

**PUBLIC TRANSPORT AUTHORITY**  
SAFEWORKING RULES AND PROCEDURES

**2023**  
UNPLANNED  
DE-ENERGISATION  
OF OVERHEAD  
SUPPLY

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## 1. PURPOSE

The purpose of this rule is to prescribe the protocols for the *De-Energisation of Overhead Supply* in life-threatening or *Emergency* situations or for urgent *Infrastructure* work, in the Public Transport Authority (PTA) *Network*.

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## 2. GENERAL

*De-Energisation* of the *Overhead Supply* requires coordination between *Train Controllers* and the *Electric Control Officer (ECO)*.



### WARNING

Unless the *Electrical Representative* tells them otherwise, *Workers* near *Electrical Equipment* and *Electrical Infrastructure* must treat it as Live.

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## 3. RESCUE OPERATIONS

In life-threatening or *Emergency* situations, rescue operations must not be attempted before the *ECO* or *Electrical Representative* says that it is safe to do so.

### 3.1. LIFE-THREATENING AND EMERGENCY CIRCUMSTANCES

In life-threatening situations, the *ECO* may *De-Energise* the *Overhead Supply* before telling the *Train Controller*.

In *Emergency* situations, the *ECO* and affected *Train Controllers* coordinate *De-Energisation* of the *Overhead Supply*.

Where the *ECO* is not in attendance the *Train Controller* may *De-Energise* the *Overhead Supply* by operating the *Emergency* key which will *De-Energise* the *Overhead Supply*.

### 3.2. ELECTRIC CONTROL OFFICER AND TRAIN CONTROLLER



### WARNING

In life-threatening or *Emergency* situations, *Overhead Supply* must also be *De-Energised* from *Adjacent Sections* that could allow the affected *Section* to be electrified by the passage of a *Train*.

The *ECO* or *Train Controller* must obtain as much information about the life-threatening or *Emergency* situation from the caller as possible.

### 3.3. ELECTRIC CONTROL OFFICER

*De-Energise* the *Overhead Supply* from the affected *Overhead Line Equipment (OLE)*.

As soon as possible, tell *Train Controllers* about the *De-Energisation* of the *Overhead Supply*.

If the *Overhead Supply* has been *De-Energised* for a rescue operation, request the *Train Controller* to apply *Blocking Facilities* and confirm with the *Blocking of Track Section for Electrical Purposes form (BF)*.

As soon as practicable, tell the *Train Controller* about the *Electrical Section* from which *Overhead Supply* has been *De-Energised*.

Make a *Permanent Record* of details about:

- the *De-Energisation* of the *Overhead Supply*; and
- if issued, the *BF* form number.

### 3.4. TRAIN CONTROLLERS

Once the *Overhead Supply* has been *De-Energised* tell the *Emergency Services* that:

- the *Overhead Supply* has been *De-Energised* for rescue purposes only; and
- rescue personnel should not come within one metre of *OLE* unless advised by an *Electrical Representative*.

Tell *Rail Traffic Crew* in affected areas:

- about the *Condition Affecting the Network (CAN)*;
- that *Overhead Supply* has been *De-Energised*;
- that people must be kept away from *OLE*; and
- *Rail Traffic Crew* must not come within one metre unless advised by an *Electrical Representative*.

Make a *Permanent Record* of:

- the *CAN*; and
- the *De-Energisation* of the *Overhead Supply*.

### 3.5. WHEN THE LIFE-THREATENING OR EMERGENCY SITUATION IS OVER

Once the life-threatening or *Emergency* situation is over and work is still required to be carried out, earthing must be applied and where required, the *Overhead Supply* must be *De-Energised* in accordance with **Rule 2017 Working Around Electrical Infrastructure**.

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## **4. DE-ENERGISATION OF OVERHEAD SUPPLY FOR URGENT ENGINEERING WORK**

If urgent engineering work on *Electrical Infrastructure* is needed to prevent *OLE* failure, *Overhead Supply* may be *De-Energised* without being *Advertised*.

