

Network Asset Technical Document

Distribution Subdivision Policy

**REQUIREMENTS FOR PROVISION/REMOVAL OF DISTRIBUTION
ELECTRICAL NETWORK IN THE SOUTH WEST INTERCONNECTED
SYSTEM WHEN LAND IS SUBDIVIDED**



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Document control

Endorsement / approvals

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Record of revisions

This document contains multiple formatting sections. When it is updated please ensure all section headers and footers have also been updated with correct version numbers and dates.

Revision no.	Date	DMS version	Revised by	Description
Original	Sept 2004	1986121	Glen Pearce	Original Issue
1	Oct 2004	1986121	Glen Pearce	Backbone option for lots > 15ha deleted
2	Nov 2005	1986121	Glen Pearce	Boundary realignment and relocation definition added, green title changed to freehold.
3	Feb 2006	1986121	Glen Pearce	O/H service removal from survey strata lots
4	Feb 2008	1986121	Glen Pearce	Subdivision definition aligned with UDS Manual
5	Mar 2008	1986121	Glen Pearce	Requirement for U/G connection for boundary relocation clarified.

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1 Purpose

This document specifies the alterations that Western Power Networks will require to its electrical distribution system when land is subdivided.

2 Application

This policy applies to the electrical distribution network in Western Power's south west interconnected system (SWIS).

It addresses only the standard requirements in detail. Additional alterations may be required over and above these. For example the installation of a regulator may be required.

The policy does not address financial or commercial requirements.

The policy does not address requirements for Western Power's electrical transmission network.

This policy should be read in conjunction with Western Power's Underground Distribution Schemes Policy and Installation Options Manual and any other related policy document.

3 Definitions

Subdivision – division of a lot into a greater number of lots via the WAPC or built or building strata.

Freehold title subdivision - division of a lot into a greater number of freehold titled lots via the WAPC.

Survey strata subdivision - division of a freehold titled lot into a survey strata plan, comprising of a greater number of survey strata lots or into survey strata lots and common property via the WAPC

Distribution network - the portion of an electricity network owned by Western Power, installed to distribute electricity from Transmission Zone Substations to the point of supply for customers. The distribution network incorporates reticulation and connections

Reticulation – the portion of a distribution network owned by Western Power, including transformers but excluding connections, installed to distribute electricity to customers

High voltage (HV) reticulation – reticulation with a voltage of 1kv - 33kv.

Connection – the final part of the electricity network owned by Western Power, provided on a customer's property that the customer's electrical installation is connected to.

Underground connection – a ground mounted pillar or similar Western Power apparatus that the customer's underground consumer mains are connected to.

Mains cable – high capacity low voltage cable in the reticulation with the capacity to supply many residential customers

Service cable – limited capacity low voltage cable in the reticulation generally connected directly to mains cable or to low voltage pillars

Bypass reticulation – reticulation installed to provide an alternate route or prospective alternate route between two points on the electricity distribution network. One of the two points may be on a proposed part of the network.

Transmission network– high capacity, high voltage (330kv – 66kv) portions of an electricity network owned by Western Power, installed to transport electricity from generating power stations to bulk distribution points (zone substations).

Boundary re alignment – The boundary between two existing lots is shifted by one meter.

Boundary relocation – The boundary between two existing lots is shifted by more than one meter.

4 General

When land is subdivided alterations to the distribution network may be required in order to provide a supply to meet Western Power's reasonable estimate of load requirement for the new lots, to meet Western Power's statutory obligations and to effect a safe and reliable electricity supply to all customers and the public.

Provision may be made for the supply of future customers.

Western Power reserves the right to refuse to provide a power supply.

Western Power imposes the following conditions at the subdivision application stage. The requirements must be met before Western Power will clear the planning application.

- Easements may be required for Western Power's equipment and will be specified by Western Power when required.
- Existing overhead lines may have to be removed or relocated. These requirements are covered in Appendix 1.

5 Freehold title subdivisions

5.1 Internal to subdivision

5.1.1 Reticulation

- All new reticulation within a freehold title subdivision must be underground unless the lot size is greater than 10 hectares
- All existing overhead reticulation within a freehold title subdivision must be removed unless the lot size is greater than 4 hectares.
- Existing overhead reticulation within a freehold title subdivision on a lot of area between 4 hectare and 10 hectare must be removed from the lot unless it meets various criteria (refer Appendix 1)

- Where a freehold title subdivision incorporates a new through road or section of an existing or proposed through road then bypass reticulation may be necessary in the road or road section.

