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Electricity Specification 400C13

Issue 6 September 2021

Multipair & Multicore Auxiliary Cables

Amendment Summary

ISSUE NO. DATE	DESCRIPTION
Issue 6	New template applied throughout.
07/09/21	Prepared by: D M Talbot
	Approved by: Policy Approval Panel and signed on its behalf by Steve Cox, Engineering and Technical Director

Contents

1 Scope

This Specification covers the technical requirements for multicore and multipair auxiliary cables for use on the Electricity North West Limited (hereinafter referred to as Electricity North West) Distribution System.

It should be noted that only multipair cables used for protection signalling (refer to sections 10.1.5 and 10.1.6) are purchased under a framework agreement to which sections 3, 6, 7, 8 and 9 shall apply. All other multicore and multipair cables for use within substations (refer to sections 10.1.1, 10.1.2, 10.1.3, 10.1.4 and 10.1.7) are purchased as small items under separate project specific contracts to which sections 3, 6, 7, 8 and 9 shall not always apply.

2 Definitions

Approval	Sanction by the Electricity North West Circuits Policy Manager that specified criteria have been satisfied
Contract	The agreement between Electricity North West and the Contractor for the execution of the Works including therein all documents to which reference may properly be made in order to ascertain the rights and obligations of the parties under the said agreement.
Contractor	The person or person's firm or company, including personal representatives, successors and permitted assigns, who's Tender has been accepted by Electricity North West.
Specification	The Specifications and schedules (if any) agreed by the parties for the purpose of the Contract.
Sub-Contractor	Any person (other than the Contractor) named in the Contract for any part of the Works or any person to whom any part of the Contract has been sub-let with the consent in writing of the Electricity North West Circuits Policy Manager, and the legal representatives, successors and assigns of such person.
Supplier	Any person or person's firm or company who supplies goods to Electricity North West or to its Contractor.
Tender	An offer in writing to execute work or supply goods at a fixed price.
Tenderer	The person or person's firm or company, including personal representatives, successors and permitted assigns, invited by Electricity North West to submit a Tender.

3 General Requirements for Approvals and Testing

3.1 Product not to be Changed

No change in the product, packaging or labelling shall be made after Approval has been granted without prior notice to the Electricity North West Circuits Policy Manager, and receipt of a written agreement to the proposed change from the Electricity North West Circuits Policy Manager.

3.2 Electricity North West Technical Approval

The Tenderer shall submit, with this Tender, proposals for testing which will demonstrate, to the satisfaction of the Electricity North West Circuits Policy Manager, compliance with this Specification. Such tests shall be carried out without expense to Electricity North West.

Alternatively, technical reports and other data may be submitted that the Tenderer considers will demonstrate, to the satisfaction of the Electricity North West Circuits Policy Manager, compliance with this Specification. Acceptance of this evidence shall be at the discretion of the Electricity North West Circuits Policy Manager but will not be unreasonably withheld.

Approval shall be 'factory specific' and is not transferable to another factory without the written Approval of the Electricity North West Circuits Policy Manager.

The Supplier and product shall comply with all the relevant requirements of Electricity North West documents EPD311 and CP311.

3.3 Quality Assurance

The Tenderer shall confirm whether or not Approval is held in accordance with a quality assurance scheme accredited under ISO 9000. If not, the Tenderer shall submit a statement of the quality assurance procedures employed to control the quality of the product, including the performance of Suppliers and Sub-Contractors.

The right is reserved for the repeat of such tests, from time to time, that the Electricity North West Circuits Policy Manager may deem to be reasonably necessary to demonstrate continued compliance with the Specification.

The Tenderer shall submit, with the Tender, a list of tests and inspections which are carried out on the product prior to despatch which shall demonstrate, to the satisfaction of the Electricity North West Circuits Policy Manager, fitness for installation and service.

The Tenderer shall provide free of charge to Electricity North West such samples as may, in the opinion of the Electricity North West Circuits Policy Manager, be reasonably required for inspection and/or retention as quality control samples. The Electricity North West Circuits Policy Manager will confirm the requirement for samples at the time of Tendering.

The right is reserved for inspections to be made of Tenderer's facilities, from time to time, as deemed reasonably necessary by the Electricity North West Circuits Policy Manager to ensure compliance with this Specification and any Contract of which it forms a part.

