

Enquiry



Bharat Heavy Electricals Limited
Transmission Business Group
Materials Management

Enquiry No	Enquiry Dt	Rev No	Rev Dt	PI No	Due Dt	Delivery Requirement
174G010	06-Sep-14	0			07-Oct-14	

DOCUMENTS ENCLOSED-

- | | | |
|---|---------------------------------|---|
| 1-Terms & conditions for Indigenous Enquiry | 4-Activity Schedule & Checklist | 8-Un-price Schedule - Indigenous Vendor |
| 2-Annexure to GTC for Indigenous & Foreign Vendor | 6-Commercial Deviation Sheet | 9- Un-price Schedule- Foreign Vendor |
| | 7-Technical Deviation Sheet | 10-Technical Specification |

Project	Equipment	Phy Unit	Qty	Unit Exworks	%ED	%CST	Unit F&I	Plan Dt	Comments
TANTRANSCO ANIKADAVU SS	MAINTENANCE & TESTING INSTRUMENTS	LOT	1	✓	✓	✓	✓	25-Sep-14	INSTRUMENTS SHALL BE AS PER TECH. SPEC. NO. TB-363-316-029. DETAIL BOQ IS GIVEN BELOW.
TANTRANSCO ANIKADAVU SS									
TANTRANSCO ANIKADAVU SS									
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TANTRANSCO ANIKADAVU SS									
TANTRANSCO ANIKADAVU SS									
TANTRANSCO ANIKADAVU SS									
TANTRANSCO ANIKADAVU SS	Insulation Tester 5 KV battery operated	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	High accuracy Digital Multimeter	No.	2	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	High accuracy AC/DC Digital Clamp Meter	No.	2	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	Transformer Oil Testing Kit	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	CT Analyser Kit	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	Primary Injection Kit 2000 A	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	Optical Power Meter	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	Optical source	No.	1	✓	✓	✓	✓		
TANTRANSCO ANIKADAVU SS	Optical splicing Machine	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	MAINTENANCE & TESTING INSTRUMENTS	LOT	1	✓	✓	✓	✓	25-Sep-14	INSTRUMENTS SHALL BE AS PER TECH. SPEC. NO. TB-363-316-029
TANTRANSCO THAPPAGUNDU SS	Insulation Tester 5 KV battery operated	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	High accuracy Digital Multimeter	No.	2	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	High accuracy AC/DC Digital Clamp Meter	No.	2	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	Transformer Oil Testing Kit	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	CT Analyser Kit	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	Primary Injection Kit 2000 A	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	Optical Power Meter	No.	1	✓	✓	✓	✓		

TANTRANSCO THAPPAGUNDU SS	Optical source	No.	1	✓	✓	✓	✓		
TANTRANSCO THAPPAGUNDU SS	Optical splicing Machine	No.	1	✓	✓	✓	✓		

You are requested to submit your most competitive offer so as to reach us positively by the tender opening date & time. THE TENDERS NOT RECEIVED WITHIN SCHEDULED DATE AND TIME ARE LIKELY TO BE IGNORED. BHEL shall not be responsible for any postal delay.

IN YOUR OWN INTEREST YOU ARE ADVISED TO CAREFULLY READ "THE INSTRUCTIONS TO BIDDERS". INCOMPLETE BIDS AND/OR BIDS NOT COMPLYING WITH TENDER CONDITIONS SHALL BE TREATED AS NON RESPONSIVE AND ARE LIKELY TO BE IGNORED.

In case Tender Documents are not received within 7 days of this E-mail message, intimate BHEL accordingly. If no intimation is received, it will be considered that you have received tender enquiry and delay in submission offer due to late receipt of tender documents will not be entertained.

YOU ARE REQUESTED TO SUBMIT YOUR MOST COMPETITIVE OFFER SO AS TO REACH US POSITIVELY BY 2 PM ON THE TENDER OPENING DATE AND TENDER WILL BE OPENED AT 2:30 PM WITH EFFECT FROM 15-SEP-09.

BHEL RESERVES THE RIGHT TO OPT FOR REVERSE AUCTION FOR OBTAINING BEST PRICES.

OFFERS THROUGH E-MAIL / FAX:

WHOSOEVER DESIRES TO SEND OFFERS ON THEIR OWN RISK (COMPLETE IN ALL RESPECTS) VIA E-MAIL or FAX HAVE TO SEND THE OFFERS TO THE COMMON E-MAIL ADDRESS tenderbox@bhel.in or 0120-6748581 FAX .

THE RECEIVED EMAIL OFFERS WILL BE PRINTED BY PURCHASE COORDINATOR AND PUT THEM INTO COVERS AS PER CONVENTIONAL METHOD FOR TENDER OPENING I.E., TECHNO COMMERCIAL & PRICE OFFER SHALL BE PUT INTO TWO SEPARATE COVERS AND BOTH THE COVERS ARE KEPT IN THIRD COVER DULY SUPER SCRIBING ENQY. NO. AND DUE DATE.

OFFERS SENT TO ANY OTHER E-MAIL ID or FAX NO AND INCOMPLETE OFFERS SHALL NOT BE CONSIDERED FOR EVALUATION PURPOSE.

It is suggested that the bidders are advised to send the files with 'password protection'. procedure for giving a password to a file has been given below:

For saving Excel file with password

Steps to be followed:

1. Click on the FILE option in XP system and Start sign in Vista system then go to SAVE AS option.
2. Select the location to save and Click on the TOOLS box and go to GENERAL OPTION.
3. It will ask for the password, type the password into open or modify box or both as required.
4. Then click on the OK button it will ask for reenter of the password.
5. After reentering the password click on the save box.

For saving Word file with password

Steps to be followed:

1. Click on the FILE option in XP and Start sign in Vista then go to SAVE AS option.
2. Select the location to save and Click on the TOOLS box and go to SECURITY OPTION in XP system and GENERAL OPTION in Vista system.
3. It will ask for the password, type the password into open or modify box or both as required.
4. Then click on the OK button it will ask for reenter of the password.
5. After reentering the password click on the save box.

The vendors who has sent offers with password, the passwords are to be forwarded to another email id: supplierinfo@bhelindustry.com

MSME STATUS

"THOSE INDUSTRIES WHO HAVE FILED A MEMORANDUM WITH THE CONCERNED AUTHORITIES AND REGISTERED AS MICRO & SMALL ENTERPRISE UNDER MICRO, SMALL AND MEDIUM ENTERPRISES DEVELOPMENT ACT 2006, HAVE TO SUBMIT A COPY OF SUCH REGISTRATION CERTIFICATE / MEMORANDUM TO BHEL FOR NECESSARY COMPLIANCES OF THE ABOVE ACT".

Please acknowledge the receipt of tender enquiry and fax back this letter by ticking the appropriate item below.

Ana Hembrom.

for BHARAT HEAVY ELECTRICALS LTD

We acknowledge the receipt of tender.

- (a) The offer against subject enquiry shall be submitted by the scheduled date and time.
- (b) We regret to quote. The item in reference is out of our manufacturing range.
- (c) We regret because of our prior commitments.
- (d) Any other reason.

To
R.K.Gangal
Sr.Manager
BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS GROUP
TOWER-A,5th Floor,
Advant Navis IT Business Park,
Plot No-7,Sector-142,Expressway Noida
Noida-201305
Distt. Gautam BudhNagar,U.P
Ph: 011-41793297 / 24302297
Fax: 011-24365869

Signature and Seal of Tenderer

Enquiry No : 174G010

Enquiry Dt : 06-Sep-14

**BHARAT HEAVY ELECTRICALS LTD.
(TRANSMISSION BUSINESS GROUP)
TERMS AND CONDITIONS FOR INDIGENOUS TENDER ENQUIRY**

This Format is to be submitted in original duly signed by bidder. Deviation, if any, is to be brought out clearly in Schedule of Commercial deviation giving clause wise deviation. Any condition / clarification / deviation mentioned elsewhere may not be accepted.

