

PR-NET-OSM-084



MANAGEMENT OF ACTIVITIES AT THE INTERFACE WITH UN- METERED SUPPLY POINTS

OPERATIONAL SAFETY MANUAL - SECTION 13.2



PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
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CONTENTS

1	Introduction.....	3
2	Scope	3
3	References	3
4	Definitions.....	4
5	General Responsibilities	4
6	Authorisation	5
7	Personal Protective Equipment.....	5
8	General Requirements	5
9	Responsible Authority Requirements.....	6
10	Procedure.....	7
11	Revision History	8
	Appendix A Guidance on Training Requirements	9

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
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1 Introduction

- 1.1 This document defines the **Approved** procedure for the management of activities at a determined **Low Voltage PoC** between the **SSEN-D System** and un-metered installations that are independently owned.
- 1.2 This **Approved** procedure addresses un-metered supplies and gives advice on how interface problems involving work on, or access to, **Street Furniture** may be dealt with in a reasonably practicable way, to provide a consistent approach when individual interests overlap.
- 1.3 Compliance with the following procedure **Shall** enable staff and **Approved** contractors to work safely and reduce the risk of injury to themselves and their colleagues and to prevent damage to **Low Voltage** interface equipment so far as is reasonably practicable.

2 Scope

- 2.1 The scope of this document **Shall** be limited to persons who are required to work at un-metered **Low Voltage** supply interface points with Third-Party **Systems** and who hold the appropriate competence and authorisation to carry out specified duties.
- 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 management of work at the **Low Voltage PoC** between the **SSEN-D System** and un-metered installations that are independently owned
 - Damage to **SSEN-D** owned equipment is prevented so far as is reasonably practicable
 - At all times consideration is given to the operating characteristics of the **System** and the **Dangers** imposed
- 2.3 Where the **PoC Low Voltage** supplies are metered, different arrangements and authorisations than those specified in this document might apply to the connection and isolation of these types of supplies. Arrangement of this nature are excluded from this document (See PR-NET-OSM-083 Management of Activities at the Low Voltage Supply Point Interfaces - Operational Safety Manual – Section 13.1).

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
PR-NET-OSM-058	Access and Work on Poles - Operational Safety Manual – Section 7.1
PR-NET-OSM-083	Management of Activities at the Low Voltage Supply Point Interfaces - Operational Safety Manual – Section 13.1
SP-NET-CAB-429	Specification for Low Voltage House Service and Street Lighting Cut Outs

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

Reference	Title
TG-NET-ENG-006	Distribution Asset Management Timescale Plans for Inspection, Servicing, Maintenance and Condition Monitoring Distribution Timescales
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 - External Documents

Reference	Title
ESQCR	Electricity Safety, Quality and Continuity Regulations (as amended)
EAWR	Electricity at Work Regulations (as amended)
MHSWR	Management of Health and Safety at Work Regulations (as amended)
BS 7671	Requirements for Electrical Installations. IET Wiring Regulations (as amended)
EREC G39	ENA Engineering Recommendation G39 - Electrical safety in the planning, installation, commissioning and maintenance of public lighting and other street furniture
NRSWA	New Roads and Streetworks Act (as amended)
SSWRW	Safety at Street Works and Road Works Code of Practice (as amended)

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 Point of Connection (PoC)

The point (or points) of physical connection between the **SSEN-D System** and un-metered installations that are independently owned.

4.4 Responsible Authority

Authority responsible for public lighting or other **Street Furniture** installation.

NOTE: This term includes contractors working on behalf of the Authority.

4.5 Street Furniture

An item of equipment located on or adjacent to a public highway having a mains supply or indirectly connected to a mains supply, including lighting columns, bollards, crossing beacons, ticket machines, bus shelters, bus signs, traffic signs, traffic signals and crossing signals.

NOTE: Communications equipment, e.g. broadband or fibre cabinets that are un-metered, are not considered Street Furniture. Operations and work on such equipment should be carried out under the principles of PR-NET-OSM-083 Management of Activities at the Low Voltage Supply Point Interfaces - Operational Safety Manual – Section 13.1.

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.

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

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.

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 Low Voltage un-metered Systems 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. However, it must be kept in mind that where work takes place beyond the **SSEN-D** ownership boundary, the **Responsible Authority** might have their own or additional PPE requirements which **Shall** be adhered to whilst employees are beyond the boundary, as long as there is no conflict with **SSEN-D** minimum PPE requirements.

