



JSC140/M2053

BHARAT HEAVY ELECTRICALS LTD.
(A GOVT. OF INDIA UNDERTAKING)
P.O BHEL Jhansi - 284129, INDIA
Tel.:0510-277001/2412260 Fax: 2412120
Email : mmx@bheljhs.co.in

PURCHASE ENQUIRY

ENQ NO/DT: E3559001 21/10/15
REV NO/DT: 0 21/10/15

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PLEASE SEND YOUR BEST QUOTATION AS PER TERMS & CONDITIONS
PREPRINTED OVERLEAF AND/OR ATTACHED AND REMARK PRINTED
UNDERNEATH.

Enqr Due on: 27-11-15 FRIDAY

Close at: 13:15 Open at: 14:00

Matcat: 351001 POWER TRANSFORMER TA

Validity: 90 days from Technical bid opening date

IEM: SHRI DRS CHAUDHARY, IAS (RETD)

TOP: 60 Days after receipt & acceptance of Material

RA: BHEL reserves the right to conduct RA

Eval: Item wise

Bid Type: TWO BID

Delivery: FOR Jhansi

Tot Item: 1

E-Proc: No

ITEM NO : 1
MAIL CODE : TR171321A629
DESTINATION: JS

PSL QTY/UM: 150.00 ST
PO QTY /UM: 3750000.00 KG

DESCRIPTION	DELIVERY	QUANTITY (PSL UM)
POWER TRFR.TANK ASSY.	APR-16	12.00
POWER TRFR TANK ACCESSORIES	MAY-16	12.00
AS PER BHEL.DRAWINGS.	JUN-16	12.00
	JUL-16	12.00
	AUG-16	12.00
	SEP-16	12.00
	OCT-16	13.00
	NOV-16	13.00
	DEC-16	13.00
	JAN-17	13.00
	FEB-17	13.00
	MAR-17	13.00

SPECIAL REMARKS:

1. QUALIFICATION CRITERIA WILL BE AS PER ANNEXURE A,B&C TO SCHEDULE-I OF TENDER DOCUMENTS.
2. PLEASE SUBMIT YOUR OFFER IN TWO BID IN LINE WITH INSTRUCTIONS FOR SUBMISSION OF TENDER MENTIONED IN TENDER DOCUMENTS SCHEDULE-II PAGE 3-4 OF 36.
3. PLEASE ENSURE TO SEAL & SIGNATURE ON EACH PAGE OF TENDER DOCUMENTS.
4. THE RATE CONTRACT WILL BE FINALIZED WITH MORE THAN ONE VENDOR AS PER THE CLAUSE 8 OF SCHEDULE IV
5. PVC WILL BE APPLICABLE AS PER THE CLAUSE 2 OF SCHEDULE IV
6. ALL OTHER TERMS AND CONDITIONS WILL BE AS PER THE TENDER DOCUMENT.
7. VENDOR SHALL RESERVE MINIMUM 40 MT/MONTH CAPEACITY FOR SUPPLY TO BHEL JHANSI.
8. ENQUIRY MAY BE FINALISED THROUGH REVERSE AUCTION RA GUIDELINES ARE AVAILABLE ON OUR BHEL WEBSITE
http://www.bhel.com/vender_registration/vender.php
9. Vendors who are not registered with BHEL need to register on our BHEL website <https://supplier.bhel.in/> and send the filled supplier registration form duly signed and stamped alongwith the offer.

THE QUOTATION MUST BE SEALED AND BE SENT IN DOUBLE ENVELOPE.

THE INNER ENVELOPE SHOULD BEAR ENQUIRY NUMBER & DUE DATE AT THE TOP.

In case the bidder has not submitted PAN No, TIN No. and E-mail ID, the bidder has to submit the same along with the copy of PAN No and TIN No. Else his offer will be liable to be rejected.

If you are not in a position to quote due to any reason, you must send regret letter titled enquiry no. etc, failing which you may not be considered for sending future enquiries.



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ENCLOSERS:

FOR AND ON BEHALF OF
 BHARAT HEAVY ELECTRICALS LTD

Abhishek
 21/10/2015
 ABHISHEK
 SR PURCHASE OFFICER
 Email:-@bheljhs.co.in

***** END OF PURCHASE ENQUIRY *****

NOTE :

- * SUPPLIERS ARE REQUESTED TO INFORM US WITH VALID CERTIFICATE,IF THEY ARE REGISTERED UNDER MSMED ACT'2006. (APPLICABLE FOR INDIAN SUPPLIERS ONLY).
- * FOR SUPPLIERS SUPPLYING FROM OUTSIDE THE LOCAL AREA OF BHEL JHANSI, ENTRY TAX WILL BE APPLICABLE.SUPPLIERS SHOULD NECESSARILY INDICATE RATE OF ENTRY TAX SEPARATELY WHEREVER APPLICABLE.THEY SHOULD ALSO MENTION THE ENTRY TAX CHARGED SAPARATELY IN THE INVOICE.
- * FOR SUPPLIERS SUPPLYING FROM OUTSIDE UP,IN CASE THE OFFER IS SILENT ON ENTRY TAX, IT SHALL BE LOADED SUITABLY WITH THE APPLICABLE RATES
- * IN CASE IF THERE IS ANY DIFFERENCE BETWEEN THE 'SPECIAL REMARKS/ANNEXURES' OF THE ENQUIRY AND THE PREPRINTED TERMS & CONDITIONS (REF JSC140/M2053), THE REQUIREMENT GIVEN IN REMARKS WILL PREVAIL.

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

सामग्री प्रबंधन विभाग

डाकघर: भेल, झाँसी पिनकोड 284120 (उत्तर प्रदेश) टेलीफोन:0510-2412459, ई-मेल: mlahirwar@bheljhs.co.in



क्रय इंकवारी सं. E3559001

पावर ट्रांसफार्मर के टैंक और इसके सहायक उपकरणों के फैब्रिकेशन और सप्लाई का टेण्डर डोक्युमेंट्स

(फिनिश आधारित)

**TENDER DOCUMENT OF ANNUAL FRAMEWORK AGREEMENT (FA) FOR FABRICATION OF
POWER TRANSFORMER TANK WITH ACCESSORIES / ONLY ALLIED TANK PARTS
(ACCESSORIES) ON FINISH BASIS**

क्र. सं.	विवरण	सिड्यूल सं.	पृष्ठ सं.
1	रेट कॉन्ट्रैक्ट निविदा की अर्हतायें और मात्रा Qualifying Criteria and Quantities covered by the Rate Contract	सिड्यूल -I Schedule-I	2
2	टेंडर भरने के निर्देश Instructions for Submission of Tender	सिड्यूल--II Schedule-II	3 से 4
3	प्रमुख तकनीकी आवश्यकतायें Salient Technical Requirements	सिड्यूल--III Schedule-III	5 से 11
4	व्यवसायिक शर्तें Commercial Terms & Conditions	सिड्यूल -IV Schedule-IV	12 से 15
5	सामान्य शर्तें General Terms & Conditions	सिड्यूल- V Schedule-V	16 से 19
6	टेक्नो कामर्सियल बिड Techno-commercial Bid	सिड्यूल- VI Schedule-VI	20 से 26
7	प्राइस बिड का प्रारूप Price Bid Format	सिड्यूल- VII Schedule-VII	27
8	रिवर्स आक्सन की सामान्य शर्तें व प्राइस ब्रेक-अप शीट General Terms & Conditions for Reverse Auction (RA) & Price Break-up sheet after RA	सिड्यूल- VIII Schedule VIII	28 से 29
9	इंटीग्रिटी पैक्ट Integrity Pact	सिड्यूल- IX Schedule IX	30 से 34
10	JPC Rate calculation and Circular for JPC Rate for the month of Sep 2015.	Schedule- X	35 से 36
11	Packing Instructions for Tank / Tank Accessories	Schedule-XI	37 से 40

Sd/-	Sd/-	Sd/-
Prepared by	Checked by	Approved by
Abhishek, Sr PO(MM)	M L Ahirwar, DGM(MM)	C V Rao, AGM (MM)

Quantity Covered Under Rate Contract and Qualifying Criteria:

सामग्री की वार्षिक आवश्यकता निम्न प्रकार होगी:

Annual requirement of material shall be as under:

इंक्वारी मद सं.	आइटम का विवरण	रेट काँट्रैक्ट मात्रा
1	पावर टैंक असेम्बली और पावर टैंक से सम्बंधित सहायक उपकरण । भेल ड्राइंग्स के अनुसार	150 सेट/ 3750000. किग्रा.(± 30 %)

उपरोक्त आवश्यकता अनुमानित है जो कि ± 30 % कम या अधिक हो सकती है। जो कि भेल की आर्डर बुक स्थिति के ऊपर निर्भर करेगा ।

Above requirement is tentative and quantity variation shall be ± 30 %. Variation can vary in any proportion both on positive and negative side depending upon BHEL's requirement and order book position.

Qualification shall be as under:

Minimum reserved capacity of bidder must be 40 MT per month for this tender.

Only the suppliers who meet the 'Qualifying Requirements (Annexure A to Schedule I)' along with 'Compliance to Mandatory Resource Requirements (Annexure B to Schedule I)' shall be eligible for this tender process. The details in 'Qualifying Requirements (Annexure A to Schedule I)', 'Compliance to Mandatory Resource Requirements' (Annexure B to Schedule I) and Compliance to Desirable Resource Requirements' (Annexure C to Schedule I) enclosed to this Schedule I should be filled and submitted along with the necessary documentation (wherever called for).

Signature of Supplier :

Name :

Designation :

Seal :

Phone No :

E-mail ID :

Schedule - II

टेंडर भरने के निर्देश

INSTRUCTIONS FOR SUBMISSION OF TENDER

1. The offers against the enquiry shall be submitted in two parts as detailed below :-
Technical Bid (Part – A) :- (A1)- Tender document Page 2 to 26 & 28-40 duly filled & signed
(A2)- Blank Price bid (Un Priced) duly signed (Page no. - 27)
(A3)- Annexure A, A1, A2, B & C of Schedule-I
Price Bid (Part – B) :- (B1)- Price bid duly filled & signed (Page no. - 27)
2. The vendors shall prepare Part-A and Part-B in two different sealed envelopes duly super-scribing Enquiry No. and Part No. of the bid. These two parts of the bid shall be kept together in a third envelope super-scribing Enquiry No., due date and time of opening as indicated in the tender enquiry. This envelope containing Part-A & Part-B shall be submitted to BHEL.
3. Part-A of the bid alone shall be opened on the due date in presence of the bidders in the first instance. This part of the bid shall be examined in detail. Part B of the bid shall be opened only for such of the bidders whose Techno-Commercial offers are found acceptable by BHEL. Such bidders shall be advised the date and time of opening of Part B i.e. price part of their bids / alternatively if BHEL decides to go for Reverse Auction, only those vendors whose techno commercial bids are found acceptable and have accepted to participate in Reverse Auction will be allowed to take part in Reverse Auction. Bidders must carefully go through all the instructions and conditions before filling in Part B of the bid. Any type of mistake in submission of the bids will make the tender liable for rejection.
4. The bids shall be submitted only in the format given in the tender documents. It may be noted that each page of the tender document has been signed by BHEL. While submitting the bid, these very pages are to be used in original. The bidder is also required to sign and stamp each and every page of the tender document clearly bringing out deviations, if any.
5. Tenders not complying with the above and other requirements of the tender shall be liable for rejection. Bidders are therefore advised to read all the documents carefully before submission of the bids and ensure the fulfillments of all the technical and commercial parameters.
6. It must be clearly understood that the order concluded pursuant to this tender enquiry shall be governed by the General terms & conditions of the contract as preprinted overleaf of the enquiry. No deviation from these conditions is permitted.
7. Corrections in the bid should normally be avoided. However, when these become essential, bidder shall score out the incorrect information and put the correct information duly endorsing each correction with his signature.
8. 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.

Schedule - II

9. 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."
10. H1 (Highest) bidder(s) found during sealed bid auction will not be allowed to participate in reverse Auction.
11. General terms and conditions of the REVERSE AUCTION shall be generally as per schedule - VIII. However final terms & condition shall be intimated after techno-commercial evaluation of the tender.
12. Integrity Pact shall be as per schedule – IX.

We confirm above instructions have been fully understood. We further confirm that price bid has been submitted exactly in line with format at page no. 27 without addition of any other terms & conditions and if the price bid is found to be conditional (e.g. minimum order quantity, slab rate, discount for quantity, different terms of payment etc. etc.), BHEL has full right not to accept our offer.

Signature of Supplier :

Name :

Designation :

Seal :

SALIENT TECHNICAL REQUIREMENTS

1. **SCOPE OF WORK** :-The scope of work covered in this enquiry is fabrication of **Power Transformer Tank with Accessories / only Allied Tank parts (Accessories)** of Transformer rating varying from 1 MVA to 315 MVA as per our drawings on fully finish basis using own material in all respects. The Tanks for Rectifier Transformer are also included in the scope. The Tanks & Accessories shall be supplied in duly shot blasted & painted condition. The supply shall be inspected by BHEL / Third party inspection agency / Customer & shall be dispatched in packed condition wherever applicable.

All material, consumables, facilities shall be arranged by the supplier. These include air pressure test, vacuum test, D.P. test, paint film thickness test and any other test called in BHEL DRG. / Mechanical test instruction. No material will be issued by BHEL like Hardwares, temporary fixtures, blanking plates, C clamps, helical inserts, gaskets etc. Pre-machining of the items / components as per drawing is in the scope of supplier.

Supplier should ensure that the supplies are as per latest, DCAs, MIDs, QA Plans and other documents. BHEL will provide main W.O. drawings only with PO / PO amendments. From the date of despatch of drawings from BHEL, normal postage period of one week shall be considered for receipt of drawings at supplier end. However, it is the responsibility of suppliers to request for all related sub drawings called in these main drawings within a week of receipt of main drawings and collect the same from BHEL. BHEL will not accept any extension request on account of late request and delay in collecting these sub drgs.

