# MANAGEMENT OF OPERATIONAL KEYS

**OPERATIONAL SAFETY MANUAL - SECTION 5.4** 



PR-NET-OSM-042

# Management of Operational Keys - Operational Safety Manual - Section 5.4

Applies to

Distribution Transmission

✓

**Revision:** 1.00 **Classification:** Public **Issue Date:** March 2023

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#### 1 Introduction

- 1.1 The use of **Operational Keys** forms part of a safe system of work for work or testing associated with the **SSEN-D High Voltage System** and on occasions, the **Low Voltage System**.
- 1.2 This **Approved** procedure provides guidance on the management of **Operational Keys**, and the procedure for when **Operational Keys** are lost or misplaced.

#### 2 Scope

- 2.1 This **Approved** procedure will provide sufficient guidance to persons who may be involved in situations where **Operational Keys** are issued, lost, or not available.
- 2.2 This Approved procedure applies to all staff and contractors working for or on behalf of SSEN-D.

#### 3 References

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

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-019	System Emergency Procedures - Operational Safety Manual - Section 2.9
FO-NET-OSM-008	Operational Key Requests - Operational Safety Manual - Section 5.4.1
WI-NET-OSM-002	Personal Protective Equipment and Workwear for Live Environments
FO-PS-1082	Temporary Loan of SSEPD Equipment and Keys

SSEN SHE Handbook (Held in Safety, Health and Wellbeing SharePoint Site)

Table 3.1 - Scottish and Southern Electricity Networks Documents

#### 4 Definitions

N/A

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 **OSR**.

#### 4.2 **Operational Administrator**

A member of the administration team at a Depot or Business Unit, responsible for administering the various processes to order, stock, issue, receive and store **Operational Keys**.

#### 4.3 **Operational Key**

A key which provides access to lock(s) which control access to Operational Sites (substations and Switching sites) and **Plant** or **Apparatus**, including **Safety Lock** keys.

#### 4.4 Operational Key Bunches

A bunch of keys made up from the **Operational Keys** associated with the operational area covered by a Depot.

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NOTE: This does not include Key Safe keys.

#### 4.5 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 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 The issue of Operational Keys Shall be recorded using the Operational Key Requests form (FO-NET-OSM-008). Completed forms Shall be retained by the **Operational Administrator** in accordance with Local Region / Business unit instructions.

#### 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 The safe custody of the **Operational Keys** rests with the recipient who **Shall** remain responsible for the **Operational Keys** in their possession at all times.
- 7.2 The issue of the **Operational Keys Shall** be noted on Operational Key Requests form by the **Operational Administrator** at each Depot or Business Unit.

## 8 Personal Protective Equipment

- 8.1 Persons who are required to work or carry out work or testing 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.
- 8.2 As a minimum, PPE **Shall** meet the requirements of WI-NET-OSM-002.

### 9 Operational Key Management Procedure

9.1 The standard and specification for **Operational Keys Shall** be determined and produced by **SSEN-D**'s Asset Management Policy department.

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- 9.2 **Operational Keys Shall** be procured by **SSEN-D**'s procurement department. Strict arrangements **Shall** be employed to ensure the secure manufacture, procurement, delivery, and storage of **Operational Keys** prior to arrival at **SSEN**s Depots or Business Unit.
- 9.3 It is the responsibility of each Depot or Business Unit Manager (or nominated deputy) to provide their **Operational Administrator** with a list of the **Operational Keys** required for their operational area.
- 9.4 During emergency situations the **Operational Administrator** may order **Operational Keys** direct from a manufacturer, providing **SSEN-D**'s procurement department agree and confirm the specification/ ordering arrangements.
- 9.5 Each **Operational Administrator Shall** keep sufficient stocks of **Operational Keys** that are required for their Depot or Business Unit operational area. It must be appreciated that there are various types of operational locks and therefore various **Operational Keys**.
- 9.6 The **Operational Administrator Shall** keep a strategic stock of **Operational Key Bunches** for their Depot or Business Unit operational area. These strategic items **Shall** only be issued to **Authorised Persons** under NEWSAC, or similar internal arrangements.

NOTE: NEWSAC is the agreement used by Distribution Companies for the sharing of industrial resources during **System** emergencies, (PR-NET-OSM-019 Emergency Procedures - Operational Safety Manual - Section 2.9).

