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RAILTRACK
Safety & Standards

Briefing Notes for:	Persons Working On or Near to AC Electrified Lines	
Document No:	GE/RT8024	Issue: One
Subject Committee(s)	Electrification	
	Operations Safety	
Issue date:	October 2000	
Initial Compliance Date	2 December 2000	

BACKGROUND

As written the former Railway Group Standard GM/RT1087 mandated the safe working on or near to implied 'classic' AC electrification systems. In the absence of new high level requirements this may result in existing practices being unsatisfactory for new, more complex, electrification systems or arrangements that are proposed to be introduced in association with higher train operating speeds.

KEY CHANGES INTRODUCED BY THIS STANDARD

- Withdrawal of GM/RT1087 Issue One - 'Persons Working On or Near to AC Electrified Lines'; and
- Introduction of GE/RT8024 Issue One - 'Persons Working On or Near to AC Electrified Lines'.

The new document has been categorised in the 'GE' series to reflect its application to multi-disciplinary activities affecting Railway Group Members.

The new document is structured in accordance with the current requirements for Railway Group Standards.

New definitions for Boundary For Working and for Live Parts. The definition for Live Parts includes the live parts of pantographs and other roof mounted electrical equipment on trains.

A revised definition of Overhead Line Equipment (OLE) which includes, where fitted, return conductors or auto-transformer feeders.

A diagram is included as an Appendix detailing the dimensions for working relative to live parts.

The addition of an exception clause to clause 4.3 allowing, where persons are authorised, the use of voltage testing devices, live line tools and live line measuring devices.

The expansion of clause 4.4 requiring safe systems of work to define the electrification system, definitions, terms, methods to maintain the adequacy of the traction return circuit and a bulleted list of additional high level precautions.

The expansion of clause 4.5 including the requirement to define the type of earths to be utilised and the precautions at the interfaces between differing types of AC electrification systems, between AC and DC electrification systems and working on or close to earth wires and auto-transformer feeders.

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The requirements in the standard in clause 4.6 have been determined as being within the scope of Railway Group Standards as there is the potential for harm to be exported outside Railtrack Controlled Infrastructure into neighbouring depots, facilities etc. Lessons learned in one area need to be shared to minimise risk to other Railway Group Members.

COMPLIANCE

The provisions in this Railway Group Standard are to be complied with from 2 December 2000.

Railway Group Standard GM/RT1087 will be withdrawn with effect from 2 December 2000.

ADDITIONAL INFORMATION

1. The term Infrastructure Controller, and not Railtrack, is used for the organisation responsible for controlling the infrastructure. The infrastructure is Railtrack Controlled Infrastructure. The definition of Railtrack Controlled Infrastructure as detailed in Railtrack's Railway Safety Case is provided for information:
The infrastructure which falls within the geographic boundaries of Railtrack's operational railway, including the permanent way and land within the lineside fence, and plant used for signalling or exclusively for supplying electricity for traction purposes to Railtrack's operational railway. It does not include stations, nor does it include depots, yards or sidings owned by, or leased to, other parties. However, it does include permanent way at stations and plant within these locations used for signalling Railtrack's operational railway or exclusively for supplying electricity for traction purposes to the operational railway. Structures, such as tunnels, bridges, viaducts, underpasses, etc., are deemed to form part of Railtrack Controlled Infrastructure only in relation to their potential to transfer risk onto, or from, the operational railway.
2. GE/RT8024 clause 4.3 permits the use of insulated tools other than just voltage testing devices. This is not in conflict with clause 6.2 of GM/RT1040 as section 6 is intended to apply to high voltage equipment within secured buildings or compounds. GM/RT1040 is currently being reviewed for suitability.