All facilities required for fabrication and testing the Tanks and Accessories are to be arranged by the vendors themselves. However the Material Testing facilities may be extended by BHEL on chargeable basis, if available. Vendor shall have to give a notice of minimum one week for this purpose. Material Testing facilities in our Material Testing Lab at BHEL rates. It must be clearly understood that BHEL shall not be held responsible for any delay in providing the above facility and consequently for any delay in final supplies by the supplier to BHEL.

2. **MATERIAL** :- Material shall be procured only from reputed mild steel manufacturers or their agents / stockist / dealers with co-related test certificates, which shall have to be furnished to BHEL. List of these suppliers is given schedule VI Para A2. In the absence of proper test certificates material shall have to be tested in BHEL approved laboratories for acceptance. The requirements of various material involved in the fabrication will be in accordance with respective BHEL & Standards. However, in general the following material specifications will be used.

Material	Specn No.	Material	Specn No.
(i) Forged Steel bar	AA 19331	(vi) H.R. Steel Sheet	AA10113
(ii) M S Plate	AA 10108	(vii) H.T.S. Plate	AA10122
(iii) S.S. Plate 304 GR	AA10740 or AA10739	(viii) Bright Steel Bars	AA10112
(iv) S.S. Plate 316 L GR	AA10730	(ix) Aluminum Plates	AA12317
(v) ERW Pipe 10 NB to 150 NB 200 NB & above.	AA10152 AA10147 / IS 3589 Grade FE410 / FE330	(x) Seamless Carbon Steel Pipe for lifting bollard	AA10445

MS Plate to specification AA 10119 can be used in place of AA 10108. The plates of 2.8 / 3.0 meters in width are to be used. If these sizes of plates are not available in the market, 2.5 meter width plates can be used. However, Joints shall be maintained strictly as per BHEL drawing.

Generally, 5 mm or 6 mm thick plates are available in 1.5 meter width. If component width is more than 1.5 meter, additional joint may be permitted.

Wherever additional joints are proposed, it requires specific approval of TRE, BHEL.

Tanks with Accessories are the combined fabrication of Mild Steel, High Tensile Steel, Stainless Steel & Aluminum . Extra charges payable for High Tensile Steel, stainless steel and Aluminum are indicated at Para 6 of schedule - III. However, total weight of Tank with Accessories including that of High Tensile Steel, Stainless Steel & Aluminum material will be considered for payment of fabrication rate as per schedule – VII / VIII.

3. SHOT BLASTING & PAINTING :-

All the Assy. / sub Assy. / items are to be supplied duly shot blasted & painted as required by BHEL as per the specification given below:

1. Degreasing - As per respective painting specification
2. Shot Blasting - SIS 055900 SA 2.5
3. Painting - As per process specification specified in TR 10005 P
4. Painting process spec. - TR 10206P, TR 10210P, TR 10211P, TR 10209P & TR 10229P

Paints will be procured from BHEL approved suppliers. Any fading / peeling-off of paint within / up to six months will be attended by the vendor to meet CQX requirement.

4. TESTING REQUIREMENT :- Air & Vacuum testing is to be done as called in the mechanical instructions or in Respective drawing issued by BHEL. During testing Tank / Assemblies will be kept on suitable structure to facilitate the leakage test of welded joint with liquid soap solution.

NDT is in the scope of vendor. It shall be carried out by BHEL approved personnel / Agencies. The details of agency carrying out NDT shall be intimated by supplier to BHEL CQX division / third party inspection for their approval.

The paint thickness is to be checked by the Elcometer. The supplier shall procure the reputed make Elcometer and in no case it will be provided by BHEL. The supplier shall carry out the Paint Adhesion test in presence of BHEL CQX / Customer.

5. QUALITY REQUIREMENTS :-

5.1 Third party / customer inspection co-ordination will be done by the supplier through CQX / MM / TRC as per existing practice. Advance notice of 7 days or more (if called in PO) is to be given by the supplier in case where third party / customer inspection is called.

5.2 Inspection will be at supplier's works by BHEL CQX / CQ / Third Party / Customer as per BHEL Standard procedure and standard or specific QA Plan.

- 5.3 Steel hardwares to property class 4.8 will only be used for testing (not to be supplied to BHEL).
- 5.4 Material identification, co-relation etc. shall be done as per standard QA plan no. QP / PT / SP / 553 / rev-02 dated-01.07.10. In any case, the supplier shall have to keep complete record of material identification and test certificate co-relation as per quality system for review. Work Order related QP (If called), the same shall also be followed.
- 5.5 Tanks and other fabricated components shall be free from shots, dust, weld slag and other foreign materials. Suppliers to ensure same before dispatch.
- 5.6 Tanks & all fabricated components shall be supplied after running of third tap in all the tapped holes. This operation will be done after final painting and just before dispatch to BHEL. The tapped holes shall be thoroughly cleaned after application of third tap to remove any burr, chip, paint etc.
- 5.7 All these tapped holes shall be blanked with insulation adhesive tape. For bigger size hole e.g. 110 dia, the thick and strong polythene sheet will be put to cover them which will be sealed using insulation adhesive tapes / clamps to avoid ingress of moisture and dust during transportation. No grease shall be applied.
- 5.8 All other opening in tank, tank cover, bottom tank, top tank, turrets etc. shall be blanked to as under to prevent ingress of dust / moisture :-
- Using blanking plates & inspection cover where called in drawing (e.g. Turret opening, OLTC inspection cover etc.) 3 to 4 bolts will be used to tighten the blanking plates.
 - Thick & strong polythene sheet stuck by insulation adhesive tape are to be provided wherever blanking plates for openings are not called.
 - 3thk NBC Gasket and adequate hardware to be used to blank all pipe works along with blanking plate. .
 - Items having male threading shall be protected using grease and plastic sleeves.
- 5.9 For the items as earthing boss & earthing pad, paint from all the contact surfaces shall be removed prior to dispatch of the items. The supplier must ensure compliance to this.
- 5.10 The jacking pads shall be painted wherever there is no specific instruction in the drawing / MID for their masking. Masking of jacking pads using paper masking tape of sufficient width shall be done wherever called in the drawing. Dye penetration Test is done to detect CRACKs after jacking of oil filled transformer / rectifier. However, it will be ensured that paint is totally absent from pad welding area so that there is no need to burn it after its receipt in BHEL.
- 5.11 A suitable fixture shall be used for drilling of tapped holes so that they are perpendicular to the axis. Perpendicularity will be checked by BHEL CQX on surveillance basis during mounting of turrets / Inspection cover for air leakage test.

- 5.12 All suppliers shall create a barricaded area having cemented floor for painting so that dust / dirt is not settled during inter-coat drying period. All major and minor items shall be painted only in the barricaded area. It shall be ensured that paint is applied over a totally clean surface.
- 5.13 The check list suggested by BHEL CQX shall be adopted by fabricators. In material TC Check List, new columns for all item as per Drg. PO will be listed first and their actual availability on Tank / Accessories will be certified by the supplier, vetted on surveillance basis by CQX personnel of Fabricator and then by BHEL CQX. This procedure will eliminate the recurring problem of pads / bosses / brackets not welded on tank, welded at wrong place, at wrong pitch and of wrong size / type.
- 5.14 Gasket including 'O' rings / cords used for sealing shall be of the quality and dimensions called in BHEL Drawing.
- 5.15 Rim flatness will be checked by BHEL CQX after all welding work is done (before welding of limiter) and just before blanking / pressure test operation. If any modification is done resulting in welding, rim flatness is to be rechecked.
- 5.16 Grooves for 'O' rings shall be made by Milling Process.
- 5.17 In case of order for Tank & Accessories both, total matching of all items on 100% basis shall be done and shown to BHEL CQX. **A photograph of complete assembly shall be submitted to inspection agency while seeking dispatch clearance of the Transformer.** All items including loose items as per PO annexure shall be match marked as per the instruction given in BHEL drawings
- 5.18 In case of order for Tank, Turret & OAB Pipe work only, matching of these items shall be done and shown to BHEL CQX.
- 5.19 Some BHEL customers accept the material / assemblies from their approved suppliers only. In such cases supplier has to get himself approved from such customers (i.e. NTPC, Power Grid, NPCL, PSEB, DVC etc.) through BHEL. Irrespective of rate contract quantity, orders for tanks for such customers shall be placed only on customer approved suppliers.
- 5.20 All sharp points / cut edges dents etc. shall be grounded smooth. Wherever radius or rounding off is called in drawing, it should be ground as per drawing without any surface defects.
- 5.21 Dispatch clearance shall be given after inspection at fabricator's works. However, final acceptance will be given only after the inspection on receipt of jobs at BHEL works.
- 5.22 **Supplier has to submit Photograph of complete Tank along with test certificates.**
- 5.23 In case any rectification work is necessitated at BHEL, Jhansi owing to Supplier's fault, the Supplier shall be given a week's notice to rectify the same. In case the supplier does not respond within the due time frame, the Cost shall be recovered from the vendor towards the rectification carried out inside BHEL. The cost for recovery shall be 1.5 times the actual costing as mentioned in the FA for the relevant work done.

6 EXTRA CHARGES :- To cater different types of requirements viz. painting, shot blasting, vacuum test by different customers, separate rates have been fixed by BHEL and are given hereunder. Suppliers will not be allowed to make any change in any of the rates fixed by BHEL for the following items :-

Schedule - III

SI No	Particulars	Rates fixed by BHEL In % of (basic rate + PVC amount, if any).
6.a	<u>Painting Charges:</u>	
6.a.i	Enamel Primer (1 coat / 25 Micron)	0.56%
6.a.ii	Epoxy Primer (1 coat / 25 Micron)	1.05%
6.a.iii	Enamel Finish (1 coat / 25 Micron)	0.73%
6.a.iv	Epoxy Finish (1 coat / 25 Micron)	1.45%
6.a.v	PU Finish (1 coat / 25 Micron)	3.23%
6.a.vi	MIO Primer (1 coat / 50 Micron)	4.68%
6.a.vii	Zinc Rich Primer (1 coat / 50 Micron)	6.05%
6.a.viii	Enamel (1coat/25 Micron) Aluminum finish paint	1.21%
6.a. ix	Epoxy (1coat /25Micron) Aluminum finish paint.	1.94%
6.a.x	Charges for Spray Galvanizing per 100 microns	4.27%
6.b	Shot blasting	1.94%
6.c	Pickling	4.60%
6.d	Vacuum Test	0.97%
6.e	Additional charges for Stainless Steel items 304 GR. as per design weight (no deduction for equivalent MS weight) irrespective of amount of SS used in the tank.	358.50% of (basic. rate + PVC amount, if any) on SS weight.
6.f	Additional charges for Stainless Steel items 316 L GR. as per design weight (no deduction for equivalent MS weight) irrespective of amount of SS used in the tank.	409.00% of (basic rate + PVC amount, if any) on SS weight.
6.g	Additional charges for Aluminum items as per design weight (no deduction for equivalent MS weight) irrespective of amount of Alum used in the tank.	251.00% of (basic rate + PVC amount, if any) on Alum weight.
6.h	Additional charges due to radiography quality butt welds (including radiography charges) .	5.00% of (basic. rate + PVC amount, if any) on tank & cover weight.
6.i	Additional charges ultrasonic quality welding on butt weld (including ultrasonic testing charges) .	3.00% of (basic. rate + PVC amount, if any) on tank & cover weight.

6.j	Additional charges for IP 55 charges on Cable Box, irrespective of size.	2.20% of (basic. rate + PVC amount, if any) limited to 7000 per Cable Box..
6.k	Additional charges for HTS items as per design weight (no deduction for equivalent MS weight) irrespective of amount of HTS used in the tank.	15.00 per kg + PVC amount, (if any) on HTS weight.

- 6.1 Payment of the wooden boxes/ crates (as mentioned in Annexure to Schedule XI) will be made @Rs33.00/Kg based on weights indicated in the annexure to Schedule XI. This will be treated as packing & forwarding charges. Rate of Rs 33.00/Kg shall remain the same throughout the period of rate contract.
- 6.2 Suppliers should quote one basic rate considering the fixed rates mentioned by BHEL in Clause 6.0. This basic rate shall be for fabrication of Transformer Tank with Accessories and shall cover complete work except those mentioned above. These extra charges will be added as & when applicable while placing PO(s). It is clarified that the basis for evaluation of the offers shall be the basic rate of Transformer Tank with Accessories
- 6.3 The assemblies shall be delivered on F.O.R. BHEL Jhansi basis as per Schedule XI. The offers received on Ex-works Basis will be rejected.

7.0 DESPATCHABLE UNITS :-The various assemblies and items are categorized in following dispatchable Units (DU) and shall be dispatched in the sequence given below:

DU-1 Tank & Cover :- Tanks & Cover or Top & Bottom Tank, Turrets, Cable Box, Disconnecting Chamber, Inspection Cover and Blanking Plates, OAB Pipe Works, Top cross beam.

Note :- (a) - Tank & Cover or Top & Bottom Tank and turrets shall be supplied to BHEL in shot blasted shot blasted & painted condition as the case may be.
(b) - Blanking plates and inspection covers shall be supplied shot blasted & painted condition.

DU-2 Thermo-siphon, Bevel gear mounting support, mounting brackets on tank and cover, Marshalling Box Brackets, loose brackets, Main & Auxiliary conservator, supports, A-Frame, Header Support, Cooler Supports, Fan Support, Cooler Pipe Work, Pipe Support, NRV, Oil Reserve Flow Stopping Device, Lightning Arrestors (IA) Brackets, Nitrogen Cylinder Mounting, Brackets, Ladders etc. duly shot blasted & painted within 10 days of supply of items listed in DU-1 or as specified in Purchase Order.

