



Office of the  
Chief Electrical Inspector



# VICTORIAN ELECTRICITY SUPPLY INDUSTRY

## CODE OF PRACTICE



### LOW VOLTAGE (LV) SERVICE FUSE REMOVAL & REINSERTION BY “ELECTRICIAN” and “L” & “G” INSPECTOR LICENCE HOLDERS



# VICTORIAN ELECTRICITY SUPPLY INDUSTRY

## CODE OF PRACTICE

### LOW VOLTAGE (LV) SERVICE FUSE REMOVAL & REINSERTION BY “ELECTRICIAN” and “L” & “G” INSPECTOR LICENCE HOLDERS

This CODE OF PRACTICE has been developed by key electrical industry stakeholders to ensure that disconnection and reinsertion of supply by operation of Electricity Distributor service fuses at the supply interface to specified Victorian electricity customers installations may be undertaken in a responsible manner by “Electrician” and “L & G” Class Electrical Inspector *licenced persons*, other than those working for Electricity Distributors.

Compliance with this *Code* permits these *licenced persons* to remove and reinsert the Electricity Distributors service fuse link normally located in the customer installations fuse holder under controlled conditions within specified installations to disconnect and reconnect supply.

Increased electrical safety, efficiencies, reduced costs and maintenance of responsible management for disconnection and reconnection of electricity to customers will result from this *Code*.

1st print and issue - December 2000  
2nd print - November 2002

# FORWARD

To: All Electrician and L & G Electrical Inspector Licence Holders

## CODE OF PRACTICE - LV FUSE REMOVAL AND REINSERTION

This Code Of Practice has been developed by key electrical industry stakeholders to facilitate appropriately licensed persons to disconnect and reconnect the majority of electrical installations by removal and reinsertion of low voltage service fuse(s).

The initiative will greatly enhance electrical safety of licensed persons who need to work on electrical equipment in electrical installations such as main switchboards, and increase industry efficiencies by reducing site visits for disconnection and reconnection purposes by electricity distribution companies.

Service fuse links are assets which are owned by electricity distribution companies (Network Operators) and the Electrical Safety (Network Assets) Regulations 1999 administered by my Office limit the operation of such assets to persons with qualifications, proficiency and experience to safely perform that function. While the Office takes the view that a licensed electrician or inspector should have these skills it supports the use of this *code* to reinforce those skills.

This *code* relates to fuse removal and reinsertion by “Electrician” and “L & G Electrical Inspector” licence holders. These licence holders should comply with the specified conditions. These conditions include:

- The necessity for those licenced holders to be competent in fuse removal and reinsertion and use the appropriate equipment and processes;
- Limitation of service fuse removal and reinsertion to single occupancy direct metered installations with a maximum demand of less than 100amps per phase supplied from a dedicated service cable;
- The distribution company must be advised of essential details where the licensed person removes and reinserts a service fuse to these installations;
- The licensed person shall contact the relevant distribution company for fuse removal and/or reinsertion not covered by the *code*;
- The licensed person to record all details, and replace seals where they have been removed;
- The licensed persons responsibilities and liability associated with this function, electricity distribution company contact details and other essential information is included in the *code*.

Further specified conditions are listed, and other sections of the *code* include useful associated references, typical processes and equipment, and photos of typical equipment and the fuse removal and reinsertion process.

Fuse removal outside these conditions should be the subject of negotiation between the distribution company and the customer.

However, to ensure electrical safety is maintained, it is emphasised that licensed persons must be competent, and use the appropriate equipment and process.

I commend this Code of Practice to you, and congratulate those industry organisations involved with the development of the *code*.

Yours in Electrical Safety

*Ian K. Graham*

**Ian K Graham**

**CHIEF ELECTRICAL INSPECTOR**

# CONTENTS

SECTION	CONTENT	PAGE
	Foreword from the Chief Electrical Inspector	2
	Contents List	3
	Definitions	3
1.	Preface	4
2.	Purpose	4
3.	Scope	4
4.	Specified Conditions	5-6
5.	References	7
6.	Processes - typical	7
7.	Equipment - typical	7
8.	Photos - typical fuse removal & insertion	8

## DEFINITIONS

**Licensed Person** - a holder of a current Electrician's "E" Licence and/or Electrical Inspector's Class L or G Licence as issued by the Office of the Chief Electrical Inspector Victoria

**Code** - Code of Practice, Low Voltage (LV) Service Fuse Removal & Reinsertion  
By "Electrician" and "L" & "G" Inspector Licence Holders

## 1. PREFACE

This **Code** has been prepared and endorsed by the following organisations:

- AGL Electricity Limited
- CitiPower Ltd
- EIG - Electrical Industries Group
- NECA - National Electrical & Communications Association (Victorian Chapter)
- OCEI - Office of the Chief Electrical Inspector
- Powercor Australia Ltd
- TXU Electricity Ltd
- United Energy Ltd

The **Code** is managed by a Steering Committee consisting of a representative from each of these organisations.

## 2. PURPOSE

Supply to a customer installation within Victoria is normally controlled by an Electricity Distributors fuse link located and sometimes sealed within a device provided by the customer.

This **Code** is to enable removal and reinsertion of LV service fuses for disconnection and reconnection of specified customers installations connected to Victorian Electricity Distribution Networks to be performed in a structured, orderly and efficient manner by other than Electricity Distributors where this is deemed necessary by an appropriately **licensed person**.

