PR-NET-ENG-005

# INFORMATION FOR MOCOP OPERATORS WORKING UPON SSEN DISTRIBUTION SYSTEMS (EXTERNAL)

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# 1 Introduction

1.1 This document provides Scottish and Southern Electricity Networks Distribution business information for Meter Equipment Managers in accordance with the Meter Operator Code of Practice in relation to metering activities.

1.2 Scottish and Southern Electricity Networks (SSEN) owns two distribution systems and holds licence for each under the Electricity Act to distribute electricity. The areas are:

- Southern Electricity Power Distribution Plc – serving central Southern England
- Scottish Hydro Electric Power Distribution Plc – serving North of Scotland

1.3 The first two digits of the Meter Point Administration Numbers for the exit points in each distribution area commence:

- Southern Electricity Power Distribution Plc – MPAN 20
- Scottish Hydro Electric Power Distribution Plc – MPAN 17

1.4 Exit points for other Licenced Distribution System Operators may exist within SSEN licenced areas. The MPANs associated with these exit points will commence with their own two-digit number.

# 2 References

The documents detailed in Table 2.1 - Scottish and Southern Electricity Networks Documents, and Table 2.2 – External Documents, should be used in conjunction with this document.

**Table 2.1 - Scottish and Southern Electricity Networks Documents**

| Reference | Title |
|---|---|
| FO-NET-ENG-007 | Health and Safety Questionnaire for MOCOP Operators |
| FO-NET-ENG-008 | Insurance Questionnaire for MOCOP Operators |
| PR-NET-ENG-004 | Management of the Meter Operator Code of Practice (MOCOP) |
| TG-NET-CAB-414 | CT Metering Guide for Customers: New LV Connections |

**Table 2.2 – External Documents**

| Reference | Title |
|---|---|
| | Meter Operator Code of Practice via MOCOP.pdf (recportal.co.uk) |
| | Guidance for Service Termination Issue Reporting via https://emar.energycodes.co.uk (access required) |
| BSCP 515 | Licensed Distribution |

# 3 Acronyms

The acronyms shown in table 3.1 are used in this document.

**Table 3.1 - Acronyms**

| Acronyms | Definition |
|---|---|
| BSC | Balance & Settlement Code |
| BSCP | Balance and Settlement Code Procedure |
| COP | Code of Practice |




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| Acronyms | Definition |
|---|---|
| CT | Current Transformer |
| EHV | Extra High Voltage |
| HV | High Voltage |
| IEC | International Electrotechnical Commission |
| LV | Low Voltage |
| LDSO | Licenced Distribution System Operator |
| MOCOP | Meter Operator Code of Practice |
| MPAN | Meter Point Administration Number |
| MEM | Meter Equipment Manager |
| REC | Retail Energy Code |
| SSEN | Scottish and Southern Electricity Networks |
| SHEPD | Scottish Hydro Power Distribution |
| SEPD | Southern Electric Power Distribution |
| SMRS | Supplier Meter Registration Service |
| SVA | Supplier Volume Allocation |
| VA | Volt-Ampere |
| VT | Voltage Transformer |

# 4 General Arrangements

4.1 All MEMs who wish to work on SSEN's Distribution Systems must be a signatory to the MOCOP and hold a valid Full Authorisation Certificate as issued by the REC.

4.2 All MEMs must comply with:

- MOCOP
- The Balance and Settlement Code
- Balance and Settlement Code Procedure 514 – SVA Meter Operations for Metering Systems Registered in SMRS
- All MEM businesses must ensure their Meter Operatives are competent and aware, as necessary, of the requirements of all regulations and all SSEN policies to ensure safety of themselves and others.
- All MEM business shall provide a named contact, address, and contact details where a responsible person can be contacted at all reasonable times for the notification of accidents / incidents and the discussion and resolution of safety matters.
- SSEN Distribution will respond to requests for information detailed in the MOCOP.

# 5 MEM Assessments and Authorisation Process

5.1 The assessment process is to provide SSEN assurance the MEMs have adequate safety standards to complete meter operator work safely and adequate Insurance cover.

5.1.1 Employers Liability insurance must be a minimum Limit of Liability of £10m.

5.1.2 Public and Products Liability Insurance cover must be a minimum Limit of Liability of £5m.

5.1.3 SSEN reserves the right to increase these limits for specific projects.



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5.2 SSEN will only permit MEM's who have had their health, safety, environmental and quality systems assessed and validated to work on SEPD and / or SHEPD distribution systems.

5.3 SSEN require the following to be sent to mocopa.distribution@sse.com to progress new applications:

- Valid Full Registration Authority Certificate
- Type of work being undertaken by the applicant
- Contact name, email address, mobile number, and job title

5.4 SSEN will provide an approval pack for completion by the applicant, including:

- A Health & Safety Questionnaire – FO-NET-ENG-007
- SSE Insurance Questionnaire – FO-NET-ENG-008

5.5 SSEN will evaluate all information provided on above forms and notify the MEM accordingly. Once written confirmation of Authorisation has been issued, work may commence on SSEN distribution systems.