8.0 Wherever tanks are supplied duly shot blasted & painted and blanked, the blanking should be painted as per TR 10005-P, Sl. No. 8 i.e. 2 coats of Enamel Paint inside and only 2 coats of Post Office Red Finish paint outside.

Schedule - III

9.0 PACKING & DISPATCH :- Necessary care shall be taken during loading and transportation to ensure that there is no scratches / damage to paint surface in any item and items are received at BHEL, Jhansi without any damage. Damage to the consignment resulting out of poor / inferior packing / improper transport shall be to the account of the supplier. Blanking / sealing of delicate parts as per clause 7 above shall be done. The supplier will have to do rectification, touching up of paint if so required at our works if items are received with such defects.

10.0 WEIGHT VARIATION:

Weight given in drawing / purchase order will be subject to variation of $\pm 7\%$ (5% variation for dimensional variation of raw material of Tank & Accessories and 2% variation for welding and painting).

Signature of Supplier :

Name :

Designation :

Seal :

COMMERCIAL TERMS & CONDITIONS

1. The rate contract shall be valid for ordering for one year from the date of issue of rate contract and supply upto 3 months thereafter.
2. The following Price Variation Claim shall be allowed over the quoted basic rate as per schedule –VII /VIII:-
 - a) For every 1 Rupee per Kg increase / decrease in JPC (Joint Plant Committee, Constituted by Govt. of India) price excluding ED & VAT of **10 mm plate** for Delhi, the basic rate will increase / decrease by Rs 1.20 per kg.
 - b) **The basic rate quoted in schedule – VII / VIII shall be based on the JPC steel market price (Retail) of Rs 28.89 per kg (excluding ED & VAT) for 10 mm plate derived from the price declared in beginning of Sep 2015 for Delhi. For detail calculation to derive JPC steel price excluding ED & VAT, refer schedule – X.**
 - c) JPC declares steel market prices (Retail) bi-monthly including ED & VAT. JPC price declared in beginning of the month for Delhi shall be considered for one full month for the purpose of calculating PVC. BHEL will derive the JPC market price (retail) excluding ED & VAT as per calculation placed at Schedule – X and the same shall be considered for full one month for calculating PVC.
 - d) JPC steel basic rate excluding ED & VAT of Delhi (derived from the declared price in beginning of the month by JPC for Delhi) as applicable one month prior to contractual delivery or actual delivery whichever is lower, will be taken for the purpose of calculating price variation. For example, if Tank Assy. is supplied in the month of March 2016 & PO delivery is Feb 2016, rate applicable for the month of Feb 2016 or January 2016 respectively whichever is lower shall be taken for PVC Claim.
3. Taxes & Duties shall be extra as applicable on the date of actual delivery. Bidders are advised in their own interest to familiarize themselves fully with various types of taxes and their rates etc. including entry tax if applicable. It may be noted that evaluation of quoted prices shall be done on the basis of landed cost at BHEL which shall be arrived at after loading the prices wherever required. Applicable taxes & duties on the date of offer MUST be mentioned. If any bidder is found to incorrectly declare less value of ED or nil in the offer, his contract will be terminated. For increase in ED rate slab during R/C period, required proof & undertaking will have to be given to this effect before same is admitted by BHEL.
4. The rates quoted shall be on FOR BHEL Jhansi basis on per Kg basis only. Freight & insurance from supplier's works to BHEL Jhansi works shall be in the scope of the bidder.
5. The validity of the quotation shall be for a period of 120 days from the opening date of tender / date of RA.
6. Rates shall be quoted duly considering the CENVAT credit available on the input material and the Corresponding benefit on this account shall be passed on to BHEL.

7. **Payment Terms :** 100% payment after 60 days of receipt and acceptance of material at BHEL works. The suppliers who are availing HDFC / SIDBI bill discounting facility (pay by BHEL in about 120 days from the date of invoice) with us will continue to get this facility. However, due to funds problems, this cannot be extended to other suppliers. For such suppliers standard payment terms shall be applicable for deciding tender. The bidders who are covered under MSMED Act- 2006 & quoted 45 days of payment after acceptance of material will also be treated as standard terms of payment. Both payment terms will be treated at par. The offer received with any other terms of payment will not be accepted.

Where ever the jobs are not to be supplied in packed condition, the payment shall be made on the supplied weight. In addition Extra charges as mentioned in clause 6.0 of Schedule III can be billed if permitted in the PO

However, certain Accessories will have to be supplied in packed condition (refer Schedule XI) & payment of accessories will be done on per kg basis of net weight (Total supplied weight including packing- weight of wooden boxes/crates as indicated in annexure to schedule XI). In addition to Extra charges as mentioned in clause 6.0 of Schedule III, the payment towards packing & forwarding i.e. wooden boxes/ crates (as mentioned in Annexure to Schedule XI) will be made @ **Rs.33.00/Kg** based on weights indicated in the annexure to Schedule XI.

8. **Manner of Splitting:** Contract may be established with ' n-1' suppliers (where n is techno-commercially accepted vendors) limited to 15 suppliers for execution of this contract and quantity distribution among L1, L2..... to & L15 would be in the ratio (%) as shown in the below table based on L1 agreed rate.

Rank*	Weightage	% Share
1 (vendor with lowest rate in R.A.)	n	n/Zx100
2	n-1	(n-1)/Zx100
3	n-2	(n-2)/Zx100
..
..
n (Vendor who has accepted counter offer & has bid highest rate in RA among 1 to n)	1	1/Zx100

$$\text{Total } Z = n(n+1)/2$$

- 'n' may vary from 1 to 15. L1 and those vendors who accept counter offer have to accept distribution of quantity as above.
- If we do not get 15 sources then qty may be distributed between agreed sources in line with above manner of splitting.

* Rank of suppliers among L1 and those who have accepted counter offer (from lowest rate to highest rate in Reverse Auction).

Note: The quantity distribution under rate contract shall be generally as per quantities allocated to the bidder, but limited to the capacity quoted by the bidder. The loading will also be subject to factors like (a) customer approval of vendors in specific projects, (b) facilities at Supplier works, (c) Suppliers delivery and quality performance during execution of rate contract, (c) Pendency of orders on the supplier and (d) responsiveness in addressing post order completion issues at BHEL. In view of above factors the loading during execution of rate contract may vary with respect to allocated quantity.

During execution, if the performance of supplier is not upto the mark in respect of delivery / quality performance / quoted capacity of the bidder, BHEL reserves the right to either reduce further loading or stop loading till the execution of overdue orders. In such cases the balance allocated full or part quantity of the defaulting vendors may at the discretion of the BHEL Jhansi be re-distributed to other performing and willing vendors of the rate contract.

9.0 DELIVERY :-

9.1 DELIVERY PERIOD

Individual LOIs / POs of the Rate Contract shall be released (along with the BHEL drawings & Quality Plan) with a delivery period of 10 weeks from the date of issue of LOI / PO.

Wherever it is mentioned in the LOI / PO that the delivery indicated is tentative and that the progress of the jobs are linked to release of documentations by BHEL and inspection of jobs by BHEL / Customer clearance, the delivery period shall be as under :

SI	Detail	Delivery terms
1	Intimation of Final WO drawings / Annexure, by way of PO Amendment	4 weeks from the date of intimation of PO Amendment or 10 weeks from the date of issue of LOI / PO, whichever is later.
2	Pursuant to communication of Intimation of final WO drawings & Annexure, if minor changes in drawings / specification are communicated by way of PO Amendment.	1 week from the date intimation of PO Amendment or 10 weeks from the date of issue of LOI / PO, whichever is later.

Notwithstanding the above delivery period, BHEL reserves the right in postponing delivery / seeking an earlier delivery from the supplier owing to the overriding concern of our production requirements.

9.2 SUPPLIER RESPONSIBILITY: BHEL will provide main W.O. drawings only with PO / PO amendments. It is the responsibility of suppliers to request for all related Sub drawings called in these main drawings within a week of receipt of main drawings and collect the same from BHEL. BHEL will not accept any extension request on account of late request & delay in collecting these sub drgs.

9.3 PENALTY FOR DELAYED DELIVERY / DELIVERY EXTENSION :

- (a) Delivery dates shall not be extended except for reason not attributable to supplier. Suppliers should strictly adhere to delivery schedule provided in the PO and plan the materials and works immediately on viewing the PO on the supplier information portal of BHEL Jhansi website. Delayed supplies would attract penalty as per Clause 9 of schedule –V
- (b) Beyond the delivery period mentioned at 9.1 above, there could be reasons wherein the supplier may seek a delivery extension. However, BHEL Jhansi may consider the request for delivery extension if there are sufficient reasons to believe that delay is not attributable to supplier. Such requests for extension should be substantially supported by letters / emails of communication, dates of receiving information, clarifications, inspection call booking and actual inspection dates etc. In case of inspection delays, the number of days of delay in inspection shall be added on the delivery date scheduled in PO, provided the advance intimation of 7 days' notice has been given for inspection as mentioned at 5.1 of Schedule III. In case the notice period is less than 7 days, the delivery period shall be calculated accordingly. Supplier should resort to recorded communication if they feel that desired inputs have not been given to them by BHEL Jhansi. Suppliers should not delay in seeking inputs from BHEL Jhansi; unreasonable delay in requesting for inputs would be to suppliers account and would not qualify for delivery extension.

9.4 HOLD

- (a) In case HOLD is issued by BHEL Jhansi and subsequently lifted after a gap of more than one month, the period of HOLD and a certain mobilization period (7 days) shall be added to the PO delivery date, and if necessitated, a reasonable time shall be considered for communicating the revised delivery from the date of lift of HOLD.
- (b) If the hold is lifted within 30 days, the period of HOLD and a certain mobilization period (5 days) shall be added to the PO delivery date.

9.5 SHORT CLOSURE/ CANCELLATION OF PO/ RATE CONTRACT:

In case of production requirement of BHEL or due to inability of vendor to execute the PO/Rate contract, BHEL reserves the right to short close / cancel the individual PO/ Rate contract.

Signature of Supplier :

Name :

Designation :

Seal :

GENERAL TERMS & CONDITIONS

1. Purchase Order Acknowledgement must reach the concerned Officer of MM Deptt., BHEL, Jhansi within 2 weeks of issue of PO. Failure to do so within stipulated period will be deemed to mean that the order has been accepted by the supplier.
2. **Marking** :-
 - (a) The following details will have to be clearly marked on each loose item :-
 - i) BHEL Order No. and Date
 - ii) Supplier's name
 - iii) Brief Description of Item / drg. no.
 - iv) Match Marking on all accessories as per drawing.
 - (b) All Markings for safety, proper handling, protection, etc. are to be clearly marked on the case as per Indian Standard.
3. **CONSIGNEE** :- Unless otherwise mentioned, all goods shall be consigned as noted below:
Incharge (CRX)
Factory Main Stores,
Bharat Heavy Electricals Ltd.,
JHANSI - 284129
4. **DOCUMENTATION** : The supplier shall forward 3 sets of the documents as detailed below :-
 - (a) First set to the concerned Purchase Executive, BHEL, Jhansi comprising :-

(i) Invoice	-	1 Copy
(ii) Challan/Dispatch Advice Note	-	1 Copy
(iii) Guarantee Certificate	-	1 Copy
(iv) Test Certificate	-	1 Copy
(v) Excise Duty Gate Pass	-	1 Copy
(vi) Material accounting statement (for free issue material). If no material is issued by BHEL, then the statement should indicate "NIL".		
 - (b) Second set to Incharge, Central Receiving Section, BHEL, Jhansi comprising:-

(i) Challan / Dispatch Advice Note	-	1 Copy
(ii) Duplicate for Transporters copy (2nd Original) of Excise Duty Gate Pass	-	1 Copy
(iii) Guarantee Certificate	-	3 Copies
(iv) Test Certificate	-	3 Copies
 - (c) Third set to Manager (Finance), Supply Bills Section, BHEL, Jhansi comprising :-

(i) Signed Invoice	-	2 Copy
(ii) Challan / Dispatch Advice Note	-	1 Copy
(iii) Excise Duty Gate Pass (Original for Buyer)	-	1 Copy
5. **GUARANTEE** :-All goods shall be free from any defects due to faulty material and workmanship and it will be guaranteed for a period of 18 months from the date of commissioning of the goods at customer's site or 24 months from the date of dispatch whichever is earlier. However, for any "LATENT DEFECTS" supplier will be responsible even after 24 months, if failure occurs due to the same.

6. **REJECTIONS** :-

I. If any goods are rejected, BHEL shall be at liberty to take action as per following at the risk and cost of supplier :-

- (a) Allow the supplier, wherever mutually agreed, to rectify the rejected goods at BHEL's works within reasonable time as fixed by BHEL.
- (b) Allow the supplier to make free replacement within a specified period; rejected goods can be lifted by the supplier thereafter.

OR

Allow the supplier to refund the full amount paid to him by BHEL by a Demand Draft before lifting the rejected goods. Fresh replacement shall be regularized as per terms & conditions of the original purchase order.

OR

Take alternative procurement action from elsewhere and recover the difference in cost, if any incurred by BHEL in this regard from the supplier. The supplier shall not be entitled to any gain on purchase

- (c) Terminate the contract either in part or in whole at the discretion of BHEL and recover the loss, if any, from the supplier.

II. If manufacturing defect is noticed in Tank at the time of use in BHEL, same shall be intimated to the vendor by email and :

- (a) Vendor shall depute their team for rectification within 02 days of intimation (excluding date of intimation).
- (b) BHEL shall at its discretion and on advise of its quality department deduct Rs. 1000 per day for the period taken by vender's team for rectification at BHEL (this period shall exclude 02 days as mentioned at (b) above). This deduction is solely for the delay incurred in progress of work in BHEL on account of defect / rectification of Tank (defect attributed to vendor).
- (c) The vendor's team will obtain a written clearance from quality department w.r.t. satisfactory Completion of rectification work.

