



Enq. No.: BHEL-HEEP/OT/E/6743/2/7179Y1

Date of issue : 09.09.2013

Sub: BHEL-HEEP/OPEN-TENDER (Water Cooled Induction Heating cable)/2013

Dear Sir,

The Heavy Electricals Equipment Plant (HEEP) located in Haridwar, India is one of the major manufacturing plants of Bharat Heavy Electricals Ltd. The core business of HEEP includes design and manufacture of large steam and gas turbines, turbo generators and so on. Government of India has a plan to add more than 1,20,000 MW in next five year plan (2012-2017).

Sealed tenders with the Tender No. and opening date clearly super scribed on the cover are invited from the manufacturers (registered as well as unregistered) for the supply of the following items:-

The tender documents can be down loaded from our web site www.bhel.com and www.bhelhwr.co.in and www.tenders.gov.in and <http://eprocure.gov.in> submitted with requisite tender fee. **Only those vendors who fulfill the Minimum Qualifying Requirements & Quality Requirements (as per Annexure-I) will be considered for further technical evaluation.**

The last date for taking tender documents shall be 11.10.2013 & opening of tender shall be 12.10.2013. Tenders will be received up to 1.45 P.M. on **12.10.2013** and opened on the same day at 2.00 P.M. in the Tender Room. **Please note that tender received after due date & time (1.45PM on 12.10.2013) will not be opened.** BHEL will not be responsible for any type of postal / courier delay.

Intending vendors must remit the **tender fee of Rs. 2,000/-** for indigenous vendors (or equivalent amount in foreign currency for foreign vendors) in the form of bank draft while submitting the tender documents as detailed in "Instruction to Bidders", after down loading from this web site.

Specifications & Drawing of the above items are available on our above website with links provided for all Specifications, Drawings & Annexure (At the end of this document). Other cross referred documents can either be physically collected from BHEL, Haridwar or can be obtained by email atiwari@bhelhwr.co.in or neel@bhelhwr.co.in against proof of draft of the tender fee in favour of BHEL, Haridwar. This draft is to be submitted along with offer. Amendments/Corrigendum, if any, will be hosted on our web site only. Other terms and conditions will be as per tender documents.

The details of item with required quantity is as follows:-

Item Description	Qty. (No)	Delivery Schedule
Water Cooled Flexible Induction heating cable for heating retaining ring, centering ring for shrink fitting. Copper cross section=70 SQ.MM, OD of rubber hose=40MM, length of cable = 50 meter with copper cable lugs fitted at two ends as per tech. spec. EMT-6800.	4 Nos.	31.12.2013

BHEL reserves the rights to place order for lesser or increased quantity. In case of increased in quantity, vendors should be ready to give discount..

BIDS SHALL BE OPENED OF THOSE VENDORS ONLY WHO SHALL SUBMIT TENDER FEE. [PLEASE SUBMIT DRAFTS FOR TENDER FEE DRAWN IN FAVOUR OF BHEL, HARIDWAR IN ANOTHER ENVELOPE SUPERSCRIBED WITH BOLD LETTERS "TENDER FEE". VENDORS ARE REQUIRED TO SUBMIT TENDER FEE at 2 PM on the due date in the presence of authorized representative of the bidders who may like to be present. The authorized representative should bring authority letter from their parent company (Manufacturer) for attending the bid opening.

KINDLY READ "INSTRUCTIONS TO BIDDERS." QUOTATIONS NOT IN ACCORDANCE WITH THE INSTRUCTIONS ARE LIABLE TO BE DISQUALIFIED AND IGNORED.



INSTRUCTIONS TO BIDDERS FOR OPEN TENDER

DEFINITION

Registered Vendors - Are those who are registered with BHEL, Haridwar for Size/specification EMT-6800 of tendered items.

Un-registered Vendors - Are those who are not registered with BHEL, Haridwar for Size/specification EMT-6800 of tendered items.

Un-registered vendors shall be considered, if and only if, they meet the minimum qualification requirement and quality requirements as given below.

**MINIMUM QUALIFICATION REQUIREMENT
(APPLICABLE FOR VENDORS NOT REGISTERED AT BHEL, HARIDWAR)**

Following is the mandatory requirement. Offer of Vendors not meeting these requirements will not be considered.

