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## Code of Engineering Practice for **SHARED USE** of Poles



## PREAMBLE

This Code of Engineering Practice for Shared Use of Poles ("Code") has been prepared and approved by the five Victorian Electricity Distribution Companies ("Distribution Companies") as a generic document which is to apply to all Shared Users.

Amongst other things, this Code sets out:

- the requirements for the design, construction, maintenance and removal of Shared User's Equipment Attached to Poles;
- the conditions for Shared Use of Poles; classification and  
Category of Shared Use; and
- the Application procedure for Shared Use of Poles.

Note:

- before Shared User's Equipment is Attached to a Pole a Shared User must enter into a Facilities Access Agreement with the relevant Distribution Company and submit and have approved an Application for Shared Use by the relevant Distribution Company;
- commercial and some procedural aspects of Shared Use are to be contained in a Facilities Access Agreement and, if applicable, an Electricity Supply Agreement between the Parties;
- the Distribution Companies make no representations or warranties in relation to the information, recommendations or standards set out in this Code;
- unless otherwise agreed by the Parties, the Shared User must warrant that the Attachment of its equipment will not damage or adversely affect a Distribution Company's assets (including Poles) and the Distribution Company's Electricity Distribution System;
- unless a Distribution Company has agreed in writing to carry out an assessment of the suitability or strength of a particular Pole (at the cost of the Shared User) and provided to the Shared User a written acknowledgment of the Pole's suitability or strength, the Distribution Companies do not warrant the suitability or strength of any Pole for its proposed use;
- the Distribution Companies may from time to time change, vary or amend provisions in this Code; and
- unless otherwise agreed by the Parties, the cost of any Make Ready Works shall be paid by the Shared User.

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Inquiries should be addressed to the Code Committee.

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# CODE OF ENGINEERING PRACTICE FOR SHARED USE OF POLES

## 1. DEFINITIONS

In this Code, unless the context requires otherwise or otherwise agreed by the Parties:

"**ABC**" has the same meaning as "Aerial Bundled Cable";

"**Aerial Bundled Cable**" means the Distribution Company's HV or LV insulated aerial bundled cables;

"**Aerial Cable**" means a Catenary, wire, cable, or other form of tension member which is Attached to a Pole aerially, but does not include Aerial Customer Lead, PSTN cable, PTC's Electrical Conductor or Electrolysis Drainage Cable;

"**Aerial Customer Lead**" means the Customer Lead aerially connected;

"**Amendment Date**" means the date on which this Code is amended in accordance with clause 4;

"**Application**" means an individual application for Shared Use of a Pole in the form referred to in Appendix C;

"**Attach**" means to attach, connect, bond, install, or support and "**Attachment**" and "**Attached**" have a corresponding meaning;

"**AUSTEL**" means the Australian Telecommunications Authority;

"**500 Metre Rules**" means the rules made by the Distribution Company in pursuance of AUSTEL's 500 metre rule, set out in Appendix G;

"**Blue Book**" means the "Code of Practice on Electrical Safety in the Victorian Electricity Supply Industry, 1994";

"**Business Day**" means a day, which is not a Saturday, Sunday, a public holiday (for the whole day) or a bank holiday (for the whole day) in the State of Victoria;

"**Calculation**" means the calculations which are required to be carried out in accordance with this Code including without limitation the calculations required to determine the mechanical loads which are applied to a Pole by Shared User's Equipment;

"**Category of Shared Use**" means the categories of Shared Use specified in clause 9;

"**Catenary**" means a separately constructed strength member Attached to Poles to which Shared User's Equipment is or may subsequently be Attached including that part of an integral bearer cable, which is used to support wires and cables and which is enclosed in a cover or a sheath. Catenaries are usually metallic, non-insulated and

installed continuously over a number of consecutive spans. They do not form part of any telecommunications circuit;

**"CMEN"** means an Electrical Distribution System's earthing system where all HV and LV equipment within an area is connected to a common earth.

In a CMEN system of earthing, the LV neutral conductor is permanently connected to earth at:

- (a) each of the multiple distribution substations supplying the Electrical Distribution System;
- (b) all customer's premises, in accordance with the State Electricity Commission Wiring Regulations 1992 (No 259) and AS 3000; and
- (c) other points throughout the neutral system, as required;

thus forming a CMEN conductor which has an impedance to ground of less than 1 ohm within the CMEN area;

**"Code"** means this document entitled "Code of Engineering Practice for Shared Use of Poles" including the preamble, schedules and appendices (if any);

**"Code Committee"** means a committee consisting of a representative of each Distribution Company;

**"Consumer's Terminals Box"** means a box owned by the Shared User which is Attached to a Pole and is where the Shared User receives electricity supply from the Distribution Company;

**"Customer Lead"** means a lead connecting the Shared User's cable network to the customer's premises where the relevant connection is located on:

- (a) a Pole; or
- (b) a Catenary within 1 metre of the point at which the Catenary is Attached to the Pole;

**"Distribution Company"** means the electricity distribution company (i.e. CitiPower Pty, Eastern Energy Ltd, Powercor Australia Ltd, Solaris Power Ltd or United Energy Ltd) which owns the Pole that is subject to an Application;

**"Down Traffic Side"** means (in a normal suburban street situation), the side of a Pole furthest away from the direction that on-coming traffic approaches the Pole in the vehicle lane closest to the Pole, (which, for illustrative purposes and not in addition to or in derogation from this definition, is illustrated in the diagram in Appendix H);



**"Electricity Distribution System"** means the Distribution Company's electricity distribution and subtransmission systems and all equipment forming part of those systems;

**"Electricity Supply Agreement"** means an agreement entered into by the Parties which sets out the terms and conditions upon which the Distribution Company will provide electricity supply to the Shared User;

**"Electrolysis Drainage Cable"** means the Victorian Electrolysis Committee's electrolysis drainage cable;

**"Emergency"** means an emergency due to the actual or imminent occurrence of an event which in any way endangers or threatens to endanger the safety or health of any person or which destroys or damages, or threatens to destroy or damage, any property including, but not limited to:

- (a) an earthquake, flood, wind-storm or other natural event;
- (b) a fire;
- (c) an explosion;
- (d) a road accident or any other accident;
- (f) a warlike act, whether directed at Victoria or a part of Victoria or at any other State or Territory of the Commonwealth; and
- (g) a hi-jack, siege or riot;

**"Facilities Access Agreement"** means an agreement entered into by the Parties which allows the Shared User to Attach Shared User's Equipment on Poles subject to the Application being approved by the Distribution Company;

**"Fly-Off Point"** means the point at which an Aerial Customer Lead Attaches to a bolt or other fixture which itself Attaches to a Pole or, where the Attachment is on or within 1 metre of the Pole, to a Catenary;

**"High Voltage"** means rms power frequency voltages in excess of 1kV;

**"HV"** has the same meaning as "High Voltage";

**"HV ABC"** means the Distribution Company's High Voltage, 3 phase, insulated Aerial Bundled Cable, complete with bare support conductor;

**"Joint Use"** means the use of a Pole in accordance with the Joint Use of Poles Arrangement;

**"Joint Use of Poles Arrangement"** means the Joint Use of Poles Arrangement between the Electricity Supply Association of Australia and the Australian Post Office dated 7 September 1965;

**"Limited Life Pole"** means a Pole that when inspected by the Distribution Company in accordance with its standard procedures, is considered safe for at least one year but because of its condition may not be safe for a further three years, and must be either reinspected annually or replaced within one year;

**"LIS"** means the unique line inspection system number identifying a Pole; **"Low**

**Voltage"** means rms power frequency voltages up to and including 1kV;

**"LV"** has the same meaning as "Low Voltage";

**"LV ABC"** means the Distribution Company's Low Voltage, 3 phase, four conductor, insulated Aerial Bundled Cable;

**"Make Ready Works"** means that work which is necessary to be carried out prior to or at the time when Shared User's Equipment is Attached to a Pole in order to make the Pole suitable for Attachment of Shared User's Equipment but does not include the replacement or maintenance of the Electricity Distribution System which has become unserviceable or obsolete, or any work that may be required for reasons other than to make the Pole suitable for Attachment;

**"Non-Approved Shared User's Equipment"** means Shared User's Equipment which has not been approved in writing by the Distribution Company;

**"Normal Shared Use"** means Shared Use of a Pole where compliance with the criteria shown in Tables E1, E2, E3 or E4 of Appendix E of this Code can be achieved and is not included as one of the classes of Poles identified in clause 8.2(a);

**"Parties"** means the Distribution Company and the Shared User and **"Party"** means any one or both of the Parties as the context requires;

**"Point of Supply"** means the point at which electricity supply is provided to a Shared User by the Distribution Company, the exact location of which is set out in clause 15.2;

**"Pole"** means a pole including crossarms, raisers, brackets and other fittings owned and installed by the Distribution Company to support its Electricity Distribution System;

**"Power Supply Equipment"** means equipment which relates to or is used in relation to the LV supply of electricity including but not limited to transformers and batteries;

**"PSTN"** means the copper twisted pair network that Telstra Corporation Limited installs, owns, operates or maintains and which, as at 1 July 1995, is used by Telstra Corporation Limited to carry narrowband telephony services and other services;

**"PTC"** means the Public Transport Corporation, a body corporate established under the *Transport Act 1983 (Vic)*;

**"PTC's Electrical Conductor"** means Public Transport Corporation's overhead electrical conductor;

**"Public Lighting Pole"** means a Distribution Company's pole which is specifically designed for public lighting and may or may not have Shared User's Equipment Attached;

**"Service Side"** means that side of a Pole on which is fitted an LV crossarm or a pole junction box or both and which is used by the Distribution Company to access the Pole for maintenance, operation and construction purposes (which, for illustrative purposes and not in addition to or in derogation from this definition is illustrated in the diagram in Appendix I);

**"Shared Use"** means where the Shared User has or does Attach Shared User's Equipment;

**"Shared User"** means a party who intends to or is using a Pole in accordance with this Code, a Facilities Access Agreement or an Electricity Supply Agreement;

**"Shared User's Equipment"** means all items of equipment owned or operated by the Shared User that are Attached or are proposed to be Attached or at some stage have been Attached to a Pole;

**"Special Shared Use"** means Shared Use of a Pole which is not Normal Shared Use or which involves a Pole which is deemed by the Distribution Company to be a Special Shared Use Pole in accordance with clause 8.2(a) of this Code or determined by the Distribution Company in accordance with clauses 8.2(b) and (c) of this Code;

**"Staked Pole"** means a wooden Pole that is reinforced in accordance with the Distribution Company's standard procedures for Pole reinforcement;

**"Stayed Pole"** means a Pole which is supported in one or more directions by an aerial stay or a ground stay or both;

**"Strained Configuration"** means the Attachment of an Aerial Cable or PSTN cable to a Pole where the Attachment and any related fittings are specifically designed to support the tension of the Aerial Cable, PSTN cable, PTC's Electrical Conductor or Electrolysis Drainage Cable in accordance with the requirements of *Electricity Supply and Construction Regulations 1988 (Vic)* (1988 No. 260), regulation 15(2) and for the purpose of transmitting all loads in the Aerial Cable, PSTN cable, PTC's Electrical Conductor or Electrolysis Drainage Cable to the Pole;

**"Strategic Zone"** means that area on a Pole which is between the following boundaries:

- (a) the clearance specified by this Code below the conductors operated by the Distribution Company; and
- (b) 4.7 metres from ground level at the Pole but always subject to compliance with the in-span ground clearance requirements as set out in Table A4 of Appendix A; and

**"Telecommunications Act"** means the *Telecommunications Act 1991 (Cth)*.

## 2. INTERPRETATION

In this Code, unless the context requires otherwise:

- (a) the singular includes the plural and vice versa;
- (b) a gender includes the other genders;
- (c) the index (if any) and the headings are used for convenience only and do not affect the interpretation of this Code;
- (d) a reference to a thing includes a reference to a part of that thing;
- (e) a reference to a document includes the document as modified from time to time and any document replacing it;
- (f) if something is to be done on a day which is not a Business Day then that thing must be done on the next or following Business Day;
- (g) the word "person" includes a natural person and any body or entity whether incorporated or not;
- (h) the word "month" means calendar month and the word "year" means twelve months;
- (i) the words "in writing" include any communication sent by letter, telex, facsimile transmission or telegram;
- (j) a reference to any statute, proclamation, rule, regulation or ordinance includes any amendment, consolidation, modification, re-enactment or reprint of it or any statute, proclamation, rule, regulation or ordinance replacing it. A reference to a specified section, clause, paragraph, schedule or item of any statute, proclamation, rule, regulation or ordinance means a reference to the equivalent section of the statute, proclamation, rule, regulation or ordinance which is for the time being in force;

- (k) wherever "include" or any form of that word is used it must be construed as if it were followed by "(without being limited to)"; and
- (l) a reference to any agency or body, if that agency or body ceases to exist or is reconstituted renamed or replaced or has its powers or functions removed ("defunct body"), means the agency or body which performs most closely the functions of the defunct body.

### **3. DISCLAIMER**

The Distribution Company, in preparing and making available this Code, makes no representations or warranties in relation to the information, recommendations, or standards set out in this Code. Any person wishing to use this Code should, before such use, independently assess the commercial, technical and safety ramifications of the information and standards contained in this Code and act in reliance on its own assessment.

### **4. AMENDMENTS TO CODE**

- (a) Amendments to this Code may be made from time to time by the Code Committee.
- (b) When this Code is amended, the Amendment Date will be inserted on the bottom right hand corner of each page of this Code and the Shared User will be able to obtain a new copy of the Code upon request made to the Distribution Company.
- (c) Unless otherwise agreed in writing by the Parties, amendments made to this Code will be effective from the Amendment Date.
- (d) Where the amendment relates to:
  - (i) issues of health and safety; or
  - (ii) issues which affect the operation or performance of the Electricity Distribution System,

the Code Committee may specify that compliance with the amendment applies to existing Attached Shared User's Equipment.

### **5. PERMITS AND STANDARDS**

#### **5.1 Permits**

Unless otherwise agreed in writing by the Parties, the Shared User must, at the cost of the Shared User, obtain all necessary authorisations, licences, permits and other similar things required by law or otherwise to enable the Shared User to Attach, operate and maintain the Shared User's Equipment.

