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| Ref: NR/L3/MTC/PL0107                                                                 | Issue: 3 | Publication Date: 06/06/2009 | Compliance Date: 05/09/2009 |
| Title: Planning and delivery of 25Kv overhead line equipment isolations               |          |                              |                             |
| Standard Owner: David Wynne, Head of Infrastructure Maintenance Strategy              |          |                              |                             |
| Non-Compliance rep (NRNC): Jon Jarrett, Programme Manager, Infrastructure Maintenance |          |                              |                             |

| <p><b>Purpose:</b> This procedure details the processes that need to be applied to ensure that Overhead Line Equipment (OLE) isolations are planned and delivered consistently and in accordance with NR/SP/ELP/29987 “Working on or about 25kV AC electrified lines” and with NR/SP/MTC/0056 “Work and possession planning for the railway infrastructure (meetings management pack)”.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p><b>The following teams require briefing</b><br/><b>A = Awareness, T= Technical</b></p> <table><tr><td>Executive Management Group</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Commercial Property</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Strategic Sourcing</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Corporate Development</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Finance</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Funding</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Govt &amp; 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| <p><b>Scope:</b> This procedure applies to all isolations that are controlled by Network Rail’s Electric Control Operator (ECO) by pre-arranged line Block To Electric Trains (BTET), switching off and securing of circuit breakers and section switches to isolate the OLE, the subsequent testing and earthing of the OLE and the issue of an Overhead Line Permit. It also includes the application of or amendment to notice of BTET that either does not require an isolation or needs to remain in force following the relinquishing of an isolation.</p> <p>It does not include local isolations or isolations carried out under emergency procedures.</p> <p>This document does not repeat the content of NR/SP/ELP/29987, it defines the process by which Maintenance will deliver compliance. If there is any conflict between interpretation of this procedure and the standard, then NR/SP/ELP/29987 takes precedent.</p>                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| <p><b>What’s New/Changed:</b></p> <p>Withdrawn. Contents are in the new standards:</p> <p>NR/L2/NDS/202</p> <p>NR/L3/NDS/302</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| <p><b>Affected documents:</b></p> <table><tr><td><i>Reference</i></td><td><i>Impact</i></td></tr><tr><td>NR/L3/MTC/PL0107 Issue 3</td><td>Withdrawn</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| <p><b>Implementation requirements:</b> <i>(The following posts have specific responsibilities within this standard and shall receive technical briefing as part of the Implementation Programme)</i></p> <table><tr><th>Post</th><th>Team</th></tr><tr><td>Lead Planner (Delivery)</td><td>NDS Area Planning Teams</td></tr><tr><td>Isolation Planner</td><td>NDS Area Planning Teams</td></tr><tr><td>Infrastructure Maintenance DU Managers</td><td>DU Teams</td></tr><tr><td>Infrastructure Maintenance Engineer</td><td>DU Teams</td></tr><tr><td>DU Engineers</td><td>IME Teams</td></tr><tr><td>Infrastructure Services Manager</td><td>I-M DU Planning Teams</td></tr><tr><td>Work Plan Co-ordinator</td><td>I-M DU Planning Teams</td></tr><tr><td>Access Co-ordinator</td><td>I-M DU Planning Teams</td></tr><tr><td>Assistant Access Co-ordinator</td><td>I-M DU Planning Teams</td></tr><tr><td>Resource Planner</td><td>I-M DU Planning Teams</td></tr><tr><td>Assistant Resource Planner</td><td>I-M DU Planning Teams</td></tr><tr><td>Section Manager</td><td>DU Engineer Teams</td></tr><tr><td>Section Planner</td><td>DU Engineer Teams</td></tr></table> | Post                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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Resource Planner    | I-M DU Planning Teams    | Assistant Resource Planner | I-M DU Planning Teams | Section Manager          | DU Engineer Teams        | Section Planner        | DU Engineer Teams        |                          |                |                          |                          |                           |                          |                                     |                     |                          |                          |                         |                          |                          |                       |                          |                          |                       |                          |                          |      |                          |                          |          |                          |                          |                    |  |  |                   |                          |                          |                              |                          |      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| Issue:           | 2                |
| Date:            | 1 June 2008      |
| Compliance date: | 26 August 2008   |

