

## **Company Directive**


### **STANDARD TECHNIQUE : NC2D/2**

#### **Relating to Specification of Connection Assets**

##### **Policy Summary**

This document describes the procedure to be followed for specification and approval where a customer decides to appoint an Independent Connection Provider to carry out some or all of the Contestable work.

It should be read in conjunction with POL:NC2 which provides an overview of the New Connections procedure.

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| <b>Approved by</b>          | <br><b>Policy Manager</b> |
| <b>Date:</b>                | <b>10 November 2011</b>  |

| Date       | Comments   | Author       |
|------------|--|--------------|
| 11/02/2014 | <ul style="list-style-type: none"> <li>5.3.1 Text changes to reflect the introduction of a Network Access and Adoption Agreement between the ICP and WPD.</li> </ul> | Paul B Smith |
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## **1.0 INTRODUCTION**

- 1.1 This document describes the procedure to be followed for specification and approval where a customer decides to appoint an Independent Connection Provider to carry out some or all of the contestable work. It includes the provision of materials and labour.
- 1.2 It should be read in conjunction with POL: NC2 which provides an overview of the New Connections procedure.

## **2.0 COMPETITION IN CONNECTIONS**

- 2.1 WPD's obligation to offer terms for making a connection pursuant to the Electricity Act 1989 (as amended by the Utilities Act 2000) is reinforced under Condition 12 of its Distribution Licence.
- 2.2 The advent of Competition in Connections in 1995 meant that a customer no longer had to depend on the host DNO providing all the new connection work. Certain activities became contestable which meant that a third party (the "Independent Connection Provider" or "ICP") could be appointed to carry out this work.
- 2.3 A Customer or their appointed ICP may indicate they wish to carry out some or all of the contestable work. In such cases WPD shall provide the installation specifications.
- 2.4 The ICP may elect to contest some or all of the contestable activities, although it is a prerequisite that some activities are carried out collectively, e.g. if construction is contested then the ICP must also provide records.

## **3.0 FRAMEWORK DOCUMENTS**

- 3.1 The Ofgem Electricity Connections Steering Group has prepared a suite of documents as a national framework specifically for the competitive connections market. The documents are administered by the Electricity Networks Association but can only be amended with Ofgem consent. Each document covers a particular aspect of the new connection process and is provided to set out the requirements on distributors and ICP's alike to ensure a common approach. The Framework Documents consist:

For Greenfield and Brownfield housing estates:

- Engineering Recommendation G81 – Part 1 Design and Planning Framework Document
- Engineering Recommendation G81 – Part 2 Materials Specification Framework Document
- Engineering Recommendation G81 – Part 3 Installation and Records Framework Document

For Industrial and Commercial Connections:

- Engineering Recommendation G81 – Part 4 Design and Planning Framework Document
- Engineering Recommendation G81 – Part 5 Materials Specification Framework Document
- Engineering Recommendation G81 – Part 6 Installation and Records Framework Document

For all contestable diversionary and reinforcement underground and overhead works not exceeding 33 kV and HV/LV substations;

- Engineering Recommendation G81 – Part 7 Diversionary & Reinforcement Framework Document

3.2 Each Framework Document is supplemented by a host DNO Appendix detailing further requirements or modifications to the national Framework Documents (e.g. ambient temperatures affecting ratings).

3.3 WPD has produced such Appendices as follows:

For Greenfield and Brownfield housing estates

- WPD Framework Appendix to Design Specification
- WPD Framework Appendix to Materials Specification
- WPD Framework Appendix to Installation and Records Specification Parts 1 and 2

For Industrial and Commercial Connections:

- WPD Framework Appendix to Design Specification
- WPD Framework Appendix to Materials Specification
- WPD Framework Appendix to Installation and Records Specification

A further WPD Framework Appendix relating to Recording Techniques and Procedures is available which applies to both Greenfield/Brownfield housing estates and to Industrial/Commercial connections.

All the above must be read in conjunction with the national Framework Documents.

Note: there is no Framework Appendix for G81-7 relating to diversionary and reinforcement works.

3.4 Copies of both the national framework documents and related WPD Appendices are available on the WPD web site. All the above can be found online by accessing the “Cust.Info” folder on the Newcon shared area.

3.5 With the exception of G81-Part 7 which covers works up to and including 33 kV, the Framework Documents and appendices only cover works up to and including 11kV. Work at higher voltages may also be contested. There is no equivalent Engineering Recommendation to cover work at higher voltages so any specification must be prepared manually by reference to WPD Policy documentation.

## **4.0 DESIGN & PLANNING SPECIFICATION FRAMEWORK DOCUMENTS**

- 4.1 Engineering Recommendation G81 – Part 1 Design and Planning Framework Document, sets out minimum requirements for electrical design of Greenfield and Brownfield housing estates.

Engineering Recommendation G81 – Part 4 Design and Planning Framework Document sets out minimum requirements for electrical design of industrial and commercial connections up to and including 11kV.

Each document must be read in conjunction with its associated WPD Framework Appendix.