## 5.2 Standards

In respect of the Attachment, operation and maintenance of the Shared User's Equipment, the Shared User must at all times:

- (a) exercise due care and skill in accordance with best international practices; and
- (b) unless otherwise agreed in writing, wherever it is applicable, comply with:
  - (i) this Code;
  - (ii) the Telecommunications National Code as determined pursuant to section 117 of the *Telecommunications Act*;
  - (iii) the Land Access Code (if any) as determined pursuant to section 127A of the *Telecommunications Act*;
  - (iv) a proper direction of the Chief Electrical Inspector made within the scope of his functions and powers;
  - (v) as set out in this Code, the *Electricity Supply and Construction Regulations 1988 (Vic)* (1988 No. 260);
  - (vi) as set out in this Code, the Blue Book;
  - (vii) the *Code of Practice for Unbalanced Single Phase High Voltage Power Lines (1965)*;
  - (viii) the Joint Use of Poles Arrangement;
  - (ix) the *Code of Practice for Earth Return High Voltage Power Lines (1969) (Reprint 1977)* (Supersedes the *Conditions for Single Wire Earth Return High Voltage Power Lines, 1962*);
  - (x) the *Code of Practice for Low Frequency Induction (1974) (Reprint 1978)*;
  - (xi) the *Code of Practice for the Protection of Personnel and Equipment Against Earth Potential Rises Caused by High Voltage Power System Faults (1984)*;
  - (xii) the *Code of Practice for Crossings between Power and Telecommunication Overhead Lines In-Span, and those formed by attachments of Conductors to Common Supports, and for Crossings between Power and Telecommunication Stay Wires and Overhead Lines (Issue 1, 1988)*; and

- (xiii) any other statute, regulation, ordinance or standard that is from time to time reasonably adopted by the Distribution Company and notified to the Shared User.

### 5.3 **Tree Clearing**

Unless otherwise agreed in writing by the Parties, the Shared User must ensure that tree growth in proximity to Shared User's Equipment is adequately controlled so that the clearances relative to the Electricity Distribution System specified in Appendix A are maintained.

## 6. **APPLICATION PROCEDURE**

### 6.1 **Complete Application**

Unless otherwise agreed in writing by the Parties, a Shared User who desires to Attach Shared User's Equipment to a Pole must enter into a Facilities Access Agreement with the relevant Distribution Company, and submit an Application to the Distribution Company (refer to Appendix K for geographical areas covered by the Distribution Companies).

### 6.2 **Application Accepted or Rejected**

- (a) Unless otherwise agreed in writing by the Parties, within 21 days of the Distribution Company receiving the Application, the Distribution Company will inform the Shared User whether it:
  - (i) accepts; or
  - (ii) rejects,the Application.
- (b) Unless otherwise agreed in writing by the Parties, where an Application has been accepted, the Shared User must Attach Shared User's Equipment within 14 days of being notified of the acceptance.

### 6.3 **Reject Application**

Unless otherwise agreed in writing by the Parties, the Distribution Company may reject an Application in its sole and unfettered discretion and without assigning any reasons therefore. Without limitation, the Distribution Company will reject an Application if:

- (a) the Shared User's Equipment to be Attached is Non-Approved Shared User's Equipment;

- (b) after having regard to the remaining criteria in this clause 6.3 that the Shared User's Equipment is unsuitable for Shared Use;
- (c) the method of Attachment to be used by the Shared User after having regard to the remaining criteria in this clause 6.3 is unsuitable for Shared Use;
- (d) compliance with requirements of this Code cannot be achieved;
- (e) the health and safety of the Distribution Company's employees or the public may be at risk;
- (f) the capacity, reliability or continuity of electricity supply may be put at risk;
- (g) the Pole (the subject of the Application) is termed "unserviceable" by the Distribution Company;
- (h) the approval of the Application would conflict with an existing approved Application or would be prevented by the requirements of a Facilities Access Agreement that relates to that Pole; or
- (i) the Attached Shared User's Equipment unduly affects the appearance or performance of the Electricity Distribution System.

#### **6.4 Revoke Application**

Without limitation, the Distribution Company may revoke its approval of an Application and withdraw the right of the Shared User to Attach Shared User's Equipment at any time after the Application has been accepted if, in the reasonable opinion of the Distribution Company:

- (a) the Application completed by the Shared User:
  - (i) was done so in a misleading or deceptive manner;
  - (ii) contains information that was incorrect; or
  - (iii) failed to provide information which was relevant to the Distribution Company and which would have affected the Distribution Company's decision to approve the Application; or
- (b) the Attached Shared User's Equipment unduly affects the appearance or performance of the Electricity Distribution System.

#### **6.5 Fees**

The Distribution Company may charge the Shared User a fee for:



- (a) processing the Application;
- (b) Make Ready Works;
- (c) Shared Use of the Pole; or
- (d) the provision of information, services, advice, or any other matter that the Distribution Company thinks fit and the Shared User agrees to pay such fees.

## **6.6 Aerial Customer Lead Exception**

Notwithstanding clause 6.1, where the Shared User, at the request of a customer or a prospective customer of the Shared User, wishes to provide a Fly-Off Point for an Aerial Customer Lead to that customer or prospective customer, then:

- (a) subject to the Shared User otherwise complying with this Code, specifically with clauses 12.2(d) and 12.2(e), the Shared User may, without making an Application to the Distribution Company, provide that Fly-Off Point for that Aerial Customer Lead; and
- (b) where the Shared User provides a Fly-Off Point pursuant to clause 6.6(a), the Shared User must, no later than 7 days (unless otherwise agreed in writing by the Parties) after such a Fly-Off Point is provided, notify the Distribution Company in writing (in the form of an Application and containing all the information which must be included in an Application), that a Fly-Off Point has been provided.

## **7. IDENTIFICATION OF POLE IN AN APPLICATION**

### **7.1 Pole Identification**

The Shared User must identify in the Application, the Pole to which it wishes to Attach Shared User's Equipment by quoting its LIS or if this is not available, some other unique Pole identification number used by the Distribution Company or other agreed method of identification.

### **7.2 Obtaining Pole Identification Information**

- (a) Pole identification information is available by contacting the Distribution Company's contact officer.
- (b) System management maps may also be available from the Distribution Company's contact officer. System management maps show Pole locations, Pole types and Pole identification information.
- (c) Unless otherwise agreed in writing by the Parties, a charge may be levied on the Shared User by the Distribution Company for the provision of Pole

identification information or the provision of system management maps, or both.

### 7.3 **Map**

The Shared User may attach to the Application its own map that clearly identifies the Pole for which Shared Use is required. This map must include (where available from the Distribution Company) the LIS or some other unique Pole identification number or other agreed method of identification alongside the Pole required for Shared Use.

## 8. **CLASSIFICATION**

### 8.1 **Shared User to Classify, Distribution Company to Approve**

- (a) Unless otherwise agreed in writing by the Parties, the Shared User must indicate in the Application whether, in its opinion, its proposed Shared Use is either:
  - (i) Normal Shared Use; or
  - (ii) Special Shared Use.
- (b) The Distribution Company will advise the Shared User within a reasonable time after receipt of the Application if Special Shared Use will apply.

### 8.2 **Special Shared Use**

- (a) A Pole is deemed to be a Special Shared Use Pole if the Pole is a:
  - (i) Staked Pole;
  - (ii) Limited Life Pole;
  - (iii) Stayed Pole;
  - (iv) steel Pole;
  - (v) Public Lighting Pole;
  - (vi) non-conductive Pole made of a material other than wood;
  - (vii) Pole supporting Electrolysis Drainage Cables or associated equipment;
  - (viii) Pole supporting PTC's Electrical Conductor or associated equipment;
  - (ix) Pole on which a Strained Configuration is employed;

- (x) Pole on which the sum of half the spans of the Distribution Company's conductors Attached to the Pole exceeds 50 metres;
  - (xi) Poles on which individual spans of Aerial Cable or PSTN cable Attached to the Pole exceed 50 metres;
  - (xii) Pole on which an Aerial Cable or PSTN cable Attached to the Pole has a deviation of 5 degrees or greater; or
  - (xiii) Pole that does not comply with the criteria set out in Tables E1, E2, E3 or E4 of Appendix E.
- (b) Poles deemed to be Special Shared Use may still be suitable for Shared Use if compliance with the requirements of clauses 10.1, 10.2, 10.3, 10.4, 11.6, 11.7 and 11.8 is achieved. The decision as to whether a Pole can be used as a Special Shared Use Pole will be made by the Distribution Company after consideration of all safety and technical issues.
- (c) Where an Application indicates that the Shared User's Equipment is outside the Categories of Shared Use, Shared Use may be allowed under the classification of Special Shared Use. Approval by the Distribution Company under this classification of Shared Use will be subject to the Distribution Company being satisfied that all safety and technical issues can be satisfactorily resolved and that compliance with clauses 10.1, 10.2, 10.3, 10.4, 11.6, 11.7 and 11.8 can be achieved.

### 8.3 **Cost of Investigations Regarding Suitability**

Unless otherwise agreed in writing by the Parties, the Shared User must pay the cost of any work or investigations necessary to determine whether a Pole is suitable for Shared Use.

## 9. **CATEGORIES OF SHARED USE**

### 9.1 **Applicable Category**

- (a) Unless otherwise agreed in writing by the Parties, the Shared User must indicate in the Application which Category of Shared Use applies.
- (b) A final decision as to which Category of Shared Use is applicable to the Shared User's Equipment will be made by the Distribution Company after examination of the Application.

### 9.2 **Categories**

There are 4 main Categories of Shared Use, defined as follows:

**1. Category A - Conductive Cable Network**

A network, as defined by this Category of Shared Use, is one which has the ability to conduct electrical current or support electrical potential either in its operating circuit, sheath, screen or support Catenary.

Shared User's Equipment under this Category of Shared Use is Attached to the Pole.

Example: coaxial cable or PSTN cable.

Note: Subsets of this Category of Shared Use have been defined as A1, A2, A3 and A4 in Table A of Appendix A.

**2. Category B - Non-Conductive Cable Network**

A network, as defined by this Category of Shared Use, is one which cannot conduct electrical current or support electrical potential either in its operating circuit, sheath, screen or support Catenary.

Shared User's Equipment under this Category of Shared Use is Attached to the Pole.

Example: fibre optic cable.

Note: In respect of this Category of Shared Use, if a conductive Catenary is required, then the combination of non-conductive cable and conductive Catenary would be considered as being under Category A of Shared Use.

**3. Category C - Electricity Supply**

Shared Use under this Category of Shared Use is limited to the situations described in clauses 15.1(a)(i) and 15.1(a)(ii).

**4. Category D - General**

Shared User's Equipment, other than that equipment which would normally be used in conjunction with Categories of Shared Use A, B or C.

Example: street signs, traffic signs, community signs, advertisements, lighting, surveillance equipment, mobile telephone equipment, associated circuits and other items of Shared User's Equipment which may or may not require electricity supply.

## 10. CLEARANCES

### 10.1 Clearances (Shared User's Equipment)

- (a) It is the responsibility of the Shared User to ensure that the Attached Shared User's Equipment complies with the clearance requirements prescribed in Appendix A for the relevant Category of Shared Use.
- (b) Where a clearance for a particular situation is not included in Appendix A, then it is the responsibility of the Shared User to take all necessary actions to determine what clearance requirements apply.

### 10.2 Limits of Approach (Safety Clearances)

It is the responsibility of the Shared User to ensure that, where appropriate, the limits of approach to the Electricity Distribution System or other Shared User's Equipment of persons, vehicles, mobile plant and elevated platform vehicles comply with the clearances prescribed in the Blue Book.

### 10.3 Ground Clearances

- (a) Subject to clause 10.3(b), it is the responsibility of the Shared User to ensure that ground clearances of its Shared User's Equipment either at the Pole or at the point where the Shared User's Equipment is Attached to a building or other structure comply with the clearances prescribed in the *Electricity Supply and Construction Regulations 1988* or such other relevant document which prescribes specific clearances for specific types of Shared User's Equipment.
- (b) Where the Shared User's Equipment includes Aerial Cable or PSTN cable or Aerial Customer Lead it is the responsibility of the Shared User to ensure that that Shared User's Equipment meets the in-span ground clearance requirements of Appendix A, Table A4.

### 10.4 Other Clearances (Shared User's Equipment) - Non Distribution Company Assets

- (a) Subject to clause 10.4(b), it is the responsibility of the Shared User to ensure that clearances to assets that do not form part of the Electricity Distribution System, for example, but not limited to, other companies' cables and buildings, either at the Pole, in-span or at the point where the Shared User's Equipment is Attached to a building or other structure, are sufficient and if applicable are in accordance with the *Electricity Supply and Construction Regulations 1988* or such other relevant document which prescribes specific clearances for specific types of Shared User's Equipment.
- (b) Where the Distribution Company has a Facilities Access Agreement with a third party which provides for specific clearances of that third party's

equipment to other Shared User's Equipment on the Pole or within proximity of the Pole, then the Distribution Company will advise the Shared User as soon as reasonably possible after receipt of its Application what specific clearances apply.

#### **10.5 Distribution Company to Direct**

Unless otherwise agreed in writing by the Parties, if the Distribution Company determines that the Shared User's Equipment does not provide clearance in accordance with this Code, the *Electricity Supply and Construction Regulations 1988*, the Blue Book or such other relevant document which prescribes specific clearances for specific types of Shared User's Equipment, it may (but is under no obligation to) direct the Shared User to take immediate action to comply with the clearance requirements.

#### **10.6 Cost**

The Distribution Company will not be liable for any costs the Shared User may incur as a consequence of the Shared User's Equipment not having adequate clearance as required by clauses 10.1, 10.2, 10.3 and 10.4.

### **11. METHODS OF ATTACHMENT AND SHARED USER'S EQUIPMENT**

#### **11.1 Approved Methods of Attachment and Approved Shared User's Equipment**

- (a) Unless otherwise agreed in writing by the Parties, the Shared User must provide detailed information in the Application, for approval by the Distribution Company, which approval will not be unreasonably withheld, describing:
  - (i) the method it will use to Attach Shared User's Equipment; and
  - (ii) the Shared User's Equipment it proposes to Attach.
- (b) The information provided must allow for, and the Shared User will ensure that, easy identification of the Shared User's Equipment by the Distribution Company can occur from:
  - (i) ground level in accordance with clause 16; and
  - (ii) at or near the Shared User's Equipment point of Attachment, by the presence of the Shared User's name or logo on or near the Shared User's Equipment.
- (c) Unless otherwise agreed in writing by the Parties, the Shared User will pay the Distribution Company's cost in investigating whether the method of Attachment or Shared User's Equipment will impact on the appearance or performance of the Electricity Distribution System.

