></b>	an embedded generator that is neither a <i>micro embedded generator</i> nor a registered participant in the National Electricity Market under the NER.
<b><i>original customer</i></b>	the <i>connection applicant</i> who triggered the requirement and paid for the construction of an <i>extension</i> asset.
<b><i>peak demand</i></b>	a connection service's maximum electricity demand.
<b><i>pioneer scheme</i></b>	has the meaning set out in section 4 of this Connection Policy.
<b><i>premises connection</i></b>	means the components of the distribution network used to provide <i>basic connection services</i> which includes:

<b>assets</b>	<ul style="list-style-type: none"> <li>a) for an overhead <i>connection</i> – the service line from the power pole to the <i>supply address</i> and the fused overhead line <i>connection</i> box; or</li> <li>b) for an underground <i>connection</i> – the underground service pit..</li> </ul>
<b>real estate development</b>	<p>the commercial development of land including its development in one or more of the following ways:</p> <ul style="list-style-type: none"> <li>(a) subdivision;</li> <li>(b) the construction of commercial or industrial premises (or both);</li> <li>(c) the construction of multiple new residential premises.</li> </ul>
<b>residential customer</b>	a retail customer whose connection service is used for residential purposes.
<b>retail customer</b>	a person to whom electricity is sold by a retailer, and supplied in respect of connection points, for the premises of the person, and includes a <i>non-registered embedded generator</i> and a <i>micro embedded generator</i> .
<b>Victorian Service and Installation Rules</b>	The rules that form the major part of Jemena’s reasonable technical requirements of Victorian Electricity Distributors, including Jemena. All installations connected, or to be connected, to the Jemena’s distribution networks must comply with the Rules as a condition to acquiring and maintaining an electricity supply.
<b>subsequent customer</b>	a <i>connection applicant</i> , other than the <i>original customer</i> , who connects to an <i>extension</i> subject to the <i>pioneer scheme</i> .
<b>supply address</b>	means a single premises

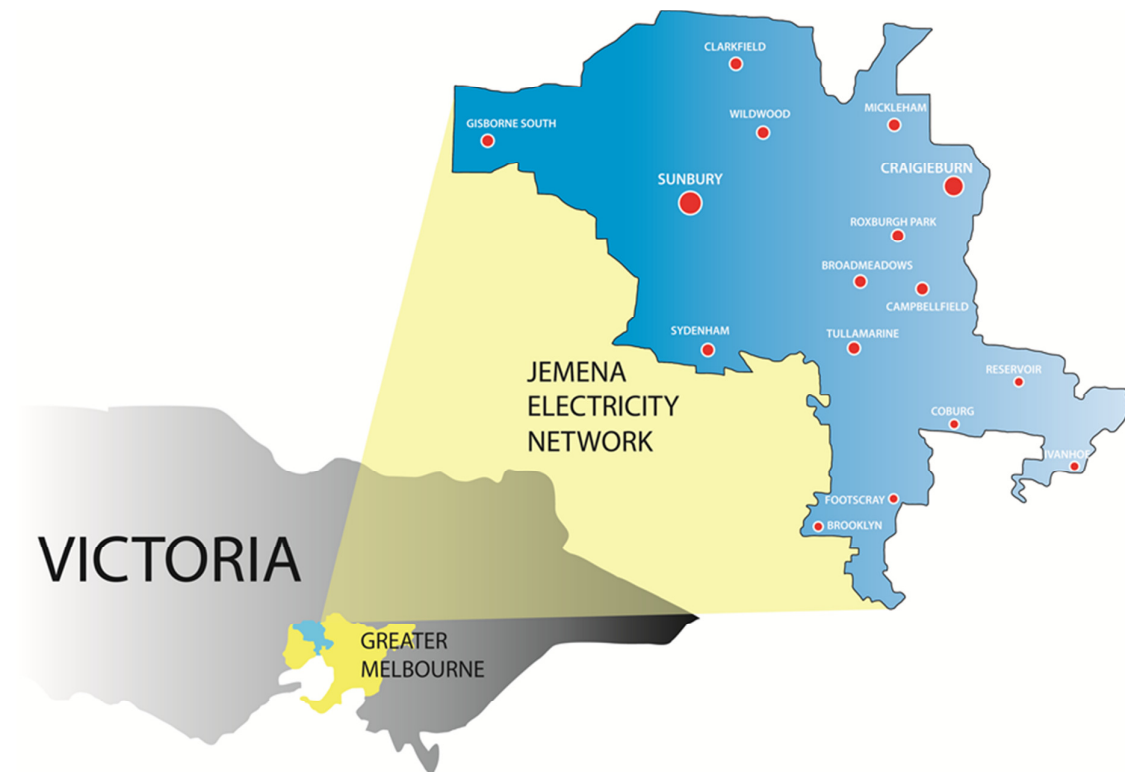
## ABBREVIATIONS

AER	Australian Energy Regulator
DUoS	Distribution Use of System
HV	High Voltage
Jemena	Jemena Electricity Networks (Vic) Ltd
kVA	Kilo Volt Amps
LCTA	Least Cost Technically Acceptable
NER	National Electricity Rules
SIRs	Service Installation Rules

## 1. INTRODUCTION

Jemena Electricity Networks (Vic) Ltd (**Jemena**) owns and operates the electricity network that safely, reliably and affordably services over 319,000 homes and businesses across North West Melbourne—from Mickleham to Footscray, and Gisborne South to Ivanhoe (see Figure 1–1). We also own, maintain and read the meters that allow electricity retailers to bill our customers for their electricity usage, and provide them with information to help them better manage this usage. Our customers, stakeholders and community depend on our service performance every day to enhance their lifestyle and support their businesses.

**Figure 1–1: Map of Jemena’s distribution area.**



### 1.1 PURPOSE OF THIS DOCUMENT

This document is Jemena Electricity Networks' (Vic) Ltd Connection Policy, required under clause 6.7A.1 of the National Electricity Rules (**NER**).

This Connection Policy sets out the circumstances in which relevant *retail customers* and *connection applicants* may be required to pay *connection charges* to Jemena and explains how Jemena will calculate those *connection charges*, applying the *connection charge principles* set out in the NER and Australian Energy Regulator's (**AER**) connection charge guidelines for electricity *retail customers*<sup>1</sup>.

<sup>1</sup> Australian Energy Regulator, *Connection charge guidelines for electricity retail customers – Under chapter 5A of the National Electricity Rules*, Version 1.0, June 2012.



### Who should read this document?

This Connection Policy applies to all *retail customers* (including *micro embedded generators* and *embedded generators*) and *real estate developers* seeking to connect to Jemena's electricity distribution network, or to upgrade or alter an existing *connection*.

