

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
P.O. BHEL Jhansi 284120

POWER TRANSFORMER MANUFACTURING DEPARTMENT



TENDER DOCUMENT
FOR WORKS CONTRACT

Tender Enquiry No: TRM/PT/TW/25/01

For

Manufacturing activities of Power Transformers using In-house facilities at BHEL Jhansi

Contact person Name: Arvind Kumar/ Monika

Designation: Sr.Manager/TRM, Sr. Manager/MM-CCC

Email: arvind.kumar@bhel.in; monikav@bhel.in

Contact No 9792049768, 8004939455

Tender Due Date: **23.05.2025 , 13:15 hrs**

Tender Opening Date: **23.05.2025, 14:00 hrs**

Rev 00	Short details of revision:
Date	

POWER TRANSFORMER MANUFACTURING DEPARTMENT
BHEL, PO: BHEL, Jhansi 284120 (UP)

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department

BHEL Jhansi-284120

Works Contract Tender Enquiry No: TRM/PT/TW/25/01 dt 14.05.2025
Details of bidder and documents to be submitted along with technical bid

Please number your documents in continuation with tender documents at bottom (footer) of page.

SL	Particular	Detail	
1	Name of the firm		
2	Name of the Proprietor/Partners		
3	Address		
4	Mobile No.		
Essential documents			
	Particulars	Details	Page No.
6	Acceptance of Terms & conditions Signature on all pages without conditions of contractor	Submitted/ Not submitted	
7	Blank price bid format duly signed by the contractor.	Submitted/ Not submitted	
8	Copy of PF registration	PF No:	
9	Copy of ESI Registration	ESI No:	
10	Copy of PAN Card	PAN No:	
11	Copy of GST Registration	GST No:	
12	Self-declaration as per as per Annexure-V on firm’s letter head	Submitted/ Not submitted	
13	Copy of ownership of firm (Refer page 21 point 8)	Submitted/ Not submitted	
14	Receipt of tender fees deposition	Amt-	
15	Receipt of EMD deposition	Amt-	
16	Copy of turn over for last three-year i. 2022-23	Submitted/ Not submitted	

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	ii. 2023-24 iii. 2024-25		
17	Work Experience: i. Work Order ii. Completion Certificate iii. Relevant TDS/TRACES form 16A or 26AS (in case of outside BHEL experience)	Submitted/ Not submitted	
Desirable Documents			
18	Copy of Income Tax Return i. 2022-23 ii. 2023-24 iii. 2024-25	Submitted/ Not submitted	
19	Validity of offer	120 days from the date opening of technical bid	
20	Blank Price bid 'JS-472'	Enclosed / Not Enclosed	
21	Acceptance of Scope of work Special terms and conditions & General Terms & conditions Signature on all pages without deviation by bidder	YES / NO	
22	Submission of Security Deposit after issue of LOI and before award of Work Order to contractor.	YES / NO	

We will fulfill all the obligations of the contractor and abide by the Terms & Conditions mentioned in the Tender Enquiry.

Date :

Signature with Name & Seal

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PART-I: TECHNO-COMMERCIAL BID

PART-II: PRICE BID

(Separate Envelope)

SL	Section	Page Nos.
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NOTICE INVITING TENDER



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SL. No.	Particulars	Details
1	Name of Works	Manufacturing activities of Power Transformers using In-House facilities at BHEL Jhansi
2	Estimated Value	
3	Estimated Value with 30% variation	
4	Tender Evaluation Criteria	As per Qualifying Requirements (As per Tender Documents & GTC)
5	Duration of the Contract	12 Months from the date of award of Works Contract / Order
6	Last Date of Receipt of the Tender	(as on page # 1)
7	Date of opening Tender	(as on page # 1)
8	Address for submitting the tender	(as on page # 7)
9	Earnest Money Deposit (EMD)	Rs 5 Lakhs/- only (Waived off for MSE Vendor provided UDHYAM is submitted)
10	Cost of Tender	NIL
11	Validity of Offer	120 Days
12	Reverse Auction	NA
13	Rejection of Tender	Bids lower than 80% of estimated value shall be rejected. This value of contract will be certified by Head TRM based on the technological hours required for the activities mentioned in tender
14	Price Variation clause	Applicable

Note: The EMD may be accepted only in the following forms:

- i. Electronic Fund Transfer credited in BHEL Account (before tender opening) BHEL account details:
Bank Name: SBI, A/C No: 10670828866, IFSC Code: SBIN0003807,
A/C Holder Name: BHARAT HEAVY ELECTRICALS LIMITED
- ii. At BHEL, cash office through POS machine No Demand Drafts shall be accepted. The contractors may physically visit the work place before quoting their rates. For relevant details, please visit our website www.bhel.com & <https://jhs.bhel.com/>.