7. **INDEMNITY** :- Supplier shall indemnify BHEL against the following: Any claim or infringement of letters, patent or registered design by the use of any article or material supplied to BHEL and against all cost and damages which may incur, any action for such infringement or for which BHEL become liable in any such action.

- (a) All claims for injury or damage caused by the supplier's negligence or the negligence of supplier's employees or arising from any defect in the goods supplied or on the work carried out by the supplier.
- (b) All claims for injury to the supplier's employees or agents employees whilst on BHEL's premises.

8. **SUB-CONTRACT** :- The purchase order or any part thereof must not be sub-contracted by supplier without BHEL's written consent.
9. **PENALTY** :- If the material is not supplied within stipulated time, BHEL shall be within their right free to cancel the contract and purchase the material through any other source at the risk and cost of the supplier. In such an event it shall be obligatory on the defaulting supplier to make good loss suffered by BHEL. The above option shall be executed at the discretion of BHEL. Failure to effect supply by the time specified in the order or period of extension granted in writing by BHEL will make the supplier liable to pay unconditional penalty of ½ % (half percent) of the price of un delivered goods in arrears per week subject to maximum of 10% (ten percent) of the order value of delayed supply.
10. **ADJUSTMENT OF RECOVERY OF AMOUNT PAYABLE BY THE SUPPLIER** :-Any amount payable by the consignor / supplier under any of the conditions of this contract shall be liable to be adjusted against any amount payable to the consignor / supplier under any other order / works contract awarded to him. This is without prejudice to any other action as may be deemed fit by BHEL.
11. **JURISDICTION** :-All suits or any matters arising out of the PO's based on the rate contract shall lie in Jhansi Courts only.
12. **ARBITRATION** :-In all cases of disputes, the matter shall be referred for arbitration. The arbitrator shall be nominated by the Unit Head, Bharat Heavy Electricals Ltd. Jhansi or any other officer nominated by him. The award of Arbitrator shall be final and binding on both the parties.
13. **FORCE MAJEURE**: Neither seller nor purchaser hereto shall be held responsible for any delay or failure to perform any or all of the obligations imposed upon such party caused by Force Majeure. In such a case, the time for performance of such obligations and the obligations of the other party to the extent that they are directly or indirectly affected by such occurrence will be extended by a period equal to that time. Notification of a circumstance of Force Majeure shall be given in writing addressed to the other party within 5 working days of its occurrence along with a certificate of the relevant Chamber of Commerce confirming the existence of the circumstances of the Force Majeure. Only the following shall be considered as Force Majeure if they intervene before contractual delivery date and impede performance: Acts of God, Wars, Revolutions, Fire, Floods, Epidemics, Freight embargoes and Acts of State. However, should such a delay, even if due to reasons of Force Majeure, be protracted for more than three (3) months, Purchaser shall have right to cancel the Contract at no charge to Purchaser.

14. Wherever purchase order stipulates payments on the basis of weight of the supplies, the order will specify the design weight. In case of change in design during execution of the order, the corresponding change in weight will be incorporated in the purchase order simultaneously. Payment will be made against such orders, only on the basis of actual weight incorporated in the order.

Signature of Supplier :

Name :

Designation :

Seal :

TECHNO COMMERCIAL BID (PART-A) : E3559001

(Supplier should fill up this bid by putting the tick in accepted / non accepted column)

SUPPLIER'S NAME & ADDRESS :-

SL No	Particulars	Please furnish required information or Put ✓ mark for whichever is applicable.
1	Capacity reserved for BHEL Jhansi in MT per monthMT Per month
2	Capacity reserved for BHEL Jhansi in MT per annumMT Per annum
3	Present rate of Excise duty with Educational cess %
4	Present rate of VAT / CST against form C% CST/ VAT
5	Quoted rate will be FOR Jhansi Basis.	Accepted / Not accepted
6	Freight and Insurance will be in suppliers scope.	Accepted / Not accepted
A	Material :	
A1	The material to following specifications will be procured and used in manufacture of Power Transformer Tank with Accessories / only Allied Tank parts (Accessories) wherever applicable to the Latest specification	Accepted / Not accepted
A1.a	M. S. Plate Material AA 10108 / AA10119	Accepted / Not accepted
A1.b	S.S. Plate Material GR 304 AA10740 / AA10739	Accepted / Not accepted
A1.c	S.S. Plate Material GR 316L AA10730	Accepted / Not accepted
A1.d	ERW PIPES (10 NB to 150 NB) AA10152	Accepted / Not accepted
A1.e	ERW Pipe AA 10149/ IS 3589 (200 NB & above) Grade FE 410/FE 330	Accepted / Not accepted
A1.f	Seamless Carbon Steel AA10445 Pipe for lifting bollard	Accepted / Not accepted
A1.g	HR. Sheet AA 10113	Accepted / Not accepted
A1.h	H. T. S. Plate AA 10122	Accepted / Not accepted
A1.i	Bright Steel Bar AA 10112	Accepted / Not accepted
A1.j	Forged Steel Bar AA19331	Accepted / Not accepted
A1.k	Aluminum Plate AA12317	Accepted / Not accepted
A2	Source of Material & Testing Requirement : Tested material to be procured from reputed manufacturers like SAIL / SAIL subsidiaries / TISCO / Mahindra UGINE/ Essar Steel / Jindal Steel / Lloyds Steel / Jindal Vijaynagar and co related material test certificates to be furnished. If co-related test certificates cannot be produced, complete testing of material is to be carried out as per relevant BHEL standard in any of the BHEL approved labs.	Accepted / Not accepted
A3	The plates of 2.5 / 2.8 / 3.0 meters in width are to be used	Accepted / Not accepted

A3.1	A3.1 - If these sizes of plates are not available in the market, lower width of the plate shall be used only after obtaining concession from TRE which will indicate position of joint.	Accepted / Not accepted
A3.2	Generally, 5 mm or 6 mm thick plates are available in 1.5 meter width. If component width is more than 1.5 meter, additional joint is acceptable	Accepted / Not accepted
A4	Rate for different type of paintings, SS, NDT, Accepted / Not Accepted shot blasting and Vacuum tests etc, as per clause 6.1 of schedule-IV.	Accepted / Not accepted
B	Scope of Work :-	
B1	Fabrication of Power Transformer Tank with Accessories / only Allied Tank parts (Accessories) shall be carried out as per the latest / MID'S / DCA'S to be obtained from BHEL during the course of manufacturing as per Para 1 of schedule III of the tender documents.	Accepted / Not accepted
B2	This tender is issued for (i) Fabrication of complete Power Trfr. Tank with Accessories and (ii) Fabrication of only Allied Tank Parts (Accessories) PO may be placed for (i) or (ii) above at discretion of BHEL and shall have to be executed by bidder.	Accepted / Not accepted
B3	The Power Transformer Tank with Accessories will be subject to vacuum testing / air pressure testing D.P. test as called in the drg. / MID'S.	Accepted / Not accepted
B4	Degreasing of Tanks & Accessories as per BHEL spec. where specified in painting process spec. (shot blasting) whose specified in party propose spec.	Accepted / Not accepted
B5	Cleaning by shot blasting / pickling as per BHEL Spec.	Accepted / Not accepted
B6	Primer & finish painting will be done as called in the Drg. / PO.	Accepted / Not accepted
B7	Matching of top & bottom tanks along with tank fitted items like Turrets, OAB pipes work etc. or tank & cover before dispatch.	Accepted / Not accepted
B8	Matching of tank & all accessories including pipe works A frame, conservator, cable box (100% items) fitted.	Accepted / Not accepted
B9	Bending & pre machining wherever required will be done by the supplier and no facility will be extended by BHEL. However if facility is not available, the same may be provided by BHEL on chargeable basis	Accepted / Not accepted
B10	Grooves for '0' rings shall be made by milling process.	Accepted / Not accepted
B11	WPS, PQR & WQR shall be followed as per quality plan no. QP / PT / SP 553 rev-02 dated-01.07.10	Accepted / Not accepted

C	Workmanship	
C1	The Power Transformer Tank with Accessories shall be manufactured maintaining the fabrication tolerances called in the drgs.	Accepted / Not accepted
C2	Painting & related quality checks shall be done as per process specification called in the drawings/ MID's	Accepted / Not accepted
C3	Suppliers to ensure to maintain weld sizes using weld checking gauges. Any lumps, scars or under cuts etc. are round smooth for neat appearance	Accepted / Not accepted
C4	To ensure desired aesthetic all sharp points cut edges, dents etc. shall be grounded smooth. Wherever radius or rounded off is called in drg., it should be ground as per drg. without any surface defect.	Accepted / Not accepted
D	Inspection Instruments	
D1	Standard QAP is QP/PT/ SP 553 rev-02 dated-01.07.10 shall be followed. If Work Order related QA Plan applicable, the same shall also be followed.	Accepted / Not accepted
D2	Stage wise inspection shall be carried out as Specified in QA Plan / as per job requirement	Accepted / Not accepted
D3	Dimensional record shall be maintained in the Performa prescribed by BHEL.	Accepted / Not accepted
D4	Inspection by BHEL CQX / Third party as per job Requirement / QA plan. All Co-ordination with Inspection agencies to be done by supplier.	Accepted / Not accepted
D5	Complete Tank's photograph shall be Supplied along with test certificates	Accepted / Not accepted
E	Cleaning & Painting :-	
E1	Cleaning, Degreasing, Shot Blasting & Painting to be done as per specification and Thickness of paint in microns shall be maintained as called in the spec. / Drgs MID.	Accepted / Not accepted
E2	Supplier to ensure that job should be free from shots, weld slag, dust and other foreign material before dispatch.	Accepted / Not accepted
E3	First coat of primer / paint shall be applied within 4 hours of surface preparation.	Accepted / Not accepted
F	Shipping Instructions :-	
F1	Tanks & Allied parts (Accessories) are to be dispatched as per sequence indicated in DU System at clause No.7 of schedule - IV (DU1 to DU 2).	Accepted / Not accepted
F2	All dispatchable units shall be properly identified with paint and deep punch	Accepted / Not accepted
G	General	
G1	In general, no material will be issued from BHEL	Accepted / Not accepted
G2	NDT wherever required is in suppliers scope of Work and should be carried out by BHEL'S Approved agencies. Quotation not confirming to this requirement is liable for rejection	Accepted / Not accepted
G3	Facilities such as bending, testing, machining Will not be provided by BHEL.	Accepted / Not accepted

G4	No Tools / Jigs / Fixtures / Gauges will be issued by BHEL	Accepted / Not accepted
G5	Only calibrated instruments and gauges will be used.	Accepted / Not accepted
G6	All inside / outside threads are to be duly protected with suitable means before shot blasting / paint applications.	Accepted / Not accepted
G7	Areas which are not to be painted e.g. jacking pads etc. are to be properly masked / protected from paint.	Accepted / Not accepted
G8	Conservator End Cover are to be sealed with gasket to ensure no water seepage.	Accepted / Not accepted
G9	Colour fading, if any, observed during course of time to be attended by the supplier.	Accepted / Not accepted
G10	Supplier has to collect and MID's from TRE / TRP /MM on intimation by BHEL and take necessary material procurement / manufacturing action as required.	Accepted / Not accepted
G11	Supplier has to obtain approval from BHEL like customer NTPC / NHPC / NPC / PSEB etc. for tank and accessories through BHEL Jhansi. necessary information will have to be submitted in time.	Accepted / Not accepted
G12	Clause no. 6 (i) & (ii) of schedule – VI.	Accepted / Not accepted
G13	Vendor must have spare capacity to supply 25 MT Per month for this contract	Accepted / Not accepted
G14	If vendor does not fulfill the criteria at G13, the offer shall be bypassed	Accepted / Not accepted
H	<u>COMMERCIAL PART.</u>	
H1	Validity of the rate contract shall be one year for ordering & 3 months thereafter for supply. This R/C E3559001 shall be effective from date of issue of rate contract to L1 bidder. However R/C can be extended for further one more year on mutual agreement.	Accepted / Not accepted
H2	Price variation clause shall be as per clause 2 of schedule - V.	Accepted / Not accepted
H3	Taxes and duties shall be extra as applicable on the date of actual delivery.	Accepted / Not accepted
H4	Penalty clause as well as other conditions given in general Terms & conditions,(schedule - VI) and Standard Enquiry terms & conditions are acceptable to us.	Accepted / Not accepted
H5	Rates quoted in the price bid are on F.O.R. Jhansi basis	Accepted / Not accepted
H6	Validity of the rates quoted is 120 days from the date of opening of price bid / date of RA.	Accepted / Not accepted
H7	The delivery shall be 10 weeks for Power Trfr.Tank with Accessories / only Allied tank parts (Accessories) after issue of LOI / PO. Other conditions as per clause 10.1 of schedule – V.	Accepted / Not accepted
H8	100% payment after 60 days of receipt and acceptance of material at BHEL'S works (not applicable for suppliers availing MSMED, SIDBI / HDFC discounting facility) & other condition given at clause 8 of schedule - V are acceptable to us.	Accepted / Not accepted
H9	Quoted rates are based on the rates frozen by BHEL for various activities which have been detailed at 6.1 of schedule - IV.	Accepted / Not accepted
H10	L1 bidder will be decided on the basis of {basic rate + ED + CST / VAT + Any other taxes (if any) - CENVAT benefit - Input Tax Credit}.	Accepted / Not accepted

