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1 Introduction

While the WAER refers to responsibilities of consumers (the owners/operators of electrical installations), in many instances these are carried out by a licensed electrical contractor or other authorised person, under instruction of and on behalf of the consumer.

Upon written application, the Director of Energy Safety may exempt in writing any network operator or other person from complying with a requirement set out in Sections 1 to 12, or to vary the application of any requirements, subject to any conditions the Director stipulates.

As a general rule, the Director will not consider an exemption from the normal requirements set out in this document unless the applicant clearly demonstrates in writing the special circumstances that may justify such an action.

Nothing in Sections 1 to 11 and 13 may be used or interpreted to vary any of the requirements for a consumer installation specified in any of the Australian Standards prescribed in Section 12, unless:

- (a) details of such variation(s) are set out in this document; or
- (b) the relevant Standard has a specific provision for varying the prescribed requirements (for the matter in question), at the discretion of the network operator.

Where it is found that the requirements of this publication have not been followed, any person aware of such a contravention should report their concern(s) to the Director of Energy Safety immediately.

2 Definitions

The Act: *The Electricity Act 1945*;

AMR System: Automated Meter Reading (AMR) system also known as a remote reading system.

C(b)1: Guidelines for the Maintenance of Overhead Distribution and Transmission Lines, as published by Energy Networks Australia.

Connection Point: That point defined in an access contract or, where there is no specific access contract, the upstream terminals of the consumer's main switch.

Consumer Pole: A pole supplied, installed and maintained by the consumer, on the consumer's property, to provide ground clearance for the network operator's overhead service cables (Figure 2.2).

Consumer Pole (Point of Attachment): A pole, complying with AS/NZS 3000, supplied, installed and maintained by the consumer, on the consumer's property, used to terminate the network operator's overhead service cable on the consumer's mains (Figure 2.3). A main switchboard enclosure containing a Service Protection Device (SPD) and meter may be mounted on this pole.

Customer (consumer): A legal entity to which electricity is sold for the purposes of consumption.

A1 Consumer Installation: An assembly of electrical wiring, components and equipment downstream from the point of supply, excluding network operator's metering equipment, and includes all types of assemblies, such as those in domestic residences and commercial, industrial and institutional premises where persons use electricity in appliances and electrical equipment.

Cyclonic Area: All of Western Australia's coastline north of Kalbarri and the immediate hinterland within 200 kilometres of the coast.

Distribution system: Any apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, the transportation of electricity at nominal voltages of less than 66 kV.

Director: The Director of Energy Safety, as defined in the *Energy Coordination Act 1994*.

Freehold Title Lot: (Formerly known as green title) A defined portion of land depicted on a plan or diagram for which a separate Crown Grant or Certificate of Title has been or can be issued as defined by the *Planning and Development Act*.

Load: The total maximum electrical power demanded by a consumer's installation, measured in Amperes or Watts. This is the maximum demand defined and calculated according to AS/NZS 3000.

Network operator: Means a supply authority and any person lawfully operating transmission or distribution works, and service apparatus, but does not include the owner of premises to which electricity is supplied who distributes the electricity to a person occupying part or all of the premises.

Network: Includes service apparatus but does not include any other part of a consumer installation.

Point of Supply: The location at which the consumers mains are connected to the network operator's supply system.

2 Definitions (continued)

Property boundary: A surveyed line or border of a freehold title lot.

Regulations: Regulations made under the *Electricity Act 1945*, (*Electricity Regulations 1947* and *Electricity (Licensing) Regulations 1991*);

Retailer: A body holding a retail licence or an integrated regional licence under the *Electricity Industry Act 2004*.

Strata Title: Lots and common property forming part of a strata plan or survey strata plan under the *Strata Title Act 1985*.

A1 Service apparatus: Any electrical equipment which is or is capable of being or is intended to be used for the purpose of conveying, measuring, or controlling electricity supplied from any transmission or distribution works to the position on any premises at which delivery of the electricity is, is capable of being, or is intended to be, made to the consumer, and includes any part of the service apparatus, and any other equipment or plant used in conjunction therewith, whether or not the property of a supply authority or network operator;.

Service Protection Device (SPD): A fuse, circuit breaker or other device on which the consumers mains are terminated and which limits fault current into a consumer's installation, provides overload protection for the consumers mains and metering equipment and enables the installation to be disconnected from the network operator's supply.

Small Country Town, Rural, Semi Rural, Major Regional Centre an or Metropolitan region: As defined by the Western Australian Planning Commission (WAPC).

Wiring Rules: The current edition of AS/NZS 3000 as published by Standards Australia.