(ANNEXURE-I)

QUALIFYING CONDITION :				
DESCRIPTION OF BHEL REQUIREMENT	TO BE SUPPLIED/ CONFIRMED/ SUBMITTED BY	OFFERED	DEVIATIONS	REMARKS
Only those vendors (OEMs) will be qualified who have supplied at least one number Water cooled Flexible induction heating Cable of capacity (copper cross section : 50 square mm, length of cable = 30 meter with lugs fitted at two ends) or higher size in last 15 years (from the date of opening of tender) and the referred cable is presently working satisfactorily for more than one year after commissioning (on the date of opening of tender). The following information should be submitted by the vendor about the companies where referred cable(s) have been supplied. This is required from all the vendors for qualification of their offer.	Vendor			
Name of the company / customer, where referred cable is supplied.	Vendor			
Complete postal address of the customer.	Vendor			
Month & Year of commissioning	Vendor			
Parameters of cable(s) supplied (copper cross section, length of cable with lugs fitted at two ends) and application for which cable is supplied.	Vendor			
Name and designation of the contact person of the customer.	Vendor			
Phone, FAX no. and email address of the contact person of the customer.	Vendor			
Performance certificate from the customers regarding satisfactory performance of cable supplied to them (Original Certificate or Through E-mail directly from the customer). The original performance certificate may be returned after verification by BHEL, if required.	Vendor			
BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.	Vendor			

Vendors must fill up Annexure – I in confirmation to above Minimum Qualifying Requirements and quality requirements.



ESSENTIAL INSTRUCTIONS

1. Only those bids will be opened which have been submitted with requisite tender fee. Those vendors who are quoting for more than one tender are required to submit tender fee for each tender.
2. All un-registered vendors shall be approved by BHEL, if found suitable, on the basis of data furnished by them in Supplier Registration Form (SRF) Foreign Vendors or Indigenous Vendors. Vendor (s) shall not be considered for ordering if not approved by BHEL.
3. BHEL team may visit the vendor (s) works for verification of capability and capacity claimed in tender documents/offer (s).
4. The tenders shall be submitted in three parts
 - a. Part I - Techno -Commercial Bid,
 - b. part II - price Bid &
 - c. part III - Vendor Registration FormAs described below on or before the due date. Vendor Registration Form shall be submitted by unregistered vendors only.
5. The Quotation should be from the Principal / Original Manufacturer, failing which the quotation is likely to be ignored. In Case the quotation is submitted through agent, the quotation must accompany original authorization letter.
6. Any corrections / amendments shall be properly & fully authenticated with signature. No overwriting is acceptable.
7. In case of ordering, manufacturing plan should be submitted for BHEL approval.
8. Part-I containing techno-Commercial bid and part-III containing Vendor Registration Form will be opened on the date and time specified in the tender notice in the presence of those tenders who wish to attend.
9. Part-II (Price Bids) along with supplementary price bids, if necessary, will be opened at a later date of only those bidders whose techno-commercial bid has been found acceptable.
10. Suitability of delivery shall be the important criteria for evaluation of techno commercial bid and the bids falling within the delivery period and meeting the last delivery requirement. Any offers beyond this period shall be rejected.
11. Currency exchange rate will be applicable on the date of opening of Part-I (Techno-commercial Bid) for evaluation purpose.
12. Depending upon the delivery suitability, BHEL reserves the right to split order on more than one vendor.
13. Evaluation of Bid: - The bid shall be evaluated
 - a. Cost to BHEL basis. (Basic Cost + Insurance + Transportation + Duty)
 - b. The loading, if any, on account of LD penalty, payment terms or any other cost determined at later stage, which shall be communicated to the vendor.
14. Tenders when finalized shall be in the name of the bidder only and change of name during tender evaluation (without certificate from registrar of company) and after submission of the tender is liable to make the offer ineligible for participation.
15. All test certificates / Guarantee certificates to be submitted in TRIPLICATE along with dispatch documents.
16. BHEL reserves the right to open the price bid (part-II) along with the opening of techno-commercial offer at its option and in that case vendor will be informed accordingly.
17. BHEL reserves the right to go for reverse auction. Vendors are requested to give their best price. In case of failure of reverse auction the paper bid shall be processed. Bidder should clearly indicate their acceptance for reverse auctioning in Annexure-1. The bids of those vendors who do not agree for reverse auction may not be considered. The Terms & Condition for Reverse Auctioning are given below.
18. Total weight -- /Gross / Net in Kg. & also package size essentially should be indicated if not exact then approximate.
19. BHEL will evaluate the technical bids against essential criteria/requirements. BHEL may seek clarifications, if required, from the qualified bidders only. These clarifications will be communicated to the eligible vendors. **The offers of those bidders, who are unable to respond in specified time frame, are likely to be ignored.**
20. SETTLEMENT OF DISPUTES
 - Indigenous Vendors: In all cases of dispute the matter shall be referred for arbitration to any arbitrator to be appointed by the Executive Director or any officer who is the administrative head of Bharat Heavy Electricals Ltd., at Haridwar. The venue of arbitration shall invariably be Ranipur Haridwar. The award of the arbitrator shall be final and binding on both the parties. The arbitrator shall have the power to extend, from time to time, the time for making his award with the consent of the parties.
 - Foreign Vendors: In the event of any dispute or difference arising between the parties to this contract regarding execution of same or their respective rights and liabilities there under, the same shall except as otherwise expressly provided therein, be referred to the arbitration of the two arbitrators, one to be appointed by each party; or in the case of the said arbitrators not agreeing then an umpire to be appointed by the two



