



RISING MAINS & LATERALS FRAMEWORK



Scottish & Southern
Electricity Networks

RISING MAINS & LATERALS OVERVIEW



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WHAT ARE RISING & LATERAL MAINS

An Overview

- A Rising Main is where the DNO's incoming mains enters a property and *rises* through the building and service cables radiate from the main to meter positions on each floor.
- This potential requirement is for the SEPD South Distribution Network licence area
- Potential Framework contract value of £10m over the coming 5 year period



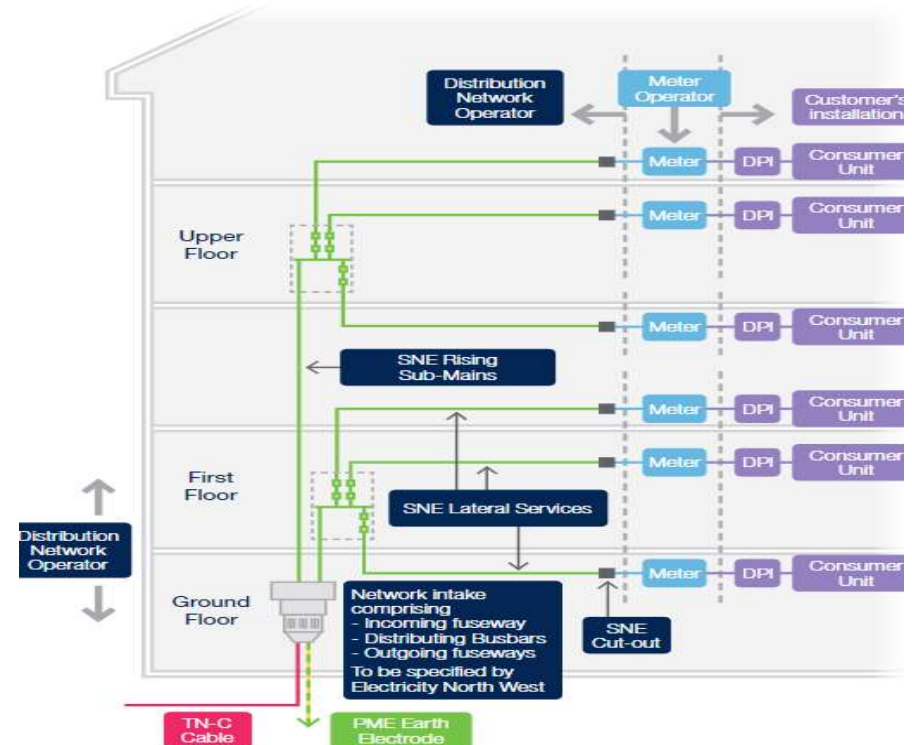


WHAT ARE RISING & LATERAL MAINS

An Overview

- Historically, the duty to inspect service terminations was mainly carried out by the meter operator under the 'duty of co-operation' clause in the Electricity Safety, Quality and Continuity Regulations (ESQCR).
- The introduction of smart metering and removal of the obligation on meter operators to inspect their equipment every 2 years has resulted in SSEN needing to increase the number of inspections of service terminations.

The diagram below show a typical electrical installation in a multi occupancy building





WHY ARE WE DOING THIS?

- The overall aim of this project is to ensure the safety and reliability of our assets on the electricity network.
- The HSE determined that DNOs would have to inspect the safety and condition of assets in multi-occupancy buildings (MOB) and where necessary replace to current electrical standards. Following discussions with the regulator (OFGEM) funding has been secured in ED2 to carry out this work.
- SSE Rising and Lateral Mains Business Plan link:

<https://ssenfuture.co.uk/wp-content/uploads/2021/12/24645-SSEN-ED2-Final-Business-Plan-Website.pdf>



WHAT ARE THE ASSETS THAT REQUIRE REPLACEMENT?

- The following items may be included, however not all will be found in the same premises:
 - Incoming mains or service cable
 - Cut-outs and Flat Meter Service Isolators
 - Multi-service Distribution Boards and Multi-way cut-outs
 - Rising Mains Cable
 - Fire barriers (Visual only)
 - Fixed Bus Bar Riser
 - Lateral Service Cables
 - Containment
 - Meter-panels
 - Building Network ownership
 - Building construction
 - Earthing arrangement
 - Fusing size
 - Asbestos / Hazardous substances
 - Protection against vandalism
 - Warning Signage



WHAT ARE THE REQUIRED SKILLS AND COMPETENCIES?

Personnel must have a minimum of the following authorisations, skills, and competencies:

- AP (Authorised Person) for electrical shutdowns including pulling of fuses and changeovers
- Qualified to electrical industry standards (NICEIC/ECA)
- Working at Height
- Asbestos Awareness
- RISM Visual Inspection Training

Personnel must also have an experience and knowledge of:

- Stakeholder and interface management in dealing with clients, project team and third parties
- Co-ordinating access with the building owners (Local Authority/Housing Association, etc) or BNOs
- Carrying out emergency repairs and management of electrical shutdowns/changeovers within residential/commercial properties
- Installation of split concentric and wavecon cables, including experience in terminating these cables into cut outs and multiway distribution units
- Building Safety Regulations and Compliance





