

# Removing 1500V supply in Electric Vehicle Maintenance Centres

## Introduction

Removing 1500V supply to allow engineering work in Electric Vehicle Maintenance Centres (EVMCs) has specific procedures for:

- roads with individual combined isolating and rail-connecting switches
- areas including more than roads with individual combined isolating and rail-connecting switches.

## Roads with individual combined isolating and rail-connecting switches

### Removing 1500V supply

#### *Electrical Representative*

1. At least 24-hours before the intended starting time, compile a *Notification for the Removal of 1500 Volt Supply in EVMCs* form.
2. Issue the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Officer in Charge of the EVMC.
3. If a groundframe can be used to gain entry to the roads to be isolated, give additional copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Officer in Charge of the EVMC.

#### *Officer in Charge of the EVMC and Running Supervisor*

4. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to acknowledge receipt.
5. Confer and agree about the details of the intended removal of 1500V supply.

## Removing 1500V supply in Electric Vehicle Maintenance Centres

### *Officer in Charge of EVMC*

6. Give the additional copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Running Supervisor for the Qualified Workers operating groundframes in affected areas.

### *Running Supervisor*

7. Attach a copy of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Train Register, or its equivalent.

### *Electrical System Operator*

8. When 1500V supply removal is due, ask the Running Supervisor to give the clearance to remove the 1500V supply.

### *Running Supervisor*

9. Get assurance from the Electrical System Operator that:
  - both parties are using the current colour version of the *1500V Sectioning Diagram*
  - the details of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form correspond with the *1500V Sectioning Diagram*
  - there are no vehicles requiring electric traction that may need to be moved during the period of isolation of the 1500V supply
  - the pantographs of stabled electric vehicles in the overhead wiring sections have been lowered and isolated.
10. Make sure that the EVMC's safety procedures to prevent trains from entering the isolated 1500V overhead wiring sections have been carried out.
11. Give the Electrical System Operator clearance to remove the 1500V supply.

## Removing 1500V supply in Electric Vehicle Maintenance Centres

12. Record, in permanent form, details about the clearance for the removal of the 1500V supply.

### **Restoring 1500V supply**

#### *Electrical System Operator*

1. Tell the Running Supervisor when the work is completed and the 1500V supply has been restored.

#### *Running Supervisor*

2. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to confirm that the 1500V supply is restored.
3. Record, in permanent form, the time when the 1500V supply was restored.

## Areas including more than roads with individual combined isolating and rail-connecting switches

### **Removing 1500V supply**

#### *Electrical Representative*

1. At least 24-hours before the intended starting time, compile a *Notification for the Removal of 1500 Volt Supply in EVMCs* form.
2. Issue copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Officer in Charge of the EVMC and affected Signallers.
3. If a groundframe can be used to gain entry to the roads to be isolated, give additional copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Officer in Charge of the EVMC.

#### *Officer in Charge of EVMC and Running Supervisor*

4. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to acknowledge receipt.

## Removing 1500V supply in Electric Vehicle Maintenance Centres

5. Confer and agree about the details of the intended removal of 1500V supply.

### *Officer in Charge of EVMC*

6. Give the additional copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Running Supervisor for the Qualified Workers operating groundframes in affected areas.

### *Running Supervisor*

7. Attach a copy of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Train Register, or its equivalent.

### *Signallers*

8. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to acknowledge receipt.
9. Attach copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Train Registers, or their equivalent.

### *Running Supervisor*

10. On the day of the intended 1500V supply removal, send a copy of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Network Controller. Ask the Network Controller to give the clearance to remove the 1500V supply.
11. Give the additional copies of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to the Qualified Workers operating groundframes in affected areas.

### *Qualified Workers*

12. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form to acknowledge receipt.

## Removing 1500V supply in Electric Vehicle Maintenance Centres

### *Network Controller*

13. Confirm with the Electrical System Operator, the Running Supervisor at the EVMC, and the Signallers that:
  - the parties are using the current colour version of the *1500V Sectioning Diagram*
  - the details of the *Notification for the Removal of 1500 Volt Supply in EVMCs* form correspond with the *1500V Sectioning Diagram*
  - the sections to be isolated are clear of vehicles that may need to be moved during the period of isolation of the 1500V supply
  - relevant parties have signed the *Notification for the Removal of 1500 Volt Supply in EVMCs*.
14. Get assurance from Signallers that:
  - signals controlling entry to the overhead wiring sections to be isolated have been set at STOP, with blocking facilities applied
  - protection has been applied to prevent entry or exit by way of unsignalled routes.
15. Get assurance from the Running Supervisor that protection has been applied to prevent entry or exit by the way of unsignalled routes.
16. Give clearance to the Electrical System Operator to remove the 1500V supply.
17. Tell the Running Supervisor and Signallers that the clearance has been given.

### *Network Controller, Running Supervisor and Signallers*

18. Record, in permanent form, the time when clearance to remove the 1500V supply was given.

## Removing 1500V supply in Electric Vehicle Maintenance Centres

### Restoring 1500V supply

#### *Electrical System Operator*

1. Tell the Network Controller when the work is completed and the 1500V supply has been restored.

#### *Network Controller*

2. Tell the Running Supervisor and affected Signallers that the 1500V supply has been restored.
3. Get assurance from Signallers that blocking facilities have been removed.

#### *Network Controller and Signallers*

4. Record, in permanent form, the time when the 1500V supply was restored.

#### *Running Supervisor*

5. Tell the Qualified Workers operating groundframes to restore non-interlocked points within the EVMC to normal working.
6. Record, in permanent form, the time when the 1500V supply was restored.

#### *Running Supervisor and Signallers*

7. Sign the *Notification for the Removal of 1500 Volt Supply in EVMCs* form.

## Network Procedures

NPR 705 *Removing 1500V supply*

NPR 714 *Removing 1500V supply in unplanned situations*

## Effective date

30 September 2018