Sr. No	Terms & Conditions
1.	<p>1. Sealed quotations are invited for the items mentioned in the enquiry. Quotations should be typed and free from over writing and erasures, corrections or additions must be clearly written both in words and figures and attested, otherwise offer may be rejected.</p> <p>2. Bidder must ensure that their quotation is received / dropped in the tender box on or before 02.00 PM of the due date of opening in Tender Room ,Material Management Division, BHEL-TBG Tower A, 5th Floor, Advant Navis It Business Park, Plot No-7, Sector-142, Expressway Noida, Noida - 201305, Distt- Gautam Budh Nagar (U.P.)</p> <p>3. The same shall be opened at 02.30 PM on the same day. Tenders received late may be rejected. Bidders sending tenders by courier or post, to ensure that it is delivered one day before as same day delivery may not reach above office by due time.</p> <p>4. Bids are to be submitted in Two parts: i) Techno-commercial bid (Part I) – To be submitted in duplicate. A copy of price bid (Part II) (without prices) is also to be enclosed in Part I bid. ii) Price bid (Part II) – To be submitted only in one copy in a separate sealed envelope. This should not contain any Technical or Commercial Terms. The rates should be quoted both in figures and words. In case of any difference between figures and words, the quoted rate in words will prevail over figure.</p> <p>Both Part I and Part II bids are to be sealed in separate envelope and both envelopes to be kept in another common envelope. Each envelope should be sealed and super scribed with enquiry no., item / package name, project name and due date of opening.</p> <p>5. For any Technical clarification, please contact Ramakant Pal, Dy. Manager (TBEM) / S.K. Shukla, Sr. Manager (TBEM) Tower A, 5th Floor, Advant Navis It Business Park, Plot No-7, Sector-142, Expressway Noida, Noida - 201305,Distt- Gautam Budh Nagar (U.P.) e-mail ramakant@bhel.in / skshukla@bhel.in Contact No. – 0120-6748535 / 0120-6748531</p> <p>For any commercial clarification please contact person issuing enquiry.</p>

Sr. No	Terms & Conditions
	<p>6. Price bid should not contain any information / description / terms & condition other than given in Part-I of the bid except prices, otherwise bid is liable for rejection.</p> <p>7. Price bid submitted along with the bid shall remain valid up to validity of offer. Unsolicited Supplementary / Revised price bid submitted during validity period of offer, unless asked by BHEL, shall not be considered. With-drawl of quotation by the bidder, at any stage after its opening, may entail blacklisting of vendor.</p> <p>8. Enquiry condition for where the scope against this tender includes Installation and Commissioning of the equipment / material There will be separate contract awarded for Supply portion and Site execution portion. For Supply portion General Terms and Conditions mentioned here shall be applicable for Site execution portion, Terms and conditions for Installation services shall be applicable. However, any breach in either of the contract shall be deemed as the breach of other contract also.</p>
2.	<p>PRICES:</p> <p><RELEVANT OPTION TO BE SELECTED BEFORE ISSUE OF ENQUIRY></p> <p>A.1. Unless specifically indicated, all prices shall be FIRM. No enhancement of rate for whatever cause unless and until asked by BHEL will be allowed.</p> <p>A.2. PVC (if indicated) The prices to be quoted are with PVC with following formula. <Formula></p> <p>The base indices in the formula shall be of first notification of ----- of the ----- month. The date of delivery shall be PO delivery date or date of actual despatch, whichever is earlier.</p> <p>B The prices shall be quoted by the vendors considering following.</p> <p>B.1. Unless specifically indicated, the prices shall be on Domestic basis.</p> <p>B.2. Deemed export (if indicated)</p> <p>i) Prices are to be quoted considering following benefits:</p> <ol style="list-style-type: none"> 1. _____ 2. _____ 3. _____ <p>ii) For availing above benefits, BHEL shall provide following documents.</p> <ol style="list-style-type: none"> 1. _____ 2. _____ <p>iii) In case of import benefit in deemed export projects, bidder to indicate import content (CIF value) in the price bid.</p>
	<p>B.3. Physical export (if indicated)</p> <p>i) Prices are to be quoted considering following benefits</p> <ol style="list-style-type: none"> 1. _____

Sr. No	Terms & Conditions
	<p>2. _____</p> <p>ii) For availing above benefits BHEL shall provide following documents</p> <p>1. _____</p> <p>2. _____</p> <p>C. The prices are to be quoted on FOR (Destination) basis. The break-up of price shall be as under:-</p> <p>a) Ex-works Price: Ex- works price including packing & forwarding charges.</p> <p>b) Excise duty: ED as applicable is to be quoted as percentage in both un-price and price bid.</p> <p>c) Sales Tax: ST / VAT /CST (against C-form) to be quoted as percentage in un-price and price bid. In case of interstate sale-in-transit supplier have to provide E1/E2 form.</p> <p>e) Entry tax / Octroi Charges: Any Entry tax / Octroi applicable at destination / destination state shall be paid extra on proof of such payment.</p> <p>f) Freight & Insurance: Freight and Transit Insurance for door delivery up to destination/store is to be quoted.</p> <p>g) Type Test charges: If asked in the technical specification, is to be quoted separately for each Test along with taxes and duties applicable on them.</p> <p>h) Erection / Commissioning supervision charges: If asked in the technical specification, to be quoted separately along with taxes and duties applicable on them.</p> <p>Note : The purchase order shall be placed on Ex-works basis.</p>
3.	<p>TERMS OF PAYMENT :</p> <p><RELEVANT OPTION TO BE SELECTED BEFORE ISSUE OF ENQUIRY></p> <p><u>For BOIs (non package items)</u></p> <p>100% payment along with taxes, duties, Freight & Insurance within 60 days from the date of receipt of invoice. The invoice must contain following documents in 3 sets (Original + 2 copies).</p> <ul style="list-style-type: none"> - Receipted LR - Excise invoice (where ED re-imburement is required) - Delivery Challan / Packing list (case wise) - Transit insurance certificate from under writers or Copy of Intimation of Transit Insurance duly endorsed by under writers, - Despatch Clearance given by BHEL, - Guarantee certificate, - All Test reports and inspection reports, - Performance Bank Guarantee copy. <p><u>For BOPs : Air-Conditioning & Ventilation, Fire Protection, Illumination, Oil handling</u></p>

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	<p><u>system where ETC is in scope of bidder</u></p> <p>a. 90% of Ex-works value alongwith 100% taxes, duties, Freight & Insurance within 60 days from the date of receipt of invoice. The invoice must contain following documents in 3 sets (Original + 2 copies)</p> <ul style="list-style-type: none"> - Receipted LR / RR - Excise invoice (where ED re-imburement is required) - Delivery Challan / Packing list (case wise) - Transit insurance certificate from under writers or Copy of Intimation of Transit Insurance duly endorsed by under writers, - Despatch Clearance given by BHEL, - Guarantee certificate, - All Test reports and inspection reports, - Performance Bank Guarantee copy. <p>b. 5% of Ex-works value on completion of supplies as per billing breakup.</p> <p>c. 5% of Ex-works value on successful completion of Erection, Testing, Commissioning (To be certified by BHEL site) and final documentation (Against proof of submission to Engineering)</p> <p>Note: When ETC is not in scope last 5% as per (c) above shall be paid alongwith (b).</p> <p><u>Terms of payment for Type test charges:</u> 100% payment with taxes and duties on acceptance of test reports by BHEL on certification by BHEL engineering within 60 days from the date of receipt of clear invoice.</p> <p><u>Terms of payment for Supervision charges:</u> 100% payment against completion with taxes and duties on certification by BHEL site within 60 days from the date of receipt of clear invoice.</p>
4.	<p>INTEREST LIABILITY</p> <p>In case of any delay in payment due to any reason, BHEL shall not pay any interest on delayed payment.</p>
5.	<p>GUARANTEE :</p> <p>The equipment / material shall be guaranteed for 18 months from the date of delivery or 12 months from the date of commissioning, whichever is earlier. The defective material / component shall be replaced free of cost at site.</p> <p><FOLLOWING TO BE DELETED IN ALL ENQUIRY OTHER THAN ILLUMINATION PACKAGE></p> <p>However for Illumination system after commissioning Lamps, Tubes, Ballast, Starters, Capacitors, Fuses will not be covered in Guarantee.</p>
6.	<p>PERFORMANCE BANK GUARANTEE :</p> <p><PBG CLAUSE TO BE REMOVED BEFORE ISSUE OF ENQUIRY FOR ITEMS FOR WHICH PBG IS NOT REQUIRED></p> <p>Bidder shall furnish along with first invoice Performance BG / deposit as per one of following 3 options.</p> <p><u>Option A</u></p>

Sr. No	Terms & Conditions
	<p>A single rolling Bank Guarantee of Rs 20 lakhs initially valid for one year for all the orders being executed for Transmission Business Group, BHEL.</p> <p><u>Option B</u> BG for 10% of the total Ex-works PO value, valid for 24 months from the date of first delivery. PO value at the time of first invoice for the particular order shall be considered for calculation of BG amount.</p> <p><u>Option C</u> Retention of 10% of the total Ex-works PO value by BHEL from the first bill in lieu of Performance Bank Guarantee, to be released after expiry of 24 months from the date of first delivery.</p> <p><u>Note</u> : For Shield wire, Earthing material, Cable gland, Cable Trench material, GI/PVC pipe, Hardwares, Al tube, MS Rod, Lable & phase colour disc, HG Fuse, Ferrule, Lug, Marker, Stationary, Office eqpt. and any petty / sundry purchase no Performance bank guarantee is required.</p> <p>The Bank guarantee shall be from State Bank of India / State bank of Hyderabad / State Bank of Travancore / State Bank of Mysore / Canara Bank / Bank of Baroda / Punjab National Bank / Deutsche Bank / HDFC Bank / Standard Chartered Bank / CITI Bank / ICICI Bank / IDBI Bank / HSBC / any other Nationalised Bank. The original BG should be sent by issuing Bank directly to AGM (Finance), TBG, BHEL.</p>
7.	<p>FINAL ENGINEERING DOCUMENTATION: Final documentation as called in the specification is to be submitted within 3 months from the date of despatch of material. In case of default, the Performance BG is liable to be en-cashed.</p>
8.	<p>INSPECTION : BHEL / customer / third party shall inspect equipment / material before despatch. Stage inspection during manufacturing may also be carried out. Material to be despatched only after getting Despatch Clearance from BHEL.</p> <p>Supplier shall send inspection call on prescribed format (web site) only, with an advance notice of 15 days.</p>
9.	<p>DESPATCH DOCUMENTS : Following despatch documents are to be immediately sent to purchaser on despatch.</p> <ul style="list-style-type: none"> - Copy of LR - Copy of delivery challan / packing list - Insurance certificate - Guarantee certificate
10.	<p>DELIVERY PERIOD: Bidder to specify delivery period in weeks from the date of LOI / PO. Time for conduction of type test, if required, is to be separately indicated.</p> <p><u>Note:</u> LR date or Invoice date whichever is later shall be considered as delivery date.</p>
11.	<p>DELAYED DELIVERY: In case of delay in execution of order beyond the lot wise contractual delivery, an amount of ½ % of total Ex-Works Value per week or part there-of subject to maximum of 5% of</p>