Note: BHEL takes no responsibility for any delay / loss of documents or correspondence sent by courier or post. Late tenders shall be rejected outright.

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The techno-commercial bid comprising (i) all its sections, (ii) all enclosures in support of various clauses and requirements and (iii) EMD, shall be duly signed and sent in a sealed envelope boldly super-scribing "PART-I TECHNO COMMERCIAL BID FOR 'Manufacturing activities of Power Transformers using In-house facilities at BHEL Jhansi. Similarly, the Price-bid must be duly signed and sent in a sealed envelope boldly super-scribing "PART-II PRICE BID FOR "Manufacturing activities of Power Transformers using In-house facilities at BHEL Jhansi. Both these envelopes shall be placed inside 3rd sealed envelope super-scribing "Manufacturing activities of Power Transformers using In-house facilities at BHEL Jhansi

The tender shall be addressed to as follows:

Tender Box
Security Room/Office
Administrative Building
Bharat Heavy Electricals Limited
Jhansi-284120 (UP)

Part-I (Techno Commercial) Bid:

Part I of the sealed tenders alone will be opened by BHEL in the presence of tenderers who are present at the time & place of opening. A signed blank price-bid copy should be enclosed with this bid. The spaces for prices should be crossed (x).

Part-II (Price) Bid:

The price bid should contain prices only. Price bid will be opened only for the parties who qualify in techno commercial bid.

TO BE SIGNED BY THE TENDERER

Certified that all sections of the Tender have been read / complied & agreed to, and each page of the tender offer has been signed & stamped.

(Signature of Authorized person(s))

Name and designation of Authorized Person(s)

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WORK SPECIFICATION

Brief Description of Works

In Power Transformer Manufacturing shops following work is to be carried out:

S. No.	Description of work	Section
1	Manufacturing activities of Power Transformer winding, winding of three phase Freight Loco, Pre-coil Assembly (For details Refer Sl.No.1);	WINDING SHOP (Bay-4 & Bay-11)
2	Manufacturing activities of Dry Type Transformer winding (For details Refer Sl.No.2);	WINDING SHOP (Bay-4 & Bay-11);
3	Manufacturing activities at Machine shop (For details Refer Sl.No.3)	BAY 3 - MACHINE SHOP
4	Preparation of CRGO Lamination (For details Refer Sl.No.4)	BAY 5- CORE & PUNCH
5	Preparation of items at Insulation shop (For details Refer Sl.No.5)	BAY 7 - INSULATION
6	Transformer Manufacturing - CORE ASSEMBLY, UNLACING & RELACING AND COIL ASSEMBLY (For details Refer Sl.No.6)	BAY 9 & 10 - BTG
7	Transformer Manufacturing – TG and SERVICING & CASE+FITTING; (For details Refer Sl.No.7)	BAY 9 & 10 - ATG
8	Transformer Manufacturing – VAPOR PHASE OPERATION AND RL01 (For details Refer Sl.No.8)	BAY 9
9	Transformer Shipping Work (For details Refer Sl.No.9)	

- A. The details of activity involved in the above said works are given detailed scope of work in Annexure-A. The total work will be of approximately 9,36,013 technology hours involved in execution of above said scope of work comprising of 3,92,733 (42%) technology hours for unskilled works, 2,98,913 (32%) technology hours for semiskilled works and 2,44,367 (26%) technology hours for skilled work, for execution of work in TRM Power & the same may vary by + 30%.
- B. The contractor will have to appoint sufficient no. of his own supervisors to organize and supervise the work being done by his employees in 1st, 2nd & 3rd shifts (if needed). Supervisors allocated for each section, against this contract need to be present full day and supervise the activities.
- C. Contractor has to ensure deployment of manpower shift wise and machine wise time to time duly intimated by shop in charges. Non-deployment of manpower will attract penalty derived from lost technology hours.
- D. Contractor has to ensure booking of executed technology hours on monthly basis in prescribed format provided by BHEL.
- E. The above work should meet the requirement of the shop/CQX executive/supervisor. The above work shall be normally done in 1st & 2nd shift. Work shall also be done in 3rd shift and on Sunday/Holidays as and when required.

