

ANGE 224

Planned Removal of 1500v Supply

Applicability

NSW SMS

Publication Requirement

External Only

Document Status

Issue/Revision #	Effective from
3.0	11 October 2015



Purpose

To prescribe the rules for planned removal and restoration of the 1500V supply in the Australian Rail Track Corporation (ARTC) NSW Network

General

Only Train Controllers may give clearance for the removal of 1500V supply.

The 1500V supply must be removed only:

- if all prescribed approvals have been obtained, and
- in accordance with the requirements specified in the *Maintenance Representative's Electrical Safety Instructions*.



For planned removal in *Electric Vehicle Maintenance Centres* (EVMCs), see *ANGE 226 Planned removal of the 1500V supply in Electric Vehicle Maintenance Centres*.

For unplanned removal, see ANGE 228 Unplanned removal of the 1500V supply.

Advertising 1500V supply removal

Planned removal of 1500V supply must be advertised.

Removal of the 1500V supply from an overhead wiring section must be *authorised* or notified using an *Authority for Removal of Supply from 1500 Volt Sections* form.

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Removing 1500V supply

The *Electrical System Operator* must get clearance from the relevant Train Controller before removing the 1500V supply.

The Train Controller must record, in *permanent form*, the details about the removal of the 1500V supply before giving the clearance.

If the removal of the 1500V supply affects more than one Train Control area, the Train Controllers must confer and nominate a Coordinating Train Controller.

The Coordinating Train Controller must:

- give the clearance to the Electrical System Operator, and
- record in permanent form, the details about the removal of the 1500V supply.



If a signal box needs to be switched in after the 1500V supply has been removed, the Train Controller must tell the *Signaller* that the supply has been removed from the overhead wiring sections.

Applying blocking facilities

Signallers must prevent *trains* from entering the *isolated 1500V overhead wiring sections* by:

- setting signals at STOP, and
- applying blocking facilities in accordance with Rule ANSG 614 Blocking facilities, and
- making sure that protection has been applied to prevent entry by way of unsignalled routes.



If it bridges isolated and live 1500V overhead wiring sections, a raised *pantograph* will re-energise an isolated section.

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Travel between live and isolated sections

Electric trains or electric *locomotives* must not enter or leave an isolated 1500V overhead wiring section unless:

- their pantographs have been lowered with the air supply isolated, and
- they are hauled by diesel locomotives.

If the motive power of an approaching train is not known, before the train may enter an isolated 1500V overhead wiring section, the relevant Signaller must:

- stop the train, and
- determine its motive power, and
- tell the Train Controller if the train requires electric traction.

Restoring 1500V supply

The 1500V supply must be restored in accordance with the requirements specified in the Maintenance Representative's Electrical Safety Instructions.

The Electrical System Operator must tell affected Train Controllers when the 1500V supply has been restored.

Removing blocking facilities

If they are not needed to protect other work in the isolated 1500V overhead wiring sections, Signallers must:

- remove blocking facilities, and
- tell Train Controllers.

Related ARTC Network Procedures

ANPR 705

Removing 1500V supply

Effective Date

11 October 2015

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