	Rates fixed by BHEL for different variables at clause no 6.1 of schedule - IV will not be considered for arriving at L1 bidder.	
I	OTHER TECHNICAL REQUIREMENTS :- MEASURES FOR AVOIDANCE OF LEAKAGES AND WELD CRACKING IN TRANSFORMER TANKS .	
I.1.1	To ensure use of approved WPS, WQR , PQR and welders for fabrication of Tank.	Accepted / Not accepted
I.1.2	To ensure availability of WPS & PQR for MS to MS, MS to SS & SS to SS before start of work.	Accepted / Not accepted
I.2.1	Use of baking oven & portable thermos for electrodes.	Accepted / Not accepted
I.2.2	One qualified person is to be nominated by vendor who will be responsible for all QC function. No inspection calls shall be attended without clearance of your internal QC person on checklist / observation sheets.	Accepted / Not accepted
I.3.1	Welding of gussets in tank rim area to be done only after complete welding of rim to provide proper accessibility to welding	Accepted / Not accepted
I.3.2	Grooves of all rectangular flanges are to be machined by Milling M/c and grooves are to be checked for dimension before Welding & in no case deviation shall be allowed. This will avoid any complication in final stage	Accepted / Not accepted
I.4.1	Additional welding up to a length of 100 mm to be done on all corners of tank	Accepted / Not accepted
I.4.2	All pads and flanges are to be duly machined & dressed before Welding on tanks	Accepted / Not accepted
I.5	Suitable relieving / angle / pipes to be provided on all pressure joints for Leakage checking	Accepted / Not accepted
I.6	Testing bosses to be provided on box stiffeners whenever the leakage joint gets concealed.	Accepted / Not accepted
I.7	Utmost care to be taken in making of grooves in inspection pads, and ensuring rim flatness to prevent seepage through cords and gaskets	Accepted / Not accepted
I.8	Flame cut edges to be properly dressed before fit-up / welding.	Accepted / Not accepted
I.9	CO2 welding if employed to be avoided in pressure joint area. Further welders to be qualified for Co2 welding process.	Accepted / Not accepted
I.10.1	If CO2 welding employed care should be taken to keep the weldment away from strong draughts. The job should be adequately screened to avoid disruption of gas.	Accepted / Not accepted
I.10.2	As far as possible for uniformity of welding appearance it is suggested to use one variety of welding process either of CO2 or conventional.	Accepted / Not accepted
I.11.1	Vertical welding and overhead welding should not be done by CO2 welding and avoided as far as possible in stick welding	Accepted / Not accepted
I.11.2	As far as possible welding is to be done in down hand position only	Accepted / Not accepted
I.12.1	Pressure testing to be done with actual size of gasket and cords as given in drgs.	Accepted / Not accepted

I.12.2	Pressure & Vacuum testing is to be done with turrets and all inspection covers duly blanked & turrets are to be tightened with full Qty studs only.	Accepted / Not accepted
I.13.1	Only calibrated pressure gauges (entire range) of 0 to 2.1 kg / sq. cm. to be used.	Accepted / Not accepted
I.13.2	Welding gauge is to be made available with your QC person to ensure proper weld size.	Accepted / Not accepted
I.14	Repetition of type test PT / VT should be avoided in all circumstances. Proper scaling and leakages should be ensured before and without subjecting the tank to the reqd. test pressure of PT / VT	Accepted / Not accepted
I.15	PT / VT shall be observed by us only once. Permission shall be taken from BHEL giving reason for repetition.	Accepted / Not accepted
I.16.1	There should be no dressing marks on tank, which gives a shabby look. Temporary lifting hooks being welded on tank for lifting purpose should be avoided.	Accepted / Not accepted
I.16.2	There should not be any sharp corner on complete tank assy. and a general radius of 0.5 mm to 1 mm is to be maintained on edges.	Accepted / Not accepted
I.17	All DP and NDT are to be certified by qualified level II inspectors only.	Accepted / Not accepted
I.18	All concession / deviations are to be regularized through our concession / déviation format	Accepted / Not accepted
I.19.1	Painting records are to be maintained and filled in BHEL Jhansi log sheet.	Accepted / Not accepted
I.19.2	Primer is to be applied within 6 hours of Shot blasting after removal of loose and dirt. Adhesion and thickness is to be done after each coat of primer / paint application	Accepted / Not accepted
I.20	Paint peel off test shall be carried out by Adhesion testing by fixing tapes on the applied surface.	Accepted / Not accepted
I.21	Deburring of all plain holes and re-tapping of all threaded holes is to be ensured before shipment.	Accepted / Not accepted
I.22	Fabrication works cannot be offloaded without prior approval of BHEL. The above suggested measure are to be used as guiding tools in an effort to reduce the occurrences of leakages and weld cracking in future	Accepted / Not accepted
J	Rate may be finalized through reverse auction.	Accepted / Not accepted
J1	Please confirm that in case BHEL decides to go for Reverse Auction you will participate in Reverse Auction	Yes : Confirmed



Schedule -VI

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

सामग्री प्रबंधन विभाग

डाकघर: भेल,झाँसी पिनकोड 284120 उत्तर प्रदेश

टेलीफोन:0510-2412459, ई-मेल mlahirwar@bheljhs.co.in

Note :- If any of the above conditions are not accepted the offer shall be liable for rejection.

K. Contact detail of vendor :-

- K1. Contact Person :
- K2. Mobile no. :
- K2. Telephone No / FAX :
- K4. E mail Id :

PRICE BID (PART - B)

To,
Dy GM (MM)
BHEL JHANSI-284129.

Subject : Price Bid against Rate Contract Enquiry no. E3559001 for Tank and Tank Accessories for POWER TRANSFORMERS on finish basis.

Dear Sir,
We are quoting Techno-commercial bid, basic rate as under:

S. No.	Description	To be filled by the bidder
1	Name & Address of the supplier	
2	Estimated Tendered Quantity	150 Sets / 3750000kg.
3	Basic Rate on F.O.R. destination basis (Rate in Rs. per kg basis) in figures	
3	Basic Rate on F.O.R. destination basis (Rate in Rs. per kg basis) in words	

- Note:- (i) Above rate are quoted based on base rate of JPC Rs **28.89** per kg of **Sep 2015 Delhi**.
(ii) The above quoted rates are inclusive of packing & forwarding charges on F.O.R. destination basis.
(iii) In addition to above Additional Charges as per Para 6 of Schedule III (if any) shall also be paid by BHEL.
(iv) . The price bid if submitted in any other fashion or by adding any condition (e.g. minimum order quantity, rates applicable for specified quantity, discount for quantity, rate based on slabs, rate based on terms of payment etc.), offer shall be straight way REJECTED even if, offer has been found technically & commercial acceptable before opening of price bid

Signature of Supplier :

Name :

Designation :

Seal :

Schedule - VIII

GENERAL 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 (will be informed later on) 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 has provided the calculation sheets (e.g. EXCEL sheets) 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 (will provide later on) 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.**

R.A. PRICE CONFIRMATION AND BREAKUP (Sample sheet)

To,
M/s “\$”('\$' Name and Address of Service Provider)
.....
.....

SUB : Final price quoted during Reverse Auction and Price breakup

We confirm that we have quoted following rate(s) for tender enquiry no.E3539013

SR NO.	DESCRIPTION	UNIT	Eng. # 01 AMOUNT (RS)
A-	BASIC RATE	(Rs / Kg)	
B-	ED & CESS @ 12.50 % or as applicable(if applicable)	(Rs / Kg)	
C-	CST @ 2 % or as applicable	(Rs / Kg)	
D-	VAT @ 14 % or as applicable	(Rs / Kg)	
E-	Cenvat benefit (same as B)	(Rs / Kg)	
F-	Input Tax Credit (same as D)	(Rs / Kg)	
G-	TOTAL LANDED COST * (A+B+C+D-E-F)	(Rs / Kg)	

Note : This total landed cost to be quoted during Reverse Auction. This sheet may be modified as per offer received.

Above prices shall be valid for a period of 120 days.

Thanking you and looking forward to the valuable order from BHEL.

Your sincerely

Signature of bidder :

Name :

Designation :

Seal of company :

**CC : Dy. General Manager (MM)
BHEL, Jhansi**

BHEL AA:MM:IP:R01 dtd 1.4.2010

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

And

(description of the party along with address)

.....
.....

hereinafter referred to as The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART'

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for fabrication of **Power Transformer Tank with Accessories / only Allied Tank parts (Accessories) on finish basis.** The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles :-

- 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information

through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved **in the tender process or the execution of the contract or to any third person any material , immaterial or any other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.**

2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or **undisclosed agreement or understanding, whether formal or informal . This applies in particular to prices, specifications , certifications , subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.**

2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC / PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of **competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.**

2.1.4 The **Bidder(s)/ Contractor(s) will, when presenting his bid , disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.**

2.2 The **Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.**

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors". framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders / Contractors / Sub - contractors

- 6.1 The Bidder(s)/ Contractor(s) undertake(s) to obtain from all subcontractors a commitment consistent with this Integrity Pact and report Compliance to the Principal. This commitment shall be taken only from those sub-contractors whose contract value is more than 20 % of Bidder's/ Contractor's contract value with the Principal. The Bidder(s)/ Contractor(s) shall continue to remain responsible for any default by his Sub-contractor(s).
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors / Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)! Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor. upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality,

- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC / PC Act and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.10 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

- 9.1 This Pact begins and shall be binding on and from the submission of bid(s) by bidder(s). It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.
- 9.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 **Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.**

11.0 The detail of IEM for BHEL Jhansi is as under :-

<u>Name</u>	<u>Address</u>	<u>Contact No.</u>
Shri D.R.S. Chaudhary, IAS (Retd)	Flat No. L-202 & L-203 (1 st Floor) Ansal Lake View enclave Shamla Hills, Bhopal (M.P.)	Phone +91 755 4050495 dilip.chaudhary@icloud.com

Note : Pending nomination of new IEM for the specific tender, prospective suppliers / bidders may address their complaints / representation as envisaged in the IP to the Head (MM) of BHEL Jhansi.

(Abhishek)

Sr. Engineer / MM

For and on behalf of
Bharat Heavy Electricals Ltd., Jhansi

For & On behalf of the Principal
(Signature with Office Seal)

For & On behalf of the Bidder / Contractor
(Signature with Office Seal)

Place : _____ Place : _____

Date : _____ Date : _____

Witness 1 : _____ Witness 2 : _____

(Name & Address) : _____ (Name & Address) _____

**CALCULATION TO DERIVE
JPC MARKET PRICE (RETAIL) EXCLUDING ED & VAT OF 10 MM PLATE FOR DELHI**

CALCULATION TO DERIVE JPC MARKET RATE (RETAIL) EXCLUDING ED & VAT OF 10MM, STEEL PLATE FOR DELHI FOR THE MONTH OF SEP-15					
JPC STEEL RATE DETAILS (Retail)					
PLATE SIZE	MONTH	RATE (Rs / Kg.) (Inclusive of all taxes)	ED	VAT	RATE (Rs / Kg.) (Excluding ED & VAT)
A		B	C	D	
10 MM	Sep-15	33.80	12.50%	4.00%	28.89

- (a)- JPC Market price (Retail) declared in beginning of 05-Sep-2015 for Delhi including Excise Duty & VAT = Rs 33.80 per kg (Rate of JPC enclosed)
- (b)- Present rate of Excise Duty (including Educational cess 2% and secondary 1%) = @ 12.50 %
- (c)- Present rate of VAT for Delhi = @ 4 %
- (d)- Therefore JPC Market price (Retail) excluding ED & VAT = JPC price for Delhi including ED & VAT
(1.125 x 1.04)
- = $\frac{33.80}{(1.125 \times 1.04)}$
- = Rs 28.89 per kg



ज्वाइन्ट प्लान्ट कमिटी
(भारत सरकार द्वारा गठित)
JOINT PLANT COMMITTEE
(Constituted by Govt. of India)
An ISO 9001 : 2000 Certified Organisation

DATE : 05th September 2015

JPC MARKET PRICE (RETAIL) AS ON 01-SEP-2015

Sl. No.	ITEM	Rs. per tonne			
		Kolkata	Delhi	Mumbai	Chennai
1	PIG IRON	25819	25333	24700	22313
2	BILLETS 100 MM	28300	26000	32400	30844
3	BLOOMS 150X150 MM	28113	25500	31700	27825
4	PENCIL INGOTS	27875	26000	34300	27563
5	WIRE RODS 6 MM	39269	38000	29630	38693
6	WIRE RODS 8 MM	39194	37750	29630	38588
7	ROUNDS 12 MM	36663	38225	34278	37590
8	ROUNDS 16 MM	36655	38225	34278	37765
9	ROUNDS 25 MM	36330	39000	34060	38325
10	TMT 10 MM	36425	40025	34902	37275
11	TMT 12 MM	36025	40050	34536	37170
12	TMT 25 MM	36140	39813	34536	37013
13	ANGLES 50X50X6 MM	37610	38759	37406	37625
14	ANGLES 75X75X6 MM	37730	38492	36794	37888
15	JOISTS 125X70 MM	38315	38625	43050	34405
16	JOISTS 200X100 MM	37080	38667	38019	37940
17	CHANNELS 75X40 MM	36880	38759	37669	37713
18	CHANNELS 150X75 MM	36790	38675	37100	38360
19	PLATES 6 MM	34930	33800	34344	35175
20	PLATES 10 MM	34857	33800	34431	35350
21	PLATES 12 MM	35055	34000	33994	35700
22	PLATES 25 MM	35688	34250	33994	36575
23	H. R. COILS 2.00 MM	36345	33933	34738	36750
24	H. R. COILS 2.50 MM	35743	33400	34388	36671
25	H. R. COILS 3.15 MM	35405	33275	34278	36330
26	C. R. COILS 0.63 MM	43750	40000	38938	42263
27	C. R. COILS 1.00 MM	42756	39233	38675	42263
28	G. P. SHEETS 0.40 MM	51381	46850	45150	52631
29	G. P. SHEETS 0.63 MM	50250	45250	44888	54075
30	G. C. SHEETS 0.40 MM	52027	48250	45150	54731
31	G. C. SHEETS 0.63 MM	51069	46100	44625	53681
32	MELTING SCRAP H M S - I	19513	22250	25000	19075
33	MELTING SCRAP H M S - II	19250	21650	25700	18550
34	SPONGE IRON (COAL BASED)	16138	18250	21900	16450

NOTE: 1) All prices are in Rs./Tonne and has been compiled on the basis of average of Main & Others producers' price.