- (d) Where applicable, information referred to in this clause 11.1 shall include:
  - (i) dimension drawings, photographs and manufacturer's drawings;
  - (ii) all relevant test results regarding the suitability of the Shared User's Equipment or method of Attachment;
  - (iii) aspects of the Shared User's Equipment that will impact on the appearance or performance of the Electricity Distribution System including, but not limited to, size, colour, weight, material type, operating voltage, power consumption and any applicable mechanical strengths such as, but not limited to tensile strength of Catenary and minimum failing load of brackets; and
  - (iv) information referred to in clause 15.4 of this Code.
- (e) Within a reasonable time, the Distribution Company will acknowledge receipt of the information provided to it by the Shared User in accordance with clause 11.1 (a).
- (f) The Distribution Company will provide a response in writing to the Shared User within 30 days of acknowledging receipt of the information provided pursuant to clause 11.1 (a).

**11.2 Non-Approved Method of Attachment and Non-Approved Shared User's Equipment**

- (a) The Shared User must not:
  - (i) Attach Shared User Equipment by a method which has not been approved in writing by the Distribution Company; or
  - (ii) Attach Non-Approved Shared User's Equipment.
- (b) Unless otherwise agreed in writing by the Parties, except in the case of an Emergency (in which case clause 11.4 will apply), where the Distribution Company becomes aware that a situation as described in clause 11.2(a) has occurred, it may by notice in writing direct the Shared User to arrange for the adjustment, removal or disconnection of the:
  - (i) Shared User's Equipment Attached by a method not approved by the Distribution Company; or
  - (ii) Non-Approved Shared User's Equipment.
- (c) Unless otherwise agreed in writing by the Parties, a notice provided pursuant to clause 11.2(b) will contain a brief explanation as to why the

Distribution Company considers that a situation described in clause 11.2(a) has occurred.

- (d) Unless otherwise agreed in writing by the Parties, if the Shared User fails to adjust, remove or disconnect the Shared User's Equipment in accordance with the notice provided pursuant to clause 11.2(b) within 20 days of receipt of that notice, the Distribution Company has the right to adjust, remove or disconnect that Shared User's Equipment in a manner consistent with the notice and at the cost of the Shared User.

### 11.3 **Attachment and Maintenance**

- (a) The Shared User must ensure that its Shared User's Equipment is correctly Attached and properly maintained with respect to its condition, operation and security of Attachment.
- (b) Unless otherwise agreed in writing by the Parties, except in the case of an Emergency (in which case clause 11.4 will apply), where the Distribution Company reasonably considers that the Shared User has not:
  - (i) correctly Attached its Shared User's Equipment; or
  - (ii) has failed to provide for proper operation or maintenance of its Shared User's Equipment to an extent that the Shared User's Equipment has or may become a hazard to life or property, or has or may affect the security of the Electricity Distribution System,

the Distribution Company may by notice in writing direct the Shared User to remedy the concern within a specified time as provided in the notice.

- (c) Unless otherwise agreed in writing by the Parties, where the Shared User fails to comply with a notice provided pursuant to clause 11.3(b) or has not provided an adequate response within the specified time, the Distribution Company may, at the cost of the Shared User, take any appropriate action, including the adjustment, removal or disconnection of the Shared User's Equipment, to ensure that the Shared User's Equipment is made safe.
- (d) Unless otherwise agreed in writing by the Parties, the Shared User must undertake work to allow the facilitation of the shifting, replacement, preservative treatment, re-arrangement or maintenance operations of the Electricity Distribution System, as reasonably required by the Distribution Company.
- (e) Unless otherwise agreed in writing by the Parties, the Shared User will, at its own cost, remove Attached Shared User's Equipment upon termination of Shared Use of a particular Pole, and will repair and rectify the Pole to



as far as reasonably possible the same condition as it was in immediately before the Shared User's Equipment was Attached.

- (f) Attached Shared User's Equipment is to remain the property of the Shared User, whether or not the Shared User's Equipment has (either, in whole or in part) become a fixture.
- (g) The Shared User shall not leave any hole, which it has created as a result of attempting to adjust, remove or disconnect Shared User's Equipment, exposed on a Pole. Any such holes shall be securely plugged by a method approved by the Distribution Company to prevent rain water entering into the Pole and causing deterioration of the timber.

#### 11.4 **Emergency**

- (a) Unless otherwise agreed in writing by the Parties, in the case of an Emergency, the Distribution Company may adjust, remove or disconnect the Attached Shared User's Equipment as is reasonably necessary to remove or minimise the effects upon the Electricity Distribution System of the Emergency and the Distribution Company will, as soon as possible thereafter, notify the Shared User of the action taken by the Distribution Company under this clause 11.4.
- (b) All reasonable costs of readjustment, installation or connection of the Shared User's Equipment after an Emergency shall be borne by the Shared User.

#### 11.5 **Shared User's Equipment - Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor**

- (a) The Shared User must indicate in the Application whether the proposed Shared Use includes Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor.
- (b) Where the Shared User's Equipment involves Attachment of Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor, the Shared User must ensure that the calculated tensions at both of the assumed loading conditions set out in the *Electricity and Construction Regulations 1988*, regulation 13(1), do not exceed 50 per cent of the minimum breaking load of the relevant cable.
- (c) Unless otherwise agreed in writing by the Parties, the Shared User must provide in the Application detailed information in the form described in clause 11.5(d) regarding the tensions and sags which will be present in the Shared User's Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor, and the method by which the tensions will be measured and set at time of Attachment.

- (d) Unless otherwise agreed in writing by the Parties, the information provided in accordance with clause 11.5(c) must be in the form of a graph with the following axis parameters:
- (i) tension in Newtons along the vertical axis; and
  - (ii) spans in metres along the horizontal axis, and containing the following information:
  - (iii) a family of constant sag lines at no wind condition;
  - (iv) a family of constant temperature lines at no wind condition including but not limited to the following temperatures:  $-5^{\circ}\text{C}$ ,  $5^{\circ}\text{C}$ ,  $15^{\circ}\text{C}$ ,  $25^{\circ}\text{C}$ ,  $35^{\circ}\text{C}$  and  $50^{\circ}\text{C}$ , with the  $15^{\circ}\text{C}$  line being a constant tension line at all span lengths; and
  - (v) a line corresponding to wind pressure of 500 Pascals at a temperature of  $15^{\circ}\text{C}$ .

## 11.6 Earth Potential Rise

### (a) Conditions

The conditions under which Shared User's Equipment may be subject to an earth potential rise as a result of faults to earth in the Electricity Distribution System are:

- (i) when Shared User's Equipment is Attached to a Distribution Company's neutral or earth systems or conductive Pole or any equipment that is earthed or may become earthed; and
- (ii) when Shared User's Equipment which is not directly Attached to a Distribution Company's neutral or earth systems or conductive Pole or any equipment that is earthed or may become earthed, is in a medium within which earth fault currents can flow, such as soil, wood or concrete.

### (b) Shared User's Responsibility

- (i) The Shared User must provide in the Application details of how it proposes to mitigate the effect of earth potential rise in its Shared User's Equipment.
- (ii) The Shared User shall ensure by insulation, equipment design and works practices that where the Shared User's Equipment may be subject to an earth potential rise to a level of that stated in Appendix B for the conditions which apply to the Pole on which

the Shared User's Equipment is Attached, then the earth potential rise in the Shared User's Equipment will not result in a hazard to life or property.

- (iii) Where appropriate, the Shared User shall use the Earth Potential Rise Code (Code of Practice for the Protection of Personnel and Equipment Against Earth Potential Rises Caused by High Voltage Power System Faults) as the reference document for the mitigation of hazards caused by earth potential rise.

#### 11.7 **Low Frequency Induction**

- (a) The Shared User must, if appropriate, provide in the Application details of how it proposes to mitigate the effect of low frequency induction in its Shared User's Equipment.
- (b) The Shared User shall ensure by adequate and suitable earthing and bonding and equipment design and works practices that where its Shared User's Equipment could be subject to low frequency induction caused by fault current ( $I_f$ ) in the Electrical Distribution System to a level of that stated in Appendix B and for the conditions which apply to the environment in which the Shared User's Equipment is situated, then any voltages induced in its Shared User's Equipment will not result in a hazard to life or property.
- (c) Where appropriate, the Shared User shall use the Low Frequency Induction Code (Code of Practice for the Mitigation of Hazardous Voltages Induced into Telecommunication Lines) as the reference document for the mitigation of hazards caused by low frequency induction.

#### 11.8 **Earthing**

- (a) The Shared User must, if appropriate, provide in the Application details of its proposed earthing system.
- (b) The Shared User shall use a suitable earthing system to mitigate the effect of high voltage injection into its Shared User's Equipment when that Shared User's Equipment is being Attached, removed or maintained.
- (c) The earthing system used by the Shared User must be suitable to mitigate the effect of earth potential rise as provided for in clause 11.6 and low frequency induction as provided for in clause 11.7.

#### 11.9 **Interference and Noise**

- (a) The Shared User will ensure that Attached Shared User's Equipment complies with all applicable standards in force relating to electrical or radio frequency emissions.

- (b) Where the Electricity Distribution System or the equipment of another Shared User suffers interference originating in Attached Shared User's Equipment then, immediately upon receipt of a notice in writing from the Distribution Company detailing the interference, that Shared User will take steps to investigate and stop the interference. The Shared User must advise the Distribution Company within 10 days of receipt of the notice of how and by when the Shared User will stop the interference.
- (c) Where the Shared User can demonstrate that the interference originating from its equipment does not exceed the appropriate standards then the Shared User is under no obligation to remedy the interference, but if requested by the Distribution Company, the Shared User will consult with the party suffering the interference with the objective of minimising its effect.
- (d) Where in the reasonable opinion of the Distribution Company, the interference is a hazard to life or property or is affecting the security or operation of the Electricity Distribution System or is considered an Emergency by the Distribution Company then, if the Shared User has not within a reasonable period from receipt of the notice in writing referred to in clause 11.9(b):
  - (i) stopped the interference;
  - (ii) provided reasons acceptable to the Distribution Company that the Shared User's Equipment should continue in service; or
  - (iii) authorised the Distribution Company to switch the electricity supply off,the Distribution Company has the right to adjust, remove or disconnect the Attached Shared User's Equipment without immediately notifying the Shared User.
- (e) Where the Attached Shared User's Equipment suffers interference caused by the Electricity Distribution System then, immediately upon receipt of a written notice detailing the interference, the Distribution Company will take steps to investigate and, subject to clause 11.9(f), stop the interference. The Distribution Company must advise the Shared User within 10 days of receipt of the notification of how and by when the Distribution Company will attempt to stop or minimize the interference.
- (f) Where the Distribution Company determines that the interference originates by the very nature of the Electricity Distribution System, the Distribution Company is under no obligation to remedy the interference.

#### 11.10 **Wave Form Distortion - Electricity Supply**

The Shared User shall ensure that where its Shared User's Equipment is provided with an electricity supply in accordance with clause 15, its Shared User's Equipment will operate effectively with an electricity supply which complies with the Electricity Supply Association of Australia document entitled Wave Form Distortion Guidelines [D(b) 35-1989].

#### 11.11 **Effect on the Electricity Distribution System**

The Shared User agrees that notwithstanding that approved Shared User's Equipment has been Attached or an approved method of Attachment has been undertaken by the Shared User to Attach its Shared User's Equipment, the Shared User must ensure that the Shared User's Equipment does not inhibit the operation of the Electricity Distribution System or reduce its capacity, reliability or safety.

### 12. **CONSTRUCTION AND CALCULATION**

#### 12.1 **Distribution Company's Construction**

- (a) Subject to clause 12.1(b), the Distribution Company's construction will generally be in accordance with that published in the manuals maintained by the Distribution Company, which may be leased by the Shared User upon request, and which may be amended by the Distribution Company from time to time.
- (b) Where Shared User's Equipment is or is to be Attached to a Pole:
  - (i) the active conductors of service leads shall be covered or insulated;
  - (ii) street light leads shall be insulated to a minimum 0.6kV grade; and
  - (iii) earth wires on wooden Poles shall, where the Distribution Company considers practicable, be covered with non-conducting material between ground and a point at least 0.6 metres above the uppermost point of Attachment of Shared User's Equipment.

#### 12.2 **Shared User's Construction and Shared User's Equipment**

- (a) Unless otherwise stated in this Code, where Shared User's Equipment in Category of Shared Use A2 is Attached to the Pole, the construction of the **PSTN** shall be in accordance with Part B of the Joint Use of Poles Arrangement.
- (b) Subject to clause 12.2(c), where the Shared User's Equipment is an Aerial Cable then the location on the Pole shall be the highest position possible

subject to maintaining clearances as required in Appendix A and shall be Attached to the Pole:

- (i) A. on the centre line of the Pole where a Strained Configuration is used; or  
B. in all other cases, on the street side;
  - (ii) within the Strategic Zone; and
  - (iii) wherever possible at a height above ground level that allows the Catenary to follow the general contours of the Pole route.
- (c) If the Distribution Company, in its sole discretion, permits the Shared User to Attach its Aerial Cable on a substation Pole, subject to maintaining the clearances required by Appendix A, the Shared User must Attach such Aerial Cable to the house or footpath side of the Pole.
- (d) Where the Shared User wishes to Attach an Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor on a Pole on which its own Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor (as the case may be) is already Attached in a Strained Configuration, then the point of Attachment for the second Aerial Cable, PSTN cable, Electrolysis Drainage Cable or PTC's Electrical Conductor shall, wherever practicable for each cable type:
- (i) be on the same horizontal plane on the Pole;
  - (ii) make use of or use the same mounting arrangement unless otherwise agreed in writing by the Parties; and
  - (iii) only involve one hole or Attachment on the Pole.
- (e) Unless otherwise agreed in writing by the Parties, a Shared User may not Attach more than two Fly-Off Points to a Pole or Catenary for any one of the Categories of Shared Use or subsets of Categories of Shared Use A and B and no more than 5 Aerial Customer Leads to any Fly-Off Point on a Pole or Catenary.
- (f) A Shared User may not Attach Shared User's Equipment on the Service Side of a Pole either to the:
- (i) Pole; or
  - (ii) Shared User's Aerial Cable, PSTN cable, PTC Electrical Conductor or Electrolysis Drainage Cable,

in such a way that in the reasonable opinion of the Distribution Company prevents or affects access by the Distribution Company to its Pole and Electricity Distribution System by ladder or elevating platform vehicle, to an extent that standard works procedures cannot be used for the purpose of construction, maintenance or operation.