The ICP is required to provide WPD with information specified in the above G81 documents when requesting a connection.

These information requirements include;

- Design characteristics
- Demand assumptions
- Economic rating criteria employed
- Layout plan

- 4.2 Where a ICP wishes to contest the design WPD shall require compliance with the relevant Engineering Recommendation G81 and WPD Framework Appendix.
- 4.3 WPD shall submit an Offer to the ICP which will include a Connection Charge for the non-contestable works together with point of connection information. See ST:NC2A for further information regarding the provision of point of connection information. [S:\Acrobat\MA\NC\NC002\NC002A\NC2A\\_4.pdf](S:\Acrobat\MA\NC\NC002\NC002A\NC2A_4.pdf)
- 4.4 The ICP shall submit a design to WPD for approval based on the proposed point of connection that complies with the requirements of G81, Part 1 or Part 4 and the WPD Framework Appendix design specification. The submission must include the information required under the WPD Appendix. See ST:NC2F for further information relating to design approval. [S:\Acrobat\MA\NC\NC002\NC002F\NC2F\\_1.pdf](S:\Acrobat\MA\NC\NC002\NC002F\NC2F_1.pdf)

## **5.0 MATERIAL SPECIFICATION FRAMEWORK DOCUMENTS**

- 5.1 Engineering Recommendation G81 –Part 2 Materials Specification Framework Document sets out the materials specification requirements for Greenfield and Brownfield housing estates.

Engineering Recommendation G81 – Part 5 Materials Specification Framework Document sets out the materials specification requirements for industrial and commercial connections up to and including 11kV.

Each document must be read in conjunction with its associated WPD Framework Appendix.

The Framework Appendices outline requirements for and possible suppliers of:

- HV switchgear
- HV/LV substation
- LV fuse cabinets
- Enclosures
- Cables

5.2 Where a ICP wishes to contest the design or provision of materials WPD shall require compliance with the relevant Engineering Recommendation and WPD Framework Appendix and the ICP will submit a list of proposed materials, specifications and suppliers.

### 5.3 Provision of Materials

#### Introduction

5.3.1 The Network Access and Adoption Agreement is a bilateral agreement between the ICP and WPD. This deals with the agreement for the use of materials and equipment supplied and installed by the ICP. This section sets out the process by which agreement can be sought from WPD by the ICP to use materials or equipment supplied and installed by the ICP. WPD agreement shall not be unreasonably withheld.

5.3.2 WPD must be satisfied, before Adoption, that these assets meet the equipment and material specifications of the Company. The requirement is for WPD to be satisfied that the assets installed by others are as good as if WPD had carried out the work. Equipment and materials must meet WPD specifications where applicable.

### 5.4 Agreement Process

5.4.1 The simplest route to reaching materials agreement is if the ICP obtains approved materials from a WPD approved supplier (see Option 1 below). If this route is followed WPD's local representative shall normally give automatic agreement to the materials.

5.4.2 For the procurement of materials for connection work there are two practical methods to specify which materials can be used by the ICP. The options are as follows:

5.4.3 **Option 1:** To issue to the customer/ICP the relevant Engineering Recommendation G81 Framework Document and associated WPD Framework Appendix.

This option will ensure that the ICP uses materials that are compatible with WPD stock from a WPD approved supplier and will overcome future spares stocking problems and training problems. This method will also minimise the risk to the ICP that WPD will not adopt the network due to non-conformity with specifications, because only the installation standard of the assets will be an issue.

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5.4.4 The WPD Framework Appendices provide a list of commonly used materials, their component specification and manufacturers

5.4.5 **Option 2:** The ICP opts to use the materials manufactured to the specification laid down in the Framework Document and WPD Appendix but supplied by an alternative manufacturer.

The charge to the ICP may be increased where there are additional costs of operation, maintenance, repair, replacement, spares holding, and training associated with the use of non-standard equipment. This is the least attractive option for WPD and it should be clearly explained to the ICP that this option will potentially be more expensive and onerous for them.

5.4.6 Whatever the method for provision of materials, the materials shall be listed to enable inspection, test and connection.

5.5 If the ICP wishes to provide materials from a supplier not approved by WPD or non approved materials from any supplier, approved or non approved, it is necessary to obtain from the ICP the information required for submission to the Policy Manager at Bristol. Agreement or refusal to the use of the proposed equipment and/or materials will normally be provided within 10 working days.

## 5.6 **Information Required when the ICP Offers Non Approved Material/Supplier**

5.6.1 The level of information required will be pertinent to the complexity of the equipment and/or materials being considered. Information under all categories is required however, no matter how small the project, and is as follows:

### 5.6.2 **Supplier**

Full details of the proposed supplier to enable future contact to be made, including quotation references to ICP/Customer, to enable items to be fully defined.

### 5.6.3 **Materials and/or Equipment**

A full product description, including ratings, type codes etc, its intended use, details of the manufacturers if different from the supplier.

### 5.6.4 **Specification**

Details of national or international specifications with which the equipment or materials comply.