### Related information

This Connection Policy should be read in conjunction with:

- Jemena's model standing offers for the provision of *basic connection services* to *retail customers*;
- The schedule of AER approved charges for *basic connection services* in our published [Distribution Services Price Schedule](#);
- Jemena Electricity Networks Negotiated Connection Process (Load Connections)
- Jemena Electricity Networks Embedded Generation Negotiated Connection Process; and
- [Victorian Service and Installation Rules 2014 \(SIRs\)](#).

### Contact us

You can contact Jemena via our [website](#) or by calling our New Connection Team on 1300 131 871 or via email [network.connections@jemena.com.au](mailto:network.connections@jemena.com.au).

## 1.2 CONNECTING TO JEMENA'S DISTRIBUTION NETWORK

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Jemena is the distribution network service provider responsible for providing *connection services* and *embedded generator connection service* to *retail customers* and generators in Jemena's distribution area. *Connection services* include:

- Connection to new premises;
- Alteration to an existing connection including an addition, upgrade, *extension*, or relocation or any other kind of alteration; or
- Connection to an embedded generator, including a *micro embedded generator alteration(s)*.

When you apply for a *connection service*, Jemena will assess whether it is a *basic connection service* or a negotiated connection service and provide you with a *connection offer* which sets out the terms and conditions of the *connection service*.

## 1.3 HOW TO USE THIS POLICY

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This Connection Policy applies to all connections to Jemena's distribution network. Table 1-1 below provides you with a guide for the different customer types, their associated connection service type, and the sections of this document that are relevant.

**Table 1-1 Customer types and associated connection services**

Customer connection type	Demand capacity	Relevant sections of this policy
New connection including connection alterations	Less than 100 Amps (or 23kVA) per phase	Section 2
<i>Basic micro embedded generator connection—e.g. solar panels, battery storage etc., including micro embedded generator alteration(s).</i>	With inverter capacity of up to 10kVA per phase	Section 2
Temporary supply, e.g. for carrying out building work	Less than 100 amps (or 23kVA) per phase	Section 2
Temporary supply, e.g. for carrying out building work	Greater than 100 amps (or 23kVA) per phase	Sections 3 & 6
Elective undergrounding—changing an existing overhead electricity supply to an underground supply	Not Applicable	Sections 3.1.3
New connection including connection alterations (Small commercial property, e.g. small shops, other small commercial premises)	Greater than 100 amps (or 23kVA) per phase	Sections 3 & 6
New connection (Multi-tenancy residential and/or commercial premises, e.g. block of flats, small shopping complex, apartment building, mixed use developments)	Greater than 100 amps (or 23kVA) per phase	Sections 3 & 6
Large commercial or industrial premises, e.g. manufacturer, shopping centre, university, hospital	Greater than 100 amps (or 23kVA) per phase	Sections 3 & 6
Real estate developments/ new land subdivision (residential or commercial)	N/A	Sections 3, 4 & 6
New public lighting in real estate developments	Not Applicable	Section 4.4
Embedded generation, e.g. micro embedded generator, embedded generator	With a capacity of more than 10kVA per phase	Section 5

## 2. BASIC CONNECTION SERVICES

### 2.1 FEE-BASED BASIC CONNECTION SERVICES

*Basic connection services* are those *connection services* provided routinely to residential and small business *retail customers* that involves minimal or no *augmentation*, replacement or *extension* of the shared distribution network. These services are **fee-based services** and the AER has approved fees (charges) in Jemena's Electricity Distribution Price Determination. *Basic connection services* include:

- New *connection* (permanent or temporary);
- *Connection alteration*; or
- *Basic micro embedded generator connection* to the distribution network, including *micro embedded generator alteration(s)*.

*Basic connection services* are normally provided under the terms and conditions in Jemena's *model standing offers* for *basic connection services*, which are available on our website. There are two *model standing offers*: one for load connections and the other for *basic micro embedded generator connection*.

A *connection applicant* for *basic connection services* has the right to negotiate the terms and conditions of the connection offer. For a negotiated connection offer, the *connection applicant* is required to contact Jemena and request a negotiated connection offer. Contact details are shown in Section 1. We will advise the *connection applicant* of the negotiated connection process and likely costs and expenses related to negotiations.

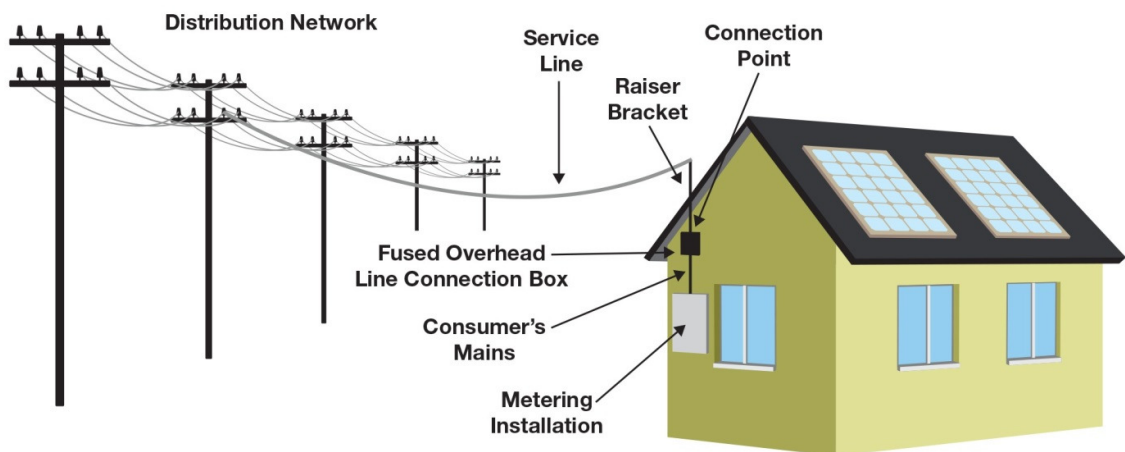
The descriptions of the *basic connection services* are set out below.

