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Level 3

Working On or About 25 kV A.C. Electrified Lines

Module 6 Planning of Isolations

(This module is one of a suite of modules forming Network Rail standard NR/L3/ELP/29987 'Working On or About 25 kV A.C. Electrified Lines')

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1 Purpose

This module will produce a consistent approach to planning isolations on 25 kV a.c. electrified lines and preparing coherent technically compliant isolation plans. Further requirements for working on or about the electrified lines are contained in the Rule Book Module AC (GE/RT8000/AC).

2 Scope

This module states the requirements for the advance planning of isolations for the purpose of carrying out work in order to produce a coherent technically compliant isolation plan for a particular week and route on 25 kV a.c. electrified lines.

It is applicable to Network Rail personnel and to Network Rail's contractors. It is also applicable in relevant part to Train Operating Companies having locally controlled 25 kV a.c. overhead lines which abut those controlled by Network Rail.

To provide a consistent approach to working on or about 25 kV a.c. electrified lines, Train Operating Companies may, as best practice, apply this standard in full on infrastructure they control.

3 Assessment of Risk Before Attempting Work

Where the risk assessment required by Modules 2 and 3 determines that the work requires a pre-arranged isolation and the issue of an overhead line permit, the isolation shall be planned in accordance with this module.

4 Principles for the Planning of Isolations

The following shall be taken into account at the planning stage:

a) the requirements for ensuring the integrity of the electrification system when work is to be carried out as stated in Module 4;

b) the requirement for particular actions to be taken by the Infrastructure Maintainer when work is to be carried out as stated in Module 5;

c) the requirement to submit the isolation details form (IDF) to electrical control with sufficient time for the IDF to be checked by an ECO as stated in this Module;

d) the requirements for isolating, testing and earthing of overhead line equipment as stated in Module 7;

e) the requirement for the current isolation instructions to be used as the primary source document for isolation planning activities.

The planning of isolations includes the following two elements:

1) the Network Rail Route concerned shall decide whether or not to grant the required isolation(s) based on its acceptability (when considered in conjunction with all other isolations required) in relation to the operational and electrical requirements of the route(s) concerned; **and**

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2) the parties and organisations actively involved in the physical implementation of the isolation and issue of overhead line permits (ECO, Authorised Persons, Nominated Persons, etc.) shall be engaged properly to undertake the activities concerned, and the necessary contractual and logistical arrangements made.

Note: It is the responsibility of the party requiring the isolation to understand the timescales of the two activities in (1) and (2) and to make the necessary arrangements in accordance with the possession planning process.

The planning process shall identify the requirement for manual switching and the isolation provider(s) that will carry out the manual switching to implement and restore the isolation.

Agreement of the necessary isolations, granted in accordance with (1), shall not be taken to imply that the arrangements described in (2) will be automatically acted upon.

5 Detailed Planning of Each Isolation

5.1 Request for an Overhead Line Permit

The party requiring the overhead line permit shall submit to the Route Isolation Planner a request giving the following information, in accordance with the possession planning process, irrespective of whether a possession is needed:

a) nature of the work;

b) overhead line structure numbers between which the work is to be carried out referenced to the line(s) concerned;

c) line of route reference (from Sectional Appendix);

d) the organisation providing the overhead line permit; and

e) duration of the work, stating preferred date and times.

Where a party is unable to provide the requirements internally, the party shall confirm that a robust plan for the activities and arrangements described in (2) of clause 4 entitled ‘Principles for the Planning of Isolations’ has been made.

The request for an isolation shall specify the electrical sections or subsections of OLE to be isolated and earthed and the structure numbers between which the work is to be carried out so that the effect on electric train working can be assessed.

5.2 Altering the Extent of an Isolation

Where it is required for the extent of an isolation to be altered whilst it remains in force (either by increasing or shortening), this shall be considered at the planning stage and detailed in the isolation plan.

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