

# **Company Directive**

**POLICY DOCUMENT: CA4/1** 

## Relating to the cable to be used on the 66/132kV system

## **Policy Summary**

This document details the Company requirements for the type of cable to be used on the Western Power Distribution 66/132kV distribution system.

**Author:** Peter White

**Implementation Date:** June 2016

Approved by:

**Network Strategy and Innovation Manager** 

Date: 30 6 2016

**NOTE:** The current version of this document is stored in the WPD Corporate Information Database. Any other copy in electronic or printed format may be out of date.

Copyright © 2016 Western Power Distribution

POL:CA4/1 June 2016

- 1 of 5 -

### **IMPLEMENTATION PLAN**

#### Introduction

Minor changes have been made to ensure the document covers the whole of WPD area and covers all cable sizes currently used.

## **Main Changes**

Minor changes have been made to ensure the document covers the whole of WPD area and covers all cable sizes currently used.

## **Impact of Changes**

None.

## **Implementation Actions**

Team managers to disseminate the information to their relevant staff.

## **Implementation Timetable**

This Standard Technique can be implemented with immediate effect.

Document Revision & Review Table		
Date	Comments	Author
June 2016	Minor changes have been made to ensure the document covers the whole of WPD area and covers all cable sizes currently used.	Peter White

#### 1.0 INTRODUCTION

This document describes the type of cable to be used on all the new circuits being added to the Western Power Distribution plc's 66/132kV distribution networks.

#### 2.0 POLICY FOR 132kV DRY DESIGN UNDERGROUND CABLES

132kV single core cable, the cable shall be constructed with a water blocked, stranded circular copper phase conductor of either 300, 630, 1000, 1000S, 1600S & 2000Smm², a semi-conducting conductor screen, XLPE insulation, a semi-conducting fully bonded insulation screen, water swelling tape, with a lead alloy E sheath, if additional earth fault current capability is required then additional copper screen wires shall be added below the lead sheath and a medium density polyethylene (MDPE) coloured black oversheath, to British Standard Specification (BS) BS 7970 or IEC 60840.

## 3.0 POLICY FOR 66kV QUASI DRY DESIGN UNDERGROUND CABLES

66kV single core cable, the cable shall be constructed with a water blocked, stranded circular copper phase conductor of 185, 300, 400, 630 & 1000mm², a semiconducting conductor screen, EPR insulation, a semi-conducting fully bonded insulation screen, a copper wire screen of suitable cross sectional area to meet the 7kA steady state single phase earth fault current, and a medium density polyethylene (MDPE) coloured black oversheath, to British Standard Specification (BS) BS 7970 or IEC 60840.

## 4.0 POLICY FOR 132kV QUASI DRY DESIGN UNDERGROUND CABLES

66kV single core cable, the cable shall be constructed with a water blocked, stranded circular copper phase conductor of 300, 630, 1000, 1000S, 1600S & 2000Smm², a semi-conducting conductor screen, EPR insulation, a semi-conducting fully bonded insulation screen, water swelling tapes, a copper wire screen of suitable cross sectional area to meet the requisite steady state single phase earth fault current, water swelling tape and a medium density polyethylene (MDPE) coloured black oversheath, to British Standard Specification (BS) BS 7970 or IEC 60840.

APPENDIX A

## SUPERSEDED DOCUMENTATION

This document supersedes POL:CA4 dated July 2006 which has now been withdrawn.

APPENDIX B

## ASSOCIATED DOCUMENTATION

Specification EE 77

**APPENDIX C** 

## **IMPACT ON COMPANY POLICY**

None.

APPENDIX D

## IMPLEMENTATION OF POLICY

Nil

APPENDIX E

### **KEY WORDS**

XLPE cable, lead alloy E sheath, 66/132kV single core, EPR Cable, Copper Wire Screen.