#### 2.1.1 NEW CONNECTION LESS THAN 100 AMPS, 400 V SUPPLY

A basic new *connection service* means the establishment of a permanent or temporary connection (single or three-phase) with a capacity of up to 100 Amps per phase that is either:

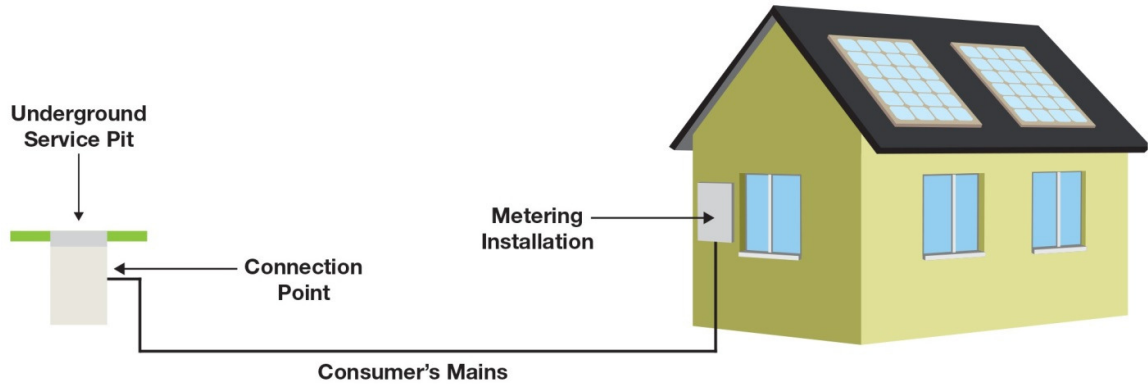
- a) a physical connection between an agreed connection point at the *supply address* and Jemena's distribution network where the connection assets are comprised of an overhead single span service cable from an existing pole where the length of the service cable does not exceed 45 meters in total and does not exceed 20 metres over *the customer's property* at *the supply address* (see Figure 2–1); or

**Figure 2–1: Basic overhead connection**



- b) a physical connection between the *supply address* and Jemena's distribution network via an underground cable where the connection point is in an existing service pit located at the of property boundary at the *supply address* (see Figure 2–2).

**Figure 2–2: Basic underground connection**



A standard overhead *connection* must comply with the technical standards set out in the current *Victorian Service & Installation Rules* and Jemena's relevant technical standards.

#### Note

- a) *Extension* of the distribution network including the installation of a service pit does not fall within the scope of the *basic connection services*. For *basic connection services* requiring *augmentation*, replacement or *extension* of the distribution network, including installation of a service pit, the *retail customer* is required to contact Jemena and request a negotiated connection offer.
- b) Where a new *connection* is made to a network *extension* that is subject of a *pioneer scheme* (i.e. the network *extension* was fully funded by one or more *retail customers*), then the *connection* will not be *basic connection services* and the *retail customer* is required to contact Jemena and request a negotiated connection offer. Refer to Section 4 for details on *pioneer schemes*.
- c) Jemena's contact details are shown in Section 1. Please contact us and we will advise you of the negotiated connection process and likely costs and expenses related to negotiations.

#### 2.1.2 CONNECTION ALTERATION

A basic *connection alteration* includes upgrades and alterations to an existing connection. Alterations may include:

- an alteration to an existing *connection* including;
  - connection upgrade from single phase to three phase supply less than 100 Amps;
  - *connection* upgrade of the service fuse of less than 100 Amps;
  - relocation of an existing *connection*;
  - a change to the maximum allocated capacity to an amount less than 100 Amps.
- which involves no *augmentation*, replacement or extension of *our* distribution network;

- where adequate capacity of electricity is available at the required voltage at the boundary of the property at the *supply address* to accommodate the alteration; and
- the required overhead clearances (as detailed in section 7—Connecting to the Low Voltage (LV) Network of the Service Installations Rules) must be achieved and maintained for an overhead *connection* and there must be no excessive property crossing.

### Note

A *retail customer* who requests an alteration of their existing overhead supply to their property to an underground supply (referred to as elective undergrounding) will be provided with a negotiated connection offer by Jemena as described in section 3.1.3. The offer will include *extension* of the distribution network from an adjacent pole to a service pit located at the customer's property boundary at the *supply address*. The customer's registered electrical contractor is responsible for providing the consumer's mains cable to the service pit.

### 2.1.3 MICRO EMBEDDED GENERATOR CONNECTION

A *basic micro embedded generator connection service* means a *basic connection service* for a *retail customer* who has a *micro embedded generator* (such as a roof-top solar power system, wind generation, battery storage) that is connected to the distribution network via an inverter that conforms to the Australian Standard AS4777 and the total generating capacity at the connection point is not greater than 10kVA per phase.

A *micro embedded generator alteration* means any alteration to a micro embedded generator (including a change to the inverter manufacturer or model or an increase or decrease in the maximum allocated generating capacity up to 10kVA per phase).

There is no charge for processing a *basic micro embedded generator connection service* or a *micro embedded generator alteration* application, so long as the provision of the service involves no *augmentation*, replacement or *extension* of the shared distribution network.

Approval for the *connection* of a *micro embedded generator* or a *micro embedded generator alteration* is not automatic, but subject to the network's capacity to receive export energy. The *micro embedded generator* connection process is described in Jemena's Model Standing Offer for Basic Connection Services involving a Micro Embedded Generator, which can be found on Jemena's website.

*Connection* of a *micro embedded generator* requires the meter at the premises to be configured to enable the meter to record the export energy flowing into the distribution network. If Jemena provides the metering then a fee may apply. The meter reconfiguration service fee is published on Jemena's website.

Refer to Section 5 of this policy for *connection* of *embedded generators* that are greater than 10kVA per phase.

## 2.2 FEES AND CHARGES

Customers who request any of the *basic connection services* described in Section 2.1 are required to pay the relevant charges approved by the AER. The approved charges are published on Jemena's website.

**New connection**—the relevant single or three-phase *connection charge* will apply.

**Connection upgrade from single to three-phase supply**—a new three phase *connection charge* will apply.

**Connection upgrade of a service fuse**—a service vehicle visit charge will apply.

**Relocation of supply connection**—a service vehicle visit charge will apply where a *connection applicant* requests relocation of an overhead supply cable to another point of attachment at the property, provided the existing supply cable can be reused. If the existing cable cannot be reused, then the relevant new connection fee will apply instead of the service truck visit fee.

**Micro embedded generator connection<sup>2</sup>**—a remote meter reconfiguration charge will apply where a connection applicant requests connection of a basic *micro embedded generator* to an existing *connection* and Jemena has previously installed an interval meter capable of bi-directional meter.

Where a *micro embedded generator connection* is concurrently connected as part of a *new connection service*, the remote meter reconfiguration charge will not apply where Jemena supplies a bi-directional interval meter.

**Note:**

Where a *connection* is made to a network *extension* that is subject of a pioneer scheme (i.e. the network *extension* was fully funded by one or more *retail customers*), the *connection* will not be *basic connection services* and the *retail customer* is required to contact Jemena and request a negotiated connection offer. An additional pioneer scheme charge may apply in addition to the relevant *connection charges*. Refer to Section 4 for details on *pioneer schemes*.