Sr. No	Terms & Conditions
	total Ex-Works value of P.O. will be withheld.
12.	VALIDITY : The offer shall be valid for 120 days from the due date of opening.
13.	ACCEPTANCE / REJECTION OF TENDER : BHEL reserves the right to reject in full or part, any or all tender without assigning any reason thereof. BHEL also reserves right to vary the quantities mentioned in the tender.
14.	EVALUATION : Comparative statement shall be prepared based on overall quantity basis unless otherwise indicated in the enquiry. Evaluation of offers shall be done on the basis of delivered cost to BHEL.
15.	DEVIATION : The bids having deviation(s) w.r.to tender are liable for rejection. However, BHEL, at its discretion, may load the prices for evaluation of offer with prior intimation to bidder.
16.	ARBITRATION : All cases of disputes emanating from and relating to this contract, the matter shall be referred to the sole arbitration of Unit Head / GM, BHEL or any other person (including an employee of BHEL, even though he had to deal with the matter relating to this contract in any manner) nominated by him to act as sole arbitrator. The arbitration shall be under 'The arbitration and contract act 1996' and the rules there under as amended from time to time. The arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award. The venue of arbitration shall be any Indian city as decided by BHEL.
17.	LEGAL SETTLEMENT : All suits/claims in respect of this contract shall be in the courts having jurisdiction at New Delhi
18.	SUBCONTRACTING : In case further subcontracting of BHEL order or part thereof is envisaged by supplier, the same can be done after written permission is obtained from BHEL. However it shall not absolve the supplier of the responsibility of fulfilling BHEL purchase order requirements.
19.	RISK PURCHASE : In case the successful bidder fails to supply or fails to comply with the terms & conditions of the purchase order, BHEL reserves the right to source such material/ component / equipment/ system from any other agency at the risk and cost of the successful bidder.
20.	ADJUSTMENT OF RECOVERY: Any amount payable by the supplier under any of the condition of this contract shall be liable to be adjusted against any amount payable to the supplier under any other works / contract awarded to him by any BHEL unit. This is without prejudice to any other action as may be deemed fit by BHEL.
21.	FORCE MAJEURE CONDITION: If by reason of war, civil commotion, act of god, Government restrictions, strike, lockout which are not in control of supplier the deliveries are delayed, supplier shall not be held responsible.

Signature of Bidder
Seal

Mentioned clauses of General Terms and Conditions are to be read as follows:

Clause 1:

2. Bid submission time: up to 02:00 PM of the due date of opening
3. Bid opening time: 02:00 PM on the same day.

Clause 2: PRICES

- A.1 Applicable
- A.2. Not applicable
- B.1 Applicable
- B.2. Not applicable
- B.3. Not applicable

Clause 3: TERMS OF PAYMENT

Terms for BOP is not applicable.

Terms for BOI is applicable.

Note: - Dispatch Clearance given by BHEL means BHEL MICC.

Clause 6: PERFORMANCE BANK GUARANTEE

Option A – Same as per GTC

Note :- IF TOTAL Ex-works EXCEEDS Rs. 2,00,00,000/- , THEN OPTION – A IS NOT APPLICABLE

Option B

BG for 10% of the total Ex-works PO value, valid for 18 months from the date of last delivery against PO. The claim period of 3 months shall also be required from the date of expiry of PBG, ie. over and above the guarantee period of 18 months. Total validity of PBG shall be for 21 months from the date of last delivery, i.e. inclusive of claim period. PO value at the time of first invoice for the particular order shall be considered for calculation of BG amount.

Option C

Retention of 10% of the total Ex-works PO value by BHEL from the first bill in lieu of Performance Bank Guarantee, to be released after expiry of 21 months from the date of last delivery.

Clause 11: DELAYED DELIVERY

In case of delay in execution of order beyond the lot wise contractual delivery. LD shall be levied as follows:

- a) LD shall be 0.5% of the total order value per week of delay or part thereof subject to a maximum of 10% of the total order value.
- b) In case of staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of delay or part thereof subject to a maximum of 10% of the total order value.

Clause 15: DEVIATION

The bids having deviation(s) w.r.t tender are liable for rejection. However, BHEL, at its discretion, may load the prices for evaluation of offer with prior intimation to bidder.

Deviations must be mentioned in deviation schedule(s) and deviation mentioned, if any, elsewhere shall not be considered.

Clause 16: ARBITRATION

The arbitration shall be under 'The Arbitration and Conciliation act 1996'. **All remaining terms which are not mentioned here shall remain unchanged.**

Note: -

1. DELIVERY –

Sep'14. Vendor has to quote their best possible delivery plan.

2. BG-

Supplier has to specifically indicate / tick mark their preference for PBG out of the three options mentioned in clause no. 6 of General Terms and Conditions (BHEL/TBG/GTC/02-07) i.e. Performance Bank Guarantee.

3. REVERSE AUCTION-

BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation.

All bidders to give their acceptance for participation in RA.

Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit "online sealed bid" in the Reverse Auction. Non-submission of "online sealed bid" by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.

Information and General Terms and Conditions governing RA as per Annexure-I.

4. OFFER ACCEPTANCE-

Offer acceptance is subject to Vendor approval by Customer after offer is technically acceptable.

The Make / Type of instruments shall be subject to approval of TANTRANSKO.

5. OFFER EVALUATION-

- **Evaluation to be done equipment wise for both the projects separately. Separate POs to be placed equipment wise and project wise.**

- For evaluation, exchange rate (TT selling rate of SBI) as on scheduled date of tender opening (part-I in case of two part bid) shall be considered.

a- Evaluation (for Indian vendors) – Evaluation on landed cost to BHEL.

b- Evaluation (for foreign vendors) – Evaluation shall be on CIF(discharge port) basis and PO shall be on FOB basis.

c- Evaluation (in case offers for Indian and foreign vendors) – Evaluation shall be on landed cost to BHEL.

6. In case if VAT is applicable, supplier has to provide VAT Invoice irrespective of availability of VAT benefit to BHEL.

7. PERMISSIBLE COMMERCIAL DEVIATION & LOADING CRITERIA:

TERMS OF PAYMENT:

If a bidder asks for payment within specified no. of days from the date of receipt of invoice with complete documents as per "Terms of Payment" at Clause. No. 3 of Terms & Conditions for Indigenous Tender Enquiry, loading to be done as follows:

Base rate of SBI (as applicable on the date of techno commercial bid opening) + 6 % shall be considered for loading for the period of relaxation sought by the bidder. Loading shall be done on total cost to BHEL.

60 days - No loading

PERMISSIBLE TECHNICAL DEVIATIONS: No permissible Technical Deviation has been envisaged.

8. INTENDED BENEFITS FOR MSME SUPPLIERS:-

MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II certificate having deemed validity (Two years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM II certificate along with CA certificate (Format enclosed as per ***Annexure II***) applicable for the year, certifying quantum of investment in plant & machinery within the permissible limit as per the act for relevant status (Micro or Small) where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.

9. PRE QUALIFICATION REQUIREMENT:-

1. The Test equipment shall be delivered to the Employer in new/ fresh condition.
 2. Supplier shall provide valid calibration certificate, test certificate & warranty certificate for the quoted test equipments (As applicable), in the event of order.
 3. Supplier should have adequate "**after sales service facility**" in India.
 4. Supplier is required to give an undertaking "to address issue of warranty / after sales services from the respective manufacturer of the equipment".
 5. Bidder should provide "Authorized Distributor Certificate" from Manufacturer/OEM of the offered test equipment.
 6. The instrument is intended for use in Extra high-voltage substation (up to 400kV) and industrial environment. The testing equipments are generally meant for carrying out testing at site and movement from one place to another is unavoidable. Therefore equipment shall be robust in design so that it gives desired performance even in adverse site conditions. Necessary transport packing arrangement shall be provided along with the equipment.
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Terms & Conditions of Reverse Auction

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit ‘online sealed bid’ in the Reverse Auction. Non-submission of ‘online sealed bid’ by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.

10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.
12. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the 'Business Rules of Reverse Auction', which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

Certificate by Chartered Accountant on letter head

This is to Certify that M/S
(hereinafter referred to as 'company') having its registered office at
..... is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part-II) dtd:.....,
Category: (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on
date..... as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost
excluding land and building and the items specified by the Ministry of Small Scale Industries vide its
notification No.S.O.1722(E) dated October 5, 2006 :
Rs.....Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and
furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED
Act, 2006:
Rs.....Lacs

The above investment of Rs.....Lacs is within permissible limit of
Rs.....Lacs forMicro / Small (~~Strike off which is not applicable~~)
Category under MSMED Act 2006.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant



Mentioned clauses of General Terms and Conditions are to be read as follows:

Clause 1:

2. Bid submission time: up to 02:00 PM of the due date of opening
3. Bid opening time: 02:00 PM on the same day.

Clause 2: PRICES

- A.1 Applicable
- A.2. Not applicable
- B.1 Applicable
- B.2. Not applicable
- B.3. Not applicable

Clause 3: TERMS OF PAYMENT

LR to be read as Bill of Lading/AWB.