BHARAT HEAVY ELECTRICALS LIMITED
HEEP HARIDWAR INDIA-PIN 249403
FAX NO: 0091 1334 226462/223948
PHONE NO: 0091 1334 284047

arbitrators in writing before entering on that reference and provisions of the Indian Arbitration Act ,1940 or any statutory notification, or re-enactment therefore and rules framed there under from time to time shall apply to such arbitration . If the two arbitrators do not agree on the appointment of umpire, the nomination of the umpire shall be done by the International Chamber of Commerce, Paris(France).The decision of arbitrators, or in case of their not agreeing, that of the said umpire shall be binding both on seller and purchaser. The venue of the arbitration invariably is New Delhi.

21. JURISDICTION: All question, dispute or differences arising under, out of or in connection with the purchase order shall be subject to the exclusive jurisdiction of Haridwar courts.
22. OVER RIDING CLAUSE :All stipulations made in any correspondence other than those exchanged in regards to “instruction” in our tender documents / enquiry for submission of your offer, if at all shall be void to the extent they are repugnant to the conditions contained herein above and in the purchase order.
23. FINALITY OF MANAGEMENT DECISION :-At all places in the preceding clauses BHEL Management’s decision shall be final.

IN CASE YOU ARE NOT MAKING AN OFFER AGAINST THIS ENQUIRY, THEN PLEASE ARRANGE TO SEND A LETTER OF REGRET IF YOU HAVE COLLECTED THE TENDER DOCUMENTS FROM BHEL.



DETAILS OF COMPOSITION OF PART-I (TECHNO-COMMERCIAL BID), PART-II (PRICE BID) & PART-III (VENDOR REGISTRATION FORM)

PART-I (TECHNO-COMMERCIAL BID) shall comprise of following documents:

- Confirmation to Minimum Qualification Requirement as per Annexure-I (For unregistered vendors only)
- Complete technical offer as per specification, drawings, technical requirement along with un-priced bid giving FOB, C&F rate and inspection charges separately and delivery schedule.
- Validity of offer to be indicated.
- Annexure - II** - Compliance sheet for technical/commercial terms and conditions for two part tender.
- Deviation with reference to specification/drawing, if any, should be clearly indicated on a separate sheet.**
- Details of activity outsourced.
- Copy of enclosed Quality Plans

PART -II (Price Bid)