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<sup>2</sup> A bi-directional interval meter is required for the metering of embedded generator connection; this may be supplied by Jemena.

### 3. NEGOTIATED CONNECTION SERVICES FOR LOAD CONNECTION

Negotiated *connection services* are provided under a negotiated connection contract. Accordingly, Jemena will make a negotiated connection offer for these *connection services*.

Negotiated connections are grouped into two classes:

- i) Quoted connection services—are small load connections where the *connection services* do not meet the conditions of Jemena’s *basic connection services* described in Section 2.
- ii) Large connections—are *connection services* which generally require capital contribution towards the cost of *augmentation* of the shared distribution network, network *extensions* (if any), design and construction of connection assets specific to the customer’s supply requirements.

#### 3.1 QUOTED CONNECTION SERVICES

It is not practical to establish fees for certain services routinely provided to small customers because the cost of providing the connection normally varies significantly on a project-by-project basis. So the AER has classified these routinely provided *connection services* as **quoted services** and has approved a method to calculate the *connection charge* for these services. Refer to Section 3.1.1 below.

Quoted connection services include:

- New *connection service* above 100 Amps, 400 V supply; or
- Elective undergrounding service.

##### 3.1.1 METHOD FOR DETERMINING PRICE OF QUOTED CONNECTION SERVICE

The quoted price for the *connection service* will be based on the AER approved applicable labour unit rates plus costs of materials, and contractors (including plant—e.g. vehicles, equipment and machinery).

###### Method for determining price

Price = Labour + materials + contractor services

Where:

- Materials costs reflect the cost of materials directly incurred in the provision of the service, material storage and logistics on-costs and overheads.
- Contractor services costs reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer.
- Labour costs consist of all labour costs directly incurred in the provision of the service which may include labour on-costs, fleet on-costs and overheads. The AER approved labour rates are escalated annually for CPI and labour escalators approved by the AER.

### 3.1.2 NEW CONNECTION ABOVE 100 AMPS, 400 V SUPPLY REQUIRING NO AUGMENTATION

A new *connection service* above 100 Amps per phase may be provided to *retail customers* under the quoted service charging method as long as there is sufficient network capacity in the low voltage network adjacent to the *supply address* and the *connection service* does not involve any *augmentation*, replacement or *extension* of the shared distribution network.

The *connection* may be an overhead connection that complies with the technical standards set out in the *Victorian Service & Installation Rules*<sup>3</sup>. Where it is not practical to install an overhead supply, Jemena will provide a quote for an underground supply.

Jemena will provide this service under a *negotiated connection contract*, which will consist of terms and conditions including the quoted price for the installation of the connection. The quote will include:

- a) Labour cost, including back-office costs to process connection application, project management, testing and energisation of the *connection*;
- b) Material (cable, brackets, fuses, connection boxes etc.)
- c) Contractor costs including plant (generally an elevating platform vehicle); and
- d) Meter provision services including current transformers where Jemena is responsible for metering services.

If there is insufficient capacity and augmentation of the shared distribution network is required, then the connection application will be processed as a negotiated *connection service*, where the *retail customer* may be required to make a capital contribution towards the *augmentation* of the shared network. Jemena will calculate the *connection charge* in accordance with Section 3 of this policy.

An underground service pit is the standard method of connection for all underground electricity supplies. A pillar or approved equivalent is a method of *connection* for supplies above 100 amps.

**Note:**

Where the *connection* is made to a network *extension* that is subject of a *pioneer scheme* (i.e. the network *extension* was fully funded by one or more *retail customers*), then an additional *pioneer scheme* charge may apply in addition to the relevant *connection charges*. Refer to Section 4 for details on *pioneer schemes*.

### 3.1.3 ELECTIVE UNDERGROUNDING OF AN EXISTING OVERHEAD SERVICE

A *connection applicant* who chooses to change the electricity supply to their property from an existing overhead cable to an underground cable will be provided with a quote by Jemena.

Jemena will provide an elective underground service under a negotiated *connection offer*, which will consist of terms and conditions including the quoted price for the installation of the *connection*. The quote price for the work will be based on the AER approved applicable labour unit rates plus costs of materials, plant (e.g. vehicles, equipment and machinery) and contractors. The quote will include:

- a) Labour cost, including back-office costs to process the connection application, project management, testing and energisation of the connection;
- b) Materials; and
- c) Construction costs (including contractor and plant costs).

<sup>3</sup> Victorian Service & Installation Rules 2014 –sections 7.4.4.2.1 and 7.4.4.8.2



The cost of installing the service pit and underground cable is in addition to the relevant AER approved connection fee referred to in Section 2.2. The connection fee applies because a separate service crew is required to make the *connection* at a later date, after the *retail customer's* registered electrical contractor has installed the customer's mains to the pit. The *connection applicant* is responsible for providing the consumer's mains cable from the meter position to the service pit.

## 3.2 CONNECTIONS REQUIRING NETWORK AUGMENTATION

On receiving a connection application for negotiated *connection service*, Jemena will provide the *connection applicant* with a *connection offer* that includes:

- a) a description of the scope of the service;
- b) cost estimate of the *connection service*;
- c) *connection charge* payable by the *connection applicant*;
- d) terms and conditions on which Jemena would provide that service;
- e) estimate of the maximum demand used for calculating the capital contribution towards the shared network augmentation charge;
- f) estimate of consumption and maximum demand (i.e. the maximum demand that will be billed to *retail customer*) used for calculation of the incremental revenue; and
- g) contestability options that are available to the *connection applicant* for undertaking the design or construction works.

*Connection applicants* who request negotiated *connection services* must pay the *connection charges* determined in accordance with the policies set out in the remainder of this section.

## 3.3 METHODOLOGY FOR CALCULATING CONNECTION CHARGES FOR LARGE NEGOTIATED CONNECTION SERVICES

Jemena's connection offer for large negotiated *connection service* will include the *connection charges* payable by the *connection applicant*. The *connection charge* for negotiated *connection services* may comprise of multiple charges:

### Connection charge

$$\text{Connection charge} = AC + CC + PS + HS$$

Where:

- AC—is the total charge payable to Jemena for all relevant fee-based and/or quoted *connection services* (refer to sections 2.2 and 3.1.1).
- CC—is the total capital contribution payable to Jemena for the negotiated load *connection service*. This is calculated with reference to the cost-revenue test (refer to Section 3.4)
- PS—is the total charge payable to Jemena to account for any *pioneer scheme* applying to the distribution network to which the *connection applicant* connects (refer to Section 4)
- HS—Incremental cost of providing the *connection service* to a higher standard than the *least cost technically acceptable* (LCTA) connection standard (refer to Section 3.7.2).

