

PR-NET-OSM-037



MANAGEMENT OF OPERATIONAL RESTRICTIONS

OPERATIONAL SAFETY MANUAL - SECTION 4.13



PR-NET-OSM-037	Management of Operational Restrictions - Operational Safety Manual - Section 4.13		Applies to	
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1 Introduction

- 1.1 This document defines the **Approved** procedure for the management of **Operational Restrictions** on the **System**.
- 1.2 Compliance with the following procedure **Shall** enable staff to work safely and reduce the risk of injury to themselves and their colleagues.

2 Scope

- 2.1 The scope of this document **Shall** be limited to **Plant** and **Apparatus** that make up the **System**. Specifically, this involves electrical equipment including switchgear, transformers, cables, overhead lines, service equipment, protective relays, control/auxiliary equipment, batteries and telecommunications equipment.
- 2.2 The dissemination of equipment failure information can help to prevent a recurrence of a failure, while the collection of equipment failure data enables analysis to be made which can be used to highlight points of weakness in the specification, design or use of equipment. Importantly this can lead towards improved reliability of equipment and reducing failures.
- 2.3 The procedures included have been developed to minimise incidents associated with equipment failure by ensuring that:
- A consistent approach is maintained for the management of **Operational Restrictions** on the **System**
 - At all times consideration is given to the operating characteristics of the **System** and the **Dangers** imposed
- 2.4 This document **Shall** be read in conjunction with OR-NET-ENG-002.

NOTE: The reporting of a **Defect** under this **Approved** Procedure does not remove or replace any legal requirements, for example, under the Health & Safety at Work Act or Electricity at Work Regulations.

3 References

The documents detailed in Table 3.1 - Scottish and Southern Electricity Networks Documents, and Table 3.2 - External Documents, should be used in conjunction with this document.

Table 3.1 - Scottish and Southern Electricity Networks Documents

Reference	Title
PR-NET-OSM-006	SSEN Distribution Operational Safety Rules – Operational Safety Manual – Section 1.1
PR-NET-OSM-028	Switching Terminology and Approved Abbreviations - Operational Safety Manual - Section 4.4
OR-NET-ENG-002	Network Operational Restriction Index
PR-NET-ENG-028	National Equipment Defect Reporting Scheme and Association with Operational Restrictions
TEM-NET-ENG-001	Operational Restriction Template
WI-NET-OSM-002	Personal Protective Equipment and Workwear for Live Environments
N/A	SSEN SHE Handbook (Held in Safety, Health and Wellbeing SharePoint Site)

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Table 3.2 - External Documents

Reference	Title
HASAWA	Health and Safety at Work Act 1974 (as amended)
EAWR	Electricity at Work Regulations 1989 (as amended)
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (as amended)
ENA Engineering Recommendation G28	Energy Networks Association Engineering Recommendation G28 National Equipment Defect Reporting System (NEDeRS®) – Notes of guidance

4 Definitions

4.1 The words printed in bold text within this document are either headings or definitions. Definitions used within this **Approved** procedure are defined within the list presented immediately below, or within Section 2 of the **Operational Safety Rules (OSR)**.

4.2 Defect

A failure or potential failure of an item of equipment to function as designed or expected, or to maintain the designed or expected state.

4.3 Operational Restriction

A specific written instruction issued by the Asset Policy Manager that conveys an official instruction modifying the normal operating procedures associated with a particular type of **Plant** or **Apparatus**.

4.4 Operational Safety Rules (OSR)

The **SSEN-D** Distribution set of rules, as read with related documents and procedures, that provide generic safe systems of work on the **System** therefore ensuring the health and safety of all who are liable to be affected by any **Danger** that might arise from the **System**.

5 Responsibilities

5.1 General Responsibilities

5.1.1 Persons who are required to operate and undertake work on the **System**, **Shall** have a thorough understanding of the work and ensure on-site risks are suitably assessed and appropriate control measures put in place before, during and after all activities.

5.1.2 Where an **Operational Restriction** is issued on **Plant** and **Apparatus** that make up the **System**, it **Shall** be the responsibility of any person involved with the operation of the **System** to ensure they are aware of any restriction imposed.

5.1.3 In the case of immediate action, the Control Centre **Shall** communicate the **Operational Restriction** directly with the **Authorised Person** who is to carry out **Switching** on the System.

5.1.4 Details of the **Operational Restriction** **Shall** be clearly communicated with any outsourced service provider who may be affected by the restriction.

5.2 Asset Policy Team

The Asset Policy and Integrity Team **Shall** maintain an overview of **Plant** and **Apparatus** Defects relevant to the **System**. Information **Shall** be obtained from the Energy Networks Association National Equipment Defect Reporting System (NEDeRS) and applicable **SSEN-D** reporting systems. Potentially defective **Plant** and **Apparatus** **Shall** be recorded in accordance with **SSEN-D** policy.

