PR-NET-OSM-048

RESTORATION OF ENERGY SOURCES

OPERATIONAL SAFETY MANUAL - SECTION 6.6

Scottish & Southern Electricity Networks

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1 Introduction

1.1 This document defines the **Approved** procedure for the temporary restoration of **Energy Sources** for the checking of correct operation and function of **Apparatus** and **Plant** released for work under a **Safety Document**.

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 the temporary restoration of **Energy Sources** by persons who hold the appropriate competence and authorisation.

2.2 The procedures included herein have been developed to minimise incidents associated with human error by ensuring that:

- A consistent approach is maintained for the temporary restoration of **Energy Sources** to **Apparatus** and **Plant** released for work that is controlled by a **Safety Document**
- Risks to health and safety from **Energy Sources** involved in the operation of Substation **Apparatus** and **Plant** are both acknowledged and so far, as is reasonably practicable, prevented
- At all times consideration is given to the operating characteristics of the **System** and the **Dangers** imposed.

3 References

The documents detailed in Table 3.1 - Scottish and Southern Electricity Networks 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
PR-NET-OSM-026	High Voltage Switching and Earthing - Operational Safety Manual - Section 4.2
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)

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 **Energy Source**

A source of auxiliary electrical or mechanical power such as electrical inter-tripping, hydraulic power, pneumatic power, compressed air or stored energy e.g. charged spring.

4.3 **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 General Responsibilities

5.1 All work **Shall** done be in compliance with **SSEN-D** Safety, Health and Environmental Policy and procedures, including the **OSR**.

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

5.3 The procedures and instructions in this **Approved** procedure **Shall** only be carried out by suitably trained and authorised persons.

5.4 Persons **Shall** ensure that, at all times during the work or **Switching**, **General Safety** arrangements are maintained and that other work areas are not adversely affected by the activities for which they are responsible.

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 or near the **System Shall** wear suitably **Approved** Personal Protective Equipment (PPE). Furthermore, where warning labels or signs identify the existence of a particular hazard, additional and appropriate PPE **Shall** be worn.

7.2 As a minimum, PPE **Shall** meet the requirements of WI-NET-OSM-002.

8 General Requirements

8.1 Where **Apparatus** and **Plant** is released for work under a **Safety Document**, it may be necessary to temporarily restore an **Energy Source** in order to check for correct operation and / or function. In such cases, an **Approved** procedure **Shall** be followed that specifies the requirements to maintain safety from the **System**. The **Approved** procedure **Shall** be agreed by all parties involved prior to commencing work.

8.2 When any person receives instructions regarding the operation of, or work upon, the **Apparatus** and **Plant**, they **Shall** report any objections, on safety grounds, to carrying out the instructions to the person issuing them. The person issuing them **Shall** then have the matter investigated and, if necessary, referred to a higher authority for a decision before proceeding, in accordance with **OSR** Rule 1.6.

8.3 The actions taken to temporarily restore an **Energy Source** for **Approved** circumstances **Shall** be subject to an on-site risk assessment. The restoration of an **Energy Source Shall** be documented in the appropriate risk assessment and any applicable **Safety Document**. Where **Danger** cannot be abated, work **Shall** cease immediately and the **Control Engineer Shall** be informed. Any decision made to proceed **Shall** be agreed by all parties involved.

8.4 Where reasonably practicable the restoration of an **Energy Source Shall** be carried out following the completion of work specified and controlled by a **Safety Document.**

9 Procedure

9.1 Persons who are required to undertake work on **Apparatus** and **Plant** which has an **Energy Source** temporarily restored **Shall** be aware of the **Dangers** that might arise. The main **Dangers** to persons include electric shock, burns and impact injuries arising from:

- Electric shock from direct and indirect contact with **Live** equipment
- Inadvertent and uncontrolled release of stored energy from ancillary equipment

9.2 Where instructed by the **Control Engineer** or where there is a specific requirement in the **OSR**, points of isolation from the **Energy Source Shall** be confirmed by the **Senior Authorised Person** and where the facility exists, secured in the **Isolated** position with a **Safety Lock** and **Caution Notice**. The **Senior Authorised Person Shall**, following the agreement of the **Control Engineer**, issue a **Safety Document** on the **Apparatus** and **Plant** accordingly.

9.3 In order to check for correct operation and or function of the **Apparatus** and **Plant** specified on the **Safety Document**, and where it is not necessary to remove a **Safety Lock**, it **Shall** be the responsibility of the **Safety Document** recipient to ensure that appropriate measures are taken and maintained to prevent **Danger** from the **Energy Source**. Actions **Shall** be clearly communicated with all members of the **Working Party** and recorded as part of the on-site risk assessment and on the **Safety Document**.

9.4 In order to check for correct operation and / or function of the **Apparatus** and **Plant** specified on the **Safety Document** and it is necessary to remove a **Safety Lock** to restore an **Energy Source**, the **Senior Authorised Person Shall** issue the specific **Safety Lock** key to the recipient of the **Safety Document.** Actions taken to prevent **Danger Shall** be clearly communicated with all members of the **Working Party** and recorded as part of the on-site risk assessment and on the **Safety Document**.

9.5 All persons who are not directly involved in the **Working Party Shall** vacate the work vicinity for the duration of work or testing.

9.6 Following the satisfactory check for correct operation and / or function of the **Apparatus** and **Plant** and where temporary restoration of the **Energy Source** is no longer required, the recipient of the **Safety Document Shall** ensure that all safety precautions have been re-established on-site.

10 Revision History

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