Terms for BOP is not applicable.

Terms for BOI is applicable.

Note: - Dispatch Clearance given by BHEL means BHEL MICC.

Clause 6: PERFORMANCE BANK GUARANTEE

Option A – Same as per GTC

Note :- IF TOTAL Ex-works EXCEEDS Rs. 2,00,00,000/- , THEN OPTION – A IS NOT APPLICABLE

Option B

BG for 10% of the total Ex-works PO value, valid for 18 months from the date of last delivery against PO. The claim period of 3 months shall also be required from the date of expiry of PBG, ie. over and above the guarantee period of 18 months. Total validity of PBG shall be for 21 months from the date of last delivery, i.e. inclusive of claim period. PO value at the time of first invoice for the particular order shall be considered for calculation of BG amount.

Option C

Retention of 10% of the total Ex-works PO value by BHEL from the first bill in lieu of Performance Bank Guarantee, to be released after expiry of 21 months from the date of last delivery.

Clause 11: DELAYED DELIVERY

In case of delay in execution of order beyond the lot wise contractual delivery. LD shall be levied as follows:

- a) LD shall be 0.5% of the total order value per week of delay or part thereof subject to a maximum of 10% of the total order value.
- b) In case of staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of delay or part thereof subject to a maximum of 10% of the total order value.

Clause 15: DEVIATION

The bids having deviation(s) w.r.t tender are liable for rejection. However, BHEL, at its discretion, may load the prices for evaluation of offer with prior intimation to bidder.

Deviations must be mentioned in deviation schedule(s) and deviation mentioned, if any, elsewhere shall not be considered.

Clause 16: ARBITRATION

The arbitration shall be under 'The Arbitration and Conciliation act 1996'. **All remaining terms which are not mentioned here shall remain unchanged.**

Note: -

1. DELIVERY –

Sep'14. Vendor has to quote their best possible delivery plan.

2. BG-

Supplier has to specifically indicate / tick mark their preference for PBG out of the three options mentioned in clause no. 6 of General Terms and Conditions (BHEL/TBG/GTC/02-07) i.e. Performance Bank Guarantee.

3. REVERSE AUCTION-

BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation.

All bidders to give their acceptance for participation in RA.

Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit "online sealed bid" in the Reverse Auction. Non-submission of "online sealed bid" by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.

Information and General Terms and Conditions governing RA as per Annexure-I.

4. OFFER ACCEPTANCE-

Offer acceptance is subject to Vendor approval by Customer after offer is technically acceptable.

The Make / Type of instruments shall be subject to approval of TANTRANSKO.

5. OFFER EVALUATION-

- **Evaluation to be done equipment wise for both the projects separately. Separate POs to be placed equipment wise and project wise.**

- For evaluation, exchange rate (TT selling rate of SBI) as on scheduled date of tender opening (part-I in case of two part bid) shall be considered.

a- Evaluation (for Indian vendors) – Evaluation on landed cost to BHEL.

b- Evaluation (for foreign vendors) – Evaluation shall be on CIF(discharge port) basis and PO shall be on FOB basis.

c- Evaluation (in case offers for Indian and foreign vendors) – Evaluation shall be on landed cost to BHEL.

6. In case if VAT is applicable, supplier has to provide VAT Invoice irrespective of availability of VAT benefit to BHEL.

7. PERMISSIBLE COMMERCIAL DEVIATION & LOADING CRITERIA:

TERMS OF PAYMENT:

If a bidder asks for payment within specified no. of days from the date of receipt of invoice with complete documents as per "Terms of Payment" at Clause. No. 3 of Terms & Conditions for Indigenous Tender Enquiry, loading to be done as follows:

Base rate of SBI (as applicable on the date of techno commercial bid opening) + 6 % shall be considered for loading for the period of relaxation sought by the bidder. Loading shall be done on total cost to BHEL.

60 days - No loading

PERMISSIBLE TECHNICAL DEVIATIONS: No permissible Technical Deviation has been envisaged.

8. PRICE BREAKUP-

Price breakup should consist of the following breakup:-

- a. FOB port of Loading.
- b. Marine Freight from load port to discharge port i.e. any Indian discharge port preferably Mumbai.
- c. Marine Insurance from load port to discharge port i.e. any Indian discharge port preferably Mumbai.

9. MARINE FREIGHT AND INSURANCE-

Marine freight and insurance to be quoted separately.

BHEL may arrange Marine Shipment or exercise option for shipment by vendor at quoted F&I rates.

Freight & Insurance from discharge port to site – BHEL's scope. Rates will be based on BHEL's applicable rate contract for arriving at landed cost to BHEL. However vendor may also quote for the same. **(i.e. from Discharge port to site i.e. Barauni, Uttar Pradesh, India)**

Freight and Insurance to be quoted separately.

10. Following details regarding shipment shall also be mentioned to arrange logistics for the same-

- a) No. of package.
- b) Size and Weight (Net & Gross) of each package.
- c) No. of containers required with type of container & size of container.
- d) Type of cargo (Break Bulk/LCL/FCL).
- e) Custom Tariff No.

11. PRE QUALIFICATION REQUIREMENT:-

1. The Test equipment shall be delivered to the Employer in new/ fresh condition.
2. Supplier shall provide valid calibration certificate, test certificate & warranty certificate for the quoted test equipments (As applicable), in the event of order.
3. Supplier should have adequate "**after sales service facility**" in India.
4. Supplier is required to give an undertaking "to address issue of warranty / after sales services from the respective manufacturer of the equipment".
5. Bidder should provide "Authorized Distributor Certificate" from Manufacturer/OEM of the offered test equipment.
6. The instrument is intended for use in Extra high-voltage substation (up to 400kV) and industrial environment. The testing equipments are generally meant for carrying out testing at site and movement from one place to another is unavoidable. Therefore equipment shall be robust in design so that it gives desired performance even in adverse site conditions. Necessary transport packing arrangement shall be provided along with the equipment.

Terms & Conditions of Reverse Auction

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit 'online sealed bid' in the Reverse Auction. Non-submission of 'online sealed bid' by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.

10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.
12. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the 'Business Rules of Reverse Auction', which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

ACTIVITY SCHEDULE**(To be filled – up by the supplier)**

NOTE: This format is to be submitted in original only, duly filled in. Reproduction of this format on bidder's letter head or on other paper is not acceptable.

SL. NO.	ACTIVITY		ACTIVITY TIME IN WEEKS	CUMULATIVE TIME IN WEEKS FROM LOI/PO DATE	REMARKS IF ANY
1.	Receipt of P.O				
2.	Submission of P.O Acceptance	Max 1 week (7 days)			
3.	Submission of documents necessary for getting manufacturing clearance like Drawings, date sheet etc.				
4.	Review and Approval of documents and issue of manufacturing clearance	"BY BHEL/CUSTOMER"			
5.	Manufacturing Time	(A)			
6.	Inspection	"BY BHEL/CUSTOMER"			
7.	Issue of other documents like MICC ,Road Permits etc.	"BY BHEL/CUSTOMER"			
8.	Dispatch				
9.	Transit time upto Site.				

Note :

- 1) For item at Sl. No. 4) Vendor to reply to all queries within 3 days.
- 2) For Sl. No. 5) Inspection call for entire lot to be issued 2 weeks in advance. Date given in call for inspection should be within the period indicated in "A" for completion of activity at Sl. No. 6.
- 3) Supplier must ensure the completeness and correctness of the requisite documents before submission for approval. Delay in approval on account of incomplete inadequate information shall be the responsibility of supplier.
- 4) Inspection call should be given in the prescribed format only. Inspection calls not in the prescribed format shall not be entertained.
- 5) Qty to be offered for inspection should be in accordance within Delivery-schedule – lot. BHEL reserves the right not to entertain multiple inspection calls for a Delivery – lot and delay on this account shall be the responsibility of Supplier.

Signature & Seal of Supplier

Date:

ENQUIRY NO. 174G010

Dated: 06.09.14

CHECKLIST**SCHEDULE OF INFORMATION TO BE FURNISHED WITH THE OFFER**

NOTE: This format is to be submitted in original only, duly filled in. Reproduction of this format on bidder's letter head or on other paper is not acceptable.

Put a tick mark on "YES" if the information is enclosed with the offer or put a tick mark on "NO" if the information is not enclosed or write "NOT APPLICABLE" if the information is not applicable.

