



SAFETY FILES, LOGBOOKS AND NOTICEBOARDS IN GRID AND PRIMARY SUBSTATIONS

OPERATIONAL SAFETY MANUAL - SECTION 6.4

PR-NET-OSM-046	Safety Files, Logbooks and Noticeboards in Grid and Primary Substations - Operational Safety Manual - Section 6.4		Applies to	
			Distribution ✓	Transmission
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1 Introduction

- 1.1 This document defines the **Approved** procedure for the management of Substation Safety Files, **Substation Logbooks** and Substation Safety Notice Boards installed in Primary and Grid substations.
- 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 storage and use of Substation Safety Files, **Substation Logbooks** and Substation Safety Notice Boards installed in Primary and Grid substations.
- 2.2 This document excludes the use of outdoor Notice Boards such as those used under Construction Design and Management Regulations (CDM) 2015 (as amended).
- 2.3 The procedures included have been developed to minimise incidents associated with human error by ensuring that:
- A consistent approach is maintained for the management of Substation Safety Files, **Substation Logbooks** and Substation Safety Notice Boards
 - At all times consideration is given to the operating characteristics of the **System** and the **Danger** imposed

3 References

The documents detailed in Table 3.1 - Scottish and Southern Electricity Networks Documents, Table 3.2 - Corporate Documents, and Table 3.3 - 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
PR-NET-OSM-043	Access to Substations and Switching Sites - Operational Safety Manual Section 6.1
TG-NET-OCS-001	Guidance for Principal Designers on completing CDM Notifiable Templates
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)

Table 3.2 - Corporate Documents

Reference	Title
MS-SHE-003	Safety, Health and Environment Risk Management Standard

Table 3.3 - External Documents

Reference	Title
CDM	Construction Design and Management Regulations 2015 (as amended)
COSHH	Control of Substances Hazardous to Health Regulations 2002 (as amended)

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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)**
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**.
- 4.3 **Substation Logbook**
A book of an **Approved** design and specific to the Primary or Grid substation in which it is stored that **Shall** be used to record all matters, including visits, relating to the electrical **System** at the Substation.

5 General Responsibilities

- 5.1 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.
- 5.2 Persons must 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.
- 5.3 Persons accessing Primary or Grid substations have a responsibility to study, recognise and comply with any health and safety guidance as defined on-site, for example in the site Safety File and the **Substation Logbook**. Any observations that are identified **Shall** be recorded in the **Substation Logbook**.

6 Authorisation

- 6.1 Persons who are required to enter substations and **Switching** sites **Shall** hold the appropriate competence and authorisation to carry out specified duties. 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 Once full, **Substation Logbooks** **Shall** be retained for a minimum period of two years on site before being archived. Active **Substation Logbooks** **Shall** not be removed from site.
- 7.2 Site Safety Files **Shall** be retained on-site until such time that they require replacing, for example on the completion of site works.

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8 Personal Protective Equipment

- 8.1 Persons who are required to enter Primary or Grid substations **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.
- 8.2 As a minimum, PPE **Shall** meet the requirements of WI-NET-OSM-002.

9 General Requirements

- 9.1 **SSEN-D** acknowledges the need for safety critical information to be made available on-site so that in the event of an emergency, effective actions can be taken. The following information **Shall**, where applicable, be made available at all Primary and Grid Substations:
- Safety Notice Board
 - Site Safety File
 - Civil, environmental and safety information
 - Emergency information
 - Drawings
 - **Substation Logbook**
- 9.2 All access to Grid and Primary substations **Shall** be accordance with PR-NET-OSM-043 Access to Substations and Switching Sites - Operational Safety Manual – Section 6.1.

10 Policy

10.1 Safety Notice Boards

- 10.1.1 A Safety Notice Board **Shall** be made available at all Primary and Grid Substations. The Safety Notice Board **Shall** be of an **Approved** design and mounted in a secure and prominent location, for example the Substation control room or similar.
- 10.1.2 The Safety Notice Board **Shall** be used to convey safety information relevant to the Primary and Grid Substation in which it is installed. Information **Shall** include but not be limited to:
- Details on where to find the Site Safety File
 - Details on where to find the site general layout plan.
 - Details on where to find the substation line-diagram
 - Details on where to find civil, environmental and safety information
 - Details on where to find the **Substation Logbook**
 - Details on where to find relevant telephone numbers
 - Details on where to find emergency procedure information
 - Details on where to find **System** abnormality information and any operational restrictions that might apply
- 10.1.3 An example of a Safety Notice Board layout can be found in Appendix A.