8 General Requirements

8.1 For new **Low Voltage** connections, the developer **Shall** be responsible for the provision of a suitable enclosure for **SSEN-D Apparatus**. The enclosure **Shall** take into account public safety by providing secure accommodation, and the safety of **SSEN-D** staff and **Approved** contractors by permitting ready (controllable) access from ground level, arranged so as to reduce the **Danger** from adjacent passing traffic.

8.2 The planning, installation, commissioning, and maintenance of **Low Voltage Street Furniture Shall** comply with Energy Networks Association Engineering Recommendation G39.

8.3 Where traffic management is required to reduce the **Danger** from adjacent passing traffic, on highways and roads (except motorways and any dual carriageways), the requirements of the New Roads and Streetworks Act (as amended) **Shall** apply. In meeting with this requirement and to ensure signing, lighting and guarding is safely carried out, reference to the Safety at Street Works and Road Works Code of Practice is necessary.

8.4 The fixing of third-party equipment to an **SSEN-D** owned meter board or similar located in **Low Voltage Street Furniture** enclosures **Shall not** be permitted without the consent of **SSEN-D** in the form of a written agreement in place.

8.5 Where applicable, **Low Voltage Street Furniture** enclosures **Shall** have the following prominently displayed on the front access door(s):

- Property Notice giving details of ownership and emergency contact telephone number
- Statutory Safety Sign

8.6 Where applicable, persons who have been issued with an access key and given the necessary authority for access to **Low Voltage Street Furniture** enclosures, **Shall** be

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

responsible for maintaining security for the full duration of their visit, ensuring all access doors are secure and, where applicable, locks are replaced on leaving site.

- 8.7 Where a cut-out (service cut-out or **Street Furniture** cut-out) provides the **Low Voltage PoC** between the **SSEN-D System** and independently owned un-metered installations, the cut-out **Shall** be of an **Approved** design and of a suitably rated capacity for its intended purpose. Cut-out designs **Shall** meet the requirements of SP-NET-CAB-429.

9 Responsible Authority Requirements

- 9.1 Any **Responsible Authority** who requires to operate cut-out fuses and make connections to the outgoing side of a **SSEN-D** owned cut-out for work on an item of **Street Furniture** **Shall** have formally agreed to adopt the arrangements contained within this policy.
- 9.2 The **Responsible Authority** **Shall** provide a contact name, address and telephone number where a responsible person can be contacted at all reasonable times for the notification of accidents/incidents.
- 9.3 The **Responsible Authority** **Shall** provide an email address for the receipt of any essential operational and safety information issued by **SSEN-D** that is relevant to the safe operation and/or work on cut-outs. The **Responsible Authority** **Shall** have as part of its Electrical Safety Management System, an effective means of disseminating any operational and safety information to all of its employees and contractors who may work on its **Street Furniture**.
- 9.4 A **Responsible Authority** **Shall** demonstrate to **SSENs** satisfaction, that it has an appropriate Electrical Safety Management System in place. This **Shall** contain details of the arrangements for the training, assessment and authorisation of employees or contractors to operate Distribution Network Operator cut-out fuses, and for the connection of wiring to the outgoing side of a Distribution Network Operators cut-out (See Appendix A).
- 9.5 When **SSEN-D** is satisfied that an appropriate Electrical Safety Management System is in place, and that the formal agreement between **SSEN-D** and the **Responsible Authority** is in place, then **SSEN-D** **Shall** allow a **Responsible Authority** to operate the cut-out fuse and connect their **Street Furniture** installations to the outgoing side of the **SSEN-D** cut-out.
- 9.6 Operation of a cut-out fuse **Shall** include initial insertion in the case of a new item of **Street Furniture**, and subsequent insertion, removal and/ or replacement of the cut-out fuse at the supply point by the **Authorised Person** of the **Responsible Authority**.
- 9.7 All employees or contractors of a **Responsible Authority** who are authorised to operate **Street Furniture** Distribution Network Operator cut-out fuses and to make connections to the outgoing terminals of a cut-out **Shall** have:
- Received basic first aid training
 - Have available an appropriate first aid kit
 - Have available for inspection, a **Responsible Authority** Authorisation Certificate whilst they are operating or working on **Street Furniture** containing a **SSEN-D** cut-out
 - Carry a photographic identification card
- 9.8 Both the photographic identification card and the Authorisation Certificate **Shall** bear the holder's signature.
- 9.9 **SSEN-D** **Shall** provide the **Responsible Authority** with contact details for the immediate reporting of defects involving **SSEN-D** cut-outs located within **Street Furniture**. Reportable defects would include damage to the cut-out exposing **Live** metal-work, overheating of a connection, discovery of reverse polarity and faults on the **Street Furniture** resulting in a member of the public receiving an electric shock.