## Level 3

# Planning and delivery of 25kV overhead line equipment isolations

### Endorsement and Authorisation

Endorsed by:

Paul Cooper, Working Group Chair

Authorised by:

Nigel Edwards, Programme Manager Standardised Process & Procedures

Accepted for issue by:

M. McManus, National Standards Manager

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| Issue:           | 3                |
| Date:            | 01 June 2008     |
| Compliance date: | 26 August 2008   |

## Issue record

| Issue | Date      | Comments                                                                                                                                           |
|-------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Dec 2006  | First issue                                                                                                                                        |
| 2     | Sept 2007 | Updated to reflect verification of isolation detail and IDF preparation. ECO no longer required to send back completed IDF as per NR/SP/ELP/29987. |
| 3     | June 2008 | Planning 2a/Engineering reorganisation responsibility change                                                                                       |

## Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 26 August 2008.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

## Reference documentation

|                  |                                                                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NR/L2/MTC/PL0056 | Work and possession planning for the railway infrastructure (meetings management pack)                                                                                                          |
| NR/L2/MTC/PL0086 | Work and possession planning for the railway infrastructure: change control                                                                                                                     |
| NR/SP/ELP/29987  | Working on or about 25kV A.C. electrified lines                                                                                                                                                 |
| SMF/EP/0190      | 25kV OLE Isolation Request Form (IRF)                                                                                                                                                           |
| SMF/EP/0243      | Isolation Planning Form (IPF) – see NR/SP/ELP/29987 Module 6 Appendix A. The standard provides an outline template of the form. This electronic version is available as SMF/EP/0243.            |
| SMF/EP/0244      | Isolation Details Form (IDF) – see NR/SP/ELP/29987 Module 6 Appendix A. The standard provides an outline template of the form. An electronic version is available as SMF/EP/0244.               |
| Form B           | Authority to test and apply local earths to overhead line equipment (OLE); Authority to apply local earths to return conductors; Authority to issue overhead line permits – see NR/SP/ELP/29987 |
| Form C           | Overhead Line Permit – see NR/SP/ELP/29987                                                                                                                                                      |

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|------------------|------------------|
| Ref:             | NR/L3/MTC/PL0107 |
| Issue:           | 3                |
| Date:            | 01 June 2008     |
| Compliance date: | 26 August 2008   |

## Contents

|                                                  |    |
|--------------------------------------------------|----|
| 1 Purpose                                        | 3  |
| 2 Scope                                          | 3  |
| 3 RACI                                           | 4  |
| 4 Flowchart                                      | 5  |
| 5 Planning of Overhead Line Equipment isolations | 7  |
| 6 Delivery of OLE isolations                     | 10 |
| 7 Abbreviations and definitions                  | 12 |
| Figure 1 – Planning isolations                   | 5  |
| Figure 2 – Delivery of isolations                | 6  |

## 1 Purpose

This procedure details the processes so Overhead Line Equipment (OLE) isolations are planned and delivered consistently and in accordance with NR/SP/ELP/29987 “Working on or about 25kV AC electrified lines” and with NR/L2/MTC/PL0056 “Work and possession planning for the railway infrastructure (meetings management pack)”.

## 2 Scope

This procedure applies to all isolations that are controlled by Network Rail’s Electric Control Operator (ECO) by pre-arranged line Block To Electric Trains (BTET), switching off and securing of circuit breakers and section switches to isolate the OLE, the subsequent testing and earthing of the OLE and the issue of an Overhead Line Permit. It also includes the application of or amendment to notice of BTET that either does not require an isolation or needs to remain in force following the relinquishing of an isolation.

It does not include local isolations or isolations carried out under emergency procedures.