The Tenderer shall submit, with the Tender, such details of product packaging disposal, as will enable Electricity North West to comply with the requirements of BS EN ISO 14001 - Environmental Management Systems.

3.4 Formulation

The Tenderer shall submit, with the Tender, such details of the formulation and use of the product and associated substances as will enable Electricity North West to comply with the obligations of the Health and Safety at Work Act 1974 and the Control of Substances Hazardous to Health Regulations 2002, in the use, storage and disposal of the product. The Tenderer may stipulate, prior to submission of such information, that it is to remain confidential, and the Electricity North West Circuits Policy Manager will, if requested, confirm agreement to this prior to receipt of the information.

3.5 Identification Markings

The Tenderer shall submit, with the Tender, details of markings which it is proposed to apply to the product or packaging to identify manufacturing batches or items. The forms and content of such markings shall be subject to the Approval of the Electricity North West Circuits Policy Manager and shall in all cases include the Electricity North West approved description and commodity code number.

The Tenderer shall submit, with the Tender, such details of marking gross weight on components, assemblies and packages, as will enable Electricity North West to comply with the Health and Safety Manual Handling Operation Regulations 1992, for components, assemblies and packages supplied with a gross weight over 1kg. The forms and content of such markings shall be subject to the Approval of the Electricity North West Circuits Policy Manager.

3.6 Minimum Life Expectancy

The minimum life expectancy of all products covered by this Specification is 60 years.

3.7 Product Conformity

Preference will be given to those Suppliers who can provide suitable product conformity certification to a recognised or specified standard, or an equivalent certification.

3.8 Confirmation of Conformance

The Tenderer shall complete the conformance declaration sheets in Appendix C. Failure to complete these declaration sheets may result in an unacceptable bid.

4 Conditions of Installation

Cables specified in this Specification will be pulled or laid into open trenches, pulled into ducts or installed in air. Cables may also be installed directly by trenchless installation techniques.

During storage and after installation cables can be expected to be subjected to the full range of climatic conditions encountered in the UK.

Cables may be surrounded by ground water for most of their operating life. Where cables are installed in ducts, flooding of ducts can occur resulting in permanently wet sections along the cable route.

Cables installed above ground will be supported by means of cleats or cable ties either vertically or horizontally and these cables may be exposed to direct sunlight for significant periods.

Cables may be installed on wood poles in contact with the pole and, therefore, in contact with a pole preservation medium such as creosote.

Cables may be installed near transformers where there may be transformer oil.

Accessories may be cold applied or require application of heat.

5 Power System Conditions of Operation

The following are the general conditions under which multicore and multipair cables purchased in accordance with this specification are required to operate adjacent to:

- Nominal power system voltage (V): 11 000/6 360; 33 000/19 000 and 132 000/76 000.
- The working voltage of any part of the power system does not normally exceed the normal system voltage by more than 6%.
- Nominal power system frequency: 50Hz.
- The power system operates with the neutral point earthed either directly or through a resistance or reactance at one or more points.

6 Cable Longevity

Cables offered shall be designed and manufactured to operate satisfactorily under the installation and operating conditions detailed in Sections 4 and 5. Cables with extruded insulation shall have passed the CIGRE 2 year long term ageing test specified as per proposed amendment 3, clause 5.4.15 to CENELEC HD 605. Preference will be for manufacturers that carry out the CIGRE 2 year test on a continual 1 year cycle.

7 Manufacturing

At the time of Tender, the Tenderer shall provide details of manufacturing location(s) for each cable offered. For cables with extruded insulation, the Tenderer shall also provide details of extrusion and curing technology for each cable offered. The cross linking process will be completely “Dry Cured” and no water will be used during this process.

Any Approval granted will be site specific and will not be transferable to any other site without the prior written agreement of the Electricity North West Circuits Policy Manager.

8 Technical Support

During the Contract period questions will arise regarding unusual or non-standard applications where advice will be required on matters such as cable ratings etc. The successful Tenderer(s) will be expected to support Electricity North West with technical advice on these matters.

9 Testing and Approval

9.1 Type Test Approval

All cables offered shall be fully Type Tested and Qualified according to the requirements of the Technical Specification and Standards detailed for each cable type. The Tenderer shall provide Type Test certificates and Type Test reports, including details of independent witnesses, at the time of Tender.

Where a Tenderer wishes to offer a cable, which has been Type Tested to an alternative Standard(s), full details of the alternative Standard(s) and how it differs from the Specified Standard(s) shall be provided at the time of Tender along with Type Test certificates.