A *connection applicant* is required to pay a non-refundable application fee at the time the *connection applicant* submits the connection application. The application fee is to recover the expenses reasonably incurred by Jemena in assessing the applicant's application and making a *connection offer*. The fee will be commensurate with the size and complexity of the negotiated *connection service*. As it will vary between connection projects, Jemena will advise the *connection applicant* of the application fee amount at the time of the connection enquiry.

A *connection applicant* may also be required to pay a security fee to Jemena in addition to the *connection charge*. The circumstance in which Jemena may require a security fee is described in Section 6.2 of this policy.

### 3.4 DESCRIPTION OF COST-REVENUE TEST

#### Cost-revenue test

$$CC = [ICCS + ICSN - IR]$$

Where:

- CC = Capital contribution for negotiated load *connection service*
- $CC \geq 0$
- ICCS = Incremental cost of customer specific connection assets
- ICSN = Incremental cost of the shared distribution network
- IR = Incremental revenue.

Jemena requires a *connection applicant* to pay a capital contribution in circumstances where the incremental cost of the negotiated *connection service* exceeds the estimated incremental revenue expected to be derived from the *connection service*.

The calculated capital contribution amount is the difference between the incremental cost attributable to the negotiated *connection service* and the incremental revenue. Where the capital contribution is equal to or less than zero, no capital contribution is payable by the *connection applicant*. This assessment is called the cost-revenue test.

Incremental revenue is the revenue stream (directly attributable to the new load *connection*) in present value terms expected to be received by Jemena over a period of time. Jemena's approach to calculating the incremental revenue is detailed in Section 3.8 of this policy.

The principles for determining the incremental costs and how they are calculated are detailed in Sections 3.5, 3.6 and 3.7 of this policy. Only the incremental cost attributable to the *connection service* will be included in the cost-revenue test.

### 3.5 PRINCIPLES FOR DETERMINING THE INCREMENTAL COST

There are two components that make up the incremental cost under the cost-revenue test:

**ICCS**—this is the incremental cost incurred by Jemena for the design and construction of the load *connection assets*, which are used solely by the *retail customer*. This may include network *extension* and *augmentation* of *connection assets* at the premises of the *retail customer*.

**ICSN**—this is the incremental cost of augmentation of the shared distribution network attributable to the new or increased load *connection*.

Jemena will determine the cost of each component:

- on the *least cost technically acceptable (LCTA)* standard necessary for the *connection service*, which is explained in Section 3.7.2; and
- in a fair and reasonable manner and ensure that the cost estimate is reflective of the efficient costs of performing the service.

## 3.6 INCREMENTAL COST OF SHARED NETWORK (ICSN)

A *connection applicant* who requests a load *connection* may be required to make a capital contribution towards the cost of *augmentation* of the shared distribution network.

### 3.6.1 CALCULATION OF THE INCREMENTAL COST OF THE SHARED NETWORK

The incremental costs of the shared network (ICSN) will be calculated as follows:

ICSN = Unit rate x Demand estimate.

Where:

- Unit rate is the average cost of *augmentation* of the shared network expressed in \$/kVA of added capacity.
- Demand estimate is an estimate of the maximum electrical energy flow that will be consumed by the *connection applicant* at the connection point measured in kVA.

### 3.6.2 UNIT RATES

Jemena has determined unit rates for the cost of *augmentation* based on the recent shared network augmentation costs for the following network components:

- Sub-transmission line
- Zone substation
- High voltage feeder
- Distribution substation
- Low voltage mains.

Jemena applies the same unit rates in all areas of its distribution network.

### 3.6.3 ESTIMATING THE MAXIMUM DEMAND AT A CONNECTION POINT

When a *connection applicant* submits a connection application to Jemena, they are also required to submit a range of information including the maximum demand calculations in accordance with AS/NZS3000 and details of large equipment to be connected.

Jemena will estimate the maximum demand at the connection point having regard to the submitted information and the *connection applicant's* specific *connection* characteristics – such as, low, medium or large low voltage connection, high voltage connection, combined load and generator connection, etc.

The maximum demand agreed between Jemena and the *connection applicant* will be used to estimate the peak coincident demand—that is, the proportion (diversified) of *retail customer's* maximum demand that would be added to each of the network components upstream of the *connection assets*.

Jemena will use the unit rates for calculating the incremental costs of the shared network for all negotiated load *connections* where the cost-revenue test is applied except for very large high voltage customers, who typically have their own dedicated zone substations or utilise a significant capacity of a zone substation. For these very large customer *connections* requiring major augmentation of zone substations and/or 66 kV sub-transmission network, Jemena will estimate the incremental cost of shared network components used by the large customer.

### 3.7 INCREMENTAL COST OF CUSTOMER-SPECIFIC CONNECTION ASSETS

#### 3.7.1 CUSTOMER-SPECIFIC CONNECTION COST ITEMS

A *connection applicant* who requests a load *connection* may be required to make a capital contribution towards the cost of customer-specific *connection assets*.

Customer-specific *connection assets* are the sum of the following cost items:

- a) design and construction of new customer specific connection assets;
- b) *augmentation* of the *premises connection assets* at the *retail customer's* connection point;
- c) *network extension*;
- d) administration (including any design approval and contractor accreditation, certification);
- e) conducting a tender process in accordance with the contestability options provided in section 3.7.3 of this Connection Policy;
- f) provision of any other *connection services* which are used solely by the *connection applicant*.

#### 3.7.2 COSTS BASED ON LEAST COST TECHNICALLY ACCEPTABLE (LCTA) STANDARD

Jemena will calculate the incremental cost of the *connection assets* and *network extensions* (if any) on LCTA standard necessary for the load *connection*, unless the *connection applicant* requests a *connection service*, or part thereof, to be performed to a higher standard. In such case, the *connection applicant* will be required to pay the additional cost of providing the service to the higher standard.

However, if Jemena elects to perform the work to a higher standard or capacity than necessary to meet the *connection applicant's* requirement (other than a *real estate developer*), then Jemena will not charge the *connection applicant* for the additional cost of performing the *connection service* to a higher standard or capacity. The exception to this approach will be when the *connection applicant* is a *real estate developer*, in which case Jemena may perform the work to a higher capacity that efficiently provides for the forecast load growth in the area being developed and charge the *real estate developer* accordingly.

Where a *connection applicant's* requirement falls between the capacities of two standard size network elements, Jemena will install the larger standard size network element to meet the *connection applicant's* requirement. In such a case, the installation of the larger size network element will not be considered as Jemena electing to perform the work to a higher standard or capacity than necessary to meet the *connection applicant's* requirement.

