

PR-NET-OSM-053

WORK IN ANCILLARY CUBICLES

OPERATIONAL SAFETY MANUAL - SECTION 6.11



PR-NET-OSM-053	Work in Ancillary Cubicles – Operational Safety Manual - Section 6.11		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

	Name	Title
Author	N/A	Distribution SHE Team
Checked by	Peter Vujanic	Head of SHE Distribution
Approved by	Richard Gough	Designated Engineer

CONTENTS

1	Introduction.....	3
2	Scope	3
3	References	3
4	Definitions.....	3
5	General Responsibilities	4
6	Authorisation	4
7	Records	4
8	Personal Protective Equipment.....	4
9	General Requirements	4
10	Procedure.....	5
11	Revision History	6

PR-NET-OSM-053	Work in Ancillary Cubicles – Operational Safety Manual - Section 6.11		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

1 Introduction

- 1.1 This document defines the **Approved** procedure for work in ancillary cubicles, such as Protection Panels, Cooler Control Panels, Tele-control panels, located in Substations and Switching stations.
- 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 persons who hold the appropriate competence and authorisation to access Substations and Switching stations for work in ancillary cubicles.
- 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 safe access to ancillary equipment cubicles located in Substations and Switching sites
 - At all times consideration is given to the operating characteristics of ancillary equipment 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 Operational Safety Rules – Operational Safety Manual – Section 1.1
PR-NET-OSM-028	Switching Terminology and Approved Abbreviations - Operational Safety Manual - Section 4.4
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 Operational Safety Rules (OSR)

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**.

PR-NET-OSM-053	Work in Ancillary Cubicles – Operational Safety Manual - Section 6.11		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

5 General Responsibilities

- 5.1 Persons who are required to operate and undertake work near 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.
- 5.2 Persons **Shall** ensure that, at all times during the work (or associated testing), **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 Records

- 7.1 Where notified, the **Control Engineer Shall**, prior to work commencing, record an event log for persons carrying out work on ancillary equipment.
- 7.2 Where notified, The **Control Engineer Shall** record an event log of any ancillary equipment that has been identified with signs of damage or distress. The **Control Engineer Shall** contact the local depot to initiate remedial actions.

8 Personal Protective Equipment

- 8.1 Persons who are required to work near the **System Shall** wear suitable Personal Protective Equipment (PPE) as identified in their risk assessment. Furthermore, where warning labels or signs identify the existence of a particular hazard, additional and appropriate PPE **Shall** be worn.
- 8.2 **SSEN-D** PPE requirements are detailed in WI-NET-OSM-002.

9 General Requirements

- 9.1 All persons who may be concerned with work in ancillary cubicles **Shall** be trained in and be conversant with the treatment of electric shock.
- 9.2 As working environments are subject to change, work in ancillary cubicles containing **Live** equipment **Shall** be regularly assessed by a **Competent Person** for **Danger** and where necessary the appropriate control measures put in place before, during and after work activities.
- 9.3 Depending on the nature of the work, the appropriate level of Supervision **Shall** be provided.
- 9.4 In agreed circumstances it may be necessary to issue a **Safety Document** where it is considered other hazards, including confined space working and environmental hazards, may exist.

PR-NET-OSM-053	Work in Ancillary Cubicles – Operational Safety Manual - Section 6.11		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

- 9.5 Work in ancillary cubicles **Shall** be carried out using **Approved** insulated tools and equipment.
- 9.6 Good housekeeping **Shall** be maintained in the work location at all times. The ancillary equipment to be worked on **Shall** be adequately illuminated and if the work is outdoors, the possibility of unduly adverse weather conditions **Shall** be considered.

10 Procedure

10.1 General

Persons who are required to undertake work in ancillary cubicles **Shall** be aware of the **Dangers** that may arise. The main **Dangers** to persons include electric shock, burns and chemical injuries arising from:

- Persons working on wrongly identified equipment
- Electric shock from direct and indirect contact
- Inadvertent and uncontrolled release of stored energy from ancillary equipment
- Inadvertent exposure to the content of batteries

10.2 Access to Ancillary Cubicles

10.2.1 Persons accessing cubicles containing ancillary equipment **Shall** carry out a visual inspection to identify signs of damage or distress. Where evidence is found, the following procedure **Shall** be implemented:

- Apply a warning notice, for example 'Access Restricted - Contact the **Control Engineer**'
- Secure the cubicle with a **Safety Lock** where reasonably practicable
- Apply an exclusion zone around the defective equipment if required
- Inform the **Control Engineer** of findings and actions taken to secure the area
- Arrange for remedial action to be taken as soon as practicable

10.2.2 Where the visual inspection proves satisfactory, the cubicles containing ancillary equipment **Shall** be accessed accordingly.

10.3 Work in Ancillary Cubicles

10.3.1 Work in ancillary cubicles **Shall** be carried out by persons who have received appropriate training.

10.3.2 Where work involves modifications or repair to the ancillary cubicle or equipment housed within, any adjacent cubicle(s) **Shall** be screened where necessary to prevent **Danger** and have an **Approved** notice applied to highlight the circuit state.

NOTE: The requirements of 10.3.2 excludes the changing of settings on ancillary equipment.

10.3.3 The use of screening and **Approved** notices **Shall** be repeated on the rear of ancillary cubicles as required.

PR-NET-OSM-053	Work in Ancillary Cubicles – Operational Safety Manual - Section 6.11		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

- 10.3.4 The **Control Engineer Shall** be notified before and upon completion of work in ancillary cubicles that involves the testing of protection, auxiliary wiring or other circuits associated with trip/close functions or supervisory equipment.
- 10.3.5 When informing the **Control Engineer** of the work to be carried out, the implications for **System** security **Shall** be discussed including 'risk-of-trip' and the need for any temporary supplies.
- 10.3.6 Where reasonably practicable, **Low Voltage** ancillary supplies **Shall** be **Isolated** or shrouded to prevent accidental contact or **Danger** during work. The isolation **Shall** be the responsibility of the appropriately **Authorised Person** in charge of the work.
- 10.3.7 NOTE: Modern **Low Voltage** ancillary supplies might be inherently shrouded by design, this would not require additional shrouding, however screening could still be beneficial.

11 Revision History

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