- (g) The Shared User must, if appropriate, indicate in the Application the number of:
  - (i) Fly-Off Points; and
  - (ii) Aerial Customer Leads,that the Shared User will be using on a Pole.
- (h) Subject to clause 12.2(f), the Shared User may only Attach Fly-Off Points to a Catenary on one side of a Pole.

### 12.3 **Increased Maintenance or Construction Costs**

Unless otherwise agreed in writing by the Parties, where as a result of the Attachment of Shared User's Equipment, the Distribution Company incurs an increase in its maintenance or construction costs, such increase will be payable by the Shared User where the Distribution Company can demonstrate that increase.

### 12.4 **Calculation**

Unless otherwise agreed in writing by the Parties:

- (a) **Requirement**
  - (i) When the Pole is deemed by the Distribution Company to be a Special Shared Use Pole, a Calculation is required to be performed before Shared User's Equipment can be Attached to that Pole.
  - (ii) An Application will only be accepted by the Distribution Company where the results of the Calculation are acceptable to the Distribution Company.
- (b) **Performance of Calculation**
  - (i) Subject to clause 12.4(b)(ii), a Calculation, if required, may be performed by the Shared User or by the Distribution Company at the Shared User's request and cost.
  - (ii) The Parties agree that where a third party's Catenary has been Attached to the relevant Pole prior to the Attachment of the

Shared User's Catenary, the Distribution Company will carry out the Calculation at the cost of the Shared User.

(c) **Where Shared User does Calculation**

- (i) The Distribution Company will provide, at the request and cost of the Shared User, sufficient information relating to the equipment of the Distribution Company, the Electrical Distribution System and any other applicable conditions to assist the Shared User to complete the Calculation.
- (ii) The Distribution Company will not provide information regarding the methodologies and processes the Distribution Company would employ to carry out the Calculation as such information is proprietary to the Distribution Company.
- (iii) The numerical results and the basis of the Calculation carried out by the Shared User must be provided to the Distribution Company in the Application, and if those results indicate that the Pole will be damaged or adversely affected by the Attachment of the Shared User's Equipment specified in the Application then the Distribution Company will reject that Application unless the Application specifies Make Ready Works which, if carried out, will result in that Pole not being so damaged or adversely affected.
- (iv) The Shared User warrants that by lodging an Application in relation to a Special Shared Use Pole that:
  - A. if not carried out by the Distribution Company, a Calculation where required has been made and the results of that Calculation are provided to the Distribution Company in the Application; and
  - B. where the Calculation has been carried out by the Shared User in respect of a Pole, that Pole will not be damaged or adversely affected by the Attachment of the Shared User's Equipment specified in the Application.

(d) **Calculation Results**

- (i) Where the Distribution Company has carried out a Calculation and has concluded that the Pole will not be damaged or adversely affected by the Attachment of the Shared User's Equipment specified in the Application and that Pole suffers loading failure after the Shared User's Equipment has been Attached, the cost of replacing the Pole will be borne by the Distribution Company.



(ii) Where a Special Shared Use Pole suffers loading failure within 5 years of the Shared User first Attaching its Shared User's Equipment to that Pole, and:

- A. a Calculation has been carried out by the Shared User;  
or
- B. a Calculation was carried out by the Distribution Company based upon incorrect information provided or supplied by the Shared User,

and no further equipment has been Attached to that Pole which would materially affect that Calculation (other than Shared User's Equipment which was the subject of the Application), the cost of replacing the Pole and the cost of any other related remedial action will be borne by the Shared User.

### **13. COSTS OF WORKS**

- (a) Unless otherwise agreed in writing by the Parties, any reasonable costs incurred by the Distribution Company in connection with the adjustment, removal or disconnection of Shared User's Equipment in accordance with the provisions of this Code will be paid by the Shared User within 30 days of receiving an invoice.
- (b) Unless otherwise agreed in writing by the Parties, where the Distribution Company has adjusted, removed or disconnected any Shared User's Equipment in accordance with this Code and the Shared User has not paid the invoice of the Distribution Company ("Outstanding Amount") in accordance with clause 13(a), the Distribution Company reserves the right to retain the adjusted, removed or disconnected Shared User's Equipment until the Outstanding Amount has been paid in full.

### **14. AUSTEL CABLER**

Where this Code permits the Distribution Company to adjust, remove or disconnect Shared User's Equipment, the Distribution Company may, where it considers it appropriate and at the cost of the Shared User, employ an AUSTEL licensed cabler to effect the adjustment, removal or disconnection of the Shared User's Equipment.

### **15. ELECTRICITY SUPPLY (240 V)**

#### **15.1 Limits of Shared Use**

- (a) Shared Use of a Pole for the purposes of providing electricity supply applies only to those situations where:

- (i) the Shared User's Power Supply Equipment is Attached to a Pole;  
or
  - (ii) the Shared User's Equipment Attached to the Pole receives an electricity supply.
- (b) For the purposes of this Code, the supply of electricity from the Electricity Distribution System, which does not involve Shared Use of a Pole as defined in clause 15.1 (a), is a standard customer electricity supply arrangement and does not fall within the scope of this Code.

## 15.2 **Location of Point of Supply**

- (a) In the case of overhead supply and where the Consumer's Terminals Box is mounted on the Pole, the Point of Supply shall be deemed to be at the point where the 240 volt a.c. service cable enters the Consumer's Terminals Box.
- (b) In the case of an electricity supply from a Public Lighting Pole, the Point of Supply shall be deemed to be the point at which the service cable leaves the ground and enters the Shared User's pedestal or pit.
- (c) Where the electricity supply arrangements and Point of Supply is outside the parameters of clauses 15.2(a) and (b), then the location of the Point of Supply and the shared isolation point referred to in clause 15.7 will be negotiated by the Parties and the Shared User must pay all the Distribution Company's costs and expenses in making electricity supply available at an agreed Point of Supply.

## 15.3 **Mounting of Consumer's Terminals Box and Power Supply Equipment on the Pole**

### (a) **Orientation**

- (i) Shared User's Equipment will be Attached so that the Power Supply Equipment is on the Pole facing away from the road and the Consumer's Terminals Box is on the Down Traffic Side.
- (ii) Where access or clearances prevent the Shared User's Equipment from being placed in this configuration, then orientation shall be determined by agreement between the Parties.

### (b) **Height Above Ground Level**

The Shared User undertakes that any Power Supply Equipment or Consumer's Terminals Box attached to a Pole will be mounted with its lower extremities at a height above ground at the Pole of between 3.0 metres and 3.5 metres always provided that no part of the Shared User's

Power Supply Equipment or Consumer's Terminals Box extends a distance which is 4.0 metres above ground at the Pole.

#### 15.4 **Network Power Supply Equipment Specification**

The Shared User will, in accordance with clause 11.1 of this Code, provide information in relation to its Power Supply Equipment to the Distribution Company, including but not limited to, the following:

- (a) maximum output voltage;
- (b) alternating or direct current supply;
- (c) power rating;
- (d) power factor;
- (e) Australian Standards or equivalent national standard to which Shared User's Equipment complies;
- (f) dimensions such as width, height and depth;
- (g) weight;
- (h) colour; and
- (i) proposed method of Attachment.

#### 15.5 **Electrical Standards for Power Supply Installation**

##### **(a) Standards and Performance of Work**

All electrical installation and wiring work performed by or on behalf of the Shared User must be performed by appropriately qualified, licensed or authorised persons and as may be required by the:

- (i) "Service and Installation Rules - Code of Practice for the Connection of Electrical Supply Mains";
- (ii) the *State Electricity Commission Wiring Regulations 1992* (No. 259); and
- (iii) any applicable statute, regulation, ordinance or standard that is from time to time applicable to the Distribution Company.

**(b) Supply from Overhead Mains with Consumer's Terminals Box Attached to Pole**

**(i) Service Cables - Provision, Size and Enclosure**

The Shared User must:

- A. provide sufficient service cable from the Consumer's Terminals Box for the Distribution Company to connect to the LV mains. The service cable must consist of two copper or aluminium single core double insulated cables of between, and inclusive of 6 mm<sup>2</sup> and 35 mm<sup>2</sup> cross sectional area with red insulation for active and black insulation for neutral conductor and have a maximum diameter (over insulation) of not greater than 10.5 mm. The service cable must be enclosed in flexible PVC conduit. The service cable will be owned by the Distribution Company from the time that it is installed;
- B. provide a Consumer's Terminals Box in accordance with clause 15.5(b)(ii) and terminate the service cables at the Consumer's Terminals Box;
- C. Attach service cables enclosed in conduit to the Pole using saddles or bands as appropriate. Sufficient cable is to be left coiled where it exits the conduit for connection by the Distribution Company to the overhead mains; and
- D. Attach an identification tag (marked "NEUTRAL") to the neutral conductor after it exits the conduit identified in clause 15.5(b)(i)C.

**(ii) Consumer's Terminals Box Attached to Pole**

- A. The Consumer's Terminals Box must be of the following standard or an agreed equivalent: weather proof and UV stabilised (Clipsal 56E2 series) with mounting bracket of stainless steel or galvanised steel.
- B. The equipment in the Consumer's Terminals Box shall include:
  - (1) a cartridge fuse in swing-out carrier, suitable for holding up to and including a 20 Amp fuse (Shared User to provide fuse); and

- (2) an accessible neutral/earth point suitable for polarity testing.

Where considered desirable by the Shared User, the Consumer's Terminals Box may also include a combined 30mA trip residual current device up to 16 Amp over-current circuit breaker (RCD/MCB) device, Clipsal series type 4BEBE2 or equivalent.

(iii) **Sub-mains**

Sub-mains cable between the Consumer's Terminals Box and the Power Supply Equipment must be enclosed by the Shared User in PVC conduit.

(c) **Supply from Public Lighting Pole**

**Shared User's Power Supply Equipment in Ground Mounted Pedestal or Pit**

(i) **Equipment to be Supplied by Shared User and Access Arrangements to Shared Isolation Point in Public Lighting Pole**

- A. The Shared User must provide the following equipment for installation by the Distribution Company in the Public Lighting Pole. The equipment must be a cartridge fuse and a fuse holder suitable for holding up to and including a 25 Amp fuse, Hagger LI 16 00 Din rail mounted for the Distribution Company to fuse the circuit or an agreed equivalent.
- B. Access to the fuse described in clause 15.5(c)(i)A is achieved by removal of the access cover on the Public Lighting Pole. A special triangular key tool which is required to remove the cover is available from the Distribution Company. Access is only permitted for the purpose of removing or replacing the fuse protecting the Shared User's Power Supply Equipment.
- C. The Shared User must provide an approved pedestal or pit installed as near as practicable to the Public Lighting Pole. Where considered desirable by the Shared User, the pedestal or pit may include a combined 30mA trip residual current device up to 16 Amp over-current circuit breaker (RCD/MCB) device, Clipsal series type 4BEBE2 or equivalent.

(ii) **Service Cable**

Between the Public Lighting Pole and the pedestal or pit the Shared User shall supply and install a 6 mm<sup>2</sup> conductor double insulated service cable or service cables which shall be suitably protected. The service cable or service cables shall be of sufficient length to enable the removal of the termination panel from within the Public Lighting Pole to facilitate the wiring of the panel by the Distribution Company.

15.6 **Maintenance up to Point of Supply**

The Distribution Company is responsible for any maintenance of its Electricity Distribution System up to the Point of Supply.

15.7 **Shared Isolation Point**

- (a) Subject to clause 11.4, unless otherwise agreed in writing by the Parties, the Shared User will provide the Distribution Company with unrestricted access to the shared isolation point for the purpose of isolating (disconnecting) supply of electricity to the Shared User's Power Supply Equipment in the event of any of the following:
- (i) non-payment by the Shared User of any invoice from the Distribution Company within 30 days of receipt;
  - (ii) maintenance works or other works are being carried out near the Electricity Distribution System;
  - (iii) the need to adjust, remove or disconnect the Shared User's Equipment in accordance with this Code; or
  - (iv) a situation has arisen where, in the reasonable opinion of the Distribution Company, either the Shared User's Equipment or the Distribution Company Electricity Supply Service has become a safety hazard for whatever reason.
- (b) In the case where the Point of Supply is in accordance with clause 15.2(a), the shared isolation point shall be the fuse within the Consumer's Terminals Box and this fuse shall be referred to as the service fuse.
- (c) In the case where the Point of Supply is in accordance with clause 15.2(b) the shared isolation point shall be the Distribution Company's fuse within the Public Lighting Pole and this fuse shall be referred to as the service fuse.

- (d) Subject to clause 11.4, the Distribution Company shall provide 5 days' written notification to the Shared User prior to isolation of supply for the reasons identified in clauses 15.7(a)(i), (ii) and (iii).

#### 15.8 **Power Factor**

The Shared User must ensure that at all times the power factor measured at the supply side of the Power Supply Equipment is between a minimum 0.85 lagging and maximum 0.85 leading, averaged over any fifteen minute period. Should the power factor fall outside these limits, the Shared User will, upon receipt of written notification from the Distribution Company, undertake works to an agreed timetable to restore the power factor within correct levels. The Distribution Company reserves the right to require the Shared User to pay a reasonable amount to compensate for electricity taken at a power factor outside the prescribed limits.

#### 15.9 **Harmonics**

The Shared User will ensure that its Shared User's Equipment will not inject harmonics into the Electricity Distribution System which are outside the limits specified in AS 2279 Part 2 - "Limitations of Harmonics Caused by Industrial Equipment".