1.	Technical offer with detailed schedule of equipment / material and spares enclosed.	YES / NO
2.	Guaranteed Technical Particulars as per Section – 4 enclosed.	YES / NO
3.	Schedule of deviation, if any, clause wise with respect to Technical Specification enclosed.	YES / NO
4.	Standard Manufacturing Quality Plan enclosed.	YES / NO
5.	GA Drawings with dimensions and weights & foundation / fixing details enclosed.	YES / NO
6.	Drawing and Data submission schedule enclosed.	YES / NO
7.	Type Test Reports enclosed.	YES / NO
8.	Bar Chart showing the schedule indicating time required for design, manufacture, test and inspection, transport, erection, site testing and commissioning enclosed.	YES / NO
9.	Makes of all components as per technical Specification enclosed.	YES / NO

The above checklist is verified for:-

Offer Ref. :

Equipment :

Submitted by : M/s

Project Reference. :

Signed with Seal

Date

SCHEDULE OF COMMERCIAL DEVIATION

Enquiry No. 174G010 dtd. 06.09.14

The following are the deviations/ variations exception from the General Terms and Conditions:

Sl. No	CLAUSE NO. OF GENERAL TERMS AND CONDITIONS	STATEMENT OF DEVIATION

In case, this schedule is not submitted, it will be presumed that the equipment /material to be supplied under this contract is deemed to be in compliance with the General Terms and Conditions.

If there is NIL deviation, even then the format to be filled as NIL DEVIATION.

Note: Continuation Sheets of like size and format may be used as per the Bidder's Requirement and shall be annexed to this schedule.

All deviations must be mentioned in this format only. Deviation(s) to terms mentioned elsewhere will not be considered.

**This Format is to be submitted in original duly signed by bidder.
Reproduction of the same in any sort is not acceptable.**

Signature of the authorized representative of Bidder

Bidder's name: _____

Designation: _____

Company Seal: _____

Place: _____

Date: _____

SCHEDULE OF TECHNICAL DEVIATION

Enquiry No. 174G010 dtd. 06.09.14

The following are the deviations/ variations exception from the Technical Specifications:

Sl. No	CLAUSE NO. OF GENERAL TERMS AND CONDITIONS	STATEMENT OF DEVIATION

In case, this schedule is not submitted, it will be presumed that the equipment /material to be supplied under this contract is deemed to be in compliance with the Technical Specifications.

If there is NIL deviation, even then the format to be filled as NIL DEVIATION.

Note: Continuation Sheets of like size and format may be used as per the Bidder's Requirement and shall be annexed to this schedule.

All deviations must be mentioned in this format only. Deviation(s) to spec/std. mentioned elsewhere will not be considered.

**This Format is to be submitted in original duly signed by bidder.
Reproduction of the same in any sort is not acceptable.**

Signature of the authorized representative of
Bidder

Bidder's name: _____

Designation: _____

Company Seal: _____

Place: _____

Date: _____

SCHEDULE OF PRICE (Part II)
(BIDDER TO STRICTLY ENSURE SUBMITTING THE PRICE BIDS IN THIS FORMAT)

Eng. No. 174G010 dtd. 06.09.14

Sr. No.	Instrument Name	Unit	Qty.	Unit Ex-w	Unit F&I	Total Exworks	Total F&I	(**)ED @ ___ % of Col 9	CST @ ___% against C-Form / VAT @	Service Tax @ %	TOTAL (FOR Dest.) PRICE (Rs.)
1	2	3	4	5	6	7 = 4*5	8 = 4 * 6	9 = 7*ED Rate	10 = (7+9)*CST Rate	11	12 = 7+8+9+10+11
Anikadavu											
1	5 kV Insulation Tester Battery Operated	No.	1							NA	
2	High accuracy Digital Multimeter	No.	2							NA	
3	High accuracy AC/DC Digital Clamp Meter	No.	2							NA	
4	Transformer Oil Testing Kit	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		
5	CT Analyser Kit	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		
6	Primary Injection Kit 2000 A	No.	1							NA	
7	Optical Power Meter	No.	1							NA	
8	Optical Source	No.	1							NA	
9	Optical Splicing Machine	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		
Thappagundu											
1	5 kV Insulation Tester Battery Operated	No.	1							NA	
2	High accuracy Digital Multimeter	No.	2							NA	
3	High accuracy AC/DC Digital Clamp Meter	No.	2							NA	
4	Transformer Oil Testing Kit	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		
5	CT Analyser Kit	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		
6	Primary Injection Kit 2000 A	No.	1							NA	
7	Optical Power Meter	No.	1							NA	
8	Optical Source	No.	1							NA	
9	Optical Splicing Machine	No.	1							NA	
	Demonstration Charges	Lot	1		NA		NA	NA	NA		

- Note:**
1. Vendor to indicate applicable local tax/VAT without as any concessional forms for transaction within the state.local tax/VAT
 2. Please note that unpriced copy of price bid (i.e. with all price blanked) shall be furnished alongwith techo-commercial bid.
 3. Required required copies of format be made & details may be annexed.
 4. The prices must be quoted in the prescribed unit only.
 5. In case of CST rate against c form shall be quoted.(for detail please refer to terms & conditions).
 6. (**). (For detail please refer to terms & conditions).

TENDERER

SCHEDULE OF PRICE (for Foreign vendors only) (Part II)

(BIDDER TO STRICTLY ENSURE SUBMITTING THE PRICE BIDS IN THIS FORMAT)

Enq. No. 174G010 dtd. 06.09.14															
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Name of item	Tariff No.	Qty	Unit-CIF {Indian Sea port}	Total -CIF {Indian Sea port}	Unit -FOB (Load port).	Break up of CIF(Indian "CHENNAI" Sea port)				Breakup of Inland Transportation				
							Total - FOB (Load port).	Unit-Sea Freight (upto indian Discharge port)	Total-Sea Freight (upto indian Discharge port)	Unit-Insurance(upto indian Discharge port)	Total-Insurance(upto indian Discharge port)	Unit-Freight (from Indian Discharge port to site)	Unit-Insurance (from Indian Discharge port to site)	Total-Freight (from Indian Discharge port to site)	Total-Insurance (from Indian Discharge port to site)
	ANIKADAVU														
1	5 kV Insulation Tester Battery Operated		1 No.												
2	High accuracy Digital Multimeter		2 No.												
3	High accuracy AC/DC Digital Clamp Meter		2 No.												
4	Transformer Oil Testing Kit		1 No.												
	Demonstration Charges		1 Lot												
5	CT Analyser Kit		1 No.												
	Demonstration Charges		1 Lot												
6	Primary Injection Kit 2000 A		1 No.												
7	Optical Power Meter		1 No.												
8	Optical Source		1 No.												
9	Optical Splicing Machine		1 No.												
	Demonstration Charges		1 Lot												
	THAPPAGUNDU														
1	5 kV Insulation Tester Battery Operated		1 No.												
2	High accuracy Digital Multimeter		2 No.												
3	High accuracy AC/DC Digital Clamp Meter		2 No.												
4	Transformer Oil Testing Kit		1 No.												
	Demonstration Charges		1 Lot												
5	CT Analyser Kit		1 No.												
	Demonstration Charges		1 Lot												
6	Primary Injection Kit 2000 A		1 No.												
7	Optical Power Meter		1 No.												
8	Optical Source		1 No.												
9	Optical Splicing Machine		1 No.												
	Demonstration Charges		1 Lot												
	Total														



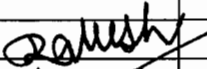
NOTE-
 Discharge Port:- any Indian discharge port preferably CHENNAI
 CIF (indian port) should be equal to "FOB(load port) + Sea Freight (upto indian Sea port) +Insurance(upto Indian Sea port)"
 Load port to be mentioned by bidder .
 No of package with Dimensions and type of cargo(/Break Bulk/LCL/FCL) and no. of container (with type of container) required - To be mentioned by bidder.
 Vendor has to mention tarrif no against each item for custom duty purpose.
 Bidder has to mention quoted (in each cell) in unpriced price bid

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BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS ENGINEERING MANAGEMENT
 NOIDA

DOCUMENT No.	TB-363-316-029	Rev	01	Prepared	Checked	Approved
CUSTOMER Doc. No.		NAME	RKP	SKS	RS	
TYPE OF DOC.	TECHNICAL SPECIFICATION	SIGN	-Sd-	-Sd-		
TITLE	Maintenance Instruments	DATE	30.07.14	30.07.14		
		GROUP	TBEM			
		W.O. No	83003 & 83006			
CUSTOMER	TAMIL NADU TRANSMISSION CORPORATION LIMITED					
PROJECT	400/110 KV Substation at Thappagundu & 400/230-110 KV Substation at Anikadavu					

<u>List of Contents</u>	<u>No. of Pages</u>
Cover Sheet	01
Section 1 Scope, Specific technical requirements & Quantities Annexure-1 (BOQ)	02
Section 2 General Equipment Specification	07
Section 3 Project Details	08

01	23.08.14				REVISION DETAILS	
Rev.	Date	Altered	Checked	Approved	CUSTOMER	TBMM
Distribution					O/C	
				-		

SECTION - I**Scope, Quantities and Specific Technical Requirements****1.1 Scope**

This specification is intended to specify the requirements for Supply of operation & maintenance test equipment & tools required at the sites as mentioned in subsequent clause. The scope of work shall encompass at least the following:

- i) Detailed design of all the equipment
- ii) Inspection and testing before supply
- iii) Packing, Loading & Transportation to site
- iv) Providing engineering data, drawings, Brochures and O & M manuals for BHEL/Powergrid review, approval and records.