If Jemena is required by the *connection applicant* to prepare a design specification to allow a *connection service* to be performed on a contestable basis, Jemena will design the *connection service* based on the LCTA standard. If Jemena elects to design the *connection service* to a higher standard or capacity, Jemena will fund

the additional design specification cost of achieving the higher standard or capacity. As above, the exception to this approach will be when the *connection applicant* is a *real estate developer*, in which case Jemena will prepare a design specification that efficiently provides for the forecast load growth.

### 3.7.3 OPTIONS TO CONTEST CONNECTION DESIGN AND CONSTRUCTION WORK

A *connection applicant* may choose Jemena to undertake both the design and construction works in accordance with the *connection offer* and waive their rights to call for tenders. Alternatively, they may choose to contest the connection design and construction work. However, not all works attributable to a *connection service* are contestable. Jemena will identify the contestable and non-contestable components of the *connection service* in the *connection offer*.

Non-contestable work may include, but is not limited to:

- a) review and approval of design undertaken by the *connection applicant*;
- b) audit of construction where the *connection applicant* undertakes the construction works;
- c) overall project management of the *connection service* having regard to the contestability options chosen by the *connection applicant*;
- d) conduct of physical inter-connections to Jemena's distribution network;
- e) commissioning and testing of the constructed *connection* assets to Jemena's distribution network; and
- f) integrating the newly created *connection* assets including any *extensions* and *augmentation* into Jemena's asset management systems.

The design and construction of *connection* assets, network *extensions* and *real estate developments* are considered contestable works by Jemena. A *connection applicant* has the following options:

- a) A *connection applicant* may elect that Jemena undertake the design, but request Jemena to conduct a tender process for the construction works on behalf of the *connection applicant* for a fee to recover the reasonable costs incurred by Jemena in conducting the tender. Jemena will provide the *connection applicant* an estimate of the cost of conducting the tender process and seek agreement before it commences the tender process.
- b) A *connection applicant* may elect that Jemena undertake the design for a fee and elect to undertake the construction works themselves, provided the connection works are performed to Jemena's construction standards and by contractors approved by Jemena
- c) A *connection applicant* may elect to undertake the design and construction works themselves, provided design and construction works are performed to Jemena's technical and construction standards and by contractors approved by Jemena. Where a *connection applicant* chooses to conduct their own tender process, Jemena will provide a list of accredited construction contractors to the *connection applicant* on request.

## 3.8 INCREMENTAL REVENUE CALCULATION

The incremental revenue (**IR**) calculated under the cost-revenue test is the present value of the distribution use of system (**DUoS**) revenue that Jemena expects to earn in providing the negotiated load *connection service*.

When calculating the incremental revenue, Jemena will:

- a) Use the minimum demand applicable to a tariff that Jemena believes would be best suited for *the retail customer* based on the information provided by the *connection applicant*, or the demand agreed to in the

connection contract for billing; and the estimated energy consumption as reasonably determined by Jemena based on information provided by the *connection applicant*, similar installations or the customer's load history in the case of a connection capacity upgrade. In circumstances where the *retail customer* and Jemena cannot agree on the demand, Jemena may require a security fee. See section 6.2 for details of Jemena's security fee policy.

In the case of residential *real estate development*, Jemena will determine the forecast energy consumption by taking into consideration the number of residential lots, and the forecast *retail customer* connection take up.

- b) In the case of an embedded network that is substantially a residential development, the forecast energy consumption and minimum demand will be determined by Jemena based on the information (number of residential apartments, number of commercial connections, development phases etc.) provided by the *connection applicant*. The *connection applicant* will not have the option to enter into a contractual demand agreement with Jemena and will be required to pay the entire amount of the connection charge.

Jemena, at its discretion, may allow the connection applicant to pay a security fee in lieu of the connection charge. The security fee may be returned after the embedded network owner enters into a contractual demand agreement with Jemena.

- c) In the case of an embedded network that is a commercial development, Jemena will use the minimum demand applicable to a tariff that Jemena believes would be best suited for the retail customer, based on the information provided by the *connection applicant*; or the demand agreed to in the connection contract for billing and the estimated energy consumption as reasonably determined by Jemena based on information provided by the *connection applicant*, similar installations or the customer's load history in the case of a connection capacity upgrade.
- d) Assume a connection period of:
  - i. 30 years when calculating the expected DUoS revenue recoverable from *residential customers* in a *real estate development*
  - ii. 15 years when calculating the expected DUoS revenue recoverable from a *business customer*. However, where a 15 year connection period does not reflect a reasonable estimate of the time that the *connection* will remain in service, Jemena may apply an alternative assumed connection period for that *connection service*.
- e) Use the network tariffs that will be assigned to the *retail customer* (or customers) by agreement at the time the connection offer is made; or in circumstances where the *retail customer* is not known, an assumed tariff based on the maximum demand and estimated energy consumption agreed by the *connection applicant*.
- f) When estimating the incremental revenue, Jemena will remove the component attributable to the operational and maintenance costs from the network tariff and not include operational and maintenance costs in the incremental cost.
- g) Use a flat real price path after the end of the current price determination period, for the remaining life of the *connection*—that is, the expected real DUoS tariff in the final regulatory period will be escalated by forecast CPI in nominal terms.
- h) Use a discount rate equal to Jemena's real pre-tax weighted average cost of capital as set out for the relevant year in the relevant price determination or as updated in accordance with it, when calculating the present value of the revenue stream.

**Note:**

When a *retail customer* applies for a contract demand reset to a lower demand than was agreed to at the time of the *connection offer* and acceptance process, it will trigger a reapplication of the cost-revenue test and may result in the *retail customer* being charged a true-up payment by Jemena.

### 3.9 ESTIMATING CUSTOMERS' ENERGY CONSUMPTION AND DEMAND FOR CALCULATING INCREMENTAL REVENUE

When a *connection applicant* submits a connection application to Jemena, they are also required to submit a range of information including the maximum demand estimate calculations in accordance with AS/NZS3000 and details of large equipment to be connected.

#### Energy consumption

Jemena will estimate the energy consumption taking in to consideration the submitted information and apply an appropriate load factor having regard to the *connection applicant's* specific *connection* characteristics – such as, medium or large low voltage connection, high voltage *connection*, combined load and generator *connection*, etc. Where the *connection applicant* is uncertain of the usage pattern, Jemena will apply typical load factors for similar customer installations or industry types.

#### Maximum demand

Refer to Section 3.6 for estimating maximum demand. The agreed maximum demand at the connection point between Jemena and the *connection applicant* will be used in the contractual demand agreement.

#### Real estate development

When a *real estate developer* submits a connection application that relates to commercial and or industrial premises, the maximum demand details of prospective *retail customers* may not be known at the time of the connection offer. In such circumstances, Jemena will use the information gathered from the *real estate developer* and typical loading figures from a similar development to:

- a) Reach agreement on the total maximum demand required for the development; and
- b) Determine the total energy consumption based on assumed maximum demand for each of the premises within the *real estate development*.