#### 15.10 **Prevention of Back-Feeding**

- (a) The Shared User must take all necessary steps to ensure that its Power Supply Equipment will not cause current flow or earth potential rise by back-feeding through the Power Supply Equipment into the Electricity Distribution System.
- (b) The Shared User must, if appropriate, provide in the Application, details regarding how it proposes to prevent the occurrence of back-feeding.

### 16. **IDENTIFICATION LETTERS**

- (a) The Shared User must Attach an identification letter to each Pole on which it Attaches Shared User's Equipment.
- (b) The Shared User must indicate in the Application:
  - (i) whether an identification letter is required to be provided by the Distribution Company; and
  - (ii) if appropriate, the method of Attachment of the identification letter.

- (c) Identification letters:
  - (i) are available from the Distribution Company; and
  - (ii) must be Attached to the Pole by an approved method of Attachment.
  
- (d) Subject to clause 16(f):
  - (i) the identification letter will be provided free of charge; and
  - (ii) the appropriate identification letter to be used is set out in Appendix D.
  
- (e) Where the number of identification letters provided to a Shared User exceeds 100, the Shared User shall provide the Distribution Company with a monthly record of the number of identification letters:
  - (i) provided by the Distribution Company;
  - (ii) Attached to a Pole; and
  - (iii) held by the Shared User ready for Attachment.
  
- (f) Where the information in clause 16(e):
  - (i) is not made available;
  - (ii) is, in the opinion of the Distribution Company, incorrect; or
  - (iii) indicates that the number of identification letter supplied is, in the opinion of the Distribution Company, unreasonably high compared to the number of identification letter Attached and held by the Shared User,

the Distribution Company may charge the Shared User for the supply of the identification letter.
  
- (g) A Shared User may elect to select and manufacture its own identification letter (subject to the letter not having been previously allocated). In this event, the letter must be in accordance with the Distribution Company's specified requirements shown in Drawing No. VX167186/2 (a copy of which will be made available upon request).
  
- (h) Where the Shared User fails to:
  - (i) Attach the identification letter;



- (ii) Attach the correct identification letter; or
- (iii) use an approved method of Attachment,

the Distribution Company may rectify the failure of the Shared User at the cost of the Shared User.

## **17. OPERATION - ELECTRICAL DISTRIBUTION SYSTEM**

- (a) To facilitate Attachment of Shared User's Equipment on the Pole it may be necessary for the Distribution Company to carry out an operation including, but not limited to switching, earthing or auto-reclose suppression on its Electrical Distribution System.
- (b) The requirement to carry out an operation may be requested by either Party.
- (c) Where the Distribution Company requires the operation, the Shared User will be advised of the reasons for the operation.
- (d) Where an operation is required by the Shared User, the Shared User must submit an application requesting that the operation be carried out. (For illustrative purposes only, an "Application for Auto-Reclose Suppression" is set out in Appendix J).
- (e) Where an application is required in accordance with clause 17(d), the Shared User must submit that application at least 5 days in advance of the date it proposes erecting its Shared User's Equipment.
- (f) Unless otherwise agreed in writing by the Parties, all costs associated with an operation as described in clause 17(a) will be borne by the Shared User.

## **18. NOTIFICATION**

### **18.1 Contact Officer**

- (a) Any notice or other communication to or by a Party to this Code:
  - (i) may be given by personal service, post or facsimile;
  - (ii) must be directed to the respective Party's contact officer; and
  - (iii) must include the contact officer's details.
- (b) The Shared User must provide in the Application a 24 hour contact for any matters of urgency that arise in connection with this Code.

18.2 **Change of Details**

Either Party may change its address for service of notices or the person for whose attention notices must be served, by notification in writing to the other Party.

## **APPENDIX A**

### **CLEARANCES FOR CATEGORIES OF SHARED USE** (clause 10)

## CLEARANCES FOR CATEGORIES OF SHARED USE

### SECTION A1. INTRODUCTION

A 1.1 This Appendix establishes the minimum clearances that apply for the conditions listed in Section A2 and for the Shared User's Equipment shown in Table A.

A 1.2 Dimensions in Tables A1(a), A1(b), A1(c), A1(d), A2, A3 and A4 are in mm.

### SECTION A2. CONDITION

A2.1 The minimum clearances that shall be maintained, from items of Distribution Company's Electricity Distribution System and the Shared User's Equipment listed in Table A, either at the Distribution Company's structure or in-span are shown in Tables A1(a), A1(b), A1(c), A1(d), A2 and A3.

A2.2 The information provided in Tables A1(a), A1(b), A1(c), A1(d), A2, A3 and A4 and their associated notes comply with the documents included in Section A3. However, it is the Shared User's responsibility to ensure that for situations or for Shared User's Equipment which are not covered by these Tables that the requirements of the documents included in Section A3 and of other relevant documents which may be applicable are satisfied.

**TABLE A**

| Shared User's Equipment   | Category of Shared Use |
|---|------------------------|
| Coaxial cable, Catenary or other forms of conductive Aerial Cable and associated equipment.   | A1                     |
| PSTN cable and associated equipment*.   | A2                     |
| PTC's Electrical Conductor and associated equipment <sup>+</sup> .  | A3                     |
| Electrolysis Drainage Cable and associated equipment*.  | A4                     |
| Fibre-optic cable or other forms of non-conductive Aerial Cable and associated equipment.   | B                      |
| Power Supply Equipment and associated equipment.  | C                      |
| Street, traffic or community signs, advertisements, lighting, surveillance equipment, mobile telephone equipment, associated circuits and other items of Shared User's Equipment not covered by Category of Shared Use A1, A2, A3, A4, B and C. | D                      |

\* For the purposes of clearances, PSTN also covers telecommunication line links installed under the 500 Metre Rules.

<sup>+</sup> Special conditions and clearances apply to Category of Shared Use A3 and A4. Information regarding these conditions and clearances may be obtained from the Distribution Company upon request.

### **SECTION A3. REFERENCE DOCUMENTS**

- A3.1 *Electricity Supply and Construction Regulations 1988* (Statutory Rules 1988 No. 260).
- A3.2 Joint Use of Poles Arrangement.
- A3.3 Crossings Code (Telecom/Electricity Supply Association of Australia Code of Practice).
- A3.4 Blue Book.

### **SECTION A4. CLEARANCES**

- A4.1 (a) Unless otherwise stated, the clearances are minimum vertical clearances.
- (b) The Distribution Company may require larger clearances than stated in Tables A1(a), A1(b), A1(c), A1(d), A2 and A3 in specific situations for construction, maintenance and operational reasons.

#### **A4.2 On Same Structure**

For the clearances on the Pole and within one metre of the Pole between the Shared User's Equipment and the Electricity Distribution System, refer to Tables A1(a), A1(b), A1(c) and A1(d).

#### **A4.3 In-Span**

For clearances in-span between Shared User's Equipment and the Electricity Distribution System, refer to Tables A2 and A3.

#### **A4.4 Ground Clearance and Clearance to Structures**

For in-span clearances from ground and other structures for Shared Users Equipment consisting of Aerial Cable or PSTN cable or Aerial Customer Lead, refer to Table A4.

**Table Al(a) - Coaxial cable, Catenary, fibre-optic and other forms of Aerial Cable and associated Shared User's Equipment  
(Category of Shared Use Al and B)**

Clearances On Or In Close Proximity To Pole (Refer note 9)

| Shared User's Equipment  | Item of Electricity Distribution System |      |     |     |                                |                        |               |
|--|---|------|-----|-----|--------------------------------|------------------------|---------------|
|  | Aerial earth and supervisory cable*     | Bare | LV  | ABC | HV ABC <sup>+</sup><br>(22 kV) | 6.6, 11, 22 kV<br>Bare | 66 kV<br>Bare |
| Coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable | 380                                     | 1000 |     | 600 | 1200                           | 2200                   | 3000          |
| Insulated Aerial Customer Lead   | 380                                     |      | 600 | 600 | 1200                           | 2200                   | 3000          |
| Terminal housings, Catenary or Pole mounted                                | 380                                     | 1000 |     | 600 | 1200                           | 2200                   | 3000          |
| Wooden crossarm or insulated support                                       | 380                                     | 1000 |     | 600 | 1200                           | 2200                   | 3000          |
| Underground cable mounted on Pole  | 380                                     | 1000 |     | 600 | 1200                           | 2200                   | 3000          |
| Earth wires on Pole, bare or insulated                                     | 200                                     | 1000 |     | 600 | 1200                           | 2200                   | 3000          |

The following notes are to be read in conjunction with Table Al(a):

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) Except as defined in note 5, the position of the coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable will always be below the Distribution Company's circuits.
- (3) All measurements shown apply at time of erection and unless otherwise stated are the minimum allowable under no wind conditions and assume Distribution Company's circuits are operating at normal loads and temperatures.
- (4) Minimum radial spacing between coaxial cable, Catenary, fibre-optic cable and other items of forms of Aerial Cable and other Shared User's Equipment and:
  - (a) insulated mechanically protected down leads, street light brackets and control equipment, cable conduit, down earths and stay fittings - 50 mm; and
  - (b) insulated non mechanically protected down leads, pole mounted LV switches/fuses/connection boxes - 150 mm.
- (5) \* Clearances of supervisory cable are radial clearances.
- (6) + Clearance is for semi-conductive non-metallic screened HV ABC, for metallic screened HV ABC, clearance may be reduced to 600 mm.
- (7) Minimum clearance to the Distribution Company's insulated service is 150 mm and assumes insulation is 600 volt grade, double insulated. A minimum clearance of 400 mm for lesser grades of insulations may be allowed after insulation has been evaluated by an approved Shared User or Distribution Company. Minimum clearance to bare Distribution Company's service cable is 1000 mm.
- (8) Subject to note 9, where Shared User's Equipment is permitted to be Attached to a substation Pole, the Shared User shall construct its Shared User's Equipment in accordance with the specific requirements of the Distribution Company and shall comply with the horizontal clearance requirements of the *Electricity Supply and Construction Regulations 1988* and the relevant vertical clearances included in Table
- (9) (9) Where the Parties agree in writing, other clearances than those provided in Table Al(a) may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.

**Table AI(b) - PSTN cable and associated Shared User's Equipment  
(Category of Shared Use A2)**

Clearances On Pole (refer note 9)

| Shared User's Equipment                        | Item of Electricity Distribution System |      |     |                                |                        |               |
|--|---|------|-----|--------------------------------|------------------------|---------------|
|  | Aerial earth and supervisory cable*     | Bare | ABC | HV ABC <sup>+</sup><br>(22 kV) | 6.6, 11, 22 kV<br>Bare | 66 kV<br>Bare |
| PSTN cable and insulated Aerial Customer Lead  | 380                                     | 1200 | 600 | 1200                           | 2400                   | 3200          |
| Insulated Terminal Box                         | 380                                     | 1200 | 600 | 1200                           | 2400                   | 3200          |
| Wooden crossarm or insulated extension bracket | 380                                     | 1200 | 600 | 1200                           | 2400                   | 3200          |
| Underground cable sheathed                     | 380                                     | 1200 | 600 | 1200                           | 2400                   | 3200          |
| Insulated Catenary, conduit or capping         | 380                                     | 1200 | 600 | 1200                           | 2400                   | 3200          |

Following notes to be read in conjunction with Table AI(b):

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) Except as defined in note 5 the position of PSTN cable and Aerial Customer Lead shall always be below the Distribution Company's circuits.
- (3) All measurements shown apply at time of erection and unless otherwise stated are the minimum allowable under no wind conditions and assume Distribution Company's circuits are operating at normal loads and temperatures.
- (4) Minimum radial spacing between telecommunication cables and items of other Shared User's Equipment, and the Distribution Company's:
  - (a) insulated mechanically protected down leads, street light brackets and control equipment, cable conduit, down earths and stay fittings - 50 mm; and
  - insulated non mechanically protected down leads, Pole mounted LV switches/fuses/connection boxes - 150 mm.
- (5) \* Clearances of supervisory cable are radial clearances.
- (6) + Clearance is for semi-conductive non-metallic screened HV ABC, for metallic screened HV ABC, clearance may be reduced to 600 mm.
- (7) Minimum clearance to Distribution Company's insulated service is 600 mm and assumes insulation is 600 volt grade, double insulated. A minimum clearance of 1000 mm for lesser grades of insulations may be allowed, after insulation has been evaluated by Shared User or Distribution Company. Minimum clearance to bare Distribution Company's service cable is 1200 mm.
- (8) Subject to note 9, where Shared User's Equipment is permitted to be Attached to a substation Pole, the Shared User shall construct its Shared User's Equipment in accordance with the specific requirements of the Distribution Company and shall comply with the horizontal clearance requirements of the *Electricity Supply and Construction Regulations 1988* and the relevant vertical clearances included in Table
- (9) Where the Parties agree in writing, other clearances than those provided in Table AI(b) may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.

**Table A1(c) - Power Supply Equipment and associated plant  
(Category of Shared Use C)**

Clearances On Pole (See Note 5)

| Shared User's Equipment  | Item of Electricity Distribution System |      |                 |                 |                                 |
|--------------------------|---|------|-----------------|-----------------|---------------------------------|
|                          | Aerial earth and supervisory cable      | Bare | LV Mains<br>ABC | Service<br>Bare | cable<br>Insulated <sup>^</sup> |
| Consumer's Terminals Box | 1200                                    | 2000 | 1200            | 2000            | 1200                            |
| Power Supply Equipment   |   |      |                 |                 |                                 |
| - Pole mounted           | 1200                                    | 2000 | 1200            | 2000            | 1200                            |
| - Catenary mounted       | 380                                     | 1000 | 600             | 1000            | 150                             |

Following notes to be read in conjunction with Table A1(c):

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) All measurements shown apply at time of erection and unless otherwise stated are the minimum allowable under no wind conditions and assume Distribution Company's circuits are operating at normal loads and temperatures.
- (3) # Clearance for insulated service assumes insulation is 600 volt grade, double insulated. Clearance of 2000 mm for insulation of a lower grade shall apply.
- (4) Notwithstanding the above minimum clearances, and subject to note 5, no part of the Power Supply Equipment (when Pole mounted) or Consumer's Terminals Box shall exceed 4000 mm above ground at the Pole.
- (5) Where the Parties agree in writing, other clearances than those provided in Table A1(c) may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.



