



Electricity

Electricity Specification 281

Issue 1 April 2008

Company-Specific Appendices to ENA Engineering Recommendation G81

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Approved for issue by the Technical Policy Panel

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Amendment Summary

Amendment No. Date	Brief Description and Amending Action
0 02/04/08	Issue 1 First Issue Prepared by: David Ball Approved by the Technical Policy Panel and signed on its behalf by:

COMPANY-SPECIFIC APPENDICES TO ENA ENGINEERING RECOMMENDATION G81

1. INTRODUCTION

The design and installation of new connections to electricity distribution networks, provided by Independent Connections Providers (ICP), is governed by a nationally agreed document, prepared by the Energy Networks Association (ENA) and endorsed by the Office for Gas and Electricity Markets (Ofgem). That document, Engineering Recommendation (ER) G81, provides a “Framework for design and planning, materials specification, installation and records” and covers low voltage housing development installations and associated, new, HV/LV distribution substations, and industrial and commercial underground-connected loads up to and including 11kV. ER G81 requires licensed Distribution Network Operators (DNO) to provide, in addition, their own company-specific appendices, setting out in more detail their own requirements and specifications, for installations, which they will adopt.

ER G81 comprises 7 parts, covering the following aspects:

- Part 1: design and planning of new low voltage underground cable electricity networks, including their new associated HV/LV distribution substations, for housing developments;
- Part 2: materials specification for new low voltage underground cable electricity networks, including their new associated HV/LV distribution substations, for housing developments;
- Part 3: installation and records of new low voltage underground cable electricity networks, including their new associated HV/LV distribution substations, for housing developments;
- Part 4: design and planning of new underground connections at voltages up to and including 11kV for industrial and commercial loads;
- Part 5: materials specification for new underground connections at voltages up to and including 11kV for industrial and commercial loads;
- Part 6: installation and records of new underground connections at voltages up to and including 11kV for industrial and commercial loads;
- Part 7: design and planning, materials specification, inspection and records requirements for contestable diversionary and reinforcement works on underground cables and overhead lines not exceeding 33kV and on HV/LV distribution substations.

Electricity North West Limited (ENW) has prepared its own appendices to Parts 1 to 6 of ER G81. These take the form of Parts 1 to 6 respectively of this Electricity Specification (ES).

Note: United Utilities Electricity Services Limited, hereinafter referred to as United Utilities, is the agent and service provider, acting for and on behalf of ENW in the operation of its electricity distribution network.

2. DEFINITIONS

CP	ENW Code of Practice
Distribution Substation	11kV to LV, or 6.6kV to LV substation
DNO	Distribution Network Operator
ENA	Energy Networks Association
Engineer	United Utilities' Competitive Adoptions Manager, or his delegated representative
EPD	ENW Electricity Policy Document
ER	Engineering Recommendation
ES	ENW Electricity Specification
HV	High Voltage, ie either 11kV or 6.6kV
ICP	Independent Connection Provider
NJUG	National Joint Utilities Group
NRSWA	New Roads and Street Works Act 1991
Ofgem	Office of Gas and Electricity Markets
Primary Substation	33kV to 11kV, or 33kV to 6.6kV substation, or, for the purposes of this document, 132kV to 11kV substation
XLPE	Cross-Linked Poly-Ethene

3. DOCUMENTS REFERENCED

New Roads and Street Works Act 1991.

ENA ER G81 -Framework for design and planning, material specification, installation and record for LV housing development installations and associated HV/LV distribution substations and industrial and commercial underground connected loads up to and including 11kV.

See also the documents referenced in each Part of this ES281.

4. KEYWORDS

See the keywords listed in each Part of this ES281.