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

- 9.10 Employees of a **Responsible Authority** are not permitted to enter any **SSEN-D** owned or operated substation for the purposes of operation or maintenance of any **Responsible Authority** equipment unless they are authorised by **SSEN-D** or provided with **Personal Supervision** by a **SSEN-D Competent Person**.
- 9.11 Any new or replacement installation of **Responsible Authority** equipment **Shall** be located such that they are located in a freely accessible position that does not require entry to a **SSEN-D** substation or substation site.
- 9.12 The Electricity Safety, Quality and Continuity Regulations (as amended), Regulation 31 requires that certain specified events are reported to the Health & Safety Executive or The Department for Business, Energy & Industrial Strategy. The **Responsible Authority** should report directly to these bodies as required under the regulations where it has the duty to report. Where events are the responsibility of **SSEN-D** to report then the **Responsible Authority Shall** advise **SSEN-D** of the event and circumstances in order that **SSEN-D** may discharge its legal duty.
- 9.13 **SSEN-D** reserve the right to conduct unannounced site audits either while the **Responsible Authority's** employees or their accredited contractors are carrying out work, or audit the installation on completion of work. The purpose of the Audit is to ensure that:
- Safe working practices are being used
 - Technically competent persons are carrying out or supervising the work
 - All equipment is sealed (where required) in accordance with requirements
 - The site is left in a safe condition

10 Procedure

10.1 General

- 10.1.1 Persons who are required to undertake operations or work on **Low Voltage Street Furniture** enclosures **Shall** be aware of the **Dangers** that might arise. The main **Dangers** include, electric shock, burns and serious injury arising from:
- Persons working on wrongly identified equipment
 - Electric shock from direct and indirect contact
 - Poor planning leading to a failure in the co-ordination of on-site work activities
 - Failure to adequately control vehicle movement in the vicinity of work
 - Fall from height
- 10.1.2 Access to the **Low Voltage Street Furniture** enclosures **Shall** be by a suitably appointed person who holds the appropriate competency and authorisation level.
- 10.1.3 Before gaining access to the **Low Voltage Street Furniture** enclosure, the **Competent Person** in charge of the work **Shall** ensure that a risk assessment is undertaken. Where the **Street Furniture** enclosure is found in a condition that poses a risk to the safety of staff, **Approved** contractors and the public, immediate action **Shall** be taken to secure the enclosure.
- 10.1.4 Where it is not safe to access, operate or work in the **Low Voltage Street Furniture** enclosure, it **Shall** be made **Dead** in order to avoid **Danger**. Dependent upon risk, the **Competent Person** in charge of the work may consider it necessary to attach a warning label that gives notice to others of the **Dangers**. The removal of the warning label **Shall** only take place when the risks from **Danger** have been permanently eliminated.

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
			Distribution ✓	Transmission
Revision: 1.00	Classification: Public	Issue Date: March 2023	Review Date: March 2028	

- 10.1.5 Where applicable, the **Competent Person** in charge of the work **Shall** ensure adequate signing and guarding is used to prevent injury and to minimise any inconvenience to the public, especially where the **Street Furniture** enclosure is located in a footpath or thoroughfare.
- 10.1.6 The **Competent Person** in charge of the work **Shall** ensure that adequate working space and safe means of access is maintained at the **Low Voltage Street Furniture** enclosure at all times during the course of work.
- 10.1.7 The **Competent Person Shall** ensure that at all times the working party conduct work activities in such a manner and that precautions are taken to prevent contact between any part of their body, any working tool and any **Live Conductor**. All work and operations **Shall** be carried out in accordance with the relevant safety precautions defined in the **OSR**.
- 10.1.8 On completion of work activities, the **Competent Person** in charge of the work **Shall** ensure that **Street Furniture** doors are securely closed and locked, with the caps screwed into the locking eyes, where applicable.