- Price bid with prices to be submitted as part-II of the tender.
- Prices should remain firm till the execution of the order.
- In case of foreign vendors, prices to be quoted on FOB & C&F Mumbai (India) basis separately. In case of FOB, Loading port must be mentioned. Please note that **Ex-Works** price are **not** acceptable & offer shall not be considered. In case of Indigenous vendor, prices must be quoted on FOR- Destination- CPS-HEEP-BHEL basis.
- Insurance – Marine in case of foreign vendor & inland in case of Indigenous vendor shall be taken care by BHEL.
- LRS inspection charges to be quoted separately.
- Prices are to be written in both Figures & Words. In case of any difference between the two, the figure written in words shall be considered for evaluation. No over writing in this is acceptable.**
- LD Penalty shall be applicable at the rate of ½ % (half percent) per week or part thereof subject to a maximum of 10% of the value of unexecuted portion of the order. In case of any variation in LD penalty, your prices shall be loaded to the extent LD penalty not accepted by you.
 - Payment term shall be “100% payment against dispatch documents, through irrevocable LC or Cash against Documents (for foreign vendors) with bank charges as either side and after receipt and acceptance of material (for indigenous vendors)”. **BHEL as a rule do not agree to release advance payment.**
 - Difference, if any, in cost in payment terms with respect to BHEL Payment terms (“100% payment against dispatch documents, through irrevocable LC (for foreign vendors) and after receipt and acceptance (for indigenous vendors)” shall be loaded in prices of vendor.**
- Irrevocable LC is opened for one quarter (3 months) & is established 45 days prior to delivery schedule. The charges of establishing the LC are on either side i.e. charges in India to be borne by BHEL and charges outside of India to be borne by vendor. If any vendor insists for LC for more than one quarter, vendor has to essentially bear all charges (Within & Out side India) for the period exceeding one quarter.
- BHEL does not open confirmed LC even if vendor agrees to bear the confirmation charges.**

Part-III - Vendor Registration Form (SRF)
(SRF-Foreign Suppliers or SRF-Indian Suppliers)

The SRF (as applicable) duly filled up will be assessed for manufacturing capability quality systems being followed, organizational soundness and financial worthiness. The same shall be submitted with Part-I (Techno-Commercial Bid) by un-registered vendor only with BHEL, HEEP, Haridwar.

MARKING OF ENVELOPE:

- Each envelop is to be super scribed as “TENDER NO.----- DUE ON -----
- Drafts for Tender Fee to be kept in one envelop – Envelop –A. On the Top of the envelop, please write Draft No., Issuing Bank Details & Amount.
- Techno-Commercial - Part-I to be kept in another envelop – Envelop-B & to be marked as Techno-Commercial Offer.
- Vendor Registration Form - Part –III to be kept in another envelop – Envelop – C & to be marked as Vendor Registration Form.
- Price Bid – Part-II to be kept in another envelop – Envelop-D & to be marked as Price Bid.
- Envelop-A, Envelop-B, Envelop-C & Envelop-D are to be kept in one envelop super scribed as above

Envelopes not marked as above are liable to be ignored and will not be opened.

ANNEXURE-I=

TECHNICAL/COMMERCIAL TERMS AND CONDITIONS: CF 'HK C'D5 FH'H9B89F

9be"bc"6<9@<99D#CH# +('##%/- M%

PLEASE FILL THIS ANNEXURE & ATTACH WITH YOUR TECHNO-COMMERCIAL BID.

Offer must be sent in two separate sealed envelopes containing techno-commercial offer in one envelope marked "TECHNO-COMMERCIAL BID" and prices in second envelope marked "PRICE-BID". Both the envelopes must be contained in the main envelope. Tender name and due date to be marked on all the envelopes

You are requested to kindly confirm /clarify the following:-

S.No.	Description	Vendor's Confirmation
1	Vendor to confirm that they meet each & every clause of our specifications/Drawings.	YES / NO
2	If "No" to serial number 1, vendor to specify each deviated clause & submit in a separate sheet.	
3	Vendor to list out on a separate sheet any activity which is outsourced. Please furnish details of out sourced vendor.	
4	Validity:confirm that validity of the offer shall be 120 days from the date of tender opening	YES / NO
5	Confirm that un-priced part of price bid is enclosed with technical commercial offer	YES / NO
6	Confirm delivery quoted as per enquiry	YES / NO
7	Confirm that prices are quoted on FOB/C&F basis. For Indian suppliers, prices are quoted on FOR, Hardwar basis.	YES / NO
8	Confirm that Loading Port/Province has been mentioned.	YES / NO
9	Confirm that prices shall be firm and fixed throughout delivery period.	YES / NO
10	Confirm that all test certificates to be submitted as per BHEL specification.	YES / NO
11	LD Penalty shall be applicable at the rate of ½ % (half percent) per week or part thereof subject to a maximum of 10% of the value of unexecuted portion of the order. Incase of any variation in LD penalty, your prices shall be loaded to the extend LD penalty not accepted by you.	YES / NO
12	Confirm that payment term shall be "On receipt and acceptance of material at BHEL, Hardwar	YES / NO
14	Right of acceptance – BHEL reserves the right to reject any or all quotations without assigning any reasons thereof. BHEL also reserves the right to increase or decrease the tendered quantities. Vendors should be prepared to accept order for reduced quantities without any extra charges. Vendor should also be prepared for giving discount in case of increase in quantity.	YES / NO
15	Confirm specifically that material shall be supplied as per tender documents.	YES / NO
16	Ink signed order acceptance shall be furnished within 15 days of order placement.	YES / NO
17	Confirm if there is any Indian agency commission.	YES / NO
18	Please confirm to participate in Reverse Auction on CIF Mumbai basis for foreign suppliers. For Indian suppliers, please quote your rates on FOR Hardwar basis, your rates will be loaded accordingly. If reverse auction is not done than price bid shall be considered for evaluation. Hence, quote competitive rates in price bid.	YES / NO
19	Confirm acceptance of Risk Purchase clause.	YES / NO
20	Confirm to send original ink signed copy of offer, if offer has been sent sent through email or FAX or photocopy has been submitted.	YES / NO