If, during the period of the Contract, the Contractor wishes to make any changes to the Approved product, packaging or labelling, proposals for such changes shall be notified in writing to the Electricity North West Circuits Policy Manager. No such changes shall be implemented without the prior written Approval of the Electricity North West Circuits Policy Manager. If the Electricity North West Circuits Policy Manager deems that the changes require Type Approval testing to be repeated, in full or in part, the cost of such testing shall be borne by the Contractor.

9.2 Requirement for Routine Tests at the Supplier's Premises and Sampling

These tests may be required to be carried out on every individual unit or component, as specified, or at some regular frequency to be determined by the Electricity North West Circuits Policy Manager.

The results of these tests may be required to be supplied to Electricity North West with each unit purchased or retained for inspection, at a period to be determined by the Electricity North West Circuits Policy Manager.

9.3 Routine and Sample Testing

The Contractor shall carry out all routine and sample tests specified for each cable. Tenderers shall state at the time of Tender their proposals for sample test frequencies where such frequencies are not detailed specifically by this Specification or the relevant referenced Standards or Specifications. The Electricity North West Circuits Policy Manager reserves the right to be present and witness routine and sample tests. Where the Electricity North West Circuits Policy Manager wishes to witness any such tests, the date and time of testing shall be mutually agreed.

9.4 Samples

During the Tender period the Tenderer shall submit samples for Approval as required by the Electricity North West Circuits Policy Manager. Such samples shall remain the property of Electricity North West.

10 Technical Requirements

10.1 Scope

Cable technical characteristics shall be in accordance with ENA TS 09-6 unless stated otherwise.

The installation of Low Smoke Zero Halogen (LSZH) sheathed cables is not permitted due to its potential reduced chemical resistance to electrical insulating oils. The only exception to this shall be installations in complex or public buildings where the risk of smoke needs to be specifically addressed and managed. Where this issue is present the requirement should be documented as part of the risk assessment process detailed in CP357.

This Specification covers the supply of the following types of auxiliary cables:

10.1.1 2.5mm^2 CSA Multicore Protection and Control Cables (including CT and VT Cables)

These cables are for internal substation use only for light current control, indication, alarm connections and protection CT and VT connections.

Only 4, 7, 12 and 19 core cables shall be installed.

These cables shall comply with BS 7870 Part 8 Section 8.1

These cables shall be seven stranded 0.67mm diameter (i.e. 2.5mm^2 CSA = 7/0.67mm strands), circular copper conductors complying with BS EN 60228 (class 2); PVC insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

Cores shall be coloured white with black text numbered markings.

NOTE: 1.5mm^2 conductors are not permitted for these functions.

10.1.2 4.0mm^2 CSA Multicore Protection and Control Cables (including CT and VT Cables)

These cables are for internal substation use only for light current control, indication, alarm connections and protection CT and VT connections.

Only 7, 12 and 19 cores cables shall be installed.

These cables shall comply with BS 5467 and BS EN 60332.

These cables shall be seven strand 0.85mm diameter (i.e. 4.0mm^2 CSA = 7/0.85mm strands), circular copper conductors complying with BS EN 60228 (class 2); XLPE insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

Cores shall be coloured white with black text numbered markings.

10.1.3 6.0mm^2 CSA Multicore Protection and Control Cables (including CT and VT Cables)

These cables are for internal substation use only for light current control, indication, alarm connections and protection CT and VT connections.

Only 7 cores cables shall be installed.

These cables shall comply with BS 5467 and BS EN 60332.

These cables shall be seven strand 1.04mm diameter (i.e. 6.0mm^2 CSA = 7/1.04mm strands), circular copper conductors complying with BS EN 60228 (class 2); XLPE insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

Cores shall be coloured white with black text numbered markings.

10.1.4 1/0.8mm Multipair Control Cables (Tele-control Signalling)

These cables are for internal substation use only for connections from switchgear and protection panels to Remote Terminal Units.

Only 5, 10 and 20 pair cables shall be installed.

These cables shall be in accordance with ENA TS 09-6 Issue 8 Table E3b.

These cables shall be one 0.8mm diameter (i.e. 0.5mm^2 CSA = 1/0.8mm strand) circular solid copper conductor complying with BS EN 60228 in so far as applicable, PVC insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

These cables shall be of the unfilled type.