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- F. The contractor shall ensure deployment of skilled/Semi skilled/Un-Skilled experienced manpower to carry out the said works. Also, for special process like brazing, welding, crimping etc., contractor has to get workers qualified by BHEL on a periodic basis.
- G. Contractor have to collect all required raw material, drawings and manufacturing information from shops/SPC/contracting department. Required space, tools & tackles and facilities like material handling equipment, fixture and crane will be provided by BHEL subject to its availability in normal working conditions. Consumables like resin glass tape, araldite, varnish, paint, cotton waste, fevicol/feviquik etc. will be issued by BHEL, and these will be collected by contractor. Contractor will check for any defect in material and get it rectified/ replaced before starting work.
- H. All the material, electricity, compressed air, consumable applicable in jobs and tools available with BHEL shall be provided by BHEL free of cost. EOT crane shall be provided by BHEL free of cost. However, in contingency in order to meet the job requirement, any additional resources if required shall be arrange by the contractor at their cost.
- I. All the job after manufacturing will be inspected by CQX/Section executive or Supervisor /customer and if any default / defect occurs, the same has to be rectified by contractor at free of cost.
- J. The contractor shall maintain proper records of all the activities/inspection stages and the same should be made available, as and when required by BHEL.
- K. Measurement Book (MB) to be prepared work order wise and job serial no./set no. wise by the contractor. Contractor should also get the MB verified by shop, CQX & TEX representative.
- L. Contractor has to ensure strict compliance of 5-S & housekeeping in the designated area of work. The contractor may be penalized if he fails to do the same.
- M. Contractor is advised to visit the work place to know the work content before submission of quotation. The required documents / drawings / MI Sheet can be seen at our works.

Note: - The Above work should meet the technical requirement of the BHEL and customer. Work should be carried out as per drawings, standards, procedures, laid down by BHEL, which may get revised as per requirement time to time. Party will be liable to follow drawings standards, procedures are in use at that time without any change in rates and terms and conditions of contract.

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Annexure -A

DETAILED SCOPE OF WORK

1.0	POWER TRANSFORMER WINDING, WINDING OF THREE PHASE FREIGHT LOCO, AND PRE-COIL ASSEMBLY (WINDING SHOP/TRM BAY-4&11)	
Sl. No.	Work Nature	Details of activity involved
1.1.	Power Trfr- Pasting of edge blocks, Scarf cylinder and preparation of Static Ring/Shield	<ol style="list-style-type: none"> 1. Collection of drawings / ES from drawing vault. 2. Check for Material Availability as per drawing. 3. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop 4. Setting of mould as per required diameter. 5. Loading of pressboard items of edge blocks and cylinder into oven for 6-8 hours. 6. Taking out the items from oven and pasting as per requirement. 7. Curing for 8 hours and then smoothening the joint part by grinding from both inside and outsides. 8. Removing cylinder/Edge block from mould. Cylinder sent to machine and edge block sent to insulation shop for edge cutting etc. 9. Preparation of Static ring/Shields as per drawing/ES.
1.2	Power TRFR-Starting of coil	<ol style="list-style-type: none"> 1. All below activities before start of each coil 2. Collection of drawings / ES from drawing vault. 3. Check for Material Availability as per drawing. 4. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop 5. Setting of mould as per required diameter. 6. Operating winding machine (both helical and vertical) 7. Wrapping or lowering of cylinder as per ES/Drawing. 8. Marking and dressing with Dovetail spacer and dovetail blocks. 9. Loading of copper reels & Checking of Copper size as per ES. 10. Lead preparation as per ES/Drawing and lead mounting Etc. 11. Issuing of QC tag and unloading coil from machine Etc. 12. Quality check points are to be strictly followed. 13. Dismantling of coils and shifting to clamping area.
1.3	Power Trfr-Winding of Helical and inter wound helical coil	<ol style="list-style-type: none"> 1. Collection of drawings / ES from drawing vault. 2. Check for Material Availability as per drawing. 3. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop. 4. Providing Dummy blocks and end blocks as per ES. 5. Loading of copper reels & Checking of Copper size as per ES. 6. Tapping on first turn and then start winding 7. Making Strand transpositions and block transpositions of conductor as per ES/Dwg. 8. For both types sequence of conductor is must by quality after completion of coil and before cutting of conductors. 9. For inter wound helical first marking of pitch then start the coil. 10. All steps pitch must be accurate. 11. Top lead preparation and locking of coil. 12. Issuing of QC tag and unloading coil from machine Etc. 13. Quality check points are to be strictly followed. 14. Dismantling of coils and shifting to clamping area.