1.2 The instruments are required for the following Projects.

Project title:	400/110kV Substation at Thappagundu and 400/230-110 KV Substation at Anikadavu
Owner/ Employer:	M/s Tamil Nadu Transmission Corporation Limited
Contractor:	Bharat Heavy Electricals Limited (BHEL)

1.3 Bill of quantities

S. No.	Item Description	Unit	Quantity	
			Anikadavu	Thappagundu
1	Insulation Tester 5 KV battery operated	No	1	1
2	High accuracy Digital Multimeter	No	2	2
3	High accuracy AC/DC Digital Clamp Meter	No	2	2
4	Transformer Oil Testing Kit #	No	1	1
5	CT Analyser Kit #	No	1	1
6	Primary Injection Kit 2000 A	No	1	1
7	Optical Power Meter	No	1	1
8	Optical source	No	1	1
9	Optical splicing Machine #	No	1	1

Note:

1. #The supplier shall have to demonstrate the function of the equipments s.no. 4,5 & 9 at both the sites. Necessary standard tests shall be done at sites during the commissioning of the equipment. Separate **Charges to be quoted** for this service.
2. All the above listed equipments shall be supplied with standard accessories & any other accessory required to meet the complete function of the supplied instrument.
3. The Make / Type of instruments shall be subject to approval of TANTRANSCO.
4. Following documents should be submitted along with the offer:
 - i) Catalogue and Data sheet of offered instrument.
 - ii) List of Past supplies in India & abroad.
 - iii) Tests Certificates
 - iv) Deviations if any in Technical Deviation schedule.

1.4 Specific Technical Requirements

1. The Test equipment shall be delivered to the Employer in new/ fresh condition.
2. Supplier shall provide valid calibration certificate, test certificate & warranty certificate for the quoted test equipments (As applicable), in the event of order.
3. Supplier should have adequate “**after sales service facility**” in India.
4. Supplier is required to give an undertaking “to address issue of warranty / after sales services from the respective manufacturer of the equipment”.
5. Bidder should provide “Authorized Distributor Certificate” from Manufacturer/OEM of the offered test equipment.
6. The instrument is intended for use in Extra high-voltage substation (up to 400kV) and industrial environment. The testing equipments are generally meant for carrying out testing at site and movement from one place to another is unavoidable. Therefore equipment shall be robust in design so that it gives desired performance even in adverse site conditions. Necessary transport packing arrangement shall be provided along with the equipment.

1.5 INSPECTION & TESTING

All the equipments shall be inspected prior to dispatch in line with relevant IS, approved GTP/ drawing/Catalogue and technical specification, BHEL/ TANTRANSCO approved QAP.

SECTION – 2**EQUIPMENT SPECIFICATION****2.1 Insulation Tester 5 KV Battery Operated:**

Sr.NO	Description	Specifications
1.	Type	5 KV Digital Battery Operated.
2.	Insulation test voltage	5KV in steps of 0.5,1,2.5,5 KV DC
3.	Accuracy(test voltage)	±3% of nominal voltages or better
4.	Range of Measurement	0 to 200 G Ohm minimum
5.	Accuracy(resistance) :	±5% of reading±3 digits or better
6.	Operation	Motor Driven by mains/batteries
7.	Display & scale length	Digital and Analog in baragraph, with auto switch off feature
8.	Power Supply	230±10% ,50 Hz
9.	Battery Charger	Automatic. Inbuilt for AC voltage 110 to 240 V
10.	Capacitive Discharge	Automatic after insulation test is over,<
11.	Guard termination	To be provided
12.	Accessories,	Test leads, power supply leads, charger leads, Carrying case,
13.		Manual , etc required for testing
14.	Calibration Certificate	Calibration certificate from/traceable to, NABL accredited lab or, internationally reputed lab, shall be submitted. Date of calibration shall not be older than one month from the date of supply of Kit.
15.	Environmental and statutory requirement	Shall conform EMI/EMC and environmental protection requirement as per relevant International standard. Copy indicating conformation shall be enclosed. <ul style="list-style-type: none"> • Temp- -5 to 50 deg C. • Humidity- upto 95% non condensing
16.	Functional requirement.	The instrument shall work in chargedswitchyard environment conditions.
17.	Additional Safety requirement,	The kit and accessories .shall be robust and rugged enough, so that it can be transported safely at different locations. The transportation case and packing of the kit shall be such that the transportation from one station to other will not affect the performance and accuracy of measurement of kit.

Safety Should Conform to IEC 1010-1 (1995)

Environmental Protection- Instrument should be rated to IP65 EMC Meets IEC61326 including amendment No.1.

Instrument should have compliance to following Safety standards IEC1010-1(1995), EN61010 (1995) to installation category III, 300V phase to earth, 500 V phase to phase.

A suitable calibrator should be provided with the Megger.

General Requirements:

Necessary transport packing arrangement shall be supplied along with the equipment. The instrument shall be supplied with two meter long mains lead and 20 meters long test leads with carrying case. As per requirement for ISO-9001, calibration certificate for each testing instrument covering entire range shall be supplied with the test kit at the time of supply.

2.2 High accuracy Digital Multi-meter

- i) Heavy Duty, shock proof, dust proof.
- ii) Measurement Range

	Description	Range
a)	DC Voltage	0 — 1000 Volts
b)	AC Voltage	0 — 750 Volts
c)	DC Current	0 — 10 Amp
d)	AC Current	0 — 10 Amp
e)	Resistance.	0 — 30 Mohms min.
f)	Continuity Check	0 — 250 Ohms min
g)	Diode Test Unit	

- iii) Display 3 and 1/2 digit, LCD, Bar graph.
- iv) Polarity Automatic, No indication for positive polarity, Minus (-) sign for negative polarity. With Capacitance, frequency and Temp.measurement features
- v) Over range indication — Half digit display with other digits blank.
- vi) Low battery indication
- vii) Power Supply — Single Standard 9 V Battery.
- viii) Transient Protection: 2 KV (DCV / ACV and Ohm Ranges).
- ix) Environment: Operating 0 — 55 degree Centigrade, 80% RH at 35 degree C. Storage — 20 to 60 deg. C 70% RH at 40 deg. C.
- x) Accessories: Test leads set, temp. probe, High Voltage probe, Carrying case, spare fuses, Manual etc.
- xi) The instrument shall work in charged switchyard environment conditions.
- xii) Instrument shall confirm to International/Indian safety and EMC standards

2.3 High accuracy AC/DC Digital Clamp Meter

General Requirements:

1000 A AC, 1000 A DC with a feature of measuring different order harmonics; Accuracy of the instrument shall be 1.5% of the range. Resolution 100 mA upto 200 A and 1A for higher.

2.4 Transformer Oil Testing Kit

- i) The equipment shall be suitable for determination of electrical strength (break down voltage) of insulating oil confirming to IS-335 up to 100 kV when measured in accordance with IS:6792. The equipment shall be used in laboratory.
- ii) The test cell shall be as per IS:6792 and IEC-156-1995 suitable for BDV up to 100kV without external flash over.
- iii) HV chamber interlocking and zero start interlocking shall be provided.

- iv) The unit shall have motorized drive to increase voltage linearly as per the rate specified in IS: 6792. Provision shall also be available for manual increase of voltage.
- v) The unit shall be complete with motorised test cell stirrer, calibrator and necessary gauges for adjusting the gap.
- vi) It shall be suitable for 230V, single phase, AC, 50Hz supply with variations of +10% and +/- 5% in voltage and frequency respectively.
- vii) Kit shall be supplied along with all accessories operating manual, spare fuses indication lamps, power supply chord etc all that is required for carrying out measurements It should offer repeatability of test results.
- viii) It should have overload and short-circuit protection

2.5 CT Analyser Kit

Sr. No.	Requirement
1.	Equipment should be able to perform following test manually and automatically both.
1.1	<p>Ratio Accuracy :ratio 1 ... 2000 0.02 % :ratio 2000 ... 5000 0.03 % :ratio 5000 ... 10000 0.05 %</p>
1.2	<p>Saturation Test The saturation test can be performed at frequency of 50 Hz up to 2,000 volts as required by IEC regulations it should calculates the rated knee point.</p>
1.3	<p>Phase measurement 3 Digits Range -0 to 360 degree Resolution 1 min Accuracy : +/- 1 min (typical) +/- 6 min (max)</p>
1.4	<p>CT winding resistance measurement (primary and secondary) Accuracy (at 20° C) +/-1%, 0 - 30 Q</p>
1.5	<p>CT excitation curve The CT Analyzer measures the excitation curve and determines the knee point and other important CT data. Depending on the value of the knee point voltage the CT Analyser identifies the test object as either a Measurement CT or a protection CT</p>
1.6	Polarity check