- 9.7 Where **Operational Keys** or **Operational Key Bunches** are loaned out, the **Operational Administrator Shall** complete and retain FO-PS-1082.
- 9.8 **Operational Administrators** are <u>not</u> expected to keep a stock of **Operational Keys** for areas not covered by their Depots or Business Units.
- 9.9 Operational Keys Shall be kept safe and secure within a lockable cabinet by the Operational Administrator and access to this cabinet Shall be restricted. Only the Depot or Business Unit Manager (or nominated deputy) and the Operational Administrator Shall be allowed access.
- 9.10 A list of current **Approved** operational locks is shown in Appendix A.
- 9.11 Depot or Business Unit Managers (or nominated deputy) **Shall** provide their **Operational Administrator** with instructions regarding the relationship between ownership of **Operational Keys** and Authorisation levels.
- 9.12 **Operational Keys Shall** only be issued where a valid business case has been documented.
- 9.13 The **Operational Administrator Shall** issue **Operational Keys** in accordance with instructions provided by the Depot or Business Unit Manager and only once the recipient has provided a valid Operational Authorisation or Assessment Certificate as evidence that they hold the required level of Operational Authorisation to receive that **Operational Key**.
- 9.14 A register of all **Operational Keys** issued and returned **Shall** be kept by the **Operational Administrator**. This record **Shall** contain:
  - Type of Key
  - Serial Number (if unique).
  - Recipient Name
  - Recipient Employee Number (or Employer if external to SSEN-D)
  - Date of Issue / Return
  - Signature of Recipient

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#### 10 Loss of Operational Keys

- 10.1 Where **Operational Keys** have been lost by the recipient or stolen, all efforts **Shall** be made to recover them.
- 10.2 Stolen **Operational Keys Shall** be reported to the Security Bureau as soon as reasonably practicable, including serial numbers and the circumstances in which they were stolen.
- 10.3 Lost **Operational Keys Shall** be reported to the **Operational Administrator** as soon as reasonably practicable, including serial numbers and the circumstances in which they became lost.
- 10.4 The **Operational Administrator Shall** maintain a permanent record against the recipient's name of the loss.
- 10.5 No **Operational Keys Shall** be re-issued until clauses 10.1 10.4 have been fulfilled.
- 10.6 Should the lost **Operational Keys** be recovered, they **Shall** be returned to the **Operational Administrator** as soon as reasonably practicable, who **Shall** update the **Operational Key** register.

#### 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** Types of Operational Locks

There are numerous legacy locks used in different geographic areas, particularly for substation access, these locks are not listed in this **Approved** procedure and should be replaced with **SSEN-D** standard access locks wherever possible. Table A.1 below, shows currently **Approved** locks for purchase by **SSEN-D**.

Table A.1 - Currently Available Approved SSEN-D Locks

Туре	Description	Region
Abloy E1D5 / E1D55	Substation access, experimental high security.	Isle of Wight
Yale YN6-D4/21	Meter reading access – dual use (equivalent AA5)	SHEPD
Yale YN6-D2/10	Access to substations under construction only	Aberdeen Area
Yale YN6-D2/45	Access to substations under construction only	Highland Area
Yale YN6-D2/1	Access to High Voltage zones	SHEPD
Yale YN6-D2/2	Access to secondary substations without <b>HV</b> zones and <b>LV</b> feeder pillars (can open YN6-D2/2A)	SHEPD
Yale YN6-D2/2A	Access to perimeter areas not enclosed by unclimbable fence	SHEPD
Yale JW1021S/ JW1021S - A1	Substation access	Wessex
Star Type Z	Weather shields	SEPD
Star Type Y	On / Off operating handles	SEPD
Star Type X	Earthing and access to chambers	SEPD
RM POS (Yellow)	General Switching used on mechanisms and access covers	SHEPD
RM ISOL (Black)	Isolation- not for local isolation i.e. safety lock	SHEPD
Safety Lock (Red)	Individual serial numbered safety lock.	All
MJE/A AA1	Access to non-operational areas and substation outer perimeter gates where there is no live exposed equipment	SEPD
MJE/A AA2	Access to operational areas where there is <u>no</u> exposed <b>Live</b> equipment	SEPD
MJE/A AA4	Access to operational areas where there is exposed <b>Live</b> equipment. Overhead line operating handles. Switchgear subject to vandalism or interference.	SEPD
MJE/A AA5	Customer substations or other areas with joint or limited access	SEPD
MJE/A AA (Key)	Master Key for AA series	SEPD