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1.4	Power Trfr-Winding of plain RS and interleaved coils	<ol style="list-style-type: none"> 1. Collection of drawings / ES from drawing vault. 2. Check for Material Availability as per drawing. 3. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop 4. Loading of copper reels & Checking of Copper size as per ES. 5. Pasting of rider dummy, marking of rider/step dummy and cutting as required. 6. Starting of coil from first section and moving continue as per ES/Dwg/Cross over Diagram. 7. Operating resistance brazing machines. 8. Jointing copper as per design standard. 9. Making of standard transposition, strand transposition and block transposition as per standard. 10. Preparations of all leads of the coil as per standard. 11. For interleaved sections conductors' sequence to be checked with buzzer before joining them in presence of BHEL person. 12. Sequence of conductors in PID coil must be check as per given check list. Etc. 13. Issuing of QC tag and unloading coil from machine Etc. 14. Quality check points are to be strictly followed as per check list. 15. Dismantling of coils and shifting to clamping area
1.5	Power Trfr-Winding of double layer and composite coils	<ol style="list-style-type: none"> 1. Collection of drawings / ES from drawing vault. 2. Check for Material Availability as per drawing. 3. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop. 4. Loading of copper reels & Checking of Copper size as per ES. 5. Complete first layer winding as per above activities. 6. Alignment of the winding, lead preparation and then wrapping as per ES/Dwg. 7. Starting winding of second layer winding as per given above activities (Sr.No.3 &4 of work nature). 8. Completing the winding and unloading Etc. 9. Quality check points are to be strictly followed as per check list. 10. Dismantling of coils and shifting to clamping area
1.6	Power Trfr- Coil final preparation, Rectification, Clamping and pressing	<ol style="list-style-type: none"> 1. Alignment and rectification of the coil and followed by QC check. 2. Clamping the coil and loading it to vessel for heating. 3. After heating as per standard taken out coil for pressing. 4. Maintaining CD by pressing the coil and tightening. 5. After testing wrapping the coil with polyfilm. 6. Quality check points are to be strictly followed as per check list. 7. Collection of drawings / ES from drawing vault. 8. Collection of drawings / ES from drawing vault. 9. Check for Material Availability as per drawing. 10. Collection of material, hardware/consumable and other required material from store/ Insulation /feeder Shop 11. Collection of material (Copper/insulation items, cylinder and other required material) 12. Pasting of dovetails strips on FG cylinder as per ES/Dwg.
1.7	Winding of three phase Freight loco coil & IGBT Coils/ Vande-Bharat/ ESP/	<ol style="list-style-type: none"> 1. Joints in copper must be as per TRE Standard. 2. Complete the coil and then lock from outside with dovetails locking strips. 3. Quality check points are to be strictly followed as per check list. 4. Final preparation of coil as per point no.6.