1.7	Secondary burden measurement The Burden Test Card allows the measurement of a current transformer's secondary burden by injecting AC current into the load (up to 5 A).
1.8	Knee-point voltage Upto 5 kV can be measured
2.0	The equipment must have following features:
2.1	Automatic demagnetization of the CT after the test System can automatically demagnetize the CT under test
2.2	Power supply: Input voltage 220V +/- 10% ; 50 Hz; 15A (Max)
2.3	Display: full color, high resolution, LCD touch screen
2.4	Environment conditions: Operating temperature: -10 °C ... + 50 °C / 14 °F ... 122 °F
2.5	Automatic assessment according to IEEE C57.13, IEC 60044-1 or IEC 60044-6.
2.6	Remote control Interface:- Full access to all functions of the CT Analyser via a laptop with software, software shall be provided on free of cost basis. Data can be export into Excel TM and Word TM, Customizable testing and reports
2.7	Data handling and reporting:- Test reports can be saved/store on the Compact Flash Card and transferred to a PC, Data and protocols can be shown on a PC via the Excel TM file loader program, Customizable report templates available for Different standards, classes and applications, Single, multi-core and multi-tap CTs, Three-phase testing, Core testing.
2.8	Weight Volume of products should be less than 0.025m ³ and weight less than 20kg otherwise suitable trolley of plastic body with stainless steel wheels shall be supplied by supplier on free of cost basis.
2.9	Safety : As per standard EN60950 and EN61010

2.6 Primary Injection Kit 2000 A

- i) Ranges
 - a) 0 – 500
 - b) 0 – 2000
- ii) Open circuit Voltage- 0 to 6 Volts (minimum) at 2000 Amp
- iii) Current measurement by Ammeter of accuracy 1%
- iv) Input Power Supply 230 V±10% ac 50 ± 5%Hz
- v) Provided with metallic enclosure.
- vi) Mobility — Kit should be sturdy and mobile on metal surface in switchyard.
- vii) Kit shall be supplied along with all accessories and cable set (15 mtr length), clamps ,connectors, spare fuses ,indication lamps, power supply cable, etc. all that is required for carrying out measurement for one unit.

- viii) Kit shall have safety features like fuses/MCBs, ON indications etc
- ix) Unit shall be rated to 20kVA and through a loading unit be able to output range 0 to 2000 Amps in series connection and 0-4000A in parallel connection. For continuous ratings, it should be rated to 10kVA, and output 0 to 1000A in series and 0-2000 A in parallel connection mode. Input power supply of the test unit should be single phase 50 Hz AC.

TEST INSTRUMENTS:

The following shall apply for the Test Instruments.

All accessories shall be procured and supplied from the respective test equipment manufacturer, including necessary, interfaces, connectors, cables, patch cords, jumpers, batteries, adapters, spares, lamps, fuses, carrying cases etc., which shall be supplied along with each instrument as a single package from each test instrument manufacturer.

These test instruments shall be suitable for the telecommunication system offered for this project and shall include factory testing. The quotation shall contain make and model & detailed specifications for each instrument.

The test instruments shall operate on 230V, 50 cycles per second AC power supply and/or built-in rechargeable batteries.

The built-in battery operated hand-held test instruments should be capable of working in the field for 2 Hour minimum.

Bidder shall provide requisite charger (charging at 230 VAC) along with respective test instruments and one spare set of batteries along-with respective hand-held instruments. Calibration certificates shall be provided for each test instrument conforming to its traceability. All test instruments shall meet rigorous environmental tests including shock & vibration.

2.7 Optical source:

Basic requirement of optical laser source:

The optical source will be applied for loss/attenuation measurements during installation, operation and maintenance of fiber optic networks. It will be operating in conjunction with an appropriate power meter.

The source has to simulate the system parameters, so laser sources are preferred operating at 1310 and 1550 nm, coupling the output power into a SM-fiber 9/125 μm .

The instrument has to withstand all practical environmental conditions like temperature, shock, bumps etc. The instruments shall use standard AA batteries –dry cells and it should be easy to replace the batteries in the field.

The optical ports shall have an universal optical adapter system which allows to change between different connector types. For the optical ports a robust protection cap against dust and shock should be included.

The output power of the lasers shall be adjustable between -7 and 0dBm.

Instrument specification

S. No.	Parameters	Particulars
1.	Nominal wavelength	1310 ± 20 nm and 1550 ± 20 nm
2.	Spectral width (RMS)	5 nm
3.	Laser classification	laser class 1 according to IEC 825
4.	Number of Ports	Single Port
5.	Fibre Type	9/125 μ m
6.	Optical Connector	FC-PC
7.	Power Supply	Rechargeable Battery and 230V AC Mains through adapter.
8.	Operating temperature	-10...+55 C
9.	Storage temperature	-40...+70 C
10.	Rel. humidity	up to 90 %

2.8 Optical power meter

The power meter shall be an easy operable, lightweight, rugged and water resistant handheld instrument withstanding all practical environmental conditions like temperature, shock, bumps etc. The instruments shall use standard AA batteries –dry cells.

The instrument must cover the whole wavelength range between 800 and 1700 nm. The operation wavelength could be set to every value between 800 and 1700 nm in 1 nm increments. Automatic wavelength detection must be there.

The instrument must have no warm up time and it must use auto zeroing with no need for manual zeroing.

The optical port must have an universal optical adapter system which would allow to change between different connector types. For the optical ports a robust protection cap should be provided.

Instrument specification

S. No.	Parameters	Particulars
1.	Wavelength range	800...1700 nm
2.	Switchable standard	800...1700 nm in 1 nm steps
3.	Display range	-80...+15 dBm
4.	Display resolution	0.01 dB/0.001 μ W
5.	Max. power level	+ 15 dBm
6.	Measurement uncertainty	± 0,13 dB, (± 3 %)
7.	Type of fibre : SM, MM 850 nm or 1300 nm	9/125 μ m, 50/125 μ m respectively 100/140 μ m
8.	Display units	dB, dBm, mW, μ W
9.	Optical interface / Connector easy to clean, universal push pull	one adapter should fit all 2.5 mm connectors (e.g. SC-, DIN-, FC-, E2000,

400/110 KV Substation at Thappagundu & 400/230-110 KV Substation at Anikadavu
 Technical specification for Testing Instruments No. TB-363-316-029

10.	Power Supply	Rechargeable Battery and 230V AC Mains through adapter.
11.	Operating temperature	-10...+55 C
12.	Storage temperature	-40...+70 C
13.	Electromagnetic Compatibility	CE-conformance acc. to EN 50081-1 / EN 50082-1

2.9 Optical splicing Machine:

	PARAMETER	VALUE
1.	Applicable Fibers	Single mode (ITU-T G 652), Multimode (ITU-T G 651), DS (ITU-T G 653), NZDS (ITU-T G 655),
2.	Cladding Diameter	80µm to 150µm
3.	Coating Diameter	100µm to 1000µm
4.	Fibre Cleave length	8 to 16 mm with 250µm coating dia, 16mm with 900µm coating dia
5.	Typical average splice loss	0.02dB with SM, 0.01dB with MM, 0.04dB with DS, 0.04dB with NZDS
6.	Arc Calibration method	Automatic real time and by using results of previous splice when AUTO mode, also Manual arc calibration mode
7.	Splicing Modes	100 preset and User programmable modes
8.	Storage of Splice result	Last 2000 results to be stored in the internal memory
9.	Fiber Display	X or Y or both X and Y simultaneously, Front or rear monitor display options with automated image orientation
10.	Magnification	300X for single X or Y view or 187X for X and Y view
11.	Mechanical Proof Test	1.96 to 2.25N
12.	Tube Heater	Built in tube heater
13.	Protection Sleeve Length	60mm, 40mm, micro
14.	Power Supply	Rechargeable Battery and 230V AC Mains through adapter.

SECTION – 3

GENERAL TECHNICAL REQUIREMENTS

3.0 Foreword

The provision under this section is intended to supplement general requirements for the materials, equipment and services covered under other sections.

3.1 PROJECT INFORMATION AND SYSTEM PARAMETERS

- a) Customer : M/s Tamil Nadu Transmission Corporation Limited
b) Project Title : 400/110 KV Substation at Thappagundu & 400/230/110 KV Substation at Anikadavu
c) Transport facilities : Road/Rail
d) Site location : THAPPAGUNDU IN THENI DISTRICT, MADURAI REGION & ANIKADAVU IN TIRUPPUR DISTRICT, COIMBATORE REGION

The following system parameters shall prevail:

Nominal system voltage	400 kV	230kV	110 kV
Highest system voltage	420 kV	245kV	132 kV
Frequency	50 Hz	50 Hz	50 Hz
Minimum creepage	25mm/kV	25mm/kV	25mm/kV
System Earthing	Effectively Earthed	Effectively Earthed	Effectively Earthed

SITE CONDITIONS

3.1.1 Ambient Temperature

- a) Ambient air temp. (max.) : 50 deg C
B) Max Temp. for design : 50 deg C
b) Ambient air temp. (min.) : 20 deg C
c) Max, Daily average ambient air temp. : 45 deg C
d) Max. yearly average ambient air temp. : 32 deg C

3.1.2 Max. humidity : 100% Max.

3.1.3 Average thunder storm days per annum : 50

3.1.4 Average rainy days per annum : 90

3.1.5 Average Annual rainfall : 1000 mm

- 3.1.6 No. of months during which tropical monsoon condition prevail: 5
3.1.7 Max, wind Pressure : 150kg/sqmm
3.1.8 Max wind speed : 39m/s
3.1.8 Altitude above MSL : 1000 m

However for design purpose, ambient temperature should be considered as 50° C and relative humidity as 100%.

