

## **6.2 Point of Supply**

### **6.2.1 Property**

The Consumer's mains must not enter or cross any property that is contiguous to the property the consumer's mains supplies.

For the purpose of these Rules "Property" means land on which the single electricity customer or controlling body or their representatives have the right to install their electrical installation.

A property may include:

(a) a single parcel of freehold, leasehold and/or public land which may include land held under lease or licence on which the customer or controlling body has the right to install their electrical installation;

(b) any combination of contiguous land to which the customer or controlling body has the right to install their electrical installation; and

(c) contiguous land and/or individual titles to which a corporate body, customer and or controlling body has the right to install their electrical installation

An expressed easement through adjacent property to which the customer or controlling body does not have occupancy rights is not considered to form part of a property for the purpose of the establishment of a Point of Supply.

In the event that the boundary of the property to be supplied is not clearly defined, the prospective customer shall be responsible to physically and accurately define the boundary of the property to the satisfaction of the Responsible Officer

Where supply has been provided to a property that comprises of contiguous land and the electrical installation and/or occupancies wiring extend into or across property the customer or controlling body will not have rights, shall upon the land becoming non-contiguous re-arrange the supply to comply with these Rules and the Electricity Safety Act and Regulations.

### **6.2.2 Point of Supply**

#### **6.2.2.1 Definition**

**Point of Supply (POS)** – the point at which the electricity Distributors service cable or supply main connects to the consumer's terminals. (Refer Section 1 – Definitions)

#### **6.2.2.2 Provision**

The Distributor, following application in accordance with clause 4.4 (Application for Supply Availability), and during negotiations for supply, will nominate the location and provide one point of supply for each property.

### 6.2.2.3 Location

In all cases the Distributor reserves the right to determine the method of supply and where the point of supply will be located.

The following are points of supply and consumer's terminals location relative to the type of supply.

Refer to Clauses 7.3.2.4 (Underground Supplies-Consumer's Terminals) and 7.4.3 (Overhead Supplies-Consumer's Terminals) and Section 9 High Voltage Electrical Installations for specific details of POS and consumer's terminal arrangements for low and high voltage supplies.

**Table 6.2-1 Point of Supply/Consumer's Terminals Location**

SUPPLY TYPE	POINT OF SUPPLY/CONSUMER'S TERMINALS LOCATION
<b>AERIAL SERVICE CABLE</b>	Within 500 mm of the first point of the service cable attachment within the property or on the premises, refer to Figure 7.4-B.
<b>UNDERGROUND</b>	
<b>Supply pit</b>	In the pit, immediately adjacent to the property
<b>Supply cable</b>	Within a connection facility at the property boundary, or with the Distributor's agreement, a short distance from the property boundary. refer clause 7.3.2.2 Location
<b>Ground, Kiosk &amp; Indoor Type Substation on property</b>	As nominated by the Distributor – Normally at the Substation LV consumer's terminals'
<b>Pole &amp; Pole Type Substation</b>	As nominated by the Distributor – normally 4m from ground level.
<b>High Voltage</b>	The point agreed between the relevant Distributor and Customer

**NOTE:**

A 'service cable' will not be provided where a substation is located on the customer's property as the customer is responsible for all wiring up to the substation LV consumer's terminals'

Where it is proposed to cross a major asset of another Authority within the customer's property, the customer shall consult with that Authority and the relevant Distributor regarding the requirements of the other Authority or an alternative means of providing supply to the property.

Examples of major assets may be, but are not restricted to: gas pipelines, water mains, oil pipelines, sewerage pipelines/channels, waterways, irrigation channels, across distribution company easements, telecommunication assets etc

### 6.2.2.4 Multiple points of supply

On the condition that it is not necessary for the Distributor to undertake unreasonable augmentation of the network to provide an additional point of supply, more than one point of supply may be provided for a property in the following circumstances;

(a) Multiple Occupancy;

- (i) comprising separate individual structures intended to be occupied by different customers and does not include any common area; and
- (ii) the land associated with each of the structures directly abuts a public road reserve or a Distributor's easement; and
- (iii) the land owner intends to subdivide and is prepared to submit a draft plan of subdivision to the Distributor verifying any future subdivision of the land will not incorporate common property;

*Note: A registered plan of sub division is considered to be a fully dimensioned plan, professionally prepared by an architect or surveyor and submitted on the letter head of a registered business*

(b) Subdivisions

Refer to clause 7.10.3 Subdivisions Incorporating Common Property and 7.10.4 Subdivisions Not Incorporating Common Property.

(c) Subject to Approval by the Relevant Distributor;

The Distributor will consider a written request for more than one point of supply where the provision of an additional point of supply reflects sound electrical engineering practices, and any safety concerns are satisfied. A second point of supply on economic grounds alone will not be granted unless it can be supported with the engineering constraints identified and justified. Formal requests can be made using the Exceptional Circumstances request form on the VSIR website.