5.6 The MEM is required, upon request, to:

- Provide confirmation to SSEN of personal assessments of Meter Operators who work in SSEN distribution areas
- Maintain a database of all staff authorisations and sealing pliers for inspection

# 6 Safety and Operational Matters

## 6.1 Contacts

6.1.1 A list of contact telephone numbers for SSEN are given in Appendix A – Contact Details.

## 6.2 MOCOP Authorisations

6.2.1 Meter operatives must only work on metering equipment that their MOCOP Authorisation permits and as instructed by their Supplier.

6.2.2 Meter Operators must complete a risk assessment prior to removal or insertion of cut-out fuses installed at exit / entry points on SSEN distribution system.

## 6.3 Substation Access

6.3.1 Entry to SSEN substations is restricted to authorised Personnel who hold the required Operational Safety Rules Authorisations. Meter Operators requiring substation access will be accompanied by a SSEN Authorised representative.

6.3.2 Requests for substation access can be made via SSEN website - https://www.ssen.co.uk/GeneralEnquiries/OutsideYourBoundary/SubstationAccess/

6.3.3 SSEN reserve the right to apply charges where appointments for substation access are agreed with a MEM business, but their representative does not attend.

6.3.4 MEMs must notify SSEN when agreed appointments cannot be met prior to the agreed date.

6.3.5 Operational emergencies may prevent SSEN from attending site as agreed with a MEM.

6.3.6 Access to Sub-stations owned by the customer is under direction from the customer only.




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### 6.4 SSEN Distribution Safety

6.4.1 SSEN will notify the REC of all relevant safety issues that may arise with SSEN equipment at exit / entry points to SSEN distribution network.

6.4.2 It is the responsibility of MEMs to observe distribution business information as informed via the REC, including information issued by SSEN.

6.4.3 MEM business shall ensure all their operatives are notified of all safety matters and adhere to any instructions as issued.

## 7 Site Specific Information

### 7.1 Meter Boards

7.1.1 Meter boards are deemed to be owned by the building owner.

7.1.2 SSEN will investigate damaged, missing, or insecure meter boards which has SSEN equipment attached. If a new meter board is required SSEN will provide and fit a replacement meter board without charge.

7.1.3 Meter boards with dual use may be replaced with two boards. One board will be dedicated to SSEN equipment only, the other for MEM equipment.

7.1.4 MEMs will be required to attend to manage their equipment.

7.1.5 SSEN will not complete any work on meter boards that does not involve SSEN equipment.

### 7.2 External Meter Boxes

7.2.1 SSEN do not supply or install replacement meter boxes.

7.2.2 SSEN may attempt to repair damaged meter boxes, including damaged doors.

7.2.3 Meter boxes that cannot be repaired will require the building owner to purchase and fit a new meter box. SSEN will make the point of work safe and oversee the replacement of the meter box.

### 7.3 Cut-Out Fuses

7.3.1 The cut-out fuse current rating is chosen to both protect the distribution system and enable the customer's agreed capacity to be utilised.

7.3.2 The MEM should not downgrade cut-out fuse rating to accommodate their meter equipment or customer meter tails. The customer should be instructed to contact SSEN to discuss agreed capacity requirements.

### 7.4 New Metering Point

7.4.1 New supply projects are undertaken at the request of a third party. SSEN will allocate a unique alpha numerical reference number which remains with the project until completion. This is additional to the site MPAN for SSEN use.

7.4.2 SSEN will provide information to the customer's representative to ensure the relevant Parties are involved with the new metering point, including appointment of a Supplier and MEM. The Supplier is expected to manage the MEM attendance and installation of meters.



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7.4.3 For heavy-duty cut-out supplies the cut-out fuse holders will be left on site with fuses pre-loaded; the fuse current rating will be correct for the customer's agreed capacity. The Meter operative would be expected to energise this supply as per Supplier's instruction and as permitted by their MOCOP Authorisations. Attendance of SSEN to assist with energising a new supply must be pre-arranged in advance and may be chargeable as per published charges.

7.4.4 For large capacity LV supplies (i.e., non-cut-out supplies) and HV metering systems, the meter panel will be remote from the point of supply. The standard meter panel will cater for either a single meter or main & check meter, as required by the relevant COP. SSEN will require a Supplier instruction to energise the supply once the meter has been installed and connected.

7.4.5 Some HV & EHV Metering Systems may be either:

- 3 phase 3 wire mode
- 3 phase 4 wire mode

SSEN will relay all connections through to the meter panel. The MEM must decide which meter variant to install.

The CT secondary current may be either 1 Amp or 5 Amp output, as declared.

7.4.6 Small wiring connected to the meter terminals is to be installed and connected by the meter operator and should comply with MOCOP requirements.