2) Prices are inclusive of Excise Duty & Sales / Vat Tax

3) All prices are as on day 01 of this month

4) Prices are Indicative.

'ISPAT NIKETAN', 52/1A, Ballygunge Circular Road, Kolkata - 700 019

'इस्पात निकेतन', 52/1A, बालीगंज सरकूलर रोड, कोलकाता - 700 019

Phone : 91 (033) 2461-4055/4058/4068 Fax : 2461-4063 E-mail : jpc@wb.nic.in. Website : www.jpcindiansteel.org

रंजन कुमार पाकी
Ranjan Kumar Padhy
प्रबंध (सूद के एवं एलिटिवल स्टॉक)
Manager (DR & AS)

ज्वाइन्ट प्लान्ट कमिटी
Joint Plant Committee
52/1A, बालीगंज सरकूलर रोड
कोलकाता-700 019
52/1A, Ballygunge Circular Road
Kolkata-700 019

Ranjan Kumar Padhy
05/09/2015

PACKING INSTRUCTIONS FOR TANK / TANK ACCESSORIES

1. Openings of all accessories including conservators, headers, cable boxes, thermosyphons, pipework etc. are to be blanked using steel blanking plate, 3thk NBC gasket and adequate hardware properly tightened to prevent ingress of dust/moisture.
2. Following accessories **are to be supplied in packed wooden boxes**:

BOX NO	ITEM DETAILS
1	Assembly Items - TG Mounting items, Inside mounting items, Tapchanger support, Line lead Fixtures, TG mounting CT Mounting etc. (If called)
2	Testing Items - Bushing Mtg. Flanges, Steel Rings for CT Terminal board, dome cover for CT Board, Impact recorder bracket and MDU Brackets
3	Header/Cooler Pipe work
4	Pedestal Type Floor mounted Fan Supports & Arms (if not welded)
5	Conservator Pipework & OAB pipes
6	Aux Conservator
7	Aux Conservator Pipe work Assy
8	Outside Fitting Items, Bracket for moisture removal system with all pipes, Radiator fixing bar, shims, clips, support assy. All other misc. fabricated items.

Each Item of Box 1 to Box 8 above to be individually wrapped in Polyethylene air bubble film and tightened with adequate polyethylene adhesive tape to prevent ingress of dust/water. Then all items of respective box to be wrapped (together) in polyethylene sheet and adequately taped while placing in wooden box. Packing list (giving description and annexure item reference) duly certified by BHEL / Third Party inspector for completeness should be kept securely in water proof envelop and delivered along with box.

3. Following items/accessories are **not to be supplied in wooden boxes** :

SL NO	ITEM DETAILS
(i)	Bottom Tank/Tank with all inspection covers. However all openings are to be blanked using steel blanking plates / inspection covers and 3 thk. NBC gasket / proper size nitrile rubber O rings (wherever applicable). Adequate hardware to be used properly tightened to prevent ingress of dust/moisture.

SL NO	ITEM DETAILS
(ii)	Top tank/Tank Cover with all inspection Covers. However all openings are to be blanked using steel blanking plates/ inspection covers and 3 thk. NBC gasket / proper size nitrile rubber O rings (wherever applicable). Adequate hardware to be used properly tightened to prevent ingress of dust/moisture.
(iii)	All Turrets with steel blanking plates / inspection covers and 3 tk NBC gasket / proper size nitrile rubber O rings (wherever applicable). Adequate hardware to be used properly tightened to prevent ingress of dust/moisture.
(iv)	Ladder assembly
(v)	A Frames
(vi)	Top/Bottom Headers
(vii)	Main Conservator
(viii)	Fan Supports & Arms (if welded)

Items from 3 (iii) to 3 (viii) above to be wrapped in Polyethylene air bubble film and tightened with adequate polyethylene adhesive tape to prevent ingress of dust/water.

4. Guidelines for making packing boxes/crates are as follows:

- (i) Pine wood material to specification AA51401 shall be used for all crates.
- (ii) Timber used shall be free from crack, rotten and infected wood.
- (iii) For crate construction and other details refer sample drg. BP 7842078190.
- (iv) For general packing instructions ref. BP 04930399.
- (v) Thickness and width of all planks and battens used in base, sides and top shall be maintained strictly as per above drg.
- (vi) Number of planks shall be decided depending upon the box size.
- (vii) Arrangement of planks in base, sides and top shall be maintained as per above drg.
- (viii) Gap of 200 to 250 mm between planks shall be maintained in sides and top cover.
- (ix) Planks (40mm) at base shall be placed side by side without gap.
- (x) All reinforcing battens shall be arranged as shown in the drg.
- (xi) All planks/battens should be used in one piece without joint.
- (xii) Base shall be raised by 50mm above ground to facilitate sling provision.
- (xiii) All corner joints of battens should be anchored using steel straps and nails.
- (xiv) Items should be packed tight using suitable cushioning material to ensure safe scratch free delivery at sites.
- (xv) BHEL / Third Party inspector should certify the completeness of box as per packing list described in point 2 above before closing the box.



Schedule -XI

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

सामग्री प्रबंधन विभाग

डाकघर: भेल, झाँसी पिनकोड 284120 उत्तर प्रदेश

टेलीफोन: 0510-2412459, ई-मेल mlahirwar@bheljhs.co.in

5. Sizes of Boxes/crates to be used and their weights are given in Annexure to this Schedule XI.
6. Supplier shall also send one copy of BHEL supplied Annexure wherein against each item either the relevant Box no & applicable sl no of that box's packing list no will be mentioned (if that annexure item is packed in box) or "loose" will be mentioned (if that annexure item is not supplied in box). This copy shall be sent with each despatch challan..

Annexure to Schedule XI

SIZES OF WOODEN CRATES FOR TANK ACCESSORIES

BOX NO	BOX DESCRIPTION (Ref. point 2 of Packing Instructions for details)	Box Crate Dimensions					Remarks
		Job Rating	Length (mm)	Width (mm)	Height (mm)	Weight (kgs)	
1	Assembly Items	All	1000	750	500	66	To be sent along with Bottom Tank / Tank
2	Testing Items	All	1000	750	500	66	To be sent along with Top Tank / Tank / Tank Cover
3	Header / Cooler Pipe Work	100 MVA and above	4800	1500	900	445	
		Below 100 MVA	3200	1100	650	254	
4	Fan Supports	All	1500	1000	650	138	
5	Conservator Pipe Work	100 MVA and above	3200	1100	650	254	
		Below 100 MVA	3200	600	650	170	
6	Auxilliary Conservator	All	1000	750	500	66	
7	Auxilliary Conservator Pipe Work	All	3200	600	650	170	
8	Outside Fittings and other items	All	3200	600	250	132	



BHARAT HEAVY ELECTRICALS LIMITED
(A Govt of India undertaking)
MATERIALS MANAGEMENT (MM) , JHANSI - 284129

TENDER ENQUIRY NO: E3559001

DATE: 30.09.15

ANNEXURE A TO SCHEDULE I

All requirements should be mandatorily filled, relevant documentation enclosed, and every page should be signed and stamped by the bidder.

QUALIFYING REQUIREMENTS

SI	Description of Qualifying requirement	Copy encl.												
1	<p>Average Annual financial turnover during the last three years, ending 31st March of the previous financial year, should be at least 115 lakhs approx.</p> <p>The bidder to fill the turnover details as per the format given below :</p> <table border="1"><thead><tr><th>Financial Year</th><th>To be filled by Bidder Turnover (lakhs)</th></tr></thead><tbody><tr><td>2014-15</td><td></td></tr><tr><td>2013-14</td><td></td></tr><tr><td>2012-13</td><td></td></tr></tbody></table>	Financial Year	To be filled by Bidder Turnover (lakhs)	2014-15		2013-14		2012-13						
Financial Year	To be filled by Bidder Turnover (lakhs)													
2014-15														
2013-14														
2012-13														
	<p><i>As evidence of the above information, bidder to attach Audited Balance sheet including Profit & Loss Statement of last three financial years. In case the Balance Sheet of the last financial year is not yet audited, the un-audited balance sheet of the last financial year can be enclosed along with certificate of CA</i></p>	Yes	No											
2	<p>Work Experience</p> <p>(i) The total tonnage of Heavy fabrication jobs (the tonnage of each job should be atleast more than 5 MT) successfully completed by the bidder during last two years (ending last day of month previous to the one in which applications are invited) should be equal to or more than 144 MT.</p> <p style="text-align: center;">and</p> <p>(ii) Out of the tonnage of 144 MT mentioned at 2(i) above, the bidder must have successfully completed at least three no of Power Transformer tanks inclusive of Accessories (tonnage of each more than 15 MT) during last two years (ending last day of month previous to the one in which applications are invited).</p> <p>The bidder to mandatorily fill the details of experience as per Annexure A1 to Schedule I, enclose the same, and the summary to be filled by bidder should be as under:</p> <table border="1"><thead><tr><th rowspan="2">Jobs executed in last two years (ending last day of month previous to the one in which applications are invited).</th><th colspan="2">To be filled by Bidder</th></tr><tr><th>No of jobs</th><th>Tonnage (MT)</th></tr></thead><tbody><tr><td>Total Heavy Fabrication jobs (the tonnage of each job should be atleast more than 5 MT)</td><td></td><td></td></tr><tr><td>3 nos. of Power Transformers inclusive of Accessories (tonnage of each set more than 15 MT)</td><td></td><td></td></tr></tbody></table>	Jobs executed in last two years (ending last day of month previous to the one in which applications are invited).	To be filled by Bidder		No of jobs	Tonnage (MT)	Total Heavy Fabrication jobs (the tonnage of each job should be atleast more than 5 MT)			3 nos. of Power Transformers inclusive of Accessories (tonnage of each set more than 15 MT)				
Jobs executed in last two years (ending last day of month previous to the one in which applications are invited).	To be filled by Bidder													
	No of jobs	Tonnage (MT)												
Total Heavy Fabrication jobs (the tonnage of each job should be atleast more than 5 MT)														
3 nos. of Power Transformers inclusive of Accessories (tonnage of each set more than 15 MT)														



BHARAT HEAVY ELECTRICALS LIMITED
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TENDER ENQUIRY NO: E3559001

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ANNEXURE A TO SCHEDULE I

All requirements should be mandatorily filled, relevant documentation enclosed, and every page should be signed and stamped by the bidder.

SI	Description of Qualifying requirement	Copy encl.													
	As evidence of the above information, the bidder to attach the documentary proof as below :	Yes	No												
	<table border="1"><thead><tr><th>Supplies made to</th><th>Documentary Proof to be attached</th><th>Bidder to Tick '√' whichever is applicable</th></tr></thead><tbody><tr><td>BHEL, Jhansi or BHEL, Bhopal or other Units of BHEL</td><td>Purchase Order Copies to be submitted</td><td></td></tr><tr><td>Other PSUs / Govt Undertakings</td><td>Copy of Performance certificate & Purchase Order issued by Customer for successful execution of the jobs to be submitted</td><td></td></tr><tr><td>Private Sector</td><td>Copy of Performance certificate, Purchase Order and relevant Excise Tax Invoice / TDS certificate must be attached.</td><td></td></tr></tbody></table>	Supplies made to	Documentary Proof to be attached	Bidder to Tick '√' whichever is applicable	BHEL, Jhansi or BHEL, Bhopal or other Units of BHEL	Purchase Order Copies to be submitted		Other PSUs / Govt Undertakings	Copy of Performance certificate & Purchase Order issued by Customer for successful execution of the jobs to be submitted		Private Sector	Copy of Performance certificate, Purchase Order and relevant Excise Tax Invoice / TDS certificate must be attached.			
	Supplies made to	Documentary Proof to be attached	Bidder to Tick '√' whichever is applicable												
	BHEL, Jhansi or BHEL, Bhopal or other Units of BHEL	Purchase Order Copies to be submitted													
Other PSUs / Govt Undertakings	Copy of Performance certificate & Purchase Order issued by Customer for successful execution of the jobs to be submitted														
Private Sector	Copy of Performance certificate, Purchase Order and relevant Excise Tax Invoice / TDS certificate must be attached.														
3	Proforma for Compliance to Mandatory Resource Requirements (Annexure B to Schedule I) along with the necessary documentary proof (wherever called for) to be mandatorily filled and submitted.	Yes	No												
4	Proforma for Compliance to Desirable Resource Requirements (Annexure c to Schedule I) to be mandatorily filled and submitted	Yes	No												
5	Self-Certificate/Declaration (as per Annexure A2 to Schedule I).that (a) the bidder is not suspended by BHEL Jhansi or any Unit/Office of BHEL or any other organization, and (b) the bidder not guilty by a Court of Law in India for any offence involving fraud, dishonesty and moral turpitude.	Yes	No												
6	Permanent Account Number (PAN) Number of Supplier (In case the PAN number is not in the name of the firm, the relevant records linking the ownership to be provided)	Yes	No												
7	TIN No of Supplier	Yes	No												
8	Part 1 (Techno - Commercial Bid) & Part II (Price Bid)	Yes	No												

We agree that our bid is liable to be rejected in case (a) the relevant information is not filled, (b) documentation is incomplete, (c) there are false declarations, and (d) if we do not meet the mandatory criteria on Financial Turnover, Experience & Mandatory Resource requirements.