Above conditions, if accepted will supersede any same/similar condition elsewhere in quotation.

(Authorised signatory of vendor)

दिनांक एवं तिथि
SIGN & DATE



TECHNICAL PURCHASE SPECIFICATION

EMT-6800

पृष्ठ 1 का 2
Page 1 of 2

SUPERSEDES
INVENTORY NO.

सामग्री सूची संख्या
श्री अक्षयप्रभा

WATER COOLED FLEXIBLE INDUCTION HEATING CABLE

1.0 PURPOSE:-

These cables are used to heat various components of generator like Retaining Rings, Centering Rings etc. up to 400°C by induction heating, using Transformer secondary terminals (Transformer details given in Table-1 below). Number of such cables can be connected in series or parallel depending upon the size of job, heating temperature requirement and time to attain the temperature.

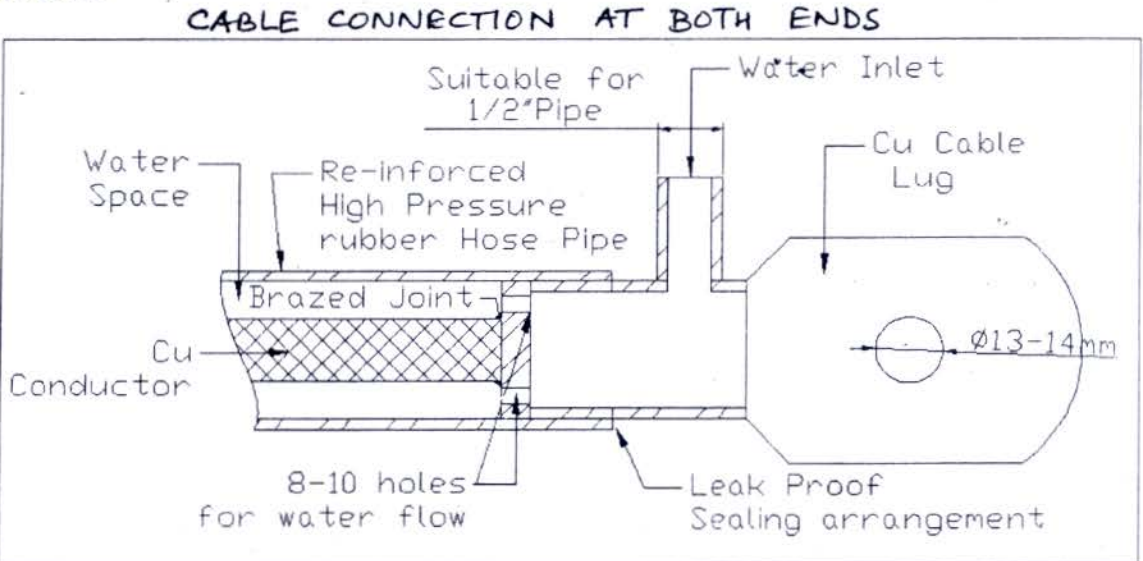
2.0 SCOPE:-

The scope of supply includes design, manufacturing & supply of "Water cooled Flexible induction Heating Cable" to shape & specifications below.