7.4.7 All small wiring provided by SSEN to the interface of a MEM will be in accordance with MOCOP requirements.

7.4.8 Meter panel fuses will be either:

- Bussman Series 32A with off-set tag
- Cartridge type, 10 X 38 mm

## 7.5 Measurement Transformers

7.5.1 Provision of Site Technical Details is provided in line with requirements of BSCP 515 or as otherwise requested via email. This information is limited to known information relating to measurement transformer and / or Supply details, as per industry flows. Stage 1 commissioning of measurement transformers is a requirement for all new measurement transformers installed since 6th November 2014. The commissioning results are transmitted to the first appointed meter operator in line with requirements of BSCP 515. The industry requires MEMs to pass this information upon change of meter operator agent.

7.5.2 Measurement transformers installed on new connections, or installed as part of fault replace work, will: -

- Meet minimum accuracy class as per current version of the relevant CoP
- Be the correct IEC standard as required by the current version of the relevant CoP
- For CTs, have a minimum 5 VA burden rating; HV CTs are typically >7.5VA
- Have calibration test certificates held in electronic format

## 7.6 Legacy Metering Systems

7.6.1 Generally, measurement transformers installed prior to 6th November 2014 will be: -

- For CTs, accuracy class 0.5 or BM



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- For VTs, accuracy class B, BF or 1.0
- Appropriate IEC standard as applicable
- May not have manufacturer calibration test certificates available

The applicable installed information will depend on the date of first installation.

7.6.2 The types of SSEN owned metering equipment installed on SSEN distribution systems varies in design and may include cable terminations and cut-out fuses in a single unit.

7.6.3 There may be occasions where live equipment may be exposed when panels are opened to access meter isolation facilities. Appropriate precautions must be taken to prevent harm or injury.

7.6.4 Further variations include remote metallic wall mounted meter panels that do not have hinge door access.

7.6.5 Small wiring may have different methods employed to denote cable function and phase identification depending on age of equipment being worked on.

7.6.6 Meter fuses used are typically a Bussman Series with off-set tags.

### 7.7 Commercial

7.7.1 SSEN agree that access is permitted to cubicles used for metering. SSEN LV metering CTs may be installed in customer owned CT Chamber remote from the actual meter panel. This CT chamber will have incoming supply cables terminations, metering CTs and source metering fuses installed; there is no method to isolate the customers supply within this chamber. Accessing the CT chamber may expose live parts.

## 8 Reporting Service Termination Issues to SSEN

8.1 The reporting of Service Termination Issues must be carried out in compliance with the latest version of MOCOP Guidance for Service Termination Issue Reporting.

8.2 The reporting should detail as much information to enable SSEN to arrange the required remedial work.

8.3 Supporting information, such as photos, can be sent to SSEN via email to serviceterminations@sse.com.

## 9 Revision History

| No | Overview of Amendments | Previous Document | Revision | Authorisation |
|---|---|---|---|---|
| 01 | Transfer to new document format | n/a | 1.00 | Stuart Reid |
| 02 | Transfer to correct template. Minor amendments and format issues; SSEPD reference changed to SSEN. Update to defect codes. | PR-NET-ENG-005 (Rev1.00) | 1.01 | Mark Kelly |
| 03 | Timescales added to comply with MOCOPA®; minor amendments. | PR-NET-ENG-005 (Rev1.01) | 1.02 | Mark Kelly |
| 04 | Revision changes to annual in line with MOCOPA®. Addition of sub-station access job requests. Inclusion of BSCP 515 & 514 references. | PR-NET-ENG-005 (Rev1.02) | 2.00 | Nigel Bessant |




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| No | Overview of Amendments | Previous Document | Revision | Authorisation |
|---|---|---|---|---|
| **05** | Reflect MOCOPA transferring to REC Co and renamed MOCOP, new branded template, new author. | PR-NET-ENG-005 (Rev2.00) | 3.00 | Nigel Bessant |
| **06** | Updated Author and Checker, minor formatting and wording updates | PR-NET-ENG-005 (Rev3.00) | 3.01 | Nigel Bessant |
| **07** | Updated Author and Checker, revised provided email address for Service Terminations (8.3 and Appendix A) | PR-NET-ENG-005 (Rev3.01) | 3.02 | Nigel Bessant |




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# Appendix A Contact Details

**Table A.1**

| | | |
|---|---|---|
| Urgent Problems | Southern Electric Power Distribution (Central Southern England) | 0800 072 7282 |
| | Scottish Hydro Electric Power Distribution (North of Scotland) | 0800 300 999 |
| General Engineering Enquiries | Southern Electric Power Distribution (Central Southern England) | 0800 048 3516 |
| | Scottish Hydro Electric Power Distribution (North of Scotland) | 0800 048 3515 |
| Authorisation of MOCOP Operators<br>General Enquires for Service Termination Issues | | Mocopa.distribution@sse.com |
| Site Technical Details - CT Metering equipment only | | Distribution.commissioning@sse.com |
| Supporting information for service terminations- including photos | | serviceterminations@sse.com |




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