10.2 Operations or Work at Height in the Vicinity of Low Voltage Overhead Conductors

- 10.2.1 Where operations or work activities are required on pole mounted **Low Voltage** street lighting equipment, and in addition to clause 10.1.7, a distance of 1 metre from any bare open-wire **Low Voltage Conductor Shall** be maintained.
- 10.2.2 **Low Voltage Conductors** and metalwork adjacent to the point of work **Shall**, so far as is reasonably practicable, be adequately shrouded with **Approved** insulating material to prevent inadvertent contact.
- 10.2.3 Where operations or work at height involves the climbing and testing of wood poles and/or the use of a Mobile Elevating Work Platform (MEWP), such activities **Shall** be carried in accordance with PR-NET-OSM-058 Access and Work on Poles - Operational Safety Manual – Section 7.1.
- 10.2.4 Where used in the vicinity of **Live** overhead **Conductors**, ladders and all working platforms associated with MEWPs **Shall** be constructed from an **Approved** non-conducting material, therefore providing an insulated zone for the **Competent Person** carrying out the operation or work.

10.3 Inspection Regimes

- 10.3.1 **SSEN-D** owned **Street Furniture** can be subject to:
- Degradation
 - Intentional and unintentional damage
 - Unauthorised access
- 10.3.2 Consequently, and to ensure the safety of its staff, **Approved** contractors and public, **SSEN-D Shall** ensure that a regular inspection and maintenance regime is established and maintained for **Street Furniture** so far as is reasonably practicable. The frequency of inspection **Shall**, and scheduled servicing **Shall** meet the requirements of TG-NET-ENG-006.

11 Revision History

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

PR-NET-OSM-084	Management of Activities at the Interface with Un-metered Supply Points - Operational Safety Manual - Section 13.2		Applies to	
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Appendix A Guidance on Training Requirements

1. These guidance notes are not prescriptive but serve to emphasise key points for consideration by organisations or individuals that provide competent persons training.
2. The appointed trainers should ideally hold nationally recognised trainer qualifications and be fully conversant with relevant Health and Safety legislation, Standards and associated guidance referenced in this **Approved** procedure. In particular, this should include familiarity with application of The Electricity at Work Regulations (as amended), The Electricity Safety Quality and Continuity Regulations (as amended) and BS 7671 (as amended).
3. Given the nature of the electrical risks involved, the trainer should have a recognised electrical qualification and/or appropriate electrical training. Ideally, the trainer should have practical experience of supervising work on street lighting systems and/or electricity distribution networks and be familiar with safety procedures. Similarly, those attending **Competent Persons** training, who are required to carry out electrical work or to isolate electrical supplies, should have a basic electrical background.
4. The training organisation should consult with **SSEN-D** and take into account in the training course any particular requirements specified by them.
5. The trainer should possess a thorough knowledge of the types of electrical equipment employed by **SSEN-D** and the **Responsible Authority** and be fully conversant with respective Standards and electrical safety design, e.g. earthing requirements.
6. Training may need to include specific practical aspects, e.g. isolation procedures and emergency procedures. There may be a need for further Health and Safety training, e.g. about specific risks, required by other legislation.
7. Training is considered to be a pre-requisite to achieving the required level of authorisation and/or competency required by this **Approved** procedure. Training and awareness by itself, i.e. without suitable experience and assessment of competence, does not constitute competence and relevant personnel should be competent or under appropriate supervision of a competent person to prevent risk of injury.
8. Competence will decline if skills are not used regularly, e.g. emergency procedures, operating particular equipment etc. The process of training and authorisation should therefore be repeated periodically to ensure continued competence.
9. With reference to The Management of Health and Safety at Work Regulations (as amended), risk assessment is a vital component in ensuring a safe work environment. Therefore, **Competent Persons** training should:
 - Ensure that significant electrical risks and hazards are addressed
 - Ensure all aspects of the work activity are reviewed, including routine and non-routine activities
 - Take account of non-routine operations, e.g. maintenance, cleaning operations, emergency response arrangements
 - Take account of the management of incidents such as interruptions to the work activity and consider what procedures should be followed to mitigate the effects
 - Be systematic in identifying hazards and looking at risks
 - Take account of the way in which work is organised, and the effects this can have on health
 - Take account of **Danger** to the public
 - Take account of the need to cover fire risks