#### Provisional estimate

If Jemena and a *connection applicant* (other than a *real estate developer*) cannot reach agreement on appropriate estimates of consumption and/or demand, then:

- a) A provisional estimate will be determined and applied by Jemena.
- b) No later than three years after the connection works occur, a refund or additional charge will be payable to/by the relevant *connection applicant* based on the difference between the estimated and actual consumption or the demand experienced over the period.
- c) The additional charge or refund will be calculated assuming the actual consumption or demand experienced over the period will continue for the duration of the total connection period.
- d) If the *connection applicant* becomes insolvent, or ceases to utilise the property within three years, then Jemena will not make a refund or require an additional charge based on the actual demand or consumption.



Jemena and *real estate developers* may enter into agreements with similar effect to the above arrangement that applies to a *retail customer*, if an estimate for consumption and/or demand cannot be agreed upon.

### 3.10 RESERVE FEEDER CONSTRUCTION

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Reserve feeders are provided to *retail customers* who request higher supply reliability. *Retail customers* who request a reserve feeder are required to fund the cost of [any connection assets and the incremental cost of any shared network augmentation required to establish the reserved capacity](#). A separate charge (\$/kVA) will apply for the ongoing provision of the reserve feeder. The approved unit rate is shown in our [Distribution Services Price Schedule](#) published on Jemena's website.

For avoidance of doubt, the reserve feeder charge will apply where the capacity is reserved on a feeder that is not the *retail customer's* normal supply. Where the *retailer customer* has arranged a stand-by supply that is connected to the same feeder that normally supplies the customer, the reserve feeder charge will not apply.



## 4. PIONEER SCHEMES

Jemena operates a *pioneer scheme*, where the *connection applicant* (being the *original customer*) is required to pay the full cost of the *extension* assets, but some of the upfront cost of the *extension* assets may be refunded if other *retail customers* subsequently connect to the extended network.

Where *connection applicants* collectively make a *connection* request that requires a network *extension*, Jemena will determine on a fair and equitable basis the contribution that each *connection applicant* must make towards the group *extension* having regard to the location and/or load of each *connection*.

All *real estate developers* are entitled to access Jemena's *pioneer scheme* for *extension* assets they fund.

Jemena may operate a high voltage (**HV**) equalisation scheme for *real estate developers* (explained in section 4.2), at its sole discretion, instead of a *pioneer scheme* charge.

### 4.1 PIONEER SCHEME CHARGE

Jemena will levy a *pioneer scheme* charge to *subsequent customers* who connect to a network *extension* that was triggered by the *original customer* by:

- a) taking into account the physical length of line a *subsequent customer* requires relative to other customers already connected to the *extension*; and
- b) taking into account the amount of electricity demand used by a *subsequent customer* relative to other customers already connected to the *extension*; and
- c) depreciating the *extension* assets over 20 years using a straight line depreciation method.

If an *original customer* requests a *connection* to be constructed to a higher standard or capacity, then only the cost of constructing the *connection* to the LCTA standard or capacity will be subject to the *pioneer scheme*—that is, the cost attributed to the higher standard or capacity will be completely borne by the *original customer* and not be included in the *pioneer scheme*.

If Jemena requires an *extension* be built to a higher standard or capacity than required by an *original customer* (other than a *real estate developer*), the *original customer* will only be required to pay for the *extension* built to the LCTA standard or capacity required by the *original customer* and only the *extension* necessary for the *original customer* will be subject to a *pioneer scheme*.

When an independent service provider accredited by Jemena performs the *extension* work in green field sites, Jemena will establish the *pioneer scheme* using an estimate of the amount it would have charged the *original customer* to perform the *extension*.

#### Note

The *connection* assets to low density *real estate development* (residential units) generally involve installation of a cable from an existing distribution network (distribution pole or underground mains) to a service pit located at the boundary of the *real estate development*. A *pioneer scheme* is not appropriate under these circumstances because the *connection* assets are usually built to the capacity required by the *real estate developer* and there is minimal or no prospect of any other *retail customers* connecting the *connection* assets.

#### Who would pay the pioneer scheme charge?

*Subsequent customers* who connect to a network *extension* that is still subject to a *pioneer scheme* must pay the *pioneer scheme* charge determined by Jemena. Jemena will pay the total amount received from *subsequent*

customers to the *original customer* and other *eligible customers who may have already connected to the network extension*. Jemena will operate its *pioneer scheme* such that it remains financially neutral.

A *pioneer scheme* has a life of 7 years from the time of commissioning the *network extension*. In other words, there shall be no refunds in relation to a *pioneer scheme* after 7 years. *Pioneer scheme* refund payments will be made only if those payments exceed \$1,091 (in CY16 dollars). If Jemena does not refund customers because of this threshold, then Jemena will not levy the *pioneer scheme* charge to any *subsequent* customer connecting to the *network extension*.

In some circumstances, Jemena may not be able to find the customers who are party to a *pioneer scheme* because they have sold their premises. In such circumstances, Jemena will discount the *pioneer scheme* charge to *subsequent* customers by the amount not refunded—that is, Jemena will remain financially neutral.

## 4.2 HIGH VOLTAGE EQUALISATION SCHEME FOR REAL ESTATE DEVELOPERS

The high voltage (HV) equalisation charge is based on the principle of the *pioneer scheme* where the original *real estate developer* or subsequent *real estate developers* who connect to a *network extension* is required to contribute their share of the initial cost of the *network extension*.

The HV equalisation charge is specifically designed for application in circumstances where Jemena is aware of adjacent lands being zoned for *real estate development* and it believes there is a strong likelihood that other *real estate developers* will utilise the *network extension*.

Unlike the *pioneer scheme*, the HV equalisation charge will be charged on a \$/lot basis and there will be no need for any refunds. Jemena will determine the average \$/lot by using a number of recently constructed high voltage *network extensions* and distribution substations for *real estate developments* and then dividing the total cost with the total subdivision lots created. The HV equalisation scheme does not extend to low voltage (LV) network assets within a *real estate development*.

HV equalisation payments are the *real estate developers'* share of the initial cost of the high voltage *network extension* necessary to connect the *real estate development*. The HV equalisation charge will be taken into consideration in the cost-revenue test referred to in Section 3.4.

## 4.3 CONNECTION CHARGES FOR REAL ESTATE DEVELOPMENTS

The *connection charge* for a *real estate development* may comprise of capital contribution towards the design and construction of *connections* assets, *augmentation* of the shared distribution network and any *network extension* necessary to supply the *real estate development*. The *connection charge* will be calculated in accordance with Sections 3 and 4 of this policy.