(Signature of the Supplier
with Name. Designation & Seal)

ANNEXURE A1 TO SCHEDULE I

TENDER ENQUIRY NO: E3559001

DATE: 30.09.15

' Job' means a single descriptive Purchase Order item for which an order has been placed. Sum of different items of a Purchase Order will not constitute a ' Job'.

SI	Customer	BHEL / GOVT PSU / PRIVATE	PO No	PO Dt	Rating (MVA)	PO Qty.	Weight Per job (MT)	PO Completion date	Whether Proof of completion enclosed	
A	Power Transformer Tanks with Accessories (each job more than 15 MT)									
1									Yes	No
2									Yes	No
3									Yes	No
	TOTAL ' A '									
B	Other Heavy Fabrication Jobs (each job more than 5 MT)									
1					NA				Yes	No
2					NA				Yes	No
3					NA				Yes	No
4					NA				Yes	No
5					NA				Yes	No
6					NA				Yes	No
7					NA				Yes	No
8					NA				Yes	No

ANNEXURE A1 TO SCHEDULE I

TENDER ENQUIRY NO: E3559001

DATE: 30.09.15

' Job' means a single descriptive Purchase Order item for which an order has been placed. Sum of different items of a Purchase Order will not constitute a ' Job'.

SI	Customer	BHEL / GOVT PSU / PRIVATE	PO No	PO Dt	Rating (MVA)	PO Qty.	Weight Per job (MT)	PO Completion date	Whether Proof of completion enclosed	
9					NA				Yes	No
10					NA				Yes	No
11					NA				Yes	No
12					NA				Yes	No
13					NA				Yes	No
14					NA				Yes	No
15					NA				Yes	No
16					NA				Yes	No
17					NA				Yes	No
18					NA				Yes	No
19					NA				Yes	No
20					NA				Yes	No
	TOTAL ' B '									
	GRAND TOTAL ' A + B '									

We agree that our bid is liable to be rejected in case of incomplete data / false declarations.

**(Signature of the Supplier
with Name. Designation & Seal)**

TENDER ENQUIRY NO. E3559001

Date :

Self Declaration

1. I / We have never been found guilty by a court of law in India for any crimes of fraud, dishonesty or moral turpitude
2. I / We have never been suspended by BHEL Jhansi or any Unit/Office of BHEL or any other organization.
3. I / We undertake to abide by all statutory and regulatory requirements while carrying out jobs for BHEL Jhansi.

(Signature of the Supplier with Name, Designation & Seal)



BHARAT HEAVY ELECTRICALS LIMITED
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MATERIALS MANAGEMENT (MM) , JHANSI - 284129

TENDER ENQUIRY NO: E3559001

DATE: 30.09.15

ANNEXURE B TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO MANDATORY RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' Outsourcing is not allowed for these requirements.

SI	Requirements	To be filled in by Bidder				
A	General					
1	Covered Shed with concrete floor for fabrication and Assembly (Minimum area 450 sqm). This should exclude requirements sought for ' Separate area' as called at ' E ' below.	Available Area (sqm)				
2	Overhead EOT Crane (with minimum crane capacity of 15 MT)	Capacity (MT)				
		Nos				
3	Bed Plates (perfectly levelled) in single location , big enough to cover complete tank rim size 6000 mm x 3000 mm approx..	Whether Available?	Available	Not Available		
		If Available, indicate the size (W x L) and numbers	Size (mm)	Numbers		
			W	L		
B	Manpower					
4	Minimum three Qualified Welders as per ASME section IX or AWS D 1.1 for MS to MS Welding - GMAW / FCAW (Necessary qualification certificates to be submitted) and following information to be filled.					
	Name of Welder					
	Experience (yrs)					
	WPS					
	PQR					
5	Fitter (Minimum two required)	Number Available				
	Grinder (Minimum three required)	Number Available				
	Crane Operator (Minimum one required)	Number Available				



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All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' Outsourcing is not allowed for these requirements.

SI	Requirements	To be filled in by Bidder		
6	Painter (Minimum one required)	Number Available		
7	Technical staff for reading and understanding the technical documents & ,inspection of jobs (Minimum one employee with Diploma / Degree in Mechanical Engg)	Name		
		Qualification(s)		
C	Working Facilities			
8	Pug Cutting Machine (Minimum two nos with capacity to cut thickness upto 32 mm)	Serial Number	1	2
		Make		
		Thickness (mm)		
9	Portable Radial Arm Drilling Machine RM 63 (Minimum one number with capacity to drill Hole Dia 63 mm)	Make		
		Year of Mfr.		
		Capacity (Max. Drill Dia)		
10	Tools for Tapping	Whether Available?	Available	Not Available
11	Vacuum Pump (Minimum one number to generate a Max Vacuum of 760 mmHg)	Make		
		Max. Vacuum (mmHg)		
12	Air Compressor (Atleast one number to generate Minimum pressure of 1.5 kg / sq. cm)	Make		
		Pressure it can generate (Kg / sq.cm)		
13	Welding Machines GMAW / FCAW (Minimum 3 numbers)	Make		
		Rating (KVA)		
		Numbers		



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PROFORMA FOR COMPLIANCE TO MANDATORY RESOURCE REQUIREMENTS

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SI	Requirements	To be filled in by Bidder			
14	Portable Hand Grinding Machines (Minimum 3 nos)	Number Available			
15	Radial Drills (Maximum drill size 63 mm dia)	Whether Available ?	Available	Not Available	
		If Available, please specify the maximum Drill Size (mm)			
16	Electrode Heating Oven with thermostatic temperature controller (Minimum one no Fixed type with maximum temperature of 300°C)	Number Available			
		Temperature (°C)			
17	Electrode Storage Ovens (Minimum four numbers Portable type, each with an electrode storage capacity of 2 kg)	Nos			
		Capacity (Kgs)			
D	Testing facilities				
18	Vacuum Testing	Whether Available ?	Available	Not Available	
19	Pressure Testing	Whether Available ?	Available	Not Available	
20	Dye Penetrant (DP) Testing	Whether Available ?	Available	Not Available	
21	Log Book for Blasting & Painting	Whether Available ?	Available	Not Available	
E	Separate Area				
22	Degreasing & Cleaning (Minimum 100 sqm of Covered Shed)	Available Area (sqm)			
23	Painting (Minimum 100 sqm. of Covered Shed)	Available Area (sqm)			
24	Storage (Minimum 100 sqm)	Available Area (sqm)			



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ANNEXURE B TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO MANDATORY RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' Outsourcing is not allowed for these requirements.

SI	Requirements	To be filled in by Bidder		
F	Instruments			
25	Pressure Guages - Minimum two nos. of range 0 -2 kg per sq cm (Calibration from NABL / Government accredited agency)	Serial Number	1	2
		Make		
		Range (kg / sq.cm)	From	To
		Calibration done from		
26	Vacuum Guages - Minimum one no. of range 0 - 760 mm Hg (Calibration from NABL / Government accredited agency)	Make		
		Range (mm Hg)	From	To
		Calibration done from		
27	Straight Edges	Whether Available ?	Available	Not Available
28	Feeler Guages (1 set) to measure clearances	Whether Available ?	Available	Not Available
29	Paint thickness measuring instrument (Measurement range between 0 - 300 microns.)	Range	From	To
		Microns		
30	Viscometer	Whether Available ?	Available	Not Available
31	Spray Painting System	Whether Available ?	Available	Not Available
32	Thread Checking Guages M4,M6,M10,M12,M16,M20,M24	Whether all required gauges Available ?	Available	Not Available
33	Barometer	Whether Available ?	Available	Not Available



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ANNEXURE B TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO MANDATORY RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' Outsourcing is not allowed for these requirements.

SI	Requirements	To be filled in by Bidder		
34	GO, NO GO gauges for limiter grooves	Whether Available ?	Available	Not Available
35	Vernier Calipers with minimum range of 300 mm (Calibration from NABL / Government accredited agency)	Range (mm)	From	To
		Calibration done from		
36	Tape for paint adhesion (minimum one-inch (25-mm) wide semi transparent pressure-sensitive tape with an adhesion strength as per ASTM 3359)	Whether Available ?	Available	Not Available
37	Measuring Tape (Calibration from NABL / Government accredited agency)	Range (mm)	From	To
		Calibration done from		

Our offer is liable to be rejected in case (a) we have not filled / not marked / left blanks, (b) if we do not meet the mandatory requirements, and (c) if the mandatory requirements are not available at our works. BHEL can assess our facilities at any point of time and we agree for penal action from BHEL in case any of the above information furnished is found to be false.

Date:

**(Signature of Supplier
with Name, Designation and Seal)**



BHARAT HEAVY ELECTRICALS LIMITED
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TENDER ENQUIRY NO: E3559001

DATE: 30.09.15

ANNEXURE C TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO DESIRABLE RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' If the facility is outsourced, mention 'OS'.

SI	Requirements	To be filled in by Bidder			
A	General				
1	Office for storing and referring the documents	Available Area (sqm)			
2	Bed Plates (perfectly levelled) in single location , big enough to cover complete tank rim size 8000 mm x 4000 mm approx..	Whether Available?	Available	Not Available	
		If Available, indicate the size (W x L) and numbers	Size (mm)		Numbers
			W	L	
B	Manpower				
3	Organization Structure (to be submitted)				
C	Working Facilities				
4	Plate Bending Machine (Minimum working thickness 16 mm)	Make			
		Year of Mfr.			
		Dimn. (mm) of plate which can be worked			
5	Plate Cutting Machine (Minimum working thickness 32 mm)	Profile Cutting			
		Upto thickness (mm)			
		Year of Mfr.			
6	Plate Rolling Machine (Minimum working thickness 8 mm)	Make			
		Upto thickness (mm)			
		Year of Mfr.			



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ANNEXURE C TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO DESIRABLE RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' If the facility is outsourced, mention 'OS'.

SI	Requirements	To be filled in by Bidder			
7	Milling Machine	Make			
		Year of Mfr.			
		Dim in mm (l x w) of plate which can be worked			
8	Lathe Machine	Make			
		Year of Mfr.			
9	Shot Blasting Set up Minimum Size W x L x H (6mtr x 9 mtr x 5 mtr)	Whether Available ?	Available	OS	
		Size (mtr.) W x L x H	W	L	H
10	Heating Ovens for Painting	Whether Available ?	Available	OS	
D	Testing facilities				
11	UT & Radiographic test on weld	Whether Available ?	Available	OS	
12	Raw Material testing	Whether Available ?	Available	OS	
13	Hydraulic test of tank	Whether Available ?	Available	OS	
14	IP-55 test	Whether Available ?	Available	OS	
F	Instruments				
15	Vacuum Cleaner	Whether Available ?	Available	OS	
16	Torque Spanners	Whether Available ?	Available	OS	
17	Humidity Measuring Instrument	Whether Available ?	Available	OS	
E	Other features				
18	Water Storage and Drainage System	Whether Available ?	Available	Not Available	
19	Water Heating arrangement for Hot water Cleaning (Temp : 80 degrees centigrade)	Whether Available ?	Available	Not Available	



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ANNEXURE C TO SCHEDULE I

PROFORMA FOR COMPLIANCE TO DESIRABLE RESOURCE REQUIREMENTS

All requirements should be mandatorily filled and every page should be signed and stamped by the bidder. Wherever information is sought regarding availability of a facility, strike off whichever is not applicable ' Available / Not Available.' If the facility is outsourced, mention 'OS'.

SI	Requirements	To be filled in by Bidder		
20	High Pressure Water Pump for cleaning and degreasing	Whether Available ?	Available	Not Available
21	Availability of ISO Certificate (If available, enclose the copy of the certificate)	Whether Available ?	Available	Not Available
22	Approved by end users like NTPC, PGCIL, SEBs, etc. (If available, Performance certificates to be enclosed)	If Approved, indicate the names of Customers		
23	From where is the raw material like Steel Plates sourced.	Indicate the probable sources		
24	From where are the Paints sourced.	Indicate the probable sources and brands		

Our offer is liable to be rejected in case we have not filled / not marked / left blanks in the above criteria.

Date:

**(Signature of Supplier
with Name, Designation and Seal)**

REF. TR10005P

COMP.DRG.

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TR 10005 P

PAGE 1 OF 6



Form no.2038

उत्पाद मानक
परिणामित्रPRODUCT STANDARD
TRANSFORMER

शाप / अभि. निर्देश SHOP / ENGG. INSTRUCTIONS

TR 10005 P

6 पृष्ठों में 1 PAGE 1 OF 6

शीर्षक :
TITLE :PAINTING INSTRUCTIONS

1	2	3	4	5	6	7	8	9	10
SR NO	PARTS	SUR-FACE	PAINT	NO.OF COATS	HOW APPLIED	PAINT SPEC.	DRY PAINT FILM THK. MICRON	PROCESS SPEC.	REMARKS
1	i. TRANSFORMER/ REACTOR TANK & COVER, TOP TANK BOTTOM TANK ii. TURRETS iii. INSPECTION COVERS, CONSERVATOR HEADERS	IN SIDE OUT SIDE	CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL WHITE / CREAM SHADE i. CHEMICAL & THERM. RESIST EPOXY PRIMER. ii. CHEM.&THERM. RESISTANT EPOXY ENAMEL LIGHT GREY SHADE 631 OF IS:5	2 2 2	SPRAY OR BRUSH SPRAY OR BRUSH SPRAY OR BRUSH	BP 56179 AA 56105 BP 56179	TOTAL DFT 50 Min. 50 Min. TOTAL DFT 100 Min.	TR10206P	EPOXY PAINTING
2	END FRAME, CLAMP PLATE, T.G & T.C BRACKETS & OTHER STEEL PARTS GOING INSIDE TRANSFORMER TANK		CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL WHITE / CREAM SHADE	2	SPRAY OR BRUSH	BP 56179	TOTAL DFT 50 Min.	TR10206P	
2 (A)	E/F, CLAMP PLATE, CROSS BEAM, T.G & T.C BRACKET, OTHER STEEL PARTS GOING INSIDE TANK UPTO 400 KV CLASS FOR TRANS & REACTORS		OIL RESISTANT FULL GLOSSY WHITE PAINT	2	SPRAY OR BRUSH	BP 56183	TOTAL DFT 40 Min.	TR10211P	
3	BARE COPPER GOING INSIDE TRANS. TANK		ONE 50% OVERLAP WOUND LAYER OF CREPE KRAFT PAPER TO AA21117 TYPE B						
4	i. TRANSF. TANKS UPTO 400 KV CLASS ii. REACTOR TANKS UP TO 400 KV CLASS iii. SPARE COIL TANK iv. CONSERVATOR, RELIEF VENT, RAD HEADER v. CABLE BOX COMPOUND FILLED. vi TURRETS	IN SIDE OUT SIDE	OIL RESISTANT FULL GLOSSY WHITE PAINT i. ANTI CORROSIVE PRIMER PAINT ii. HIGH QUALITY FULL GLOSSY OUTDOOR FINISHING PAINT LIGHT GREY SHADE 631 OF IS:5	2 2 2	SPRAY OR BRUSH SPRAY OR BRUSH SPRAY OR BRUSH	BP 56183 AA 56101 AA 56126	TOTAL DFT 40 Min. 40 Min. 40 Min TOTAL DFT 80 Min	TR10211P	

पुनः Rev.