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5.3 Asset Policy Manager

The Asset Standards and Investigation Manager **Shall** be responsible for the dissemination of equipment failure data in accordance with ENA Engineering Recommendation G28. Where there is a potential for an **Operational Restriction** to be issued, the Asset Standards and Investigation Manager **Shall** discuss options with the Network Stakeholders, including Control Centres, the **Designated Engineer** responsible for the application of the **OSR** and the Head of Operational Safety.

5.4 Director of Asset Management

The **Director of Asset Management** (or his designated representative) **Shall** communicate **Operational Restrictions** to the appropriate stakeholders.

6 Authorisation

- 6.1 It **Shall** be the responsibility of the individual to ensure that any actions performed are within the bounds of their competency and authorisation level.
- 6.2 Competence and authorisation certificates **Shall** be retained personally and be made available upon request.

7 Personal Protective Equipment

- 7.1 Persons who are required to work or carry out **Switching** on the **System Shall** wear suitably **Approved** Personal Protective Equipment (PPE). Furthermore, where warning labels or labels that identify a particular hazard exist, additional and appropriate PPE **Shall** be worn.
- 7.2 As a minimum, PPE **Shall** meet the requirements of WI-NET-OSM-002.

8 Records

- 8.1 An **Operational Restriction Shall** be issued as controlled document and made available via the **SSEN-D** Document Management System. Details of Operational Restrictions can be found in OR-NET-OPS-002.
- 8.2 Operators of other **High Voltage** networks connected to the **SSEN-D System** may also request a copy of the applicable **Operational Restriction**.

9 Procedure

9.1 Equipment Defects

- 9.1.1 Equipment **Defects Shall** be brought to the attention of the Asset Policy Manager without delay. Following agreement with the relevant stakeholders, the Asset Policy Manager (or nominated representative) **Shall** where applicable submit a report to the National Equipment Defect Reporting System (NEDeRS) in accordance with ENA Engineering Recommendation G28.

NOTE: Consideration **Shall** be given to the requirement to report under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

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9.1.2 **Defect** reports **Shall** be produced for any **Defect** that involves one or more of the following:

1. Weakness in design
2. Faulty manufacture
3. Defective materials
4. Inadequate quality control procedures
5. Premature wear
6. Inadequate or inappropriate maintenance
7. Incorrect installation
8. Weakness in **SSEN-D** specification
9. Weakness in **System** design

9.1.3 **Defects** as a result of items 1. to 7. above, **Shall** generally be investigated by the Original Equipment Manufacturer or Service Supplier who **Shall** find an appropriate solution that is agreeable with and approved by **SSEN-D**.

9.1.4 **Defects** caused by items 8. and 9. Above, **Shall** be jointly considered by the **Designated Engineer** and the Asset Policy Team who **Shall** assess whether any policy changes or changes to the technical specification are necessary.

9.2 Operational Restrictions

9.2.1 The Asset Standards and Investigations Manager **Shall** issue **Operational Restrictions** using the standard template specified in TEM-NET-ENG-001.

9.2.2 The **Operational Restriction** will contain, but not be restricted to, the following:

1. The **Apparatus** involved
2. Details of the restriction
3. History
4. The number of affected units in **SSEN-D**
5. Action List
6. Target completion date for removal (where practicable)
7. List of affected equipment
8. Other information of immediate need such as temporary **Switching** arrangements

9.2.3 Details of equipment items affected (where possible) **Shall** be issued when an **Operational Restriction** is first introduced. This data is mainly sourced from the asset database and is only valid on the day of issue. Up-to-date listings of **Plant** affected **Shall** be made available by the Asset Policy Manager using the Asset Data Repository.

9.2.4 The Action List **Shall** give details of the responsibility and requirements for deployment of the **Operational Restriction**.

9.2.5 The initial **Operational Restriction** **Shall** be considered a 'containment of the issue' and as such might not contain the 'fix' to a problem. This will normally be included via a Work Instruction process released with revisions to the **Operational Restriction**.

9.2.6 The following signatures are required to confirm release of an **Operational Restriction**:

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- Author: The author of the document
- Checked by: Asset Policy Manager (or delegate)
- Authorised by: Head of Asset Policy, Director of Asset Policy, Designated Engineer or nominated representative.
- Details of the OR should also be passed to the Head of Network SHE prior to its issue for consideration of any required input.
- In all cases (unless there is no potential impact on the **SSEN-D OSR** and/or associated **Approved** Procedures); the Designated Engineer and Head of Networks SHE (or their nominated reps) should be made aware and be given the opportunity to review

NOTE 1: Since 1 August 1999 **Operational Restrictions** have been common to both Distribution North and South.

NOTE 2: From 1978 to 1 August 1999 Distribution North issued **Operational Restrictions** for the North only and these are all included as controlled documents.

NOTE 3: Prior to 1 August 1999 Power Distribution South issued **Operational Restrictions** for the South only and these are all included in EOP A/18 (Contact the Operational Safety Team, or Designated Engineer for guidance).