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10.2 Site Safety File

- 10.2.1 The site Safety File **Shall** be specific to the Primary or Grid Substation in which it is located. It **Shall** be used to record health and safety hazards whether these are of a general or specific nature. Typically, specific hazards that are related to site activities or site alterations.
- 10.2.2 Following any alterations to the Primary or Grid Substation layout or **Apparatus** located within, the site Safety File **Shall** be updated accordingly by the person in receipt of any **Safety Document** issued, the person in charge of the **Working Party**, by the **Senior Authorised Person** issuing the **Safety Document**, or the Project Manager.
- 10.2.3 Key to the success of the site Safety File content, is the ability to carry out risk assessments to identify hazards and risk factors that have the potential to cause harm and to analyse and evaluate the risk associated with that hazard. Risk assessments **Shall** therefore be carried out in accordance with **SSEN-D** policy. Persons who are required to carry out a risk assessment **Shall** be suitably trained and competent. Risk management processes **Shall** be carried out in accordance with MS-SHE-003.
- 10.2.4 Where a site CDM file is available this **Shall** also be used to help form the contents of the site Safety File. In accordance with TG-NET-OCS-001, the Principal Designer **Shall** identify hazards as part of the pre-construction Safety Health and Environment (SHE) information. The **Senior Authorised Person Shall** review the Principal Designer's findings and verify any operational safety issues for inclusion in the site Safety File.
- 10.2.5 Typically, the site Safety File **Shall** include but not be limited to:
- Site name and identification number
 - Details of the substation layout
 - Details of generic and specific hazards
 - Additional space **Shall** be provided for a signatory's comments regarding site safety
- 10.2.6 A signed copy of the site Safety File **Shall** be stored in a secure location within the Primary or Grid Substation, this location **Shall** be listed on the site Safety Notice Board.
- 10.2.7 Where a site Safety File is replaced, the original copy **Shall** be removed from site and archived.
- 10.2.8 Whilst significant alterations to the Primary or Grid Substation site layout or **Apparatus** will generally result in the creation of hazards that evolve due to the changing work environment, it is unreasonable for the site Safety File to reflect these hazards as they continue to develop within the work area. In these circumstances the Project Manager in charge of the work **Shall** ensure, under the auspices of CDM Regulations:
- Safe Systems of work are implemented
 - The site Safety File or the relevant section on the Safety Notice Board is updated to reflect any hazards that might pose a risk to persons accessing the Primary or Grid Substation
 - Upon completion of the work, the site Safety File is 'closed' and removed and a new Safety File produced
- 10.2.9 Where temporary alterations to the site create hazards, the **Senior Authorised Person** in charge of the work **Shall** consider a revision of the existing site Safety File. Where reasonably practicable, any such work that is limited in nature and has a short time scales can, as an alternative, be communicated using the Safety Information section of the site Safety Notice Board.

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10.3 Operational Safety Information

10.3.1 Civil, environmental and operational safety related information **Shall** be made available at each Primary or Grid Substation. Typically, **this Shall** include but not be limited to:

- Details of asbestos
- Details of oil spillage
- Details of fire risk
- Details of Control of Substances Hazardous to Health (COSHH) related substances
- Details of ground contamination
- Details of any environmental access restrictions
- Details of **Live** exposed **Conductors**

10.3.2 The location of the above information **Shall** be listed on the site Safety Notice Board.

10.4 Emergency Information

10.4.1 Emergency information **Shall** be made available at each Primary or Grid Substation. Typically, this **Shall** include but not be limited to:

- Telephone number for emergency services
- Contact details for area Control Centre
- Substation geographical location
- The Substation ordinance survey grid reference.
- The Substation postal address
- The Substation direct telephone number (if applicable)

10.4.2 Emergency information **Shall** be listed on the site Safety Notice Board.

10.5 Drawings

10.5.1 Up-to-date drawing information **Shall** be made available at each Primary or Grid Substation. Typically, this **Shall** include but not be limited to:

- Primary or Grid Substation **System** diagram.
- Site layout / general arrangements (plan view or elevation view) showing relative layout and clearances.

10.5.2 The location of the drawings **Shall** be listed on the site Safety Notice Board.

NOTE: It is common for the Substation **System** diagram to be wall mounted in the control room or similar.

10.5.3 Although not a mandatory requirement, it is preferred that the Substation **System** diagram is laminated to facilitate temporary markings indicating points of Isolation and site demarcation in relation to achieving safety from inherent **Dangers** from the **System**.

10.5.4 Where a laminated substation **System** diagram is not achievable, the use of a permanently installed tamper-proof mimic diagram of an **Approved** design **Shall** be considered.

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10.5.5 Where used, the mimic diagram **Shall** reflect the current operational state of the **System** it represents. Any inaccuracies identified and adjustments made **Shall** be recorded in the **Substation Logbook**.

10.5.6 A copy of the Substation **System** diagram, (clearly defining ownership and Operational Control boundaries), **Shall** be prominently displayed at any Substation and switchroom under joint control.

10.6 Substation Logbook

10.6.1 A **Substation Logbook Shall** be made available at all Primary and Grid Substations. The **Substation Logbook Shall** be of an **Approved** design and stored in a secure and prominent location for example, the Substation control room or similar.