The pairs shall be clearly identified by colours in accordance with the sequence detailed in ENA TS 09-6 section 4.5, as follows :-

No. of Cable Pairs	5	10	20
No. of pairs in centre	Filler	2	1
No. of pair in 1st layer	5	8	6
No. of pairs in 2nd layer	-	-	13
Pair No. 1	Orange - White	Orange - White	Orange – White
Pair No. 2	Red – Grey	Green - Black	Orange - White
Pair No. 3	Blue – Brown	Orange - White	Red – Grey
Pair No. 4	Red – Grey	Red – Grey	Blue – Brown
Pair No. 5	Green - Black	Blue – Brown	Red – Grey
Pair No. 6	-	Red – Grey	Blue – Brown
Pair No. 7	-	Blue – Brown	Green - Black
Pair No. 8	-	Red – Grey	Orange - White
Pair No. 9	-	Blue – Brown	Red – Grey
Pair No. 10	-	Green - Black	Blue – Brown
Pair No. 11	-		Red – Grey
Pair No. 12	-		Blue – Brown
Pair No. 13	-		Red – Grey
Pair No. 14	-		Blue – Brown
Pair No. 15	-		Red – Grey
Pair No. 16	-		Blue – Brown
Pair No. 17	-		Red – Grey
Pair No. 18	-		Blue – Brown
Pair No. 19	-		Red – Grey
Pair No. 20	-		Green - Black

10.1.5 1/0.8mm Multipair 5kV Pilot Cables

These cables are for general communications and protection signalling connections between substations.

Only 7, 19, 37 and 61 pair cables shall be installed.

Only unfilled types are permitted. The cable shall be capable of withstanding a minimum 5kV DC test voltage for 1 minute between both conductor to conductor and conductor to armouring.

Unless otherwise specified, pilot cables installed between substations for the purpose of communications and protection signalling shall have an insulation rated to 5kV between cores and cores and armouring. Where studies determine a higher insulation level is required, cables with an insulation rated to 15kV between cores and cores and armouring shall then be installed. Generally, this will only be a requirement for substations with very high Earth Potential Rise (EPR) values or where the pilot cables are routed in close proximity to 275kV and 400kV power circuits. The insulation rating of the pilot circuit shall be continued within the substation installation between the pilot termination point and the connected device (i.e. relaying equipment) at each end."

These cables shall comply with BS 7870 Part 8 Section 8.2.

These cables shall be one 0.8mm diameter (i.e. 0.5mm^2 CSA = 1/0.8mm strand), circular solid copper conductor complying with BS EN 60228 in so far as applicable, polyethylene insulation, polyethylene bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

The cable sheath shall, in addition to the requirements of BS 7870 Part 8, be embossed with the conductor diameter and number of pairs, e.g. 0.8mm/37pr and indicate the cable is unfilled.

The pairs shall be clearly identified by colours in accordance with the sequence detailed in ENA TS 09-6, section 3.6, as follows:-

No. of Cable Pairs	7	19	37
No. of pairs in centre	1	1	1
No. of pair in 1st layer	6	6	6
No. of pairs in 2nd layer	-	12	12
No. of pairs in 3rd Layer		-	18
Pair No. 1	Red - Yellow	Red - Yellow	Red - Yellow
Pair No. 2	Black - Violet	Black - Violet	Black - Violet
Pair No. 3	Orange - Grey	Orange - Grey	Orange - Grey
Pair No. 4	Green – Brown	Green – Brown	Green – Brown
Pair No. 5	Orange - Blue	Orange - Blue	Orange - Blue
Pair No. 6	Green - Brown	Green - Brown	Green - Brown
Pair No. 7	Orange - White	Orange - White	Orange - White
Pair No. 8	-	Black - Violet	Black - Violet
Pair No. 9	-	Red - Yellow	Red - Yellow
Pair No. 10	-	Green - Brown	Green - Brown
Pair No. 11	-	Red - Yellow	Red - Yellow
Pair No. 12	-	Green - Brown	Green - Brown
Pair No. 13	-	Red - Yellow	Red - Yellow
Pair No. 14	-	Green - Brown	Green - Brown
Pair No. 15	-	Red - Yellow	Red - Yellow
Pair No. 16	-	Green - Brown	Green - Brown
Pair No. 17	-	Red - Yellow	Red - Yellow
Pair No. 18	-	Green - Brown	Green - Brown
Pair No. 19	-	Blue - White	Blue - White
Pair No. 20	-	-	Black - Violet
Pair No. 21	-	-	Red - Yellow
Pair No. 22	-	-	Green - Brown
Pair No. 23	-	-	Red - Yellow
Pair No. 24	-	-	Green - Brown
Pair No. 25	-	-	Red - Yellow
Pair No. 26	-	-	Green - Brown
Pair No. 27	-	-	Red - Yellow
Pair No. 28	-	-	Green - Brown
Pair No. 29	-	-	Red - Yellow
Pair No. 30	-	-	Green - Brown
Pair No. 31	-	-	Red - Yellow
Pair No. 32	-	-	Green - Brown
Pair No. 33	-	-	Red - Yellow
Pair No. 34	-	-	Green - Brown
Pair No. 35	-	-	Red - Yellow
Pair No. 36	-	-	Green - Brown
Pair No. 37	-	-	Blue - White