9.3 Operational Restriction Categories

Operational Restrictions are classified as follows:

Category 1

Current **Operational Restrictions** where work or actions are in progress.

Category 2

Operational Restrictions where the restriction is long term and there is a “work around” in place that can be accepted because of the limited impact, e.g. test prods cannot be inserted Live – if this applies to a small number of units testing can be done with the **Plant Dead**, or from remote ends).

Category 3

Modifications complete / all units removed on **SSEN-D** equipment – restrictions might still be relevant to Customers **Plant** and needs to be available for third-party maintenance contracts, etc.

Category 4

Cancelled.

9.4 Management of Operational Restrictions

9.4.1 The Procedures and Investigations Team **Shall** administer two locally held databases, NEDeRS Spreadsheet Record and **Operational Restrictions** Database. This database information **Shall** be held in the Secure Asset Policy SharePoint site that has a restricted access rule.

9.4.2 The NEDeRS Spreadsheet Record **Shall** hold a summary of the NEDeRS information received from the Energy Networks Association database. Where applicable, the spreadsheet **Shall** include mitigation why **SSEN-D** has chosen not to deploy an **Operational Restriction** or undertake an investigation. This spreadsheet allows for monitoring of failures which may affect **SSEN-D** equipment.

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- 9.4.3 The **Operational Restriction** database **Shall** hold background information on **Operational Restrictions**. This information **Shall** be held in folders titled with the **Operational Restriction** number.
- 9.4.4 Active **Operational Restrictions** **Shall** normally be managed via the asset database. This **Shall** be done by issuing a Work Instruction. The Work Instruction number **Shall** be linked to the **Operational Restriction** to allow progress to be tracked. The Procedure and Investigations Team **Shall** monitor progress of the removal of the **Operational Restrictions**.
- 9.4.5 Some active **Operational Restrictions** might not have a 'fix'. These restrictions **Shall** remain in force until the affected equipment is replaced.
- 9.5 **Access to Operational Premises containing Equipment Subject to an Operational Restriction**

Where a substation or other building contains equipment subject to an **Operational Restriction**, the site owner **Shall**, within 2 weeks for primary distribution equipment and above, and 4 weeks for secondary distribution sites, fit a label(s) to the normal access gates or doors indicating that an **Operational Restriction** is in force and the number of the **Operational Restriction**. This label **Shall** meet the requirements of Appendix A.

9.6 Operational Restrictions in the Network Management System

- 9.6.1 Upon receiving notification of an **Operational Restriction**, a marker **Shall** be attached to all relevant items of **Plant** or **Apparatus** within the Network Management System.



Figure 9.1 - Operational Restriction Marker in Network Management System

- 9.6.2 The marker in the Network Management System **Shall** contain details of the relevant **Operational Restriction**, including the title and number, as well as a brief description.

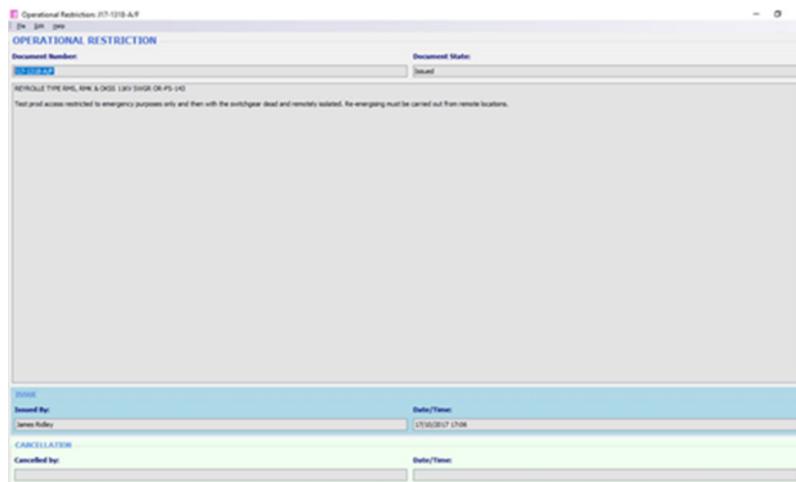


Figure 9.2 - Operational Restriction Marker in Network Management System

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9.6.3 Upon rectification or cancellation of an **Operational Restriction**, markers **Shall** be removed from the Network Management System as soon as reasonably practicable either:

- By a batch removal based upon equipment type, or
- Individually by a **Control Engineer** upon completion of rectification work.

10 Revision History

No	Overview of Amendments	Previous Document	Revision	Authorisation
01	New document created	TBC	1.00	Richard Gough
02				

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Appendix A Operational Restriction Labels

The following **Approved** labels **Shall** be securely fixed at a prominent position in accordance with Clause 9.5 of this document.



Figure A.1 - Operation Restriction Label for Substation Access