10.6.2 The **Substation Logbook Shall** clearly and indelibly be marked with the name of the Substation to which it refers.

10.6.3 The **Substation Logbook Shall** be used to provide a dated and time sequenced record of all visits to the Substation to which it refers, together with identities of persons entering, brief details of the purpose of each visit and any actions taken, where such actions are considered to be of operational significance. This may include details of any abnormal conditions and remedial actions taken, for example switches found open, relays flagged, tap-changer out of step, building defects, dangerous situations, etc.

10.6.4 **Substation Logbook** entries **Shall** be made in continuous chronological order.

10.6.5 No page, blank or otherwise, **Shall** be removed from a **Substation Logbook** and no active **Substation Logbook Shall** be removed from a Substation.

10.6.6 A detailed record of **Switching** operations need not be replicated in the **Substation Logbook**, this **Shall** remain a **Switching** Schedule or **Switching** Notebook activity. A brief description of activities quoting the relevant schedule number **Shall** be entered.

11 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 Typical Safety Notice Board

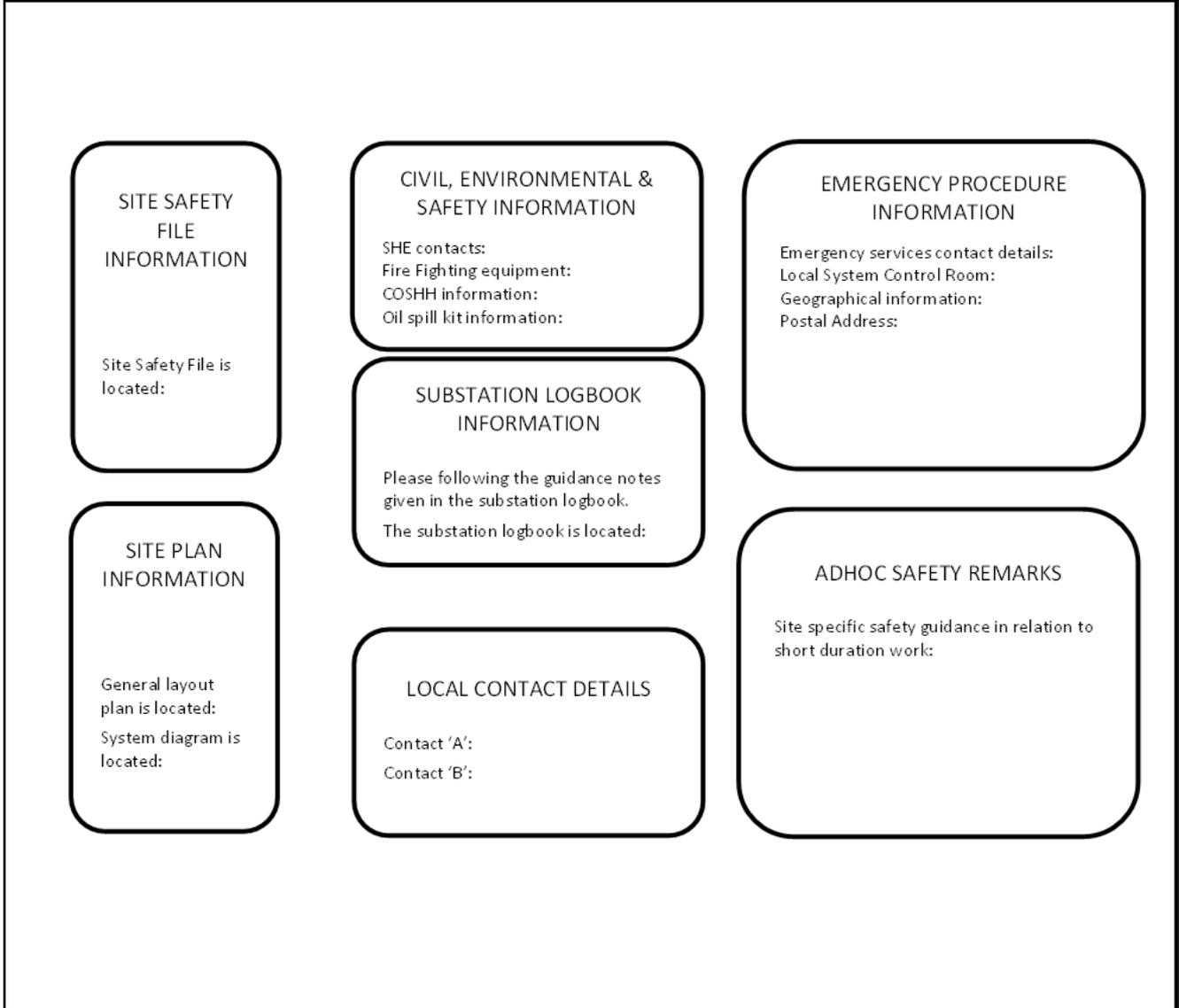


Figure A.1 - Typical Safety Notice Board