NOTE: 61 pair cable has 4 layers with remaining 24 pairs. Construction and colours for centre, 1st, 2nd and 3rd layers are as per 37 pair. 4th layer starts with pair colours Black – Violet, followed by 22 pairs in Red – Yellow and Green – Brown sequence and ends with pair colours Blue – White.

10.1.6 1/0.8mm Multipair 15kV Pilot Cables

These cables are for general communications and protection signalling connections between substations.

Only 7, 19, 37 and 61 pair cables shall be installed.

Only unfilled types are permitted. The cable shall be capable of withstanding a minimum 15kV DC test voltage for 1 minute between both conductor to conductor and conductor to armouring.

Unless otherwise specified, pilot cables installed between substations for the purpose of communications and protection signalling shall have an insulation rated to 5kV between cores and cores and armouring. Where studies determine a higher insulation level is required, cables with an insulation rated to 15kV between cores and cores and armouring shall then be installed. Generally, this will only be a requirement for substations with very high Earth Potential Rise (EPR) values or where the pilot cables are routed in close proximity to 275kV and 400kV power circuits. The insulation rating of the pilot circuit shall be continued within the substation installation between the pilot termination point and the connected device (i.e. relaying equipment) at each end."

These cables shall comply with BS 7870 Part 8 Section 8.2.

These cables shall be one 0.8mm diameter circular solid copper conductor complying with BS EN 60228 in so far as applicable, polyethylene insulation, polyethylene bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

The cable sheath shall, in addition to the requirements of BS 7870 Part 8, be embossed with the conductor diameter and number of pairs, eg 0.8mm/37pr and indicate the cable is unfilled.

The pairs shall be clearly identified by colours in accordance with the sequence detailed in ENA TS 09-6, as follows:-

Cable construction and core colours as per section 10.1.5.

10.1.7 LV Multicore Supply Cables

These cables are for internal substation use, primarily for connections from the substation LV distribution to items requiring an LV AC supply.

Only 3 and 4 core cables shall be installed.

These cables shall comply with BS 5467 and BS EN 60332.

Cables with a CSA up to 35mm^2 shall be seven stranded (of appropriate diameter), circular copper conductors complying with BS EN 60228 (class 2); XLPE insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

Cables with a CSA greater than 35mm^2 shall be have an appropriate number of stands of applicable diameter, circular copper conductors complying with BS EN 60228 (class 2); XLPE insulation, PVC bedding, one layer of galvanized steel wire armour, protected with a coating of waterproof compound, and black PVC oversheath.

3 core cables shall be coloured Brown, Black and Grey.

4 core cables shall be coloured Brown, Black, Grey and Blue.

10.2 Cable Identification

Each delivery length of cable shall be allocated a unique reference number. This unique reference number shall be embossed on the cable near to the metre mark. This unique reference number will be used to identify all materials used within the manufacturing process. This number shall appear on the factory test sheet covering the cable length and shall be clearly marked on the drum on which the length is delivered and shall be referred to on all invoices and advice notes.

Additional costs should be included if applicable for the option of providing a unique identifier / batch number or having Electricity North West printed on to the conductor to enable positive identification of ownership in event of theft.

10.2.1 Oversheath Marking

In addition to the requirements detailed in the relevant specification for each cable supplied, the unique reference number shall be embossed in the cable oversheath.

The oversheath of the cable shall also identify the specification number (i.e. BS7870 etc) which the cable has been constructed too.