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	any other miscellaneous type of winding	<ol style="list-style-type: none"> Healthiness checking of coils Loading of mould, copper, dismantling of coil, clamping & pressing of coil (technology hours included in winding/preparation time)
1.8	Pre-coil Assembly	<ol style="list-style-type: none"> Collection of drawings / ES from drawing vault. Check for Material Availability as per drawing. Collection of hardware/consumable material from store/CRX/Bay-7 Station preparation, placement of assembly plates, bottom ring assembly arrangement. Yoke shunt preparation if any & assembly Lead preparation, Assembly of block washer and spacer, lowering of coil etc as per drawing Clamping of coil and loading in vessel for processing. Pressing of coils
1.9	Miscellaneous Works	<p>Various Miscellaneous activities as below:</p> <ol style="list-style-type: none"> Drum loading & shifting to scrap area after dismantling (scrap copper to be put in designated bins). Mould setting & loading. Mould unloading & coil dismantling Clamping of coil & loading in oven. Unloading of coils from heater & pressing of coil Preparation of copper shield Preparation of earthing shield Preparation of scarf cylinder including mould setting Preparation of pressboard edge block including mould setting
1.10	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. Cleaning of machines, tools & tackles and shop must be on regular basis. All items are to be placed with identification and at allocated/Defined place. '5S' is to be maintain in the shop.
1.11	Office work	<ol style="list-style-type: none"> Maintaining attendance of workers regular (daily and monthly) basis on BHEL register. Maintaining production records and daily work progress sheet on BHEL Logbook. Maintain material records like copper, insulation items, fiber glass items etc. Sending of breakdown reports to maintenance etc.
2.0	DRY TYPE TRANSFORMER WINDING (WINDING SHOP/TRM BAY-4&11)	
Sl. No.	Work Nature	Details of activity involved
2.1	Winding of DTT coils	<ol style="list-style-type: none"> Mold readiness by applying mold releasing agent and loading on machine. Issuing material from SPC store/Main Store Start winding as per ES and Dwg. Loading of copper reels & Checking of Copper size as per ES. Copper joints brazing must be as per Design standard. Cleaning of segments and then applying releasing agent and then putting on winding before start of second layer. Use fiber glass mate and other insulating items as per requirement/ ES/Drawings. Completing the coil and sending it to for preparation Etc. Quality check points are to be strictly followed as per check list. All crane activities for loading, unloading & shifting of tools, coils, material etc.

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2.2	DTT coil Casting	<ol style="list-style-type: none"> 1. TG work of HV coils followed by terminal brazing. 2. Jacketing of the coils. 3. Loading of coils in encapsulation plant, connection of filling material tubes & closing/clamping of doors. . 4. Preparation & Filling of resin/Epoxy material in plant as per standard. 5. Shifting of coils in heater for curing 6. After heating dismantling of coil and removal of jackets and segments and placing the jackets / segments at specified location. 7. Cutting and finishing of conductors and maintaining CD. 8. Testing of coils and handing over to Assy shops. 9. All crane activities for loading, unloading & shifting of tools, coils, material etc. 10. Quality check points are to be strictly followed as per check list. 11. Cleaning of encapsulation plant, cutting machine & coil finishing area.
2.3	SPC Store Work	<ol style="list-style-type: none"> 1. Collecting material from SPC / Main store. 2. Collecting material from Insulation shop. 3. Collecting material from feeder section and Bay-8. 4. Maintaining all material records. 5. Providing/shifting materials to the shops as per requirement. 6. Checking of items as per drawings/ES.
2.4	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> 1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. 2. Cleaning of all machines, tools, encapsulation plants, ovens and shop must be on regular basis. 3. All items are to be placed with identification and at allocated/Defined place. 4. '5S' is to be maintain in the shop.
2.5	Office work	<ol style="list-style-type: none"> 1. Maintaining attendance of workers regular (daily and monthly) basis on BHEL register. 2. Maintaining production records and daily work progress sheet on BHEL logbook. 3. Maintain material records like copper, insulation items, fiber glass items etc. 4. Sending of breakdown reports to maintenance etc.
3.0	MACHINE SHOP ITEMS OF POWER / SPL TRFR ASSY. (BAY 3 - MACHINE SHOP)	
Sl. No.	Work Nature	Details of activity involved
3.1	Preparation of machine shop Items of Power / Spl Trfr Assy.	<ol style="list-style-type: none"> 1. Preparations of copper TG items for Power, dry type, ESP and special transformers. It includes preparation of copper Bus bar, flexible jumper, earthling links and strips, Neutral grounding other miscellaneous items of Transformers, as per BHEL drawings. 2. Slitting and cutting of CT-VT copper tubes and connecting palm preparation as per BHEL drawings. 3. Preparations of steel items such as pressure bolt, cover support bolt, tie rod, square bar and other machined items. 4. Machining Operation on bushing mounting steel rings etc. 5. Additional copper and machined Items required at sites. Spare items required by assembly shop or any modification work related to suit to assembly work for example machining on locking channel and feet, rethreading of tie rods, nozzle requirements by different shops etc. 6. All manufacturing activities of copper and steel items which involve operation of marking, bend saw & power saw cutting, tube slitting, Drilling, Grinding, Guillotine machine shearing, machining on lathe and milling machines, Bending,