**Table A1(d) - Street, traffic or community signs, advertisements, lighting surveillance equipment, mobile telephone equipment etc. (Category of Shared Use D)**

Vertical Clearances On Pole (refer note 7)

| Shared User's Equipment   | Item of Electricity Distribution System |      |              |               |                     |            |
|---|---|------|--------------|---------------|---------------------|------------|
|   | Aerial earth and supervisory cable      | Bare | LV cable ABC | HV ABC (22kV) | 6.6, 11, 22 kV Bare | 66 kV Bare |
| Signs, advertisements, surveillance equipment, mobile telephone equipment, etc. | 1200                                    | 1800 | 1400         | 2000          | 3000                | 4500       |

Following notes to be read in conjunction with Table A1(d):

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) The Shared User's Equipment will always be lower than the Distribution Company's circuit.
- (3) The minimum distance to the Distribution Company's circuit shall be measured from the top of the Shared User's Equipment.
- (4) The wind area of the Shared User's Equipment shall not exceed 0.3 metres<sup>2</sup> and the longest dimension will not exceed 1000 mm.
- (5) No masonry fasteners designed to penetrate concrete will be used when attaching the Shared User's Equipment to concrete Poles.
- (6) Where the Shared User's Equipment projects over a roadway, or is in a position such that it could be struck by a vehicle which is on the road pavement, it shall be so placed that its lower edge is at least 4600 mm from ground level (4900 mm for over-dimensional routes) or, if it is to be over the footpath, then not less than 2700 mm from ground level.
- (7) Where the Parties agree in writing, other clearances than those provided in Table A1(d) may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.
- (8) Minimum clearance to the Distribution Company's insulated service is 600 mm and assumes insulation is 600 volt grade, double insulated. A minimum clearance of 1000 mm for lesser grades of insulations may be allowed after insulation has been evaluated by an approved Shared User or Distribution Company. Minimum clearance to bare Distribution Company's service cable is 1200 mm.

**Table A2 - Coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable and PSTN cable and Aerial Customer Lead  
(Category of Shared Use A1, A2 and B)**

Vertical Mid Span Clearances - Conductors/Circuits On Same Pole Line (refer note 10)

| Shared User's Equipment   | Aerial earth and supervisory cable* | Item of Electricity Distribution System |         |                   |                        |               |
|---|-------------------------------------|---|---------|-------------------|------------------------|---------------|
|   |                                     | ABC                                     | LV Bare | HV ABC<br>(22 kV) | 6.6, 11, 22 kV<br>Bare | 66 kV<br>Bare |
| Coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable, PSTN cable and Aerial Customer Lead | 380                                 | 750<br>(See notes 4 and 5)              | 600     | 1200              | 1800                   | 2700          |

Following notes to be read in conjunction with Table A2:

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) Except as defined in note 7, the position of the coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable and PSTN cable or Aerial Customer Lead will always be below the Distribution Company's circuits.
- (3) Unless otherwise stated, all clearances shown are the minimum allowed at the time of Attachment.
- (4) In the case of a Catenary to bare LV, the minimum clearance at the time of Attachment is 600 mm provided that:
  - (a) unless otherwise agreed in writing the Shared User will use its reasonable endeavours to Attach a coaxial cable within 5 days; and
  - (b) a minimum of 750 mm between the Catenary/coaxial cable combination and the LV circuit is achieved as a final clearance.
- (5) Where the Shared User's Equipment is insulated to 600V grade, the minimum clearance at the time of Attachment is 600 mm.
- (6) Clearances apply to spans up to 50 metres, spans in excess of this require special design.
- (7) \* Clearances of supervisory cable are radial clearances.
- (8) Minimum in-span clearances (Pole to house) between the Shared User's insulated Aerial Customer Lead and the Distribution Company's service wire are:
  - (a) insulated service wire - 150 mm radially#, in-span, under normal load and temperatures; and
  - (b) bare service wire - 600 mm radially below the horizontal, in-span, under normal load and temperatures.
- (9) Minimum clearances between the Shared User's aerial customer lead and the Distribution Company's service wire at the point of Attachment on a building is:
  - (a) insulated service wire - 150 mm radially#; and
  - (b) bare service wire - 300 mm radially below the horizontal, and above the horizontal but outwards of a vertical line initiating on the horizontal.

# Assumes insulation is 600 volt grade, double insulated. For lesser grades of insulations 400 mm may be allowed after insulation has been evaluated by an approved Shared User or Distribution Company.
- (10) Where the Parties agree in writing, other clearances than those provided in Table A2 may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.

Table A3 - Coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable and PSTN cable and Aerial Customer Lead  
(Category of Shared Use A1, A2 and B)

Vertical Clearances In-Span - Conductors/Circuits Not On Same Pole Line (refer note 10)

| Shared User's Equipment  | Item of Electricity Distribution System     |                       |      |        |                        |               |
|--|---|-----------------------|------|--------|------------------------|---------------|
|  | Aerial earth and supervisory cable*<br>Bare | Insulated*<br>(22 kV) | LV   | HV ABC | 6.6, 11, 22 kV<br>Bare | 66 kV<br>Bare |
| Coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable (refer note (9)) and PSTN cable, Aerial Customer Lead | 380   | 1200                  | 1000 | 1500   | 2100                   | 3000          |

Following notes to be read in conjunction with Table A3:

- (1) Persons working on or near the Electricity Distribution System must be appropriately trained and authorised to work in the vicinity of live electrical apparatus.
- (2) Except as defined in note 5, the position of the coaxial cable, Catenary, fibre-optic cable and other forms of Aerial Cable and PSTN cable and Aerial Customer Lead shall always be below the Distribution Company's circuits.
- (3) All measurements shown are the minimum allowable under no wind condition at the time of erection and assume that Distribution Company's circuits are operating at normal loads and temperatures.
- (4) Clearances apply to spans up to 50 metres, spans in excess of this require special design.
- (5) \* Clearances of supervisory cable are radial clearances.
- (6) # Assumes insulation is 600 volt grade, double insulated. For lesser grades of insulation or bare a minimum clearance of 1200mm applies.
- (7) The angle of the crossing shall be as near as practicable to a right angle and shall normally be not less than 45° and be as far as practicable from the centre of the Distribution Company's span.
- (8) Where the Shared User provides its own poles for purpose of the under crossing, the separation between the Distribution Company's circuit and the Shared User's poles shall be:
  - (a) 2400mm horizontally between Distribution Company's circuit and Shared User's pole;
  - (b) where the separation stated in Note 8(a) is not practicable, a lesser horizontal separation may be permitted, provided the separation at any angle between the Distribution Company's circuit and the Shared User's pole is not less than 2400mm for LV and 4000mm for of 6.6 kV and above;
  - (c) 2400mm horizontally between the Shared User's circuit and a Pole, where the Distribution Company's circuit is LV; or
  - (d) 3700mm horizontally between the Shared User's circuit and a Pole, where the Distribution Company's circuit is 6.6 kV and above.
- (9) In the case of a Distribution Company's streetlight suspension wire crossing a Telstra line or in the case of a stay wire crossing where the stay wire is owned by Telstra or the Distribution Company, the crossings shall be in accordance with the *Code of Practice for Crossings between Power and Telecommunication Overhead Lines In-Span, and those formed by Attachments of Conductors to Common Supports, and for Crossings between Power and Telecommunication Stay Wires and Overhead Lines (Issue 1, 1988)*.
- (10) Where the Parties agree in writing, other clearances than those provided in Table A3 may be permitted under Special Shared Use, provided those agreed clearances comply with the *Electricity Supply and Construction Regulations 1988*.

**Table A4 - In-span ground and structure clearances for Aerial Cable and PSTN cable and Aerial Customer Lead  
(Category of Shared Use A1, A2, B)**

| Description   | Direction     | Minimum Clearance |
|---|---------------|-------------------|
| Centre of all carriage ways*  | Vertical      | 5500              |
| Kerb or nature strip area of primary arterial roads, highways, over dimensional routes*   | Vertical      | 5500              |
| Kerb or nature strip area of secondary arterial roads and collector roads (typical road width 10-12.5 metres)*  | Vertical      | 4900              |
| Kerb or nature strip area of other roads (typical road width 7.5 metres)*   | Vertical      | 4600              |
| Driveway or area on customer's property normally used by vehicles*  | Vertical      | 3900              |
| Structure or part of building on which a person cannot stand for example sign, mast or blank wall**   | Any direction | 600               |
| Where the Aerial Cable or PSTN cable or Aerial Customer Lead passes over but is not Attached to any part of a building or structure not normally accessible but on which a person may stand, for example carport or pergola** | Vertical      | 2700              |
| Area on customer's property not normally used by vehicles**   | Vertical      | 3000              |

Following notes to be read in conjunction with Table A4:

1. Minimum clearances shall apply at an ambient temperature of 35°C.
2. \* In respect of the clearance for centre of all carriage ways, kerbs or nature strips of primary arterial roads, highways or over dimensional routes, where the State Road Traffic Authority or other authority or enactment allows a clearance which is less than the minimum clearance shown in Table A4 for specific items of Shared User's Equipment, then such lesser clearance allowed by the State Road Traffic Authority, or other authority or enactment where applicable, shall apply.
3. \*\* Where the cables included under this description are not covered by the *Electricity Supply and Construction Regulations*, then the minimum related clearance shall be determined by the Shared User by reference to an appropriate document.

## **APPENDIX B**

### **FAULT CURRENT AND EARTH POTENTIAL RISE INFORMATION** (clause 11.6(b))

Note: Information on Pole footing resistance and protection clearance time in respect of a particular Pole or situation may be obtained from the Distribution Company. The Distribution Company may charge a fee for the provision of this information.

**Table Bl. 6.6kV With No Earth Fault Current Limitation**

| RMS Power Frequency<br>Fault Current, EPR and<br>Fault Clearance Time             |                | Pole Footing Resistance ..... $R_g \Omega$ |         |         |         |         |         |         |         |
|---|----------------|--|---------|---------|---------|---------|---------|---------|---------|
|   |                | 1  | 5       | 10      | 20      | 25      | 30      | 50      | 100     |
| M<br>I<br>N<br>I<br>M<br>U<br>M<br>F<br>A<br>U<br>L<br>T<br>L<br>E<br>V<br>E<br>L | I <sub>f</sub> | 1959A                                      | 686A    | 364A    | 187A    | 150A    | 125A    | 76A     | 38A     |
|   | Vepr           | 1959V                                      | 3430V   | 3638V   | 3730V   | 3747V   | 3759V   | 3780V   | 3796V   |
|   | Time           | 0.9 sec                                    | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |
| M<br>A<br>X<br>I<br>M<br>U<br>M<br>F<br>A<br>U<br>L<br>T<br>L<br>E<br>V<br>E<br>L | I <sub>f</sub> | 3754A                                      | 762A    | 381A    | 191A    | 152A    | 127A    | 76A     | 38A     |
|   | Vepr           | 3754V                                      | 3808V   | 3810V   | 3810V   | 3810V   | 3810V   | 3810V   | 3811V   |
|   | Time           | 0.82 sec                                   | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |

**Table B2. 11kV With No Earth Fault Current Limitation**

| RMS Power Frequency<br>Fault Current, EPR and<br>Fault Clearance Time |           | Pole Footing Resistance ..... $R_g \Omega$ |          |         |         |         |         |         |         |
|---|-----------|--|----------|---------|---------|---------|---------|---------|---------|
|   |           | 1  | 5        | 10      | 20      | 25      | 30      | 50      | 100     |
| M<br>I<br>N<br>F<br>L<br>T<br>L<br>E<br>V<br>E<br>L                   | $I_f$     | 2521A                                      | 1080A    | 593A    | 308A    | 248A    | 208A    | 126A    | 63A     |
|   | $V_{epr}$ | 2521V                                      | 5400V    | 5925V   | 6158V   | 6200V   | 6227V   | 6279V   | 6316V   |
|   | Time      | 0.86 sec                                   | 1.30 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |
| M<br>A<br>X<br>F<br>L<br>T<br>L<br>E<br>V<br>E<br>L                   | $I_f$     | 6000A                                      | 1267A    | 635A    | 317A    | 254A    | 212A    | 127A    | 64A     |
|   | $V_{epr}$ | 6000V                                      | 6336V    | 6347V   | 6350V   | 6350V   | 6350V   | 6351V   | 6351V   |
|   | Time      | 0.80 sec                                   | 1.15 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |

**Table B3. 11kV With Earth Fault Current Limitation Neutral Resistor**

| RMS Power Frequency<br>Fault Current, EPR and<br>Fault Clearance Time |           | Pole Footing Resistance ..... $R_g \Omega$ |          |          |         |         |         |         |         |
|---|-----------|--|----------|----------|---------|---------|---------|---------|---------|
|   |           | 1  | 5        | 10       | 20      | 25      | 30      | 50      | 100     |
| M<br>I<br>N<br>I<br>M<br>U<br>M<br>L<br>E<br>V<br>E<br>L              | $I_f$     | 1080A                                      | 652A     | 433A     | 258A    | 215A    | 184A    | 116A    | 61A     |
|   | $V_{epr}$ | 1080V                                      | 3261V    | 4330V    | 5161V   | 5364V   | 5509V   | 5819V   | 6075V   |
|   | Time      | 0.31 sec                                   | 0.62 sec | 1.35 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |
| M<br>A<br>X<br>I<br>M<br>U<br>M<br>L<br>E<br>V<br>E<br>L              | $I_f$     | 1267A                                      | 705A     | 453A     | 265A    | 219A    | 187A    | 118A    | 61A     |
|   | $V_{epr}$ | 1267V                                      | 3526V    | 4535V    | 5295V   | 5474V   | 5603V   | 5880V   | 6107V   |
|   | Time      | 0.28 sec                                   | 0.54 sec | 1.22 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |



**Table B4. 22kV With No Earth Fault Current Limitation**

| RMS Power Frequency<br>Fault Current, EPR and<br>Fault Clearance Time             |           | Pole Footing Resistance ..... $R_p \Omega$ |          |          |          |         |         |         |         |
|---|-----------|--|----------|----------|----------|---------|---------|---------|---------|
|   |           | 1  | 5        | 10       | 20       | 25      | 30      | 50      | 100     |
| M<br>I<br>N<br>I<br>M<br>U<br>M<br>F<br>A<br>U<br>L<br>T<br>L<br>E<br>V<br>E<br>L | $I_f$     | 2087A                                      | 1511A    | 1011A    | 579A     | 474A    | 401A    | 247A    | 125A    |
|   | $V_{epr}$ | 2087V                                      | 7555V    | 10115V   | 11574V   | 11844V  | 12015V  | 12328V  | 12531V  |
|   | Time      | 0.85 sec                                   | 0.99 sec | 1.10 sec | 2.10 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |
| M<br>A<br>X<br>I<br>M<br>U<br>M<br>F<br>A<br>U<br>L<br>T<br>L<br>E<br>V<br>E<br>L | $I_f$     | 9132A                                      | 2494A    | 1264A    | 634A     | 508A    | 423A    | 254A    | 127A    |
|   | $V_{epr}$ | 9132V                                      | 12471V   | 12643V   | 12687V   | 12692V  | 12695V  | 12699V  | 12701V  |
|   | Time      | 0.55 sec                                   | 0.7 sec  | 0.95 sec | 1.8 sec  | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |

Table B5. 22kV With Earth Fault Current Limitation Neutral Resistor

| RMS Power Frequency<br>Fault Current, EPK and<br>Fault Clearance Time |           | Pole Footing Resistance ..... $R_g \Omega$ |          |          |          |          |          |         |         |
|---|-----------|--|----------|----------|----------|----------|----------|---------|---------|
|   |           | 1  | 5        | 10       | 20       | 25       | 30       | SO      | 100     |
| M<br>I<br>N<br>I<br>M<br>U<br>M<br>L<br>E<br>V<br>E<br>L              | $I_f$     | 1088A                                      | 831A     | 634A     | 427A     | 366A     | 321A     | 214A    | 116A    |
|   | $V_{epr}$ | 1088V                                      | 4152V    | 6343V    | 8539V    | 9159V    | 9620V    | 10678V  | 11616V  |
|   | Time      | 0.31 sec                                   | 0.43 sec | 0.63 sec | 1.35 sec | 1.90 sec | 3.1 sec  | 3.1 sec | 3.1 sec |
| H<br>I<br>G<br>H<br>E<br>S<br>T<br>L<br>E<br>V<br>E<br>L              | $I_f$     | 1403A                                      | 974A     | 705A     | 453A     | 385A     | 334A     | 219A    | 118A    |
|   | $V_{epr}$ | 1403V                                      | 4872V    | 7046V    | 9067V    | 9618V    | 10024V   | 10948V  | 11760V  |
|   | Time      | 0.25 sec                                   | 0.35 sec | 0.55 sec | 1.25 sec | 1.70 sec | 2.40 sec | 3.1 sec | 3.1 sec |

**Table B6. 66kV With No Earth Fault Current Limitation**

| RMS Power Frequency<br>Fault Current, EPE and<br>Fault Clearance Time |                  | Pole Footing Resistance ..... $R_g \Omega$ |         |         |         |         |         |         |         |
|---|------------------|--|---------|---------|---------|---------|---------|---------|---------|
|   |                  | 1  | 5       | 10      | 20      | 25      | 30      | 50      | 100     |
| M<br>I<br>N<br>F<br>L<br>T<br>L<br>E<br>V<br>E<br>L                   | I <sub>f</sub>   | 5448A                                      | 4300A   | 3007A   | 1749A   | 1433A   | 1212A   | 745A    | 378A    |
|   | V <sub>opr</sub> | 5448V                                      | 21498V  | 30071V  | 34981V  | 35835V  | 36356V  | 37245V  | 37753V  |
|   | Time             | 0.2 sec                                    | 0.2 sec | 0.2 sec | 0.2 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |
| M<br>A<br>X<br>F<br>L<br>T<br>L<br>E<br>V<br>E<br>L                   | I <sub>f</sub>   | 17323A                                     | 7068A   | 3730A   | 1894A   | 1518A   | 1266A   | 761A    | 381A    |
|   | V <sub>opr</sub> | 17323V                                     | 35341V  | 37303V  | 37873V  | 37948V  | 37990V  | 38055V  | 38087V  |
|   | Time             | 0.2 sec                                    | 0.2 sec | 0.2 sec | 0.2 sec | 3.1 sec | 3.1 sec | 3.1 sec | 3.1 sec |

APPLICATION FOR SHARED USE OF POLE

APPLICATION FOR SHARED USE OF POLE  
(Read in conjunction with Code of Engineering Practice for Shared Use of Poles)

Application No: .....

**PART 1** (Shared User to Complete)

**SHARED USER DETAILS (Please Print)**

1.1 Name .....  
 1.2 Address .....  
 Contact person ..... Postcode .....  
 1.4 Phone No ..... Fax No .....

**POLE FOR WHICH SHARED USE IS REQUIRED**

1.5 Pole ID No (clause 7.1) .....  
 1.6 Property No .....  
 1.7 Street/Road .....  
 1.8 City/Suburb .....  
 1.9 Post Code .....

**DETAILS OF SHARED USE**

1.10 Date Required ..... / ..... / .....  
 1.11 Has Fly-Off Point only been used? (clause 6.6(b))  
 Yes  No   
 1.12 Classification (clause 8.1) Normal  Special   
 1.13 Category (clause 9.1) A  B  C  D   
 1.14 Number of Fly-Off Points (clause 12.2 (g)(i)) .....  
 1.15 Number of Aerial Customer Leads (clause 12.2(g)(ii)) .....  
 1.16 Is Identification letter required? (clause 16(b)(i))  
 Yes  No   
 1.17 Is 500 Metre Rule being applied? (Refer Appendix F and G of Code)  
 Yes  No

**ADDITIONAL INFORMATION**

For the following items the Shared User shall indicate if additional information is provided or whether provision of this information is considered as not applicable (N/A).

1.18 Map (clause 7.3) Yes  No  N/A   
 1.19 Method of Attachment (clause 11.1(a)(i)) Yes  No  N/A   
 1.20 Equipment to be Attached (clause 11.1(a)(iii)) Yes  No  N/A   
 1.21 Cable/Conductor Type (clause 11.5(a)) Yes  No  N/A   
 1.22 Cable/Conductor Stringing (clause 11.5(b)) Yes  No  N/A   
 1.23 Earth Potential Rise mitigation (clause 11.6(b)(i)) Yes  No  N/A   
 1.24 Low Frequency Induction mitigation (clause 11.7(a)) Yes  No  N/A   
 1.25 Earthing System (clause 11.8(a)) Yes  No  N/A   
 1.26 Make Ready Works (clause 12.4(c)(iii)) Yes  No  N/A   
 1.27 Calculation results (clause 12.4(c)(iii)) Yes  No  N/A   
 1.28 Back-feeding details (clause 15.10(b)) Yes  No  N/A   
 1.29 Method of Attachment of identification letter (clause 16(b)(ii)) Yes  No  N/A

**PART 2** (To be completed by the Distribution Company)

**APPLICATION PROCESSING (Please Print)**

2.1 Processing Officer ..... Fax No .....  
 2.2 Phone No .....  
 2.3 Date Application Received: ..... / ..... / .....  
 2.4 Date Applicant notified:  
 (i) Application Accepted ..... / ..... / .....  
 (ii) Application rejected ..... / ..... / .....  
 (iii) Make Ready Works costs ..... / ..... / .....  
 (iv) Other applicable costs ..... / ..... / .....  
 2.5 Date:  
 (i) Make Ready Works accepted by Applicant ..... / ..... / .....  
 (ii) Other applicable costs accepted by Applicant ..... / ..... / .....  
 (iii) Make Ready Works commenced ..... / ..... / .....  
 (iv) Make Ready Works completed ..... / ..... / .....  
 (v) Make Ready Works invoiced ..... / ..... / .....  
 (vi) Other invoices sent ..... / ..... / .....  
 (vii) All payment(s) received ..... / ..... / .....  
 (viii) Licence issued ..... / ..... / .....  
 Signature of Officer named in 2.1 ..... Date ..... / ..... / .....

**DECLARATION**

I, ..... an authorised officer of the Shared User, hereby certify that the information contained in this Application is true and correct and is not misleading or deceptive. I hereby acknowledge that the Distribution Company will:  
 (a) use the information contained in this Application to:  
 (i) make appropriate decisions in relation to the Application; and  
 (ii) carry out its necessary investigations in relation to the Pole including whether the Make Ready Works are required;  
 (b) be relying upon this Application to make a number of decisions concerning the Application and the Shared Use of the Pole.  
 Signature of Shared User ..... Date ..... / ..... / .....

**Note: Process of Application**

The following steps will occur in relation to an Application lodged by a Shared User.  
 1. The Distribution Company will, at the cost of the Shared User, check the suitability of the Pole for Shared Use and will advise the Shared User of any Make Ready Works required.  
 2. Where no Make Ready Works are specified in the Application and the Distribution Company accepts the Application then an invoice for the licence fee will be issued and, when paid, a licence to permit Shared Use of the Pole by the Shared User will be issued.  
 3. Where Make Ready Works are required and the Application is accepted then the Make Ready Works will be carried out by the Distribution Company.  
 4. After the Make Ready Works have been completed, an invoice for the Make Ready Works, the licence fee and any other fees will be issued to the Shared User. Upon payment a licence will be granted.

**APPENDIX D**

**IDENTIFICATION LETTERS**  
(clause 16)

## **IDENTIFICATION LETTERS**

The letters used to identify the type of Shared Use will be allocated by the Distribution Company. Identifications letters allocated so far are as follows:

- A - Shared Use in accordance with the AUSTEL 500 metre rule.
- B - Shared Use by Optus.
- E - Shared Use by the Victorian Electrolysis Committee.
- J - Shared Use (formally termed "Joint Use") by Telstra. (Not to be used in new construction.)
- M - Shared Use by Public Transport Corporation.
- T - Shared Use by Telstra (Telstra to supply).

The location of the identification letters is to be approximately 1.8 metres above ground level on the road side of the Pole.

Note: Letters still available for allocation by the Distribution Company are the letters C, L, N, R, S and X.

## **APPENDIX E**

### **NORMAL SHARED USE TABLES**

**(Tables E1, E2, E3 and E4 referred to in the  
definition of "Normal Shared Use")**

## NORMAL SHARED USE TABLES

Note: The following Tables E1, E2, E3 and E4 are subject to compliance with:

- (a) the clearances in Appendix A;
- (b) clauses 11.6, 11.7 and 11.8 of the Code; and
- (c) any Note to that Table.

TABLE E1

| <b>Criteria</b>  | <b>Categories Under Which Normal Shared Use Allowed</b> |
|--|---|
| (i) Wooden Pole LV only  | A1, A2, B, C, D   |
| (ii) Concrete Pole LV only<br>with neutral bonded to<br>the Pole's earth | A1, A2, B, C, D   |



**TABLE E2**

| <b>Criteria</b>   | <b>Categories Under Which Normal Shared Use is Allowed</b> |
|---|--|
| (i) Wooden Pole supporting bare HV circuits not exceeding 12.7 kV phase to earth (i.e. 22 kV distribution feeder) with no bare LV circuits or LV ABC below the HV.                    | A1, B, C, D  |
| (ii) Wooden Pole supporting HV ABC circuits not exceeding 12.7 kV phase to earth (i.e. 22 kV distribution feeder) with no LV bare circuits or LV ABC below the HV.                    | A1, B, C, D  |
| (iii) Wooden Pole supporting LV and HV circuits where the HV exceeds 12.7 kV phase to earth (i.e. above 22 kV distribution feeder).   | A1, B, C, D  |
| (iv) Wooden Pole supporting LV and HV circuits where HV does not exceed 12.7kV phase to earth (i.e. 22kV distribution feeder).  | A1, A2, B, C, D  |
| (v) Concrete Pole supporting LV and HV circuits where the HV does not exceed 12.7 Kv phase to earth (i.e. 22 kV distribution feeder) and the LV neutral is a CMEN bonded to the Pole. | A1, A2, B, C, D  |

**TABLE E3**

| <b>Criteria</b>  | <b>Categories Under Which Normal Shared Use Allowed</b> |
|--|---|
| (i) Concrete Pole supporting bare HV circuits not exceeding 12.7 kV phase to earth (i.e. 22 kV distribution feeder) with no LV bare circuits or LV ABC, below the HV.                                  | A1, B   |
| (ii) Concrete Pole supporting HV ABC circuits not exceeding 12.7 kV phase to earth (i.e. 22 kV distribution feeder) with no LV bare circuits or LV ABC, below the HV.                                  | A1, B   |
| (iii) Concrete Pole supporting LV and HV circuits where the HV exceeds 12.7 kV phase to earth (i.e. above 22 kV distribution feeder).  | B   |
| (iv) Concrete Pole supporting LV and HV circuits where the HV does not exceed 12.7 kV phase to earth (i.e. 22 kV distribution feeder) and the LV neutral is not bonded to the Pole.                    | A1, B   |
| (v) Wooden or Concrete Pole on which are mounted transformers, switchgear or other HV equipment, not exceeding 12.7 kV phase to earth (i.e. 22 kV distribution feeder), which are earthed at the Pole. | B   |

Note: In the case of Category A1 on concrete Poles Shared Use is subject to Shared User's Equipment being insulated from the Pole by an approved support.

**TABLE E4**

| <b>Criteria</b>   | <b>Categories Under Which Normal Shared Use is Allowed</b> |
|---|--|
| (i) Wooden or Concrete Pole supporting LV and HV circuits where the HV does not exceed 12.7 kV phase to earth (i.e. 22 kV distribution feeder) and in the case of a Concrete Pole the LV neutral is bonded to the Pole. | A2, B  |

Note: Subject to the earth potential rise in the Distribution Company's LV neutral and/or earthed structures not exceeding 430V.

**APPENDIX F**

**500 METRE AGREEMENT**  
(Appendix C)

**1. INTRODUCTION**

This document establishes an agreement between the Distribution Company and a Shared User, ("500 Metre Agreement"), to allow the Shared User to Attach a telecommunication line link to Poles in accordance with AUSTEL's 500 metre rule and the rules prepared by the Distribution Company ("500 Metre Rules").

