



AUSTRALIAN RAIL TRACK CORPORATION LTD

This document has been adopted by the ARTC with the permission of the NSW Government and will continue to apply under the authority of the ARTC General Manager Infrastructure, Strategy & Performance until further notice

Discipline
Engineering Standard - NSW

Category
Electrical

Title
**Isolation of High Voltage Equipment for Work
Inside Substations**

Reference Number
PMP 12 - (RIC Standard: EP 95 10 00 04 SI)

Document Control

Status	Date	Prepared	Reviewed	Endorsed	Approved
Issue 1 Revision 2	Mar 05	Standards and Systems	Signalling Standards Engineer	GM Infrastructure Strategy & Performance	Safety Committee
		Refer to Reference Number	T Moore	M Owens	Refer to minutes of meeting 24/01/05

Disclaimer

Australian Rail Track Corporation has used its best endeavors to ensure that the content, layout and text of this document is accurate, complete and suitable for its stated purpose. It makes no warranties, express or implied, that compliance with the contents of this document shall be sufficient to ensure safe systems of work or operation. Australian Rail Track Corporation will not be liable to pay compensation in respect of the content or subsequent use of this document for any other purpose than its stated purpose or for any purpose other than that for which it was prepared except where it can be shown to have acted in bad faith or there has been willful default.

Document Approval

The technical content of this document has been approved by the relevant ARTC engineering authority and has also been endorsed by the ARTC Safety Committee.

Document Supply and Control

The Primary Version of this document is the electronic version that is available and accessible on the Australian Rail Track Corporation Internet and Intranet website.

It is the document user's sole responsibility to ensure that copies are checked for currency against the Primary Version prior to its use.

Copyright

The information in this document is Copyright protected. Apart from the reproduction without alteration of this document for personal use, non-profit purposes or for any fair dealing as permitted under the Copyright Act 1968, no part of this document may be reproduced, altered, stored or transmitted by any person without the prior written consent of ARTC.

About This Standard

This instruction sets out the mandatory steps for the isolation of high voltage equipment within Substations to permit work to be undertaken on the equipment.

Document History

Primary Source – RIC Standard EP 95 10 00 04 SI Version 1.0

List of Amendments –

ISSUE	DATE	CLAUSE	DESCRIPTION
1.1	05/01/2005		Reformatted to ARTC Standard
1.2	11/03/2005	Disclaimer	Minor editorial change

Contents

About This Standard	3
Document History	4
1. General	6
2. Procedure for Removal of Supply	6
3. Procedure for Restoration of Supply	6

1 General

All work near exposed high voltage equipment within substations must be carried out in accordance with PMP 09 - "Work Near High Voltage Equipment - Permit Requirements and Safe Working Distances".

The neutrals of transformers when disconnected from the earthing system must be considered as high voltage equipment.

When supply is to be removed for work on or near high voltage equipment within substations, the equipment must be isolated, proved dead, short circuited and earthed, the work area and access markers set where required and an appropriate Permit issued before any work commences.

Where 1500V and/or low voltage equipment in the Substation also has to be isolated and proved dead for the work, it must be included on the Permit.

2 Procedure for Removal of Supply

No High Voltage equipment within substations is to be taken out of service without the prior approval of the Electrical System Operator, except where a life threatening situation exists.

The Authorised Person issuing the Permit must arrange for the removal of supply with the Electrical System Operator.

The Electrical System Operator must request any other Network Operator involved for the removal of supply from their services where required, and for them to issue an Operating Agreement if necessary.

3 Procedure for Restoration of Supply

Danger Tags and earths must not be removed and supply to high voltage equipment within substations must not be restored, until all associated Permits have been cancelled.

The Authorised Person cancelling the Permit must arrange for the restoration of supply with the Electrical System Operator.

The Electrical System Operator must advise the other Network Operator that their Operating Agreement, if issued, has been signed off and supply may be restored.

WARNING

The equipment must not be returned to service until any necessary tests and phase checks have been carried out.