दिनांक Date

वितरण

DISTRIBUTION

मं.

स्वीकृत किया :

APPROVED : sd/SRR, sd/SNA

पुनः Rev.

दिनांक Date

SR NO 20 MODIFIED & SR NO 22 ADDED.

10.02.10

शशि
SKG A.DEOTA S.G.BTRE/TRM/FTM
TRX/ITG
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SHOP / ENGG. INSTRUCTIONS

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SR NO	PARTS	SUR-FACE	PAINT	NO.OF COATS	HOW APPLIED	PAINT SPEC.	DRY PAINT FILM TH. MICRON	PROCESS SPEC.	REMARKS
5	PIPE WORK	IN SIDE	---AS IN SL.NO.4---		FLOODING	BP 56183			
6	ROLLER ASSY, A-FRAMES, BREATHERS, STEEL PARTS OUTSIDE TRANSFORMER TANK	OUT SIDE	---AS IN SL.NO.4---	2	SPRAY OR BRUSH	AA 56101	40 Min.	TR10210P	
		OUT SIDE	---AS IN SL.NO.4---	2	SPRAY OR BRUSH	AA 56126	40 Min. TOTAL DFT. 80 Min.	TR10211P	
7	RADIATORS	OUT SIDE	i. SELF ETCH PRIMER	1	SPRAY OR BRUSH	AA56103	5 Min.	TR10205P	
		OUT SIDE	ii. ANTI CORROSIVE PRIMER	2	FLOODING	AA56101	40 Min.		
		OUT SIDE	iii. HIGH QUALITY FULL GLOSSY FINISHING PAINT	2	FLOODING OR SPRAY OR BRUSH	AA56126	40 Min. TOTAL DFT. 85 Min.		
8	ALL BLANKING DURING SHIPPING	IN SIDE	---AS IN SL.NO.4---	2	SPRAY OR BRUSH	BP56183	TOTAL DFT. 40 Min.	TR10211P	
		OUT SIDE	POST OFFICE RED FINISHING PAINT	2	SPRAY OR BRUSH	AA56126	TOTAL DFT. 40 Min.		
9	INSTRUMENT TRANSFORMER CT/CVT TANK	INSIDE EXCEPT SECONDARY TERMINAL BOX	---AS IN SL.NO.4---	2	SPRAY OR BRUSH	BP 56183	TOTAL DFT. 40 Min.		
		INSIDE SECONDARY TERMINAL BOX	i. ANTI CORROSIVE PRIMER	2	SPRAY OR BRUSH	AA56101	40 Min.	TR10211P	
		OUT SIDE	ii. NON YELLOWING FULL GLOSSY WHITE PAINT	2	SPRAY OR BRUSH	AA56127	40 Min. TOTAL DFT. 80 Min.		
			---AS IN SL.NO.4---	2	SPRAY OR BRUSH	AA56101 AA56126	40 Min. TOTAL DFT. 80 Min.		

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SR NO	PARTS	SUR- FACE	PAINT	NO.OF COATS	HOW APPLIED	PAINT SPEC.	DRY PAINT FILM TH. MICRON	PROCESS SPEC.	REMARKS
10	MARSHALLING BOX/ KIOSK	IN SIDE	i. ANTICORROSIVE PRIMER PAINT. ii. NON YELLOWING FULL GLOSSY WHITE PAINT	2 2	SPRAY OR BRUSH	AA56101 AA56127	40 Min. 40 Min. TOTAL DFT. 80 Min.	TR10211P	
11	MARSHALLING BOX / KIOSK AIR FILLED CABLE BOX	OUT SIDE	—SAME AS IN SL. NO. 4 —	2 2	SPRAY OR BRUSH	AA56101 AA56126	40 Min. 40 Min. TOTAL DFT. 80 Min.	TR10211P	
12	PANELS MOUNTED INSIDE M.BOX/KIOSK	IN SIDE	i. ANTICORROSIVE PRIMER PAINT. ii. WHITE ANTI CONDENSATION PAINT	2 2	SPRAY OR BRUSH	AA56101 HE1006 BP56194	40 Min. 40 Min. TOTAL DFT. 80 Min.	TR10211P	
13	MARSHALLING BOX/ KIOSK PARTS INCLUDING PANELS EXPOSED TO CHLORINE CONTAMINATED ATMOSPHERE	OUT SIDE	—SAME AS IN SL. NO. 4 — i. CHEMICAL & THERMAL RESISTANT EPOXY PRIMER PAINT. ii. CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL WHITE SHADE	2 2	SPRAY OR BRUSH	AA56101 AA56127	40 Min. 40 Min. TOTAL DFT. 80 Min.	TR10211P	EPOXY PAINTING
14	NON FERROUS PARTS EXPOSED TO CHLORINE CONTAMINATED ATMOSPHERE	OUT SIDE	i. CHEMICAL & THERMAL RESISTANT PRIMER PAINT. ii. CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL PAINT LIGHT GREY SHADE 6310F IS:5	2 2	SPRAY OR BRUSH	AA56105 BP56179	50 Min. 50 Min. TOTAL DFT. 100 Min.	TR10206P	
15	RADIATORS (EPOXY PAINTING	OUT SIDE	i. SELF ETCH PRIMER ii. CHEMICAL & THERMAL RESISTANT EPOXIDE PRIMING PAINT. iii. CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL PAINT LIGHT GREY SHADE 6310F IS:5	1 1 2	SPRAY OR BRUSH	AA56103 AA56105 BP56179	5 Min. 25 Min. 50 Min. TOTAL DFT. 80 Min.	TR10208P	

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10	REMARKS	EPOXY PAINTING		ALUMINIUM PAINTING	
9	PROCESS SPEC.	TR10206P	TR10206P	TR10211P	TR10209P
8	DRY PAINT FILM TH. MICRON	50 Min.	50 Min. 50 Min. TOTAL DFT. 100 Min.	TOTAL DFT. 50 Min.	TOTAL DFT. 40 Min. 40 Min. TOTAL DFT. 80 Min.
7	PAINT SPEC.	BP56179	AA56105 BP56179	BP56179	BP56183
6	HOW APPLIED	SPRAY OR BRUSH	SPRAY OR BRUSH	SPRAY OR BRUSH	SPRAY OR BRUSH
5	NO.OF COATS	2	2 2	2	2 2
4	PAINT	CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL WHITE SHADE	i.CHEMICAL & THERMAL RESISTANT EPOXY PRIMER ii.CHEMICAL & THERMAL RESIST EPOXY ENAMEL LIGHT GREY SHADE 631 OF IS : 5	CHEMICAL & THERMAL RESISTANT EPOXY ENAMEL WHITE SHADE	OIL RESISTANT FULL GLOSSY WHITE PAINT i. ANTI CORROSIVE PRIMING PAINT. ii. ALUMINIUM PAINT
3	SUR-FACE	IN SIDE	OUT SIDE	IN SIDE	OUT SIDE
2	PARTS	i. TRANSFORMER TANK & COVER, TOP TANK, BOT. TANK ii. TURRETS iii. INSPECTIONS COVERS, CONSERVATOR HEADERS		END FRAME, CLAMP PLATE, CROSS BEAM, T.G & T.C. BRACKETS, OTHER STEEL PARTS GOING INSIDE TRANS. TANK	TRANS. TANK, COVER, TURRETS, INSP. COVER, CONS., RAD. HEADERS, RELIEF VENT, CABLE BOXES, P.W. A-FRAME MARSHALLING BOX ETC.
16	SR NO				
17					
18					
19					RADIATORS (ALUMINIUM PRINTING)

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SR NO	PARTS	SUR- FACE	PAINT	NO.OF COATS	HOW APPLIED	PAINT SPEC.	DRY PAINT FILM THK MICRON	PROCESS SPEC.	REMARKS
20	i. TRANSFORMER TANK & COVER, TOP & BOT. TANK ii. TURRETS iii. INSPECTIONS COVERS, CONSERVATOR HEADERS, A-FRAMES, P/W ETC.	IN SIDE	CHEMICAL & THERMAL RESISTANT EPOXY WHITE PAINT	*	SPRAY OR BRUSH	TRE/168	TOTAL DFT 50 Min	TR10265P	POLYURETHANE PAINTING
		OUT SIDE	i. CHEMICAL & THERMAL RESISTANT EPOXY ZINC PHOSPHATE PRIMER ii. POLYURETHANE FINISHING PAINT.	*	SPRAY OR BRUSH	TRE/166	50 Min		
21	i- TRANSFORMER TANK & COVER, TOP TANK BOT TANK ii. TURRETS iii. INSPECTIONS COVERS, CONSERVATOR HEADERS, A FRAMES, P/W ETC	IN SIDE	CHEMICAL & THERMAL RESISTANT EPOXY WHITE PAINT	*	SPRAY OR BRUSH	TRE/168	TOTAL DFT 50 Min	TR10211P	TR10229P
		OUT SIDE	FLUSHED WITH VARNISH i. CHEMICAL & THERMAL RESISTANT EPOXY ZINC PHOSPHATE PRIMER ii. POLYURETHANE FINISHING PAINT.	*	SPRAY OR BRUSH	TRE/166 OR AA56105 TRE/165 OR AA56142	50 Min. 50 Min. TOTAL DFT 100 Min.		
	RADIATOR	IN SIDE	OIL RESISTANT FULL GLOSSY WHITE PAINT	2	SPRAY OR BRUSH	BP56183	40 Min.		
		OUT SIDE	i. CHEMICAL RESISTANT HIGH BUILD EPOXIED PRIMING PAINT OR CHEMICAL & THERMAL RESISTANT EPOXY PRIMER ii. POLYURETHANE FINISHING PAINT SHADE 631 OF IS:5	1 2 1 OR 2	SPRAY OR BRUSH	AA56109 AA56105 AA56142	50 Min. 50 Min 50 Min. TOTAL DFT. 100 Min.		

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SR NO	PARTS	SUR- FACE	PAINT	NO.OF COATS	HOW APPLIED	PAINT SPEC.	DRY PAINT FILM TK. MICRON	PROCESS SPEC.	REMARKS
22	i. TRANSFORMER TANK & COVER, TOP & BOT. TANK ii. TURRETS iii. INSPECTIONS COVERS, CONSERVATOR HEADERS, A-FRAMES, PWV ETC.	IN SIDE	CHEMICAL & THERMAL RESISTANT EPOXY WHITE PAINT	*	SPRAY OR BRUSH	TRE/168	TOTAL DFT 50 Min		POLYURETHANE PAINTING
		OUT SIDE	i. CHEMICAL & THERMAL RESISTANT EPOXY ZINC PHOSPHATE PRIMER ii. EPOXY HB MIO iii. POLYURETHANE FINISHING PAINT.	*	SPRAY OR BRUSH	TRE/166 TRE/167 TRE/165	50 Min. 75 Min. 50 Min. TOTAL DFT. 155 Min.	TR10257P	
	END FRAME, CLAMP PLATE, CROSS BEAM, T.G & T.C. BRACKETS, OTHER STEEL PARTS GOING INSIDE TRANS. TANK		CHEMICAL & THERMAL RESISTANT EPOXY WHITE PAINT	*	SPRAY OR BRUSH	TRE/168	TOTAL DFT 50 Min.		
	RADIATOR	IN SIDE	FLUSHED WITH VARNISH			TRE/382/03			
		OUT SIDE	i. CHEMICAL & THERMAL RESISTANT EPOXY ZINC PHOSPHATE PRIMER ii. POLYURETHANE FINISHING PAINT.	*	SPRAY OR BRUSH	TRE/166 TRE/165	50 Min. 50 Min. TOTAL DFT. 100 Min.		

NOTE TO DO:

- EPOXY PAINTING TO BE CALLED WHEN SPECIFICALLY ASKED FOR BY THE CUSTOMERS.
- EPOXY PAINTING HOWEVER TO BE CALLED WHEN EQUIPMENTS ARE TO BE INSTALLED IN CHEMICAL ATMOSPHERE OR NEAR SEA SHORES.
- SHADE OF FINISHING PAINT IS TO BE COVERED ON MID/ DRAWINGS ALONG WITH RESPECTIVE S.NO. OF THIS STD.

(*) NUMBER OF COATS SHALL BE GIVEN TO ACHIEVE DFT AS PER COLUMN 08 .

NOTE TO SHOP:

- PAINTING TO BE TOUCHED UP WHERE EVER REQUIRED BY TRANSFORMER SHOP BEFORE SHIPMENT.

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