This document does not repeat the content of NR/SP/ELP/29987, it defines the process by which Maintenance will deliver compliance. If there is any conflict between interpretation of this procedure and the standard, then NR/SP/ELP/29987 takes precedent.

| SMP applies to: | Infrastructure Maintenance | Operational Property | Overhead Line Condition Renewals | Contractors |
|-----------------|----------------------------|----------------------|----------------------------------|-------------|
|                 | ✓                          |                      | ✓                                | ✓           |

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|------------------|------------------|
| Ref:             | NR/L3/MTC/PL0107 |
| Issue:           | 3                |
| Date:            | 01 June 2008     |
| Compliance date: | 26 August 2008   |

### 3 RACI

| RACI DETAILS | KEY CONTROL ACTIVITY | Resources       |                                 |                 |               |                   |                             |                  |                          |     |                       |
|--------------|----------------------|-----------------|---------------------------------|-----------------|---------------|-------------------|-----------------------------|------------------|--------------------------|-----|-----------------------|
|              |                      | Section Planner | Infrastructure Services Manager | Work Originator | Other parties | Isolation Planner | Electrical Control Operator | Nominated Person | Business Support Manager | COS | Section Manager (OLE) |
| Process Task |                      |                 |                                 |                 |               |                   |                             |                  |                          |     |                       |
| 5            |                      | R               |                                 |                 |               |                   |                             |                  |                          |     | I                     |
| 5.1          |                      |                 |                                 |                 |               |                   |                             |                  |                          |     |                       |
| 5.1.1        |                      | AR              | IR                              |                 |               | I                 |                             |                  |                          |     | I                     |
| 5.1.2        |                      | IR              |                                 | AR              |               | I                 |                             |                  |                          |     |                       |
| 5.1.3        |                      | IR              | I                               |                 | AR            | I                 |                             |                  | I                        |     | I                     |
| 5.2          |                      | AR              |                                 |                 |               | I                 | I                           | I                |                          |     | C                     |
| 5.3          | X                    | C               |                                 | C               | C             | AR                | I                           |                  |                          |     | I                     |
| 5.4          | X                    |                 |                                 |                 |               | R                 | AR                          |                  |                          |     |                       |
| 5.5          | X                    | I               | I                               | I               | I             | AR                | IC                          |                  |                          |     | I                     |
| 5.6          |                      | I               |                                 | I               | I             | AR                |                             |                  |                          |     | I                     |
| 6.1          |                      | AR              |                                 |                 |               |                   |                             | I                |                          |     | I                     |
| 6.2          |                      |                 |                                 | C               | C             |                   | I                           | R                |                          |     | A                     |
| 6.3          | X                    |                 |                                 |                 |               |                   | I                           | R                |                          |     | A                     |
| 6.4          | X                    |                 |                                 |                 |               |                   | AR                          | I                |                          |     |                       |
| 6.5          |                      |                 |                                 |                 |               |                   | C                           | C                |                          |     | AR                    |
| 6.6          | X                    |                 |                                 |                 |               |                   | AR                          | C                |                          |     |                       |
| 6.7          | X                    |                 |                                 |                 |               |                   | AR                          | CR               |                          |     |                       |
| 6.8          |                      |                 |                                 |                 |               |                   |                             | AR               |                          |     |                       |
| 6.9          | X                    |                 |                                 |                 |               |                   |                             | AR               |                          | I   |                       |
| 6.10         |                      |                 |                                 |                 |               |                   |                             |                  |                          | AR  |                       |
| 6.11         |                      |                 |                                 |                 |               |                   |                             | I                |                          | AR  |                       |
| 6.12         | X                    |                 |                                 |                 |               |                   | C                           | AR               |                          |     |                       |
| 6.13         |                      |                 |                                 |                 |               |                   | R                           | AR               |                          |     |                       |
| end RACI     |                      |                 |                                 |                 |               |                   |                             |                  |                          |     |                       |