### **4.1. ELECTRICAL REPRESENTATIVE**

Ask the *ECO* to *De-Energise* the *Overhead Supply* for urgent engineering work.

### **4.2. ELECTRIC CONTROL OFFICER AND TRAIN CONTROLLER**

Confer and agree about:

- which *Electrical Section* the *Overhead Supply* will be *De-Energised* from; and
- when the *Overhead Supply* can be *De-Energised*.

### **4.3. ELECTRIC CONTROL OFFICER**

The *ECO* prepares a *BF* for *De-Energisation* of *Overhead Supply* and issues the *BF* to the *Train Controller*.

The *Train Controller* must give *Authority* to *De-Energise* the *Overhead Supply* on the *BF*.

When *De-Energisation* of the *Overhead Supply* is due, ask the *Train Controller* to give the *Authority* to *De-Energise* the *Overhead Supply*.

### **4.4. TRAIN CONTROLLERS**

The *Train Controller* must get assurance from the *ECO* that the details of the *BF* for *De-Energisation* correspond with the overhead section from where the *Overhead Supply* will be *De-Energised*.

The *Train Controller* must make sure or get assurance that the *Sections* from where the *Overhead Supply* will be *De-Energised* are *Clear of Rail Traffic*.

The *Train Controller* must tell *Rail Traffic Crew* and affected *Workers* about the affected *Sections*.

The *Train Controller* must make sure that *Blocking Facilities* have been applied to *Signalled Routes* and *Protection* has been applied to unsignalled *Routes*.

The *Train Controller* must prevent all *Rail Traffic* from entering the *De-Energised Sections* by:

- setting *Signals* at *Stop*;
- applying *Blocking Facilities*; and
- making sure that *Protection* has been applied to prevent entry by way of unsignalled *Routes*.

The *Train Controller* must give the *ECO Authority* to *De-Energise* the *Overhead Supply*.

Make a *Permanent Record* of the *Authority* and the *De-Energisation* of the *Overhead Supply*.

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## **5. RESTORING OVERHEAD SUPPLY**

The *ECO* must coordinate the restoration of the *Overhead Supply*.

*Overhead Supply* must be restored in accordance with the requirements specified in **Rule 2017 Working Around Electrical Infrastructure**. The *ECO* must tell the *Train Controller* when *Overhead Supply* has been restored.

The *Train Controller* must make a *Permanent Record* of the time that the *Overhead Supply* was restored.

If *Blocking Facilities* are no longer needed the *Train Controller* must remove the *Blocking Facilities*.

### **5.1. TELL AFFECTED TRAIN CONTROLLERS THAT OVERHEAD SUPPLY HAS BEEN RESTORED**

The *Train Controller* may *Authorise* the *Overhead Supply* to be restored only after receiving assurance that rescue personnel and their equipment are *Clear*.

This assurance can only be given by the *Electrical Representative*.

The relevant *Train Controller* gives clearance to restore *Overhead Supply* if the supply was *De-Energised* due to a life threatening or *Emergency* situation.

#### **5.1.1. Electric Control Officer**

After ensuring it is safe to do so, restore *Overhead Supply* and inform the relevant *Train Controller*.

#### **5.1.2. Train Controllers**

Tell other affected *Train Controllers* that *Overhead Supply* has been restored.

If *Blocking Facilities* are not needed for *Work On Track*, remove:

- *Signal Protection* from *De-Energised OLE*; and
  - *Protection* applied to unsignalled *Routes*.
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## **6. KEEPING RECORDS**

The *Train Controller* and the *ECO* must make a *Permanent Record* of the time when *Overhead Supply* is restored.

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## **7. REFERENCE**

Rule 2017 Working Around Electrical Infrastructure

Rule 2019 Planned De-Energisation of Overhead Supply

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## **8. EFFECTIVE DATE**

4 December 2017

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