

Australian Standard[®]

High-voltage live working

Part 2: Glove and barrier work



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- Australian Services Union
 - CIGRE
 - Communications, Electrical and Plumbing
 - Consumers' Federation of Australia
 - Electrical Regulatory Authorities Council
 - Energy Networks Association
 - National Electrical and Communications Association
 - National Generators Forum
-

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Part 2: Glove and barrier work

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PREFACE

This Standard was prepared by the Standards Australia subcommittee EL-052-01, High-voltage Live Working for Committee EL-052, Electrical Energy Networks, Construction and Operation.

The objective of this Standard is to set out the minimum standards for high-voltage live glove and barrier work to ensure the safety of live workers and the general public.

This Standard is the second of a four Part series as follows:

AS

- 5804.1 Part 1: General
- 5804.2 Part 2: Glove and barrier work (this Standard)
- 5804.3 Part 3: Stick work
- 5804.4 Part 4: Barehand work

The intention of having four separate parts to the Standard is to highlight the different methods of live work.

Part 1 of this series is an integral part of each of the other parts of the series and is intended to be read first.

The subsequent parts of this series are not intended to be read alone, but always in conjunction with Part 1.

This Standard has its origins in the documents of the former Electricity Supply Association of Australia (ESAA) documents; HB ESAA LLM 01—2000 *Guidelines for live line barehand work*, HB ESAA LLM 02—2000, *Guidelines for live line stick work*, HB ESAA LLM 03—2000 *Guidelines for live line glove and barrier work* and ESAA ND/NL 04—1995 *Guidelines for use of helicopters for live line work*. All but ESAA ND/NL 04—1995 are now published as Energy Networks Association (ENA) documents.

Over time, changes in Australian Standards, industry standards and legislative requirements, as well as technological advances and other factors relevant to the information contained in this document, may affect the accuracy of the information contained in this document. Accordingly, caution should be exercised in relation to the use of the information in this document.

Statements expressed in mandatory terms in notes to tables and figures are deemed requirements of this Standard.

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STANDARDS AUSTRALIA

Australian Standard
High-voltage live working**Part 2: Glove and barrier work**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out the minimum industry standards for live high-voltage glove and barrier work. The principles may be enhanced or supplemented provided this does not result in reduced safety standards.

THIS PART OF THE STANDARD SHALL ALWAYS BE READ IN CONJUNCTION WITH PART 1: GENERAL

This Standard applies to all work performed on live high-voltage electrical apparatus where the live glove and barrier method is used.

This Standard does not constitute a live work training manual nor does it set down live work procedures. These procedures and techniques are to be developed in accordance with the principles in this Standard by the network operator or service provider for inclusion in their live work manual.

The objectives of this Standard are—

- (a) to manage and promote the safety of live workers and the general public at the worksite.
- (b) to specify the minimum standards required for work and equipment for high-voltage glove and barrier work methods.

Glove and barrier work is currently restricted to a maximum system voltage of 33 kV due to insulation limitations.

1.2 CONCEPT

The glove and barrier method is based on the principle that the live workers always maintain a minimum of two independent levels of insulation to prevent phase-to-earth or phase-to-phase contact. The live workers operate at varying potential between the electrical apparatus they are working on and other line and earth potentials.

This is achieved by—

- (a) wearing appropriately rated and tested insulating gloves and sleeves;
- (b) always working from an insulated elevating work platform (EWP) fitted with an insulating basket liner, or insulating positioning tower or an insulating platform. Glove and barrier work shall never be directly undertaken from an uninsulated ladder or structure;
- (c) working at only one potential at a time from a single platform; and
- (d) providing additional protection for the live worker by using insulating barriers. All sources of potential difference that are within reach shall be covered with insulating barriers with the exception of the item to be worked upon.