**2. CONDITIONS**

- 2.1 The Shared User agrees to comply with and be bound by the 500 Metre Rules.
- 2.2 Other documents provided by the Shared User as required in the 500 Metre Rules are to be attached to this 500 Metre Agreement.
- 2.3 The original of the signed 500 Metre Agreement together with the other documents, shall be retained by the Distribution Company.
- 2.4 A copy of the 500 Metre Agreement and other documents shall be retained by the Shared User.
- 2.5 The establishment fee, as at ..../..../...., is \$..... per Pole.
- 2.6 The annual rental fee for the term is \$..... per Pole.
- 2.7 The term of this 500 Metre Agreement is 3 years from the date on which the Distribution Company signs this document.

**3. AGREEMENT**

The Distribution Company agrees to provide the use of Poles for the Attachment of a line link in accordance with the AUSTEL 500 metre rule, the 500 Metre Rules and the conditions listed in clause 2.

Shared User .....  
Authorised Signatory for Shared User  
Name: .....  
Title: .....  
Address: .....  
..... Postcode .....  
Phone/Fax No: .....  
Signature/date: .....

Distribution Company.....  
Authorised Signatory for Distribution Company  
Name: .....  
Title: .....  
Location: .....  
Phone/Fax No: .....  
Signature/date: .....

## **APPENDIX G**

### **500 METRE RULES** (Appendix F, Introduction)

## **500 METRE RULES**

### **1. INTRODUCTION**

- 1.1 On approval of the relevant Application or Applications by the Distribution Company, the Parties will enter into an agreement entitled "500 Metre Agreement". The 500 Metre Agreement will establish the term and the fees payable under that 500 Metre Agreement.
- 1.2 This document establishes the rules by which a telecommunication line link can be Attached to a Pole so that a Shared User can utilize AUSTEL's 500 metre rule.

### **2. INTERPRETATION**

The terms used in these 500 Metre Rules will have the meaning ascribed to those terms in the Code of Engineering Practice for Shared Use of Poles ("Code of Engineering Practice").

### **3. RULES**

#### **3.1 Compliance with Code of Engineering Practice.**

A Shared User wishing to Attach a telecommunication line link on a Pole must comply with the Code of Engineering Practice.

#### **3.2 Additional Requirements**

In addition to the requirements of the Code of Engineering Practice, when applying for Shared Use of a Pole in order to utilize AUSTEL's 500 metre rule, the Shared User shall provide the following additional information to the Distribution Company:

- (a) copy of AUSTEL's approval in accordance with clause 3.3;
- (b) drawing showing the location of the relevant properties to which the telecommunication line link is to be Attached;
- (c) drawing showing the proposed entry and exit points of the telecommunication line link;
- (d) details of the AUSTEL licensed cabler who is to Attach the telecommunication line link; and
- (e) any other information requested by the Distribution Company.

#### **3.3 AUSTEL's Approval**

The Distribution Company will not assess the Application to determine if it meets any AUSTEL criteria, as such, the Shared User must provide the Distribution Company with all relevant AUSTEL approval documents at the time of lodging the Application.

### 3.4 **Land Access and Easements**

The Shared User warrants that all necessary authorisations, licences, permits and other similar things required by law or otherwise to enable the Shared User to Attach, operate and maintain the telecommunication line link have been obtained prior to the lodgment of the Application.

### 3.5 **Costs, Fees and Invoicing**

- (a) All costs incurred in regard to the design, testing, manufacture, delivery, Attachment, adjustment and removal of any materials or equipment required to establish the telecommunication line link will be borne by the Shared User.
- (b) The establishment fee, which covers the cost of reviewing the Application, is payable by the Shared User upon lodgement of the Application.
- (c) The annual rental fee will be set by the Distribution Company at the date of acceptance of the Application.
- (d) The Shared User must pay any invoice received from the Distribution Company within 30 days of receipt of that invoice.

### 3.6 **Notice of Attachment**

The Shared User must provide the Distribution Company with at least 5 days prior written notice of:

- (a) the date it proposes to Attach the telecommunications line link; and
- (b) the date upon which the Attachment of the telecommunications line link will be completed.

### 3.7 **Indemnity**

The Shared User must indemnify and keep indemnified the Distribution Company against all actions, proceedings, claims, demands, costs, damages, loss and expenses of whatsoever nature which may be brought against the Distribution Company or which the Distribution Company may pay, sustain or incur by reason of or in any way relating to, concerning or effecting the 500 Metre Agreement, the Shared User's Equipment or telecommunications line link installed on a Pole or otherwise and such indemnity extends, without limitation to any such actions, proceedings, claims, demands, costs, damages, loss or expenses that would not have arisen but for the installation or proposed installation of the Shared User's equipment or the telecommunications line link and third party claims in respect of any loss or profits, revenue, or any consequential, special or indirect liability, loss, damage, cost, charge or expense.



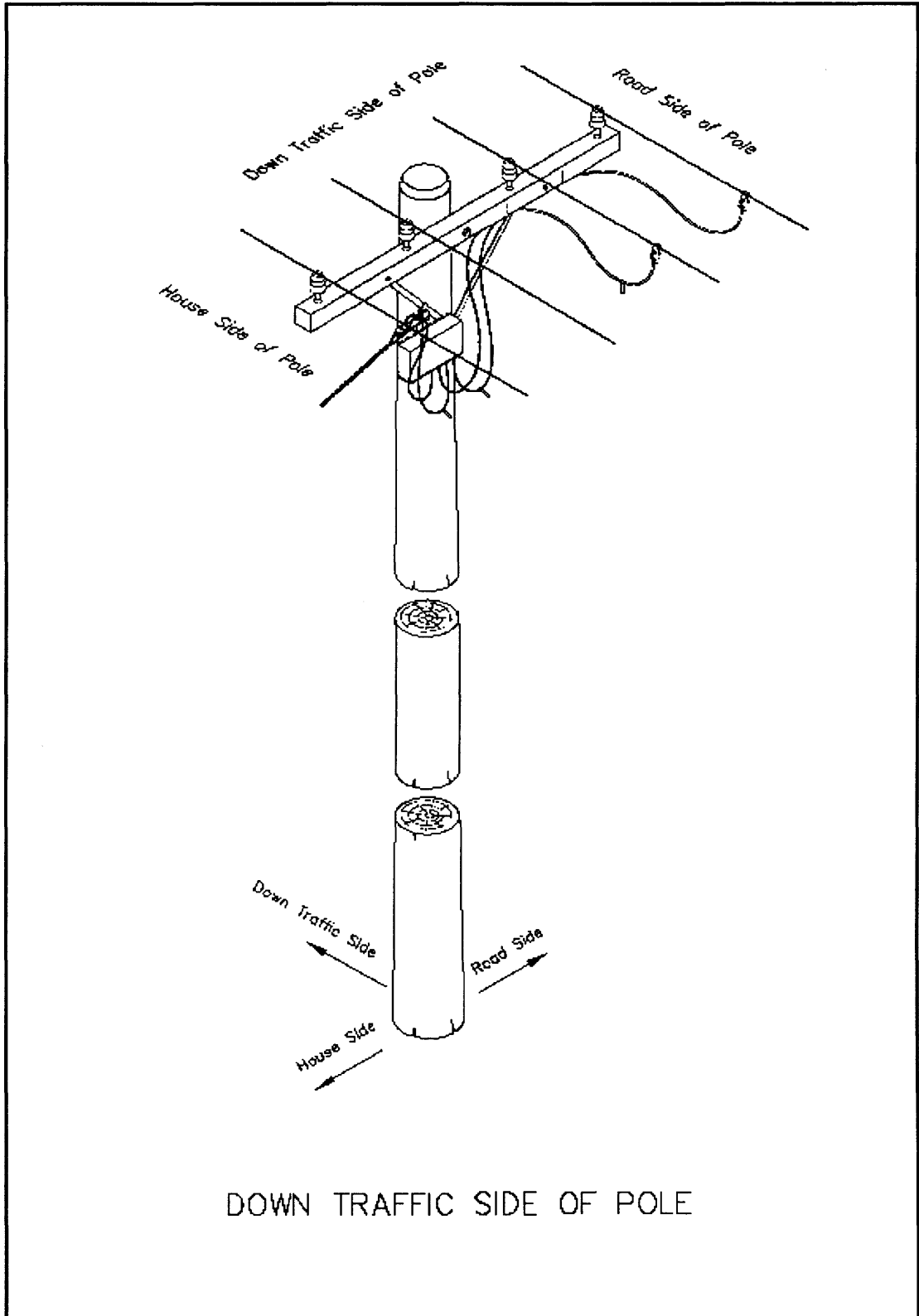
### 3.8 Termination of 500 Metre Agreement

- (a) The 500 Metre Agreement may be terminated by the Distribution Company for any reason.
- (b) Where the Shared User no longer requires the telecommunications line link, the Shared User shall notify the Distribution Company in writing specifying the date on which the 500 Metre Agreement is to terminate and details of the arrangements that have been made for an AUSTEL licensed cabler to remove the telecommunications line link prior to or on the date the 500 Metre Agreement terminates.
- (c) Any liability imposed upon the Shared User pursuant to the 500 Metre Agreement continues until notice pursuant to clause 3.7(a) has been received and acknowledged by the Distribution Company.

# APPENDIX H

## DOWN TRAFFIC SIDE

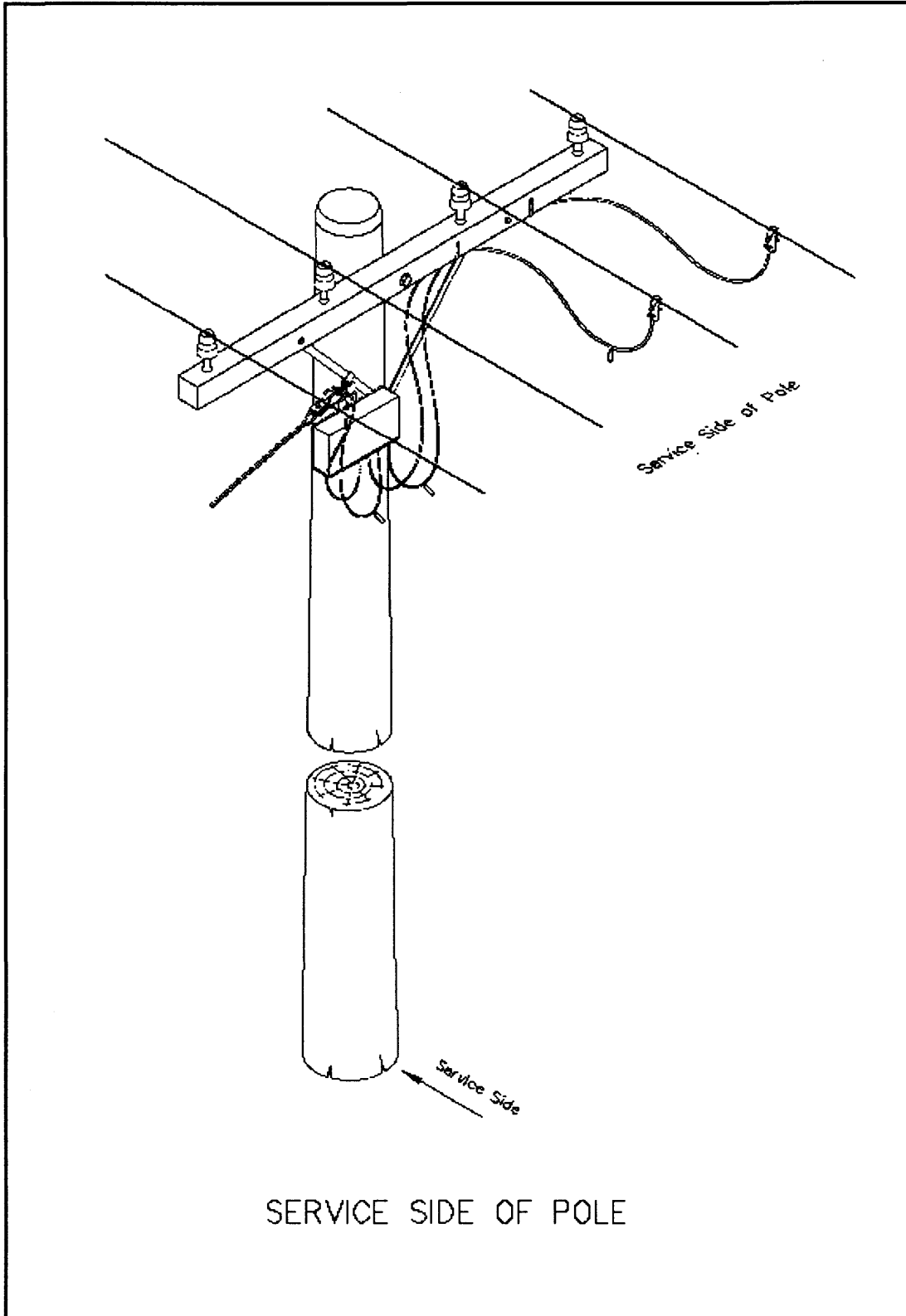
(Definition of "Down Traffic Side")



**APPENDIX I**

**SERVICE SIDE**

**(Definition of "Service Side")**





**APPENDIX J**

**APPLICATION FOR AUTO-RECLOSE SUPPRESSION  
(clause 17)**

## APPLICATION FOR AUTO-RECLOSE SUPPRESSION

**To:** [Distribution Company address]

**Date:** ./. /20

Shared User: .....

Signatory for Shared User

Name: .....

Title: .....

Address: .....

.....

Phone/Fax No: .....

Signature: ..... **Date:** . / /20

| STREET | SUBURB | MELWAY<br>REF | FEEDER<br>(if known) | DATE<br>(start) | TIME<br>(start) | DATE<br>(finish) | TIME<br>(finish) |
|--------|--------|---------------|----------------------|-----------------|-----------------|------------------|------------------|
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |
|        |        |               |                      |                 |                 |                  |                  |

To facilitate this request, please find the attached map(s), indicating the above locations.

**Notes:**

1. The Distribution Company requires at least three days written notice to action this request.
2. The Distribution Company reserves the right to refuse or delay all or part of this request due to network operational and customer requirements. In such cases, the Distribution Company will advise the Shared User.
3. The Shared User is advised not to assume that the auto reclose facility is either enabled or disabled without first confirming the status with the Distribution Company.

The Shared User agrees to pay all costs associated with this application.

**APPENDIX K**  
**GEOGRAPHICAL AREA OF DISTRIBUTION COMPANIES**

# GEOGRAPHICAL AREA OF DISTRIBUTION COMPANIES