A *real estate developer* will be treated as a single customer for the purposes of calculating a capital contribution. Jemena will determine the capital contribution in accordance with the cost-revenue test that is set out in Section 3.4 of this policy. When determining the capital contribution, Jemena will include the incremental cost of *connection* assets and *network extension* in the cost-revenue test to the extent Jemena considers necessary to provide efficiently for forecast load growth, and other additional costs related to the network capacity created for the *real estate development*.

The incremental revenue for the cost-revenue test will be the estimated revenue that Jemena expects to receive from all the potential *connection services* to *retail customers* over a 30 year period within the *real estate development*.

#### 4.4 CHARGES FOR NEW PUBLIC LIGHTING IN REAL ESTATE DEVELOPMENTS

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*Real estate developers* are required to fully fund the provision of new public lighting assets. The cost of the new public lighting will not be included in the cost-revenue test.

A *real estate developer* may request the design and construction of new public lighting services in a *real estate development* to be included in the negotiated *connection offer* for the design and construction of the *connection* assets in a *real estate development*, given the design and construction for both public lighting and *connection* assets are generally undertaken together.

If a *real estate developer* is not satisfied with the prices offered by Jemena, the *real estate developer* can contest the design and construction of the new public lighting assets in accordance with Section 3.7.3 of this policy.

If a municipal council elects to build, own and operate the new public lighting assets, then Jemena will only provide a *basic connection service* to a metered connection point of the public lighting electrical installation in accordance with Section 2 of this policy or a negotiated connection service in accordance with Section 3.

## 5. NEGOTIATED CONNECTION SERVICES FOR EMBEDDED GENERATOR CONNECTION

A person who makes a connection application to connect an *embedded generator* (excluding *retail customers* who apply to connect a *basic micro embedded generator*) must pay the full costs of the *connection assets* and any cost of removing distribution network constraints that are specific to the *connection* of the *embedded generator*.

The *connection applicant* is required to pay a non-refundable application fee at the time the *connection applicant* submits the connection application. The application fee is to cover the expenses reasonably incurred by Jemena in responding to any information the applicant reasonably requires in order to negotiate on an informed basis and assessing the applicant's application and making a *connection offer*. The fee will be commensurate with the size and complexity of the *negotiated connection service*. As it will vary between connection projects, Jemena will advise the *connection applicant* of the connection fee amount at the time of the connection enquiry.

The capital contribution for the *connection* of an *embedded generator* that is also a load *connection* will be calculated based on the total cost of the connection works required to support both the generation (expected electricity output) and load components of the *connection service*. The relevant load for the purposes of calculating the incremental cost of the shared network (i.e. the ICSN component) will be the gross peak demand of the load, regardless of the embedded generator's expected electricity output. As no revenue will be received by Jemena from the generation component, the incremental revenue component in the cost-revenue test will only include the expected DUoS revenue earned by Jemena from the load *connection*.

## 6. CONNECTION PAYMENTS

Jemena's Connection Policy provides for *connection charges* payable by a *connection applicant*, *retail customer* or *real estate developers*. These payments may relate to network *extensions*, *augmentations*, *connection assets* or security fees.

Jemena requires prepayment for the development of a negotiated *connection offer* and a *negotiated connection contract* including a connection fee and tender charges where applicable. Jemena's prepayment policy is in outlined in Section 6.1 below.

In certain circumstances, Jemena requires security fees, either in the form of a prepayment, or a bank guarantee. Security fee as outlined in Section 6.2 below

### 6.1 PREPAYMENTS

Jemena will provide *connection applicants* with options of either paying the total *connection charge* up front at the time the *connection offer* is accepted or in accordance with Jemena's prepayment policy described below.

Jemena requires advance payment of the *connection charge* before the commencement of any construction work, unless the upfront total *connection charge* is greater than \$5,455 (in CY16 dollars) and:

- a) the construction work is not scheduled to commence for 3 months or more after the connection offer is accepted; or
- b) the construction work can be logically segmented into distinct stages of construction.

Where the construction work is of the nature described above in (a) or (b), Jemena will request payment, at the time the *connection offer* is accepted, of all the costs Jemena has already incurred to that point in time and prepayment of any costs that it will incur before the commencement of construction work. The prepayment may include but is not limited to:

- a) the costs of any specialised or non-standard *connection assets* (that are not normally held in Jemena's store); and
- b) design, tendering and administration costs.

The balance of the *connection charge* that is not recovered under this prepayment policy must be paid by the *connection applicant* to Jemena no later than one month prior to the commencement of the construction work.

Where the construction work can be logically segmented into distinct stages of construction, Jemena will include details of prepayment(s) required in its *connection offer*, prior to commencement of each construction stage. Each prepayment will be reasonably reflective of the costs that will be incurred in that particular construction stage.

### 6.2 SECURITY FEE

Section 3.8 of this policy outlines a fair and reasonable assessment of the incremental revenue used in the cost-revenue test when determining the required capital contribution.

Jemena may require a security fee, which may be in the form of either an upfront prepayment, or a bank guarantee.

Jemena will operate its security fee scheme in accordance with the following principles:

- a) The security fee will not be greater than the amount of the incremental revenue which Jemena assesses as having a risk of not being recovered.
- b) The security fee will not exceed the present value of the incremental costs that Jemena will incur in undertaking any relevant new works and *augmentation*.
- c) Where the security fee has been provided as an upfront payment, Jemena will rebate the security fee annually over the period of the security fee scheme. The first rebate will be in the calendar year after the *connection services* are provided and subsequent rebate payments will be made annually on the same date thereafter until the earlier of:
  - i. the actual incremental revenue realised over the period of the security fee scheme exceeds the estimated incremental revenue; or
  - ii. Jemena refunds the security fee in full.
- d) The security fee scheme will not result in Jemena recovering more than the total estimated incremental revenue. If the actual incremental revenue realised over the period of the security fee scheme exceeds the estimated incremental revenue, Jemena will refund the security fee in full.
- e) The period of the security fee scheme will not be more than the revenue period applied in the calculation of the customer contribution.
- f) Where the security fee has been provided as an upfront payment, Jemena will pay interest on the security fee, commensurate to the manner in which the security fee is treated by Jemena. Interest is not payable on security held in the form of a bank guarantee.
- g) The *connection applicant* will not be rebated an amount greater than the total of the security fee deposit plus interest from Jemena over the security fee period.

## 7. PROCESS FOR UPDATING THIS POLICY

Jemena may amend or replace this Connection Policy in accordance with the NER and any Victorian regulatory requirements in force at that time.