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		<p>slot drill, hot dip tinning, brazing, heat treatment of copper sleeves and other items.</p> <p>7. Material movement from Stores to Shop Floor and from one work center of shop floor to another.</p> <p>8. Segregation and stacking of prepared material and keeping its record. In-house handling of prepared material/Raw material.</p> <p>9. Handing over and Maintaining the record of Dispatch Items to different Sections after getting checked from Shop Supervisors.</p>
3.2	Cleaning, Housekeeping and '5S'	<p>1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area.</p> <p>2. Cleaning of machines, tools & tackles and shop must be on regular basis.</p> <p>3. All items are to be placed with identification and at allocated/Defined place.</p> <p>4. '5S' is to be maintain in the shop.</p>
3.3	Office work	<p>1. Maintaining attendance of workers regular (daily and monthly) basis.</p> <p>2. Maintaining production records and daily work progress sheet.</p> <p>3. Maintain material records like copper, insulation items, fiber glass items etc.</p> <p>4. Sending of breakdown reports to maintenance etc.</p>
4.0	PREPARATIONS OF CRGO LAMINATIONS (BAY 5- CORE & PUNCH)	
Sl. No.	Work Nature	Details of activity involved
4.1	Preparation of CRGO Lamination	<p>1. Preparations of CRGO Laminations for power transformer, dry type transformer, Traction transformer, ESP transformers including laminations for ACR core which involves all manufacturing activities of slitting, cropping and punching of laminations on CNC cropping line, CNC slitting line, Red-Man machine, guillotine machines, punching machines and manual slitting machine in bay 5 and new bay 7 area. This also includes the operation of applying blue lacquer (the anti-rust compound).</p> <p>2. Preparation of ring core for power transformer, rectifier transformer & special transformers. This involves winding, welding, annealing, testing, varnishing.</p> <p>3. Preparations of yoke shunt for power transformer and cropping of wall shunt laminations.</p> <p>4. Stacking of laminations by counting the number of sheets for each and every job.</p> <p>5. CRGO sample preparation as per BHEL quality plan.</p> <p>6. Additional work for CRGO shortage preparation by assembly shop.</p> <p>7. Segregation and proper keeping the offcuts for further Utilization to prepare dry type, ESP transformer laminations.</p> <p>8. Preparation of dry type, ESP, ACR etc laminations from Off-cuts.</p> <p>9. Packing and dispatch of all finished product.</p> <p>10. Segregation and stacking of prepared material and keeping its record. In-house handling of prepared material/Raw material.</p> <p>11. Handing over and Maintaining record of Dispatch Items to different Sections after getting checked from Shop Supervisors.</p> <p>12. Material movement from Stores to Shop Floor and from one work center of shop floor to another and un-packing of CRGO roll.</p> <p>13. Maintaining the housekeeping and cleaning of work area and machines on regular basis and maintain the 5 S in the Shop Floor.</p> <p>14. Attendance of workers, Production Records, daily Work progress sheets etc. to be maintained.</p>

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4.2	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> 1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. 2. Cleaning of machines, tools & tackles and shop must be on regular basis. 3. All items are to be placed with identification and at allocated/Defined place. 4. '5S' is to be maintain in the shop.
4.3	Office work	<ol style="list-style-type: none"> 1. Maintaining attendance of workers regular (daily and monthly) basis. 2. Maintaining production records and daily work progress sheