

**Engineering System Integrity
Electrical Network Safety Rules**

**Engineering Procedure
Electrical Distribution Unit**

Electrical Distribution Network Management

**PR D 78504
Operating Agreements**

Version 1.3

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Approved by: Associate Director
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Document control

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1.0	29 July 2015	Chris Leung	First issue as a Sydney Trains document, rebranded from previous RailCorp SMS-06-EN-0585 V1.3
1.1	16 July 2018	Chris Leung	3 Yearly Review
1.2	19 February 2019	Nick Loveday	Updated PR D 78102 "Approved by" to Associate Director Electrical Distribution Unit
1.3	1 February 2022	ENSR Project Team	Reviewed as part of the ENSR Project.

Summary of changes from previous version

Summary of change	Section
Minor grammatical updates	All
Updated reference documents	All

Table of Contents

1	Purpose and Scope	4
2	Definitions	4
3	Responsibility	4
4	System Overview	5
5	General Requirements	6
5.1	WHVI or Authority	6
5.2	Inclusion of Low Voltage Aerial Lines	6
5.3	Deletions or Alterations	6
5.4	Details Specific on the Operating Agreement	6
6	Writing, Checking, Instructing, Issuing and Retrieving Operating Agreements	7
7	Responsibility of the Person Issuing the Operating Agreement	7
7.1	Preparation.....	7
7.2	Instruction of the Person Receiving the Operating Agreement	8
7.3	Feedback from the Operating Agreement Holder	8
7.4	Issue of the Operating Agreement	9
8	Responsibility of the Person Retrieving the Operating Agreement	10
8.1	Preliminary Checks	10
8.2	Cancellation of the Operating Agreement.....	10
8.3	Removal of Working Earths and/or Portable Rail Connections	10
9	Reference documents	11

1 Purpose and Scope

To describe the procedures required for the issuing and retrieving of a Sydney Trains' Operating Agreement (*PR D 78504 FM01 Operating Agreement*).

An Operating Agreement is the safety document used as a token where another Electrical Network Operator requires Sydney Trains' Low Voltage (LV), High Voltage (HV) aerial lines, cables or 1500 Volt DC Overhead Wiring (OHW) to be isolated to allow its work on their infrastructure to proceed. For further information on the applicability of an Operating Agreement refer to *PR D 78500 Electrical Permits*.

For procedures relating to receipt of Operating Agreements from other Electrical Network Operators see procedures *PR D 78202 Working High Voltage Instruction* and *PR D 78302 1500 Volt Authority*.

2 Definitions

Refer to the **Electrical Safety Definitions** page available on the **RailSafe** site.

3 Responsibility

This document sets out specific responsibilities for persons undertaking the following tasks:

- Writing and checking Operating Agreements.
- Instructing the person receiving the Operating Agreement.
- Issuing and retrieving Operating Agreements.

These persons shall have the appropriate authorisation (refer to Section 7).

Nominated Authorised Officers in the area concerned are responsible for reviewing Operating Agreements returned to them upon completion of the work covered by the Operating Agreements.

4 System Overview

An Operating Agreement is issued by an Authorised Person (refer to Section 7) to a representative of another Electrical Network Operator as a confirmation that:

- The specified Transport Asset Holding Entity of New South Wales (TAHE) HV aerial lines, or cables have been isolated and earthed
- The specified sections of TAHE 1500 Volt DC OHW system have been isolated and rail connected.
- The specified TAHE LV aerial lines or cables have been isolated and proved dead.
- The isolated and earthed or rail connected conditions will remain until the Operating Agreement is returned and cancelled.

The Operating Agreement form is used as a token passed between Sydney Trains and another Electrical Network Operator. The other Electrical Network Operator should not start work until the Operating Agreement is received, and Sydney Trains shall not remove its safety measures until the Operating Agreement is received back from the other Electrical Network Operator.

In issuing an Operating Agreement for equipment nominated by the other Electrical Network Operator, Sydney Trains gives no assurance that it will be safe to carry out the proposed work with that equipment isolated. The Operating Agreement only certifies that the equipment nominated is isolated and earthed or rail connected, and that the nominated equipment will remain isolated and earthed or rail connected until the Operating Agreement is returned.

5 General Requirements

5.1 WHVI or Authority

An Operating Agreement issued by Sydney Trains shall be in accordance with the *PR D 78202 FM01 Working High Voltage Instruction (WHVI)* or *PR D 78302 FM01 Authority for Removal of Supply from 1500 Volt Sections (Authority)*.

5.2 Inclusion of Low Voltage Aerial Lines

Where a LV aerial line has to be isolated and proved dead for the work, it shall be included on the Operating Agreement. If specifically requested by the other Electrical Network Operator, the LV aerial line shall be earthed if possible, i.e. the aerial line is not insulated.

5.3 Deletions or Alterations

No deletions or alterations may be made to the Operating Agreement once it has been issued. Should amendment be necessary after the Operating Agreement has been issued, the Operating Agreement shall be cancelled and a new Operating Agreement issued.

5.4 Details Specific on the Operating Agreement

The Operating Agreement specifies the:

1. Operating Agreement number.
The Operating Agreement number is a unique number. The number format is detailed in:
 - PR D 78202 Section 6.2 (c) if issued under a WHVI
 - PR D 78302 Section 6.3 (d) if issued under an Authority.This number includes the associated WHVI or Authority number.
2. Planned time and date for the work.
3. Location, description, voltage, identification number and limits of electrical equipment covered by the Operating Agreement:
 - the HV aerial lines, or cables that have been isolated and earthed
 - 1500 Volt DC OHW sections or cables that have been isolated and rail connected shall be identified by the labels on the OHW structures within the limits of the safe work area
 - LV aerial lines or cables that have been isolated, proved dead, and/or earthed (if specifically requested by the other Electrical Network Operator).

6 Writing, Checking, Instructing, Issuing and Retrieving Operating Agreements

At least 2 Authorised Persons i.e. an Authorised Traction Operator or Authorised Officer (Mains), must be involved in the checking, instructing and issuing of a Sydney Trains Operating Agreement

The Sydney Trains Operating Agreement may be written by either an Authorised or unauthorised person (e.g. an apprentice).

7 Responsibility of the Person Issuing the Operating Agreement

7.1 Preparation

The Authorised Person (refer to Section 7) issuing a Sydney Trains Operating Agreement to the representative of another Electrical Network Operator shall:

1. Be authorised to issue an Operating Agreement for the equipment concerned (refer to Section 7).
2. Have an approved copy of the relevant WHVI or Authority where applicable.
3. Ensure that:
 - i. The Operating Agreement is correctly numbered.
This number is issued by the Authorised Person (Mains) in charge of the relevant WHVI or Authority and listed on the relevant WHVI or Authority, refer to Section 6.
 - ii. All relevant electrical equipment and information including any relevant special instructions on the WHVI or Authority is entered on the Operating Agreement – item (3).
 - iii. The Operating Agreement is be made out in duplicate. This may be done by either:
 - o using an Operating Agreement book (Stock Code 2087484) procured through a Sydney Trains authorised printing company
 - o making a photo copy, if facilities for doing so are readily available.
 - iv. The Authorised Person (Mains) in charge of the WHVI or Authority:
 - o has confirmed that the specified LV and HV aerial lines or cables as detailed at item (3) of the Operating Agreement, have been isolated and safety earths applied as required
 - o has confirmed that the specified sections/subsections of the 1500 Volt DC OHW system as detailed at item (3) of the Operating Agreement, have been isolated and has advised the locations of the associated rail connections.
 - v. The working earths for the specified HV aerial lines or cables are in place at each side of the work site and shall visually check at least one set.

All 1500 Volt DC equipment covered by the Operating Agreement is rail connected.

7.2 Instruction of the Person Receiving the Operating Agreement

The person receiving the Sydney Trains Operating Agreement shall be instructed in the details of the electrical equipment covered by the Operating Agreement by the relevant Sydney Trains Authorised Person (refer to Section 7) at the worksite immediately prior to the Operating Agreement being issued.

The person issuing a Sydney Trains Operating Agreement shall ensure that the representative of the other Electrical Network Operator:

- i. Understands:
 - which electrical equipment is covered by the Operating Agreement, and
 - the requirements of the Operating Agreement.
- ii. Is aware of the time and date restrictions of the Operating Agreement.
- iii. Print their name and sign the Operating Agreement in the space provided at item 5 of the form, in acknowledgment of items (i) and (ii) above.
- iv. Understands that the other Electrical Network Operator shall retain the original of the Operating Agreement until it is returned.

7.3 Feedback from the Operating Agreement Holder

The Authorised Person instructing the prospective Sydney Trains Operating Agreement Holder shall obtain an acknowledgment from the prospective Sydney Trains Operating Agreement Holder that the equipment identified as isolated, proved dead, earthed or rail-connected, will allow the other Electrical Network Operator to proceed with its work on their infrastructure.

The instructing Authorised Person shall provide the prospective Sydney Trains Operating Agreement Holder with any advice or assistance required in order for the prospective Sydney Trains Operating Agreement Holder to make an informed assessment prior to giving the required acknowledgment.

The instructing Authorised Person shall read items (1), (2) and (3) of the Sydney Trains Operating Agreement to the prospective Sydney Trains Operating Agreement Holder, and, as each item is completed, require the prospective Sydney Trains Operating Agreement Holder to give verbal confirmation that:

- i. They have understood that item of the Sydney Trains Operating Agreement.
- ii. The information in that item of the Sydney Trains Operating Agreement will enable their work to be undertaken safely.

7.4 Issue of the Operating Agreement

The person issuing the Sydney Trains Operating Agreement shall:

- i. Acknowledge having shown the electrical equipment covered by the Operating Agreement to the receiver of the Operating Agreement and make it 'in force' by printing their name, position, phone number, time and date 'in force' and then signing, in the space provided at item (4) of the form.
- ii. Ensure that the other Electrical Network Operator's authorised representative prints their name and other details as requested on the form and then signs.
- iii. The Operating Agreement at the space provided at item (5) in acknowledgement of acceptance of the associated responsibilities.
- iv. Then issue the Operating Agreement.

The person having issued the Operating Agreement shall then:

- v. Confirm the details of the Operating Agreement with the Authorised Person (Mains) in charge of the WHVI or Authority.
- vi. Advise Sydney Trains' Electrical System Operator (ESO) of the details of the Operating Agreement issued, i.e. Operating Agreement Number, associated WHVI and/or Authority number, issued to the name of the person and I Electrical Network Operator, date and time of issue.

The person issuing the Operating Agreement is not required to remain in the vicinity of the work.

8 Responsibility of the Person Retrieving the Operating Agreement

8.1 Preliminary Checks

The Authorised Person (refer to Section 7) retrieving the Sydney Trains Operating Agreement shall:

- i. Check that the representative of the other Electrical Network Operator has completed and signed the Operating Agreement as returned at item (6).
- ii. Check that the electrical equipment for which the Operating Agreement was issued has been inspected and is safe to be energised.

8.2 Cancellation of the Operating Agreement

Once the preliminary checks have been satisfactorily completed, the Authorised Person (refer to Section 7) retrieving the Sydney Trains Operating Agreement shall:

- i. Cancel the original copy of the Operating Agreement by completing and signing in the space provided at item (7).
- ii. Ensure that the Authorised Person (Mains) in charge of the WHVI or Authority is advised that the Operating Agreement has been cancelled.
- iii. Advise ESO of the cancelled Operating Agreement.
- iv. Forward the cancelled Operating Agreement to the nominated Electrical Engineer.

8.3 Removal of Working Earths and/or Portable Rail Connections

Working earths and/or portable rail connections shall not be removed:

- a. Without first checking with the Authorised Person (Mains) in charge of the WHVI or Authority.
- b. If the said working earths and/or portable rail connections are protecting work being carried out on other Permits or Operating Agreements.

NOTE

Where overlapping Authorities exist, as indicated on the completed *PR D 78501 FM02 Portable Rail Connection/Earthing Schedule*, the portable rail connections applied in the overlapping areas shall not be removed without the approval of the Authority Holders for each of the overlapping Authorities concerned.

9 Reference documents

PR D 78202 Working High Voltage Instruction

PR D 78202 FM01 Working High Voltage Instruction (WHVI)

PR D 78302 1500 Volt Authority

PR D 78302 FM01 Authority for Removal of Supply from 1500 Volt Sections

PR D 78500 Electrical Permits

PR D 78501 FM02 Portable Rail Connection/Earthing Schedule

PR D 78504 FM01 Operating Agreement