

1. SCOPE

This document details the Company's minimum requirements for installing and recording Low Voltage underground cable electricity networks including their new associated HV/LV distribution substations. The document specifically relates to housing developments constructed under Ofgem's Competition in Connections regime.

The document forms the Appendix to, and shall be read in conjunction with, the Energy Networks Association Engineering Recommendations EREC G81 – Parts 1, 2 and 3 (Framework for new low voltage housing development installations; design and planning, materials specification and installation and records).

This document only applies to new developments comprising of single-occupied premises and their associated street lighting installations and shall not be applied retrospectively.


2. ISSUE RECORD

This is a **Controlled** document. The current version is held on the EN Document Library.

It is your responsibility to ensure you work to the current version.

Issue Date	Issue No.	Author	Amendment Details
August 2002	1	Alastair Graham	Initial Issue
September 2014	2	Graeme Vincent	General revision and update
December 2019	3	Miles Buckley Stephen Jones	Planned review and update
May 2024	4	ShengJi Tee	Planned review and update

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
ShengJi Tee Lead Engineer	Russell Bryans System Design & Development Manager	Malcolm Bebbington Head of Distribution Network Planning  Date: 31/05/2024

4. REVIEW

This is a **Controlled** document and shall be reviewed as dictated by business / legislative change but at a period of no greater than 5 years from the last issue date.

5. DISTRIBUTION

This document is not part of a Manual maintained by Document Control and does not have a maintained distribution list but is published to the SP Energy Networks website.

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7. DEFINITIONS AND ABBREVIATIONS

Applicant	The Company wishing to undertake the contestable work.
Approved	Equipment approved in accordance with the Company's Equipment Approvals Procedure, and which is considered suitable for installation on the Company network.
Company	SP Distribution plc and SP Manweb plc
Housing Estate	A development consisting of domestic dwellings.
SP Distribution plc	The Distribution Licence Holder for the Distribution service area formerly known as ScottishPower.
SP Energy Networks	The brand name for the division of the ScottishPower group of companies that encompasses SP Distribution plc, SP Transmission plc, SP Manweb plc and SP Power Systems Ltd.
SP Manweb plc	The Distribution Licence Holder for the Distribution service area formerly known as Manweb.
SP Power Systems Ltd	Operator of network assets on behalf of the Company.

8. RELATED DOCUMENTS

This document is one of a suite of specifications relating to this subject area and should be read in conjunction with:

(a) **Energy Networks Association Documents:**

Engineering Recommendation G81 – Framework for new low voltage housing development installations.

- Part 1: Design and Planning
- Part 2: Materials Specification
- Part 3: Installation and Records

(b) **The Company Internal Documents:**

- Framework for Design & Planning of LV Housing Developments, including U/G Networks and Associated HV/LV S/S (Ref. **ESDD-02-012**)
- Materials Specification Framework for Low Voltage Housing Development Installations and Associated New HV/LV Distribution Substations (Ref. **EPS-03-027**)
- New Connections Independent Connection Provider (ICP) Approval Policy (Ref. **ASSET-01-015**)

All materials shall comply with both the requirements described within this document and those detailed in (a) and (b) above.

9. GENERAL

The data and guidance contained within this document remains the property of the Company and may not be used for purposes other than that for which it has been supplied and may not be reproduced either wholly or in part, in any way whatsoever, nor may it be used by, or its contents divulged to, any other person whatsoever, without the prior written permission of the Company.

This document applies to new installations and is not to be applied retrospectively.

The Company reserves the right to change the data contained within this document without notification. Although specific network extensions will have designs proposed by third parties, the Company retains the responsibility for the design of the distribution system and since the guidance cannot cover every eventuality, reserves the right to apply other criteria where necessary. The Company accepts no responsibility for any inaccuracies in, or omissions from the document.

The Applicant is responsible for ensuring they have all relevant information to undertake the work. Only Applicants possessing the appropriate skills, training, experience and accreditation as detailed in **ASSET-01-015**, shall use the data and guidance contained within this document.

The data and guidance contained within this document gives details on materials and does not embrace the physical design and construction of the distribution system or the associated safety, environmental and legal requirements.

10. INSTALLATION SPECIFICATIONS

All equipment offered by the Applicant shall have successfully passed the type-approval tests specified in the relevant standard (EATS, BS, IEC) specified in **EPS-03-027**. If the Applicant wishes to

incorporate any change which may in any way modify or affect the performance of the equipment, such changes shall be notified in writing and arrangements made for repeat type-approval testing. The costs of such testing shall be borne by the Applicant. Certified evidence that the equipment offered for adoption is in accordance with the specification shall be submitted.

Only Approved apparatus, plant, equipment and materials detailed in **EPS-03-027** and the Company's Approved Equipment Register shall be used. Only new apparatus, plant, equipment and materials shall be installed unless prior agreement is obtained in writing from the Company's Head of Distribution Network Planning.

10.1 Installation, Commissioning and Testing

All equipment shall be installed and commissioned in accordance with the following Company documents unless prior written agreement is obtained in writing from the Company's Head of Asset Management.

Document Title	Reference
Handling and Installation of Cables up to and including 33kV	CAB-15-003
Secondary Substation Installation and Commissioning Specification	SUB-02-006
Technical Specification for Earthing and Bonding at Secondary Substations	EART-03-003
Policy & Application Guide for 11kV Polymeric Cables	CAB-04-009

All installations shall be tested in accordance with the following documents.

Item	Document Title	Reference
Each service	Inspection and Testing of New Low Voltage Supplies	EPS-04-016
Each new section of cable	Electrical Insulation Testing of HV Equipment up to 33kV	SUB-02-613
Earthing resistance at Secondary Substations	Technical Specification for Earthing and Bonding at Secondary Substations	EART-03-003
LV fuse cabinet	Secondary Substation Installation and Commissioning Specification	SUB-02-006
HV/LV transformer	Electrical Insulation Testing of HV Equipment up to 33kV	SUB-02-613
HV switchgear	Electrical Insulation Testing of HV Equipment up to 33kV	SUB-02-613
HV cables	Electrical Insulation Testing of HV Equipment up to 33kV	SUB-02-613

10.2 Asset Recording

The recording of information pertaining to installed assets shall be undertaken in accordance with the following document:

Document Title	Reference
Recording of Electrical Assets by Contractors	BUPR-22-015

Company internal documents are available to download from the [SP Energy Networks website](#).