3.0 SHAPE AND TECHNICAL SPECIFICATIONS OF CABLE:

The Shape and specifications of the cable shall be as given below :

SHAPE :



TECHNICAL SPECIFICATIONS:-

- 3.1 Cable to be suitable for Transformer as per details given in Table 1.
- 3.2 O.D. of rubber hose pipe = 40 mm. (Approx.)
- 3.3 I.D of rubber hose pipe= Vendor to inform.
- 3.4 Copper cross section = 70 mm² or more.
- 3.5 Length of each cable = 50 Meter.
- 3.6 Current carrying capacity of each cable = 1500 Amperes (Max.)

Transformer rating:	300KVA
Volts (No Load)	HV: 400 LV: 200
Amperes	HV: 750 LV: 1500
Phase	HV: 1 LV: 1
Frequency	50 Hz

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स्वाधिकाार गोपनीय
इस प्रलेख में दी गई सूचना भारत हेवी इंजिनियरिंग लिमिटेड की संपत्ति है इसका प्रयोग एवं आरक्षण रूप में किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

Contd..

				नाम NAME	दिनांक एवं हस्ताक्षर SIGNATURE & DATE
			निर्माणाकर्ता WORKED BY	UDAY KUMAR	Uday Kumar 24/8/11
			जांचकर्ता CHECKED BY	AJIT KUMAR	Ajit Kumar 24/8/11
			पर्यवेक्षणकर्ता SUPERVISED BY	S.K.GUPTA	S.K.GUPTA 24/8/11
			स्वीकृति APPROVED :	AGM (EMT) [Signature]	24/8/11
			निर्माण PREPARED :		
			जारी ISSUED :		
			दिनांक DATE :		
BI-1	TAHIR HASAN	[Signature]			
सहमत विभाग AGREED DEPTT	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE			
REV.NO.	00				
Dt.					

सामग्री सूची संख्या
INVENTORY NO.

हस्ताक्षर एवं तिथि
SIGN & DATE



TECHNICAL PURCHASE SPECIFICATION

EMT-6800

पृष्ठ 2 का 2

Page 2 of 2

दिनांक
SIGN & DA

SUPERSEDES
INVENTORY NO.
सापेक्ष सूची संख्या
की अतिरिक्ति

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स्वत्वधिकार गोपनीय
इस प्रलेख में दी गई सूचना भारत हीवी इलेक्ट्रिकल्स की संपत्ति है इसका प्रलेख एवं अप्रलेख रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

हस्ताक्षर एवं दिनांक
SIGN & DATE

- 3.7 Cable consists of copper core for conducting current, covered with reinforced high pressure rubber hose pipe for carrying cooling water and should be flexible.
- 3.8 Copper conductor shall be flexible multi strand twisted single core cable (Copper cross section = 70 mm² or more).
- 3.9 Cable to be water cooled using normal municipal water supply at approx 2-3 Kg/cm² pressure & temperature of cooling water should not increase beyond 80° C during heating.
- 3.10 Water Inlet should be suitable for 1/2 Inch rubber Pipe (available at BHEL works).
- 3.11 Cable to be water tight at ends, and should have copper cable lugs for water and current connection at both ends as per above sketch. There should not be any water leakage either at cable ends or at any other place throughout the length of the cable.
- 3.12 The cables should be capable for repetitive use of induction heating & have long life.

4.0 ACCEPTANCE CRITERIA

- 4.1 **Test certificate:** The supplier shall provide certificate that the material is conforming to BHEL technical specifications no. EMT-6800.
- 4.2 **Guarantee certificate:** The supplier shall provide Guarantee certificate for 24 months after successful commissioning of the cables at BHEL works.
- 4.3 The material shall meet the technical specification as above.
- 4.4 Cables will be tested at BHEL Haridwar for final acceptance. BHEL reserves the right to reject the material on account of any non-conformity to BHEL technical specifications no. EMT-6800

5.0 PACKING

The material shall be supplied in wooden packing box to avoid any damage during transit.

6.0 GENERAL:

Vendor to give complete clausewise confirmation to this specification & indicate delivery period in their offer.

REV.NO.	00	निर्माणकर्ता	WORKED BY	UDAY KUMAR	<i>Uday Kumar</i> 19/5/11
Dt.		जांचकर्ता	CHECKED BY	AJIT KUMAR	<i>Ajit Kumar</i> 19/5/11