AMENDMENT NO. 02

ENQUIRY NO. 220E222 DATED 07.02.2011 DUE ON 09.03.2011

ITEM : 400 KV XLPE CABLES WITH ACCESSORIES

PROJECT : 750 MW Pragati CCPP at Bamnauli

The Amendment No. 02 Dated 08.03.2011 to Enquiry No. 220E222 with aforementioned details is issued for reasons elaborated below :

1. Amendments to Technical Specification TB-335-316-001, **Rev.- 01.**
2. Due date for submission of Techno-Commercial Bid is extended upto **18.03.2011**.

All other Terms & Conditions of Tender Enquiry remains unchanged.

Archana
for BHARAT HEAVY ELECTRICALS LTD.
Engineer (TBMM)

Amendments to technical specification no. TB-335-316-001, R-01

Cl. No./Item No.	Description	Amendments/Clarifications
1.1 of Section -1 (Item No. 23 and 24)	Design ambient temperature and Minimum ambient temperature	50°C and 0°C
1.2 of Section -1 (Note -4)	The cables will be laid on Al. trays which will be earthed by providing MS Flat.	The cables will be laid directly on cable racks made of 100X100x10 mm MS painted angle which will be earthed by providing GI Flat.
1.2 of Section -1 (Item no. 1.4.1)	Link Box for Earthing	Set is defined for complete one circuit (approximately 1 kilometer) including jointing required to complete.
1.2 of Section -1 (Item no. 1.4.4)	Link Box for Cross bonding	Set is defined for complete one circuit (approximately 1 kilometer) including jointing required to complete.
1.2 of Section -1 (Item no. 1.4.6)	24 cores Optical fiber cable in each circuit for protection communication and temperature sensor purpose along with Junction Box on both sides at an interval of 1000M.	Supplied 24 core fibre optic cable shall be suitable for **communication to existing OPGW cables**, protection and temperature sensing purpose. This scope also include splashing of fibre optic cables at both end. Specification for fibre optic cable is enclosed.
6.0 of Section -2	Customer	**DTL Property**
11.0 of Section -2	In surface trench, cable will be laid in trefoil arrangement on support angle and will be fixed with angle by clamps made of non-magnetic material.	In surface trench, cable will be laid in Flat formation on support angle and will be fixed with angle by clamps made of non-magnetic material
5.2-h of Section -2	**Metallic Screen (Armour):** The metallic screen shall be of non-magnetic SS316 stainless steel tapes or 1% bronze tapes/ plain copper round wires, helically applied over the semi-conducting bedding tape/s.	**Metallic Screen (Unarmour):** The cross section of the metallic sheath that is corrugated or laminated Aluminium sheath in combination with stainless steel tapes/bronze tapes/plain copper round wire screen

	A binder tape of suitable material/annealed plain copper shall be applied in the form of an open helix, over the metallic screen. **Note: Requirement of Metallic Sheath/Screen:** The cross section of the metallic sheath that is corrugated Aluminium sheath in combination with stainless steel tapes/bronze tapes/plain copper round wire screen shall be designed to meet the following requirements: i) Sustaining the system short circuit rating of 40 KA for 1 Sec. The temperature of metallic sheath at the time of short circuit (cable operating at maximum conductor temperature) shall be indicated in the short circuit calculations of the design of metallic screen/sheath. ii) Ensuring mechanical protection of the cable. iii) Ensuring radial water tightness of the cable. Test report ensuring the above compliance shall be furnished by the contractor.	shall be designed to meet the following requirements: i) Sustaining the system short circuit rating of 40 KA for 1 Sec.The temperature of metallic sheath at the time of short circuit (cable operating at maximum conductor temperature) shall be indicated in the short circuit calculations of the design of metallic screen/sheath. ii) Ensuring mechanical protection of the cable. iii) Ensuring radial water tightness of the cable. Test report ensuring the above compliance shall be furnished by the contractor.

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