5.1.2 Connection

- All lots in freehold title subdivisions must be connected underground unless the lot size is greater than 50 hectares.
- No connection is required for lots greater than 50 hectares.
- If the boundary of a freehold titled lot of area less than 4 hectare is realigned or relocated then an underground connection is required to be installed if there is no existing connection to the lot
- If the boundary of a freehold titled lot of area between 4 hectare and 50 hectare is relocated then an underground connection is required to be installed if there is no existing connection to the lot
- If the boundary of a freehold titled lot of area less than 4 hectare is realigned and the realignment results in an existing overhead connection traversing another lot than the one it is servicing then an underground connection is required to be installed in lieu of the overhead connection
- If the boundary of a freehold titled lot of area greater than 4 hectare is realigned and the realignment results in an existing overhead connection traversing another lot than the one it is servicing then the overhead connection is required to be re-routed
- New freehold title commercial/industrial lots that have an existing overhead connection must be connected underground if more than two lots are being created
- New freehold title residential lots that have an existing overhead connection must be converted to underground connection unless the lot size is greater than 50 hectares.
- Freehold title lots that have an existing overhead connection must be converted underground if the boundary is relocated.

5.2 External to subdivision (reticulation only)

- All new reticulation in road reserves bordering a freehold title subdivision must be underground unless the lot size is greater than 4 hectares.
- Normally, existing overhead reticulation bordering a freehold title subdivision will be removed but may remain in situ even if new reticulation is installed electrically parallel to it.
- New low voltage mains cable reticulation must be installed if more than 2 freehold titled lots are created fronting the same road and the combined lot frontages span an existing bay of low voltage overhead mains. This requirement may be applied where more than one subdivision is occurring simultaneously and the combined lot frontages of the subdivisions span an existing bay of low voltage overhead mains.
- New reticulation may be required in order to bring a suitable supply to the subdivision.

6 Survey strata Subdivisions

6.1 Internal to subdivision

6.1.1 Reticulation

- All new reticulation within a survey strata subdivision must be underground unless the area of the survey strata lot or common property that the reticulation is located in is greater than 10 hectares.
- All new reticulation within common property with an area greater than 10 hectares must be underground when it is installed in or adjacent to roads passing and servicing survey strata lots of area 10 hectare or less
- All existing overhead reticulation within a survey strata subdivision must be removed unless the area of the survey strata lot or common area that the reticulation is located in is greater than 4 hectares
- Existing overhead reticulation within a survey strata subdivision on a survey strata lot or common property of area between 4 hectare and 10 hectare must be removed from the lot unless it meets various criteria (refer Appendix 1).
- Where a survey strata subdivision requires internal installation of HV reticulation, then bypass reticulation may be necessary.

6.1.2 Connection

- All survey strata lots and common property in survey strata subdivisions must be connected underground unless the area of the survey strata lot or common property that is being connected is greater than 50 hectares.
- New survey strata lots that have an existing overhead connection must be converted to underground connection unless the lot size is greater than 50 hectares
- If the boundary of a survey strata lot of area less than 4 hectare is realigned or reconnected and the realignment results in an existing overhead connection traversing another freehold title or survey strata lot than the one it is servicing then an underground connection is required to be installed in lieu of the overhead connection
- If the boundary of a survey strata lot of area greater than 4 hectare is realigned and the realignment results in an existing overhead connection traversing another freehold title or survey strata lot than the one it is servicing then the overhead connection is required to be re-routed off that lot
- If more than two survey strata lots are created on a survey strata plan then a main switchboard (MSB), suitable for supplying all of the strata lots, shall be established at the point of supply. This requirement applies when the freehold title lot that the strata lots are located within has an area not exceeding 2500m².
- Survey strata lots that have an existing overhead connection must be converted underground if the boundary is relocated.

6.2 External to subdivision (reticulation only)

- All new reticulation bordering a survey strata subdivision must be underground unless the area of the survey strata lot or common area is greater than 4 hectares
- Generally, existing overhead reticulation bordering a survey strata subdivision may remain in situ. However if more than two lots are being created and more than more than one point of supply is being provided then new mains cable reticulation must be installed

- New low voltage mains cable reticulation must be installed if more than 2 strata titled lots are created fronting the same road and the combined lot frontages span an existing bay of low voltage overhead mains. This requirement may be applied where more than one subdivision is occurring simultaneously and the combined lot frontages of the subdivisions span an existing bay of low voltage overhead mains.

7 Other Strata subdivisions

Strata subdivisions other than those covered by clause 4.2 will be provided with one point of connection only. The connection must be underground.

8 Amalgamations

A lot created by amalgamation of two or more lots is considered a new lot. A new underground connection is required as per clause 5.1.2 unless either

- the WAPC apply conditions that prevent the lots being sold or developed without further subdivision or
- the amalgamated lot is being created to allow the immediate subdivision into smaller lots and this is guaranteed to Western Power's satisfaction.

9 Appendix 1:

Existing overhead powerlines must be removed or relocated in accordance with the Western Power approved policy titled -

“Treatment of Existing Overhead Power Lines That Traverse or Are Adjacent to Land to be Subdivided, Amalgamated or Strata Titled” located in the Underground Distribution Schemes Manual .