RISER EXAMPLE INSTALLATIONS



CONDITION ASSESSMENT – ASSET LOCATION

Example of photo taken as evidence of:

- **Asset Location Condition: 1 – As new**
- **NB. Cover removed for photo**





CONDITION ASSESSMENT – ASSET LOCATION

Example of photo taken as evidence of:

- **Asset Location Condition: 3 – Insecure – no signs of rubbish, vandalism etc.**





CONDITION ASSESSMENT – ASSET LOCATION

Example of photo taken as evidence of:

- **Asset Location Condition: 4a – Insecure – rubbish dumped**





DEALING WITH CUSTOMERS

Tips and Guidance

- The RLM inspections and intervention works process are planned with the consumer in mind. This includes providing important information to the consumer prior to inspection and carrying out intervention works, whilst ensuring that the engineers undertake the inspections and works in a courteous and professional manner.
- The work must be carried out in accordance with SSEN's latest Coronavirus Guidelines (which can be accessed here: https://ssecom.sharepoint.com/teams/corporate-ca-yoursse/Pages/About_Me/SSE%20Epidemic%20and%20Pandemic%20Guidelines.aspx?csf=1&e=XLrKuu&cid=a93f336c-7017-4cc7-bf3a-00a11231cb47)
- The work must be planned on a risk assessment basis following SSEN's general practice standard for Lone and Remote Working (for further reference please see document RS-SHE-108).
- Suppliers use their discretion before entering a premises unaccompanied and if in any doubt, have a colleague present to satisfy any concerns about the visit.



TECHNICAL GUIDELINES



- 1) All rising lateral services must be installed in such a way that they can easily be replaced and without the need to enter the property of a third party.
- 2) Lateral & Rising Service cables are ideally to be installed in continuous service tubes from multi-intake position to meter cabinets placed external to flats in hallways wherever possible. The service tube should have no more than two easy radius bends. Entry to the cabinet should be at the bottom and the tube sealed to the cabinet.
- 3) Service tubes installed in the building fabric for rising / lateral services should be 50mm black flexible twin wall e.g. Flexi-twin' or similar and installed with a draw cord.
- 4) Where continuous duct lines are not possible service cables may be laid and secured on trays or in trunking or a combination of tube, trays & trunking installed through communal areas.
- 5) Walls, ceilings or other surfaces that trays or trunking are to be installed behind must be designed to be easily removed and re-secured without damage to the fabric of the building. Transition points between tubing and trays or trunking should be accessible to enable replacement.



- 6) Each tube whether continuous or used in combination with trays or trunking should contain one only service cable and nothing else e.g. meter tails, other cables, pipes and the like and must be sealed against ingress of water or gas at each end.
- 7) Where service cables pass through walls and floors they are to be sleeved and the cable sealed within the sleeve.
- 8) Cables on trays or in trunking should not be bunched in groups of more than three and where bunched should be connected to separate phases to ensure fields are balanced out. Each bunch can be separately secured. A space of 25mm should be maintained between each group of cables to enable heat dissipation and aid identification.
- 9) Cables should be secured at no more than 600 mm intervals where horizontally supported on trays and at 450 mm intervals where on vertical trays or otherwise fixed to surfaces. Methods used to secure cables e.g. cable ties should be flame resistant to at least flammability rating UL94V2. It is recommended that cables are fully supported on trays but where this is impractical cables may be secured to the underside at maximum 450mm intervals.
- 10) No cable or tray should be placed in such close proximity to any other service, or pipe, such that the route of the cable has to be diverted away from the tray around the obstruction.



- 11) No cable or tray should be placed in such close proximity to any beam, or other construction of the building such that it will become encased e.g. plastered over or sprayed with fire retardant foam or otherwise contained within any other fire spread prevention measures.
- 12) 'The ESQC Regs 2002 require that the cut-out and meter are installed in a safe location where they are mechanically protected and can be safely maintained. Meters and cut-outs must not be installed in a kitchen, bathroom, shower room or toilet.
- 13) Meter position must be at a nominal height of 1.5 m from floor level with a wall space of 600mm high & 450 mm wide where a cabinet is not used. A distance of 300mm must be maintained between the electrical equipment and any gas meter. Sufficient spare space must be available to enable connection of a check meter, voltage recorder or similar monitoring device.
- 14) Cut-out, security block, meter and isolators must be installed so they can be replaced without need to dismantle cupboards or other fixtures.
- 15) All services must be installed with the correct information stickers for cut-out, security block, meter and earth terminal as appropriate and in accordance with drawings contained in the metering manual.
- 16) An ID tag must be fitted on the service cable at every cut-out / FSMI position



RLM PROCUREMENT CONTACTS AND REGISTRATION OF INTEREST PROCESS



PROCUREMENT CONTACTS AND PROCESS

Points of Contact

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Jaggaer System

“If you are registered on Jaggaer and interested in this opportunity, please access our SSE Opportunities page where you will be able to view the PQQ Questionnaire. Please also contact Nicola Compton to register your interest to which you will then be added into the live PQQ.

<https://www.sse.com/potential-suppliers/>

If your company is not already registered on Jaggaer, please contact Nicola Compton via email with the name of your company and contact email address. We will start the registration process for you, and you will receive an invitation by email to complete this. Once you have completed the registration, please let us know and we will activate your account, following which you will be able to access and complete the PQQ.”