Benefits will include:

- enhancement of safety during emergencies
- reduction of frequency of electrical workers working live, thus providing increased safety for electrical workers
- increased industry efficiency and decreased costs by reducing the necessity of Electricity Distributor personnel site visits.

## 3. SCOPE

This **Code** applies to any **licensed person** who has the competency to remove and reinsert LV service fuses for the purpose of disconnection and reinstatement of supply to the following types of existing installations connected to an Electricity Distribution Network within Victoria under the **specified conditions** section of this **Code**:

- Domestic, Commercial and Industrial Installations
- Single occupancy supplied from a dedicated service cable
- Single and multi-phase up to 100 A maximum demand
- Direct metered.

#### 4. SPECIFIED CONDITIONS

1. The **licensed person** shall be competent in the removal and reinsertion of LV service fuses and use appropriate equipment and processes.
2. The **licensed person** shall obtain permission from the customer and any affected occupier prior to supply removal, except in emergency conditions.
3. The **licensed person** shall not remove and/or re-insert LV service fuses to other than the following types of installations connected to a Victorian Electricity Distributors Network:

- Domestic, Commercial and Industrial Installations
- Single occupancy supplied from a dedicated service cable
- Single and multi-phase up to 100 A maximum demand
- Direct metered.

4. The **licensed person** shall notify the relevant Electricity Distributor on the following telephone numbers prior\* to removal of the service fuses/s and provide the information listed:

AGL	131 626
CitiPower	131 280
Powercor	132 412
TXU	131 799
United Energy	132 099

- Name, licence number and contact phone number of the licenced person
- Customer
- Address
- Meter Number
- Reason for disconnection
- Disconnection time
- Proposed reconnection time (ensure reference to item 6 for 3 phase installations)

\*In an emergency this information shall be provided at the earliest opportunity following the fuse removal.

5. The **licensed person** shall notify the relevant Electricity Distributor by telephone following reinsertion of the service fuse/s and provide the following information:

- Name and Licence Number (if different to original caller)
- Customer
- Address
- Reconnection time

6. The **licensed person** shall arrange for the relevant Electricity Distributor to reinsert the fuses if any work performed upstream of 3 phase meters affect the meters phase rotation.

7. The **licensed person** shall maintain records including the time, date and location of all service fuse removals and reinsertions, and the seal identification number where a seal is required to be replaced.
8. The **licensed person** shall perform all work to a standard equal to or better than that required by the Electricity Safety Act 1998, the Electricity Safety (Installations) Regulations 1999, AS/NZS 3000 2000 and Victorian Service and Installations Rules as amended from time to time.
9. The **licensed person** shall not interfere with Electricity Distributor assets other than service fuses and their associated seals.  
Note: Electricity Distributor assets such as service cables, meters, time switches, metering and time switch seals and wiring shall not be interfered with.
10. The **licensed person** shall replace any service fuse seal which has been removed with a commercially available seal that has a unique number. The seal number shall be recorded in accordance with clause seven.
11. The **licensed person** shall not purport to represent any Electricity Distributor.
12. The **licensed person** shall minimise the time supply is disconnected and acknowledges that Electricity Distributors charges may apply where supply is removed in excess of 4 continuous hours.
13. The **licensed person** shall notify the relevant Electricity Distributor to arrange repair where the service fuse or equipment is damaged during fuse removal or reinsertion.
14. The **licensed person** shall perform all work in a manner which complies with good industry practice and all applicable occupational health and safety laws and regulations.
15. The **licensed person** shall comply with the conditions of this Code.
16. The **licensed person** accepts responsibility and all liability for any loss, consequential loss, injury or damage resulting from any work performed under this **Code**.
17. The **licensed person** will contact the relevant Electricity Distributor for service fuse removal and reinsertions which are not covered by this **Code**.

## 5. REFERENCES

REFERENCE	SUPPLIER
1. Electricity Safety Act 1998 Section 43, 44. 2. Electricity Safety (Installations) Regulations 1999 Regulation 405. 3. OCEI Code of Practice for Safe Electrical Work, Low Voltage Electrical Installation 4. Victorian Service & Installation Rules Clause 2.1 and Appendix C - Polarity Testing Guide for Supply to Electrical Installations	Information Victoria 356 Collins Street Melbourne 3000 Phone 1300 366 365 Facsimile 03 9603 9920
5. AS/NZS 3000:2000 Section 6 AS/NZS 3017 Testing Guidelines	Standards Australia 19-25 Raglan Street South Melbourne Phone 03 9693 3555 Facsimile 03 9696 1319

## 6. PROCESSES - TYPICAL

1. Obtain permission of customer and any affected occupant
2. Notify Distributor
3. Install notices, shed load (turn off main switches), remove service fuse and test
4. Perform work
5. Test, reinsert service fuse, test and re-seal fuse
6. Advise customer and any affected occupant
7. Inform Distributor
8. Record work details

## 7. EQUIPMENT - TYPICAL

1. LV Fuse sticks
2. LV gloves
3. Testing equipment
  - Earth Reel/Spike/Trailing Lead
  - 3 Tube Neon Tester or approved Voltage Tester
4. Seals with a unique number

This equipment is available through most Victorian Electrical Wholesalers.

## 8. TYPICAL FUSE REMOVAL AND INSERTION



**Typical overhead fuse removal and re-insertion**



**Typical meter panel fuse removal and reinsertion**



### **Typical range of seals with a unique number**

These seals do not require the use of a special tool to fit them.

Records of the seal number must be kept, along with job details.

Refer to Section 4, Conditions 6, 9 and 10.