### 5.6.5 **Submission of Application for Agreement called for in 5.6.1**

Local WPD representatives should satisfy themselves that sufficient information is submitted for formal agreement.

Applications in the form of a short report and the name and contact point for the local WPD representative should be sent to the Policy Manager.

## **6.0 INSTALLATION & RECORDS SPECIFICATION FRAMEWORK DOCUMENTS**

- 6.1 Engineering Recommendation G81 – Part 3 Installation and Records Framework Document outlines requirements for Greenfield and Brownfield housing estates, including;
- Service entries to new dwellings
  - Provision of new connections to flats, maisonettes and bedsits
  - Cable installation methods
  - Recording of assets
- 6.2 Engineering Recommendation G81 – Part 6 Installation and Records Framework Document outlines requirements for commercial and industrial underground connected loads up to and including 11kV, including;
- Service entries into premises
  - Cable installation methods
  - Recording of assets
- 6.3 Where a ICP wishes to install the assets, WPD shall require compliance with the relevant Engineering Recommendation G81 and WPD's Framework Appendix. The process for inspecting the assets installed by the ICP is given in ST:NC2H.

## **7.0 DIVERSIONARY AND REINFORCEMENT FRAMEWORK DOCUMENT**

- 7.1 The Engineering Recommendation Framework Document G81 – Part 7 entitled, "Contestable Diversionary and Reinforcement underground and overhead works not exceeding 33 kV and HV/LV distribution substations" identifies those elements of reinforcement and diversionary work that may be carried out by a suitably accredited ICP for adoption by WPD. The scope of such work is limited to reinforcement and diversionary works associated with a connection which:
- are new works that are physically and electrically separate from the existing WPD System;
  - do not require access to existing WPD System operational areas;
  - are fully funded by the single third party who is seeking the connection; and
  - are restricted to works to install overhead lines and underground cables at voltage levels not exceeding 33 kV and HV/LV distribution substations.
- 7.2 The design of reinforcement works can require a large volume of information about the WPD System. The level and complexity of information that would need to be made available to allow the ICP to carry out such design works is likely to outweigh the benefits of including design work within the scope of contestability. The design of connection reinforcements therefore remains non-contestable.
- 7.3 The design of the majority of diversion projects associated with connection projects is likely to be less complex than the design of reinforcement schemes. The design of diversionary works therefore can be contestable for overhead lines and underground cables not exceeding 33 kV and for HV/LV distribution substations.



The dismantlement and disposal of existing WPD System assets remains non-contestable because it would require access to existing WPD System assets and/or operational areas.

## **8.0 EMBEDDED NETWORKS**

- 8.1 Any person wishing to build a distribution network embedded within WPD's operational area and requiring a connection to WPD's System will need to discuss with WPD the connection arrangements at the interface, or point of supply.
- 8.2 WPD will adhere to the national framework document facilitated by the ENA, entitled; "Principles for the planning, connection and operation of electricity distribution networks at the interface between Distribution Network Operators (DNOs) and Independent Distribution Network Operators (IDNOs), as amended.

Further information is available by following the link to policy document POL:NC6/4

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## **APPENDIX A**

### **SUPERSEDED DOCUMENTS**

This document supersedes ST:NC2D/1 dated June 2008 which must now be withdrawn.

## **APPENDIX B**

### **ANCILLARY DOCUMENTS**

The Electricity Act 1989 as amended by the Utilities Act 2000  
The Electricity (Connection Charges) Regulations 2002  
The Electricity Safety Quality and Continuity Regulations 2002  
Western Power Distribution (South West) plc's Distribution Licence  
Western Power Distribution (South Wales) plc's Distribution Licence  
Western Power Distribution (East Midlands) plc's Distribution Licence  
Western Power Distribution (West Midlands) plc's Distribution Licence  
Statement of Methodology and Charges for Connection to Western Power Distribution (South West) plc's Electricity Distribution System;  
Statement of Methodology and Charges for Connection to Western Power Distribution (South Wales) plc's Electricity Distribution System;  
Statement of Methodology and Charges for Connection to Western Power Distribution (East Midlands) plc's Electricity Distribution System;  
Statement of Methodology and Charges for Connection to Western Power Distribution (West Midlands) plc's Electricity Distribution System.  
POL HS9 and associated STs – CDM Regulations  
POL:NC2 Competition in New Connections  
ST:NC2C Customer Information

## **APPENDIX C**

### **POLICY IMPLEMENTATION**

This policy shall be implemented immediately.

Distribution Managers shall ensure that all affected staff are notified of the update of this Standard Technique and be advised to familiarise themselves with the process outlined. In particular this will concern 11 kV Planners, Planners, Technicians and Team Supports.

## **APPENDIX D**

### **POLICY IMPACT**

This policy is relevant to all staff involved with the specification of Connection Assets. Its implementation will ensure compliance against relevant legal and regulatory requirements within the WPD process for providing customer connections.

## **APPENDIX E**

### **KEY WORDS**

Network Access and Adoption Agreement, Assets, Connection, ICP, Framework Document, Inspection, Materials, Specification.

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