12 Additional Requirements (continued)

12.11 Applicable Standards

Electrical work must be carried out so as to comply with all parts of the latest version of the following Standards:

A1	AS 2067	Substations and high voltage installations exceeding 1kV a.c.;
A1	AS/NZS 3001	Electrical Installations – Transportable structures and vehicles including their site supplies;
	AS/NZS 3002	Electrical Installations – Shows and Carnivals;
	AS/NZS 3003	Electrical Installations – Patient Treatment Areas of Hospitals and Medical, Dental Practices and Dialysing Locations;
A1	AS/NZS 3004.1	Electrical Installations – Marinas;
A1	AS/NZS 3004.2	Electrical Installations – Recreational Boats Installations;
	AS/NZS 3008.1.1	Electrical Installations – Selection of Cables;
	AS/NZS 3010	Electrical Installations – Generating Sets;
A1	AS/NZS 60079	Explosive Atmospheres; and
	AS/NZS 61241	Electrical Apparatus for Use in the Presence of Combustible Dust.

12.12 Part 1 Design and Verification Certificate

PART 1 DESIGN AND VERIFICATION CERTIFICATE³

This form has been approved by the Director of Energy Safety, EnergySafety WA, for use by designers and verifiers of electrical installations which are based on a Wiring Rules “Part 1” design and installation solution, to satisfy requirements detailed in Section 12.1 of the WA Electrical Requirements manual.

Section A: To be completed by the designer who wishes to adopt a design solution complying with Part 1 of AS/NZS 3000:2007 Wiring Rules.

Designer’s Name:

Designer’s Employer or Business Name:

Project Name:

Project Address:

Brief Description of Project and Proposed Electrical Installation:

Certification by Designer:

I certify that the electrical installation design described above was designed by me, that I comply with the competence requirements for designers set out in Section 12.1 of the WA Electrical Requirements, and that the installation –

- (a) will satisfy the fundamental safety principles of Part 1 of the Wiring Rules; and
- (b) will result in a degree of safety from physical injury, fire and electric shock not less than that which, in other circumstances, would be achieved by compliance with the particular requirements of the Wiring Rules; and
- (c) will satisfy the other requirements of Clause 1.9 of the Wiring Rules.

Signature:

Date:

³ This form is to be used as a template, shall be typed and may comprise several pages in order to contain all required information.

13 Network Operators (continued)

13.5 BHP Billiton Limited

13.5.1 Introduction

The following requirements are particular to BHP Billiton Leinster Nickel Operation electricity networks, and are monitored by the Leinster Supply Authority.

13.5.2 Definitions

No additional definitions

13.5.3 General Requirements

13.5.3.1 Connection Process

The electrical contractor must contact the Leinster Supply Authority.

13.5.3.2 Supply Arrangements

The electrical contractor or consultant responsible for the project design shall submit details to the Leinster Supply Authority of any new connections that increase the maximum demand of an existing or new installation.

The method of connection and details of requirements will be location dependent.

13.5.3.3 Boundary Fuses

The Leinster Supply Authority must be consulted about the location and type of service protection device (SPD) required. SPDs generally will be in accordance with the requirements of Section 6.8.

13.5.4 Overhead Supplies

The Leinster Supply Authority must be consulted about where overhead supplies may be used.

13.5.5 Underground Supplies

No additional requirements.

13.5.6 Service And Metering Equipment

The Leinster Supply Authority must be consulted about the types of metering systems in Leinster.

13.5.7 High Voltage Installations

The Leinster Supply Authority must be consulted concerning supplies at high voltage, which are normally 33 kV.

13.5.8 Special LV Supply Arrangements

The Leinster Supply Authority must be consulted about any special LV supply arrangements of the kind mentioned in Section 8.

13.5.9 Private Generators Connected To Networks

Connection of private generators to the network generally will be permitted. Individual applications will be considered on their merit and only for specific reasons.

13 Network Operators (continued)

13.5.10 Supply To Construction Sites

The Leinster Supply Authority must be consulted about any supply to construction sites mentioned in Section 10.

13.5.11 Supply Under Emergency Conditions

To make an installation safe under emergency conditions, an electrical contractor may remove the SPD fuse(s) and subsequently replace them when the emergency condition is cleared. The Leinster Supply Authority must be notified as soon as practicable after removal of the SPD fuse(s) and will indicate at the time if replacement of the fuse(s) may be performed by the contractor.

13.5.12 Special Requirements For Installation In WA

No additional requirements.

13.5.13 General Information

An electrical contractor or consultant who requires:

- specific information from the Leinster Supply Authority;
- specific information for submission of Preliminary Notices or Notices of Completion;
- a Supply Ruling;
- a Regulatory/Inspection Ruling,

is required to contact the Leinster Supply Authority at:

The Leinster Supply Authority Electrical Inspector's Office
PO Box 22
LEINSTER WA 6437
Tel: (08) 9037 9327
Fax: (08) 9037 9128