10.3 Logistical Requirement

Each cable supplied shall meet the requirements of Appendix B.

11 Documents Referenced

All references to documents listed below are to the latest versions, unless stated otherwise.

DOCUMENTS REFERENCED	
Health and Safety at Work Act 1974	
Control of Substances Hazardous to Health Regulations 2002	
Manual Handling Operations Regulations 1992	

BS EN ISO 9000:	Quality management systems.
BS EN ISO 14001:	Environmental management systems. Requirements with guidance for use.
BS EN 60228:	Conductors of insulated cables.
BS EN 60332:	Tests on electric and optical fibre cables under fire conditions.
BS 5467	Electric cables. Thermosetting insulated, armoured cables of rated voltages of 600/1 000 V and 1 900/3 300 V for fixed installations. Specification.
BS 7870 Part 8 Section 8.1:	LV and MV polymeric insulated cables for use by distribution and generation utilities.
BS 7870 Part 8 Section 8.2:	LV and MV polymeric insulated cables for use by distribution and generation utilities.
ENA TS 09-06:	Auxiliary Multicore & Multipair Cables.
CENELEC HD 605:	Electrical Cables – Additional test Methods.
EPD311:	Approval of Equipment.
CP311:	Equipment Approval Process.
CP357:	Fire Risk Assessments for Operational Sites.
ES400C7:	Returnable Cable Drums for Mains Cables Conforming to ECP 410 Chapter 1.

12 Keywords

Cable; multicore; multipair

Appendix A – Schedule of Cables

ITEM NO.	ORDERING SPECIFICATION	NO. OF CORES/PAIRS
1	Multipair Cable (Induced Voltages not exceeding 5kV) Unfilled polythene insulated multipair cable with PVC oversheath, with core diameter of 1/0.8mm	7 19 37 61
2	Multipair Cable (Induced Voltages may exceed 5kV but not exceed 15kV) Unfilled polythene insulated multipair cable with PVC oversheath, with core diameter of 1/0.8mm	7 19 37 61

Appendix B – Logistical Requirements

B1 Cable Drums and Labelling

Cable drums shall meet the requirements of ES400C7.

All cable drums shall be marked in accordance with the relevant cable specification or standard. The drum label shall also contain:

- Electricity North West commodity code
- Name of manufacturer
- Supplied length
- Rated voltage
- Cable type
- Number of cores/pairs
- Size of conductor
- Gross and nett weights
- Direction of rolling drum
- The metre marking start and end values
- The unique reference number

B2 General Logistical Requirements

Cable drums may be stored for long periods outdoors. All drum labels shall remain legible and durable under these conditions.

All cable drums shall be returnable and the Tenderer shall arrange to collect empty drums from the company's normal delivery locations. Tenderers shall state at the time of Tender their proposed cable drum sizes and weights for each cable type offered.

The ends of all cables shall be effectively sealed against the ingress of moisture by a method appropriate to the cable type. Tenderers shall detail at the time of Tender their proposed sealing arrangement for each cable type offered.

The cable end projecting from the drum shall be protected from damage during transit, storage and handling on site.

The cable on the drum shall not be susceptible to damage during transit, storage and handling on site.

Tenderers shall state at the time of Tender their proposed method of protection for each cable.

Appendix C – Conformance Declaration

SECTION-BY-SECTION CONFORMANCE WITH SPECIFICATION

The Tenderer shall declare conformance or otherwise for each product/service or range of products/services, section-by-section, using the following Conformance Declaration Codes.

Conformance Declaration Codes:

N/A =	Clause is not applicable/appropriate to the product/service.
C1 =	The product/service conforms fully with the requirements of this clause.
C2 =	The product/service conforms partially with the requirements of this clause.
C3 =	The product/service does not conform to the requirements of this clause.
C4 =	The product/service does not currently conform to the requirements of this clause, but the manufacturer proposes to modify and test the product in order to conform.

Manufacturer:

Product/Service Description:

Product/Service Reference:

Name:

Company:

Signature:

SECTION-BY-SECTION CONFORMANCE			
Section	**Section Topic**	**Conformance Declaration Code**	**Remarks * (must be completed if code is not C1)**
3.1	**Product not to be Changed**		
3.2	**Electricity North West Technical Approval**		
3.3	**Quality Assurance**		
3.4	**Formulation**		
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