To enable the distributor to review the request, the following supporting information should be supplied;

Electrical concept plan	Plan to outline the proposed connection and existing connection on the site, including details of the existing and proposed connection points, leased areas, and property boundaries. Plans clearly showing how the multiple supplies will be segregated on site, including any sub installations.
Site photos	Photographs of the current site
Existing MSB details	Details of the existing site main switchboard (MSB) including the rating of any customer owned SPD assembly
Single Line diagram	Diagram showing existing and proposed electrical connections
Maximum demand	Maximum electrical demand for the existing site and the calculated maximum demand of the proposed secondary supply site.

Justification	Any supporting evidence to show that a second point of supply is required to remove engineering constraints and is more viable than consolidating with existing infrastructure
Labelling	Provide details & examples of how warning labels and signage will appropriately identify the generations source(s), network points(s) of supply informing operational and emergency services staff of: <ul style="list-style-type: none"> <li>• the existence and location of each source of supply;</li> <li>• type(s) of supply;</li> <li>• point(s) of isolation; and</li> <li>• safe shutdown and isolation procedures</li> </ul>

Requests will be considered where the magnitude of the customers' electrical load and/or distance, separating the relevant electrical installations are such that it would be sound engineering practice to provide more than one point of supply. Examples of situations where sound engineering practice is a consideration are;

(i) load;

where the supply capacity cannot be supported by a single substation located within the property; or

(ii) distance;

- a. where it is impractical to supply the relevant load using a low voltage sub-main or final sub-circuit originating at the primary electrical installation.
- b. where sub mains are not practical due to size of the load and distance for the starting of large pumps and motors; or

(iii) environmental;

where the cable route would involve:

- a. deep crossing of water channels, creeks, or rivers
  - b. digging a trench in rock reefs/outcrops
  - c. obstruction of building, structures prohibiting the cable route
  - d. feasibility of cable route due to site conditions,
- practicability limitations of equipment/location:
- e. space constraints for switchboard upgrade

(iv) safety considerations –

where a second point of supply is assessed due to load, distance or environment the following safety conditions need to be satisfied to enable approval:

- a. Clear identification of isolation points for each supply point for field crews and other emergency agencies.
- b. Segregation of supplies

There is electrical separation between multiple points of supply and physical segregation between any respective electrical installation and circuits

- c. Mitigation of electrical risk of conductive parallel paths between zones such as;
  - i. Fire systems
  - ii. Metal pipes
  - iii. Adjoining roof, spouting
  - iv. Common concrete slabs with steel reinforcing
  - v. Metal fences
  - vi. Communication conductive cables
  - vii. External perimeter lighting
  - viii. Remote pumps
  - ix. Boom gates
- d. Earthing considerations
  - i. Segregation of Supplies – Earthing
  - ii. Multiple Earthed Neutral (MEN) – Separate Supplies
  - iii. Earthing of Multiple Installations

Should multiple points of supply be approved, the applicant will be charged the augmentation cost to establish the point of supply as per the connection policy of the distributor.

Where a second point of supply was not granted consideration should be given to establishing a multiple occupancy arrangement between the point of supply and the existing site main switchboard.

#### **6.2.2.5 Minimum requirements for additional points of supply**

Where approval has been provided by the distributor for more than one point of supply the installation shall comply with the following conditions:

- i. Establishment of zones and labelling as per Electricity Safety (General) Regulations 2019 (ES(G)R) clause 218
- ii. The location of the distributor's point of supply for each zone are clearly identified on zone diagrams.
- iii. The installation is easily recognisable as separate entities on the existing property
- iv. Maintain electrical separation between multiple points of supply and physical segregation between any respective electrical installation.
- v. No wiring is permitted to cross zone boundaries.
- vi. Provide unhindered and clear access to point of supplies
- vii. For third party leased areas provide to the distributor a statement of consent from the property owner or controlling body indicating the physical boundaries of the leased area and acknowledgement that multiple points of supplies exist and they are compliant to the requirements of the Electricity Safety (General) Regulations 2019 (ES(G)R) clause 218

### **6.2.2.6 Properties with Existing Multiple Points of Supply**

Existing properties may have multiple points of supply that were historically provided or because of the purchase of adjoining titles. These tend to be schools, council recreation reserves, caravan/camping reserve, large rural farms, process plants on large sites.

Where re-developments are proposed that result in a major upgrade or additions to the electrical installation, the owner of these properties is required to consolidate the points of supply to a single point of supply or, at a minimum, reduce the number of supply points. Additional supply points proposed to remain in place must satisfy the requirements in 6.2.2.4 to be approved to remain.

For minor upgrades of a single point of supply, and provided all safety concerns for multiple points of supply can be satisfied, then the existing point of supply to undisturbed section may remain provided:

- i. The minor upgrade is limited to modernisation of the installation and does not propose load increase by more than 10% or propose adding additional phases
- ii. The minor upgrade only involves a discrete part of such properties so that clear separation is maintained from the remaining undisturbed portion
- iii. The undistributed electrical installation is safe
- iv. No electrical work is proposed in the undisturbed section to either the supply arrangement or switchboard
- v. All warning labels are in place re multiple points of supply
- vi. Provision shall be made to transfer these supplies over to the main supply when any major installation or supply arrangement upgrade is undertaken.