AUXILIARY POWER SUPPLY

3 phase AC Supply	415V, 3 phase 4 wire 50 Hz, neutral grounded AC supply -15% to +10%
1 phase AC supply	240V, single phase, 50 Hz neutral grounded AC supply
DC supply	220, 2 wire DC supply + 10% to -15% 48V, 2 wire DC supply

3.2 GENERAL REQUIREMENT

3.2.0 ALL THE EQUIPMENTS /MATERIALS TO BE SUPPLIED SHOULD BE IN ACCORDANCE WITH RELEVANT LATEST / AMMENDED ISS /IEC, WHETHER IT HAS BEEN SPECIFICALLY MENTIONED IN THE SPECIFICATION OR NOT”.

3.2.1 The supplier shall also furnish drawings for the following:

All EQUIPMENTS and type of clamps, fitting hardware, insulators, bus bar. These designs/ drawing shall be got approved by the BHEL/TANTRANSCO before commencing the manufacture / construction / erection and are to be as per latest IS.

3.2.1 GENERAL:

- 3.2.1.1 The bidders shall be fully responsible for providing all equipment, materials system and services specified or otherwise which are required to complete the construction and successful commissioning of the substation in all respects.
- 3.2.1.2 Any other items not specifically mentioned in the specification but which are required for erection of materials/equipments under the scope of work, testing and commissioning are deemed to be included in the scope of the specification unless specifically excluded.
- 3.2.1.3 All items shall be supplied as per schedule and as specified in the relevant Indian standard of latest revision. The Technical specification of the main materials/equipments is furnished. The Technical specification contained herein for the materials are for the guidance of the tenderer.

- 3.2.1.4 The Tenderers are requested to procure the equipments/materials/component only from reputed /qualified manufacturer as per Technical requirement stipulated in Section - I of Technical specifications. Approval of make of item shall be taken up by vendor from TANTRANSCO himself.

3.3 SPECIFIC REQUIREMENT

- 3.3.1** The Supplier shall furnish make/manufacturer, catalogues, engineering data, and technical information, design documents, drawings etc., fully in conformity with the technical specification and get approval from competent authority before commencement of any work.
- 3.3.2** All steel materials, other than materials for earthing should be of galvanized if not specified.

3.4 SPECIFIC TECHNICAL REQUIREMENTS: / Drawing submission

The successful bidder shall submit all drawings and documents as per clause no. 3.15 along with the list of drawings within 7 days after placement of order to BHEL.

3.5 STANDARD:

The goods supplied under this contract shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, to the standard specified by the Institution of Central / State Government or internationally recognized Institutions shall be applicable and such standards shall be the latest issued by the concerned institution.

3.6 TEST CERTIFICATE:

Copies of all test certificates relating to material to be procured by the Supplier for the works shall be forwarded to BHEL.

3.7 Inspection clause :

- 3.7.1** The BHEL/TANTRANSCO or his representative shall have the right to inspect and/or test the goods /works to confirm their conformity to the supplier. BHEL/TANTRANSCO shall notify the supplier in writing of the identity of any representatives authorized for these purposes.

The inspections and tests may be conducted on the premises of the supplier or his Sub vendor at the point of delivery and /or at the goods' final destination. Where tests are conducted in the premises of Supplier, all reasonable facility and assistance including access to drawings and production data shall be furnished at no charge to the BHEL.

Should any inspected or tested goods fail to conform to specifications, the BHEL/TANTRANSCO may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specification requirements free of cost to the BHEL/TANTRANSCO within one week of intimation.

The BHEL/TANTRANSCO's right to inspect, test and where necessary reject the goods after the goods; arrival at the site, shall in no way be limited or waived by reason of the goods having been previously inspected. Tested and passed by the BHEL/TANTRANSCO or his representative prior to the goods dispatch.

3.7.2 Not less than 15 (Fifteen) days advance intimation shall be given about the quantity of materials that will be ready for inspection by the officers of TANTRANSCO/ BHEL/Third agency authorized by the Corporation. The materials should not be dispatched without instruction from the Corporation.

3.8 GUARANTEE:

3.8.1 The supplier shall guarantee that the goods under the Contract are new, unused of the most recent or current models and incorporated all recent improvements in design and materials unless provided otherwise in the Contract. The supplier shall further guarantee that the goods supplied under this Contract shall have no defects arising from design, materials or workmanship, installation and erection, if that may develop under normal use of the supplied goods. The supplier shall also guarantee the performance of the works executed by him including the performance of all the materials/goods supplied by him.

3.8.2 BHEL shall promptly notify supplier in writing of any claims arising under guarantee in respect of goods. Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective works or parts thereof, free of cost at site. All the expenses towards transportation of defective parts to supplier's works and of repaired/replaced parts to site shall be borne by the Supplier.

3.8.3 If the Supplier, having been notified, fails to remedy the defects within 14 days, the BHEL will proceed to take such remedial action as may be necessary, at the supplier's risk and expenses. All expenses in this regard will be recovered from Supplier.

3.9 PRE COMMISSIONING TESTING :(if applicable)

On completion of erection of equipments and before charging each item of equipments shall be thoroughly cleaned and inspected jointly by the TANTRANSCO and the BHEL for correctness and completeness of installation and acceptability for charging leading to initial pre commissioning test. The pre commissioning testing to be carried all equipments in the presence of Board Engineers. Necessary tools, testing kits are to be arranged by the Supplier.

3.10 PACKING:

3.10.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit to their final destination as indicated in the Contract and exposure to extreme temperatures, salt and precipitation etc., during transport and open storage. Packing case size and weights shall be taken into consideration wherever appropriate, the remoteness of the 'goods' final destination and absence of heavy mechanized handling facilities, at all points in transit.

3.10.2 The packing, marking and documentation within and outside the package shall comply strictly with such special requirements as shall be expressly provided for in the Contract or in any subsequent instructions issued by BHEL.

3.11 DISCREPANCIES BETWEEN DRAWING AND SPECIFICATION:

Should there be any discrepancy between the specifications and/or schedule of prices and/or drawings or any inconsistency, error or omission in either of them, reference must be made to the BHEL/TANTRANSCO for an explanation and the Supplier will be held responsible for any errors that may occur in the work through neglect of this precaution. The explanation of the BHEL/TANTRANSCO shall be final and binding on the Supplier.

3.12 APPROVAL PROCEDURE

The scheduled dates for the submission of drawings as well as for, any data/information to be furnished by the Employer would be as per the following schedule. The supplier shall also submit required no. of copies as mentioned in this specification of all drawings/design documents/test reports for approval by the Employer. The following schedule shall be followed generally for approval.

i.	First Submission	7 days after LOI/PO
ii.	Approval/comments/by employer on Initial submission	Reasonable time
iii.	Resubmission	Within 7 days (whenever from date of comments required) Including both ways postal time.
iv.	Approval or comments	Within 2 weeks of receipt of resubmission.
v.	Furnishing of distribution copies	2 weeks from the date of last approval.

Note: The supplier may please note that all resubmissions must incorporate, all comments given in the submission by the Employer failing which the submission of documents is

likely to be returned. Every revision shall be a revision number, date and subject, in a revision block provided in the drawing, clearly marking the changes incorporated.

The title block of drawings shall contain the following information incorporated in all contract drawings. Please refer enclosed sheet for details of Title block.

3.13 TITLE BLOCK

Following Title Blocks to be used in drawings at the time of drawing approvals

For Thappagundu

Customer	M/s Tamil Nadu Transmission Corporation Limited
Project:	400/110 KV Substation at Thappagundu
Contractor	BHEL

For Anikadavu

Customer	M/s Tamil Nadu Transmission Corporation Limited
Project:	400/230-110 KV Substation at Anikadavu
Contractor	BHEL

3.14 DOCUMENTS TO BE SUBMITTED ALONGWITH OFFER

- 1) Drawings
- 2) Guaranteed Technical Particulars
- 3) Type Test Reports
- 4) List of Part Supplies with rating

Drawings & Documents submitted at the time of offer shall be subject to review at contract stage.

3.15 DOCUMENTATION SCHEDULE

Following Documentation schedule to be followed per project.

S. No.	DESCRIPTION	TENDER STAGE	CONTRACT STAGE FOR APPROVAL	FINAL DOCUMENTATION	
				Prints	CDs
1	Drawings and Data Sheets	1	7	10	5
2	Drawings "As Built "	-	-	10	
3	Type Test Reports	1	7	10	

4	Erection Manuals	-	7	10	
5	Operation and Maintenance Manuals	-	7	10	
6	Manufacturing Quality Plan	-	7	10	
7	Field Quality Plan	-	7	10	
8	Inspection Test Reports	-	7	10	

Note: Drawings will also be submitted in CD/DVD in Latest AUTOCAD-2004 or Later version or any other CAD package along with conversion files for all major items.

Final Documentation shall be submitted in bound volumes with details of Customer & Project etc. written on top.

APPENDIX-A

SCHEDULE OF TECHNICAL DEVIATION

The following are the deviations/variations/exceptions from the specification:

SECTION	CLAUSE NO. / PAGE NO.	STATEMENT OF DEVIATION / VARIATIONS / EXCEPTIONS

In case, this schedule is not submitted, it will be presumed that the equipment /material to be supplied under this contract is deemed to be in compliance with the specification.

If there is NIL deviation, even then the format to be filled as **NIL DEVIATION**

Note: Continuation sheets of like size and format may be used as per the Bidder's Requirement and shall be annexed to this schedule.

Place

Signature of the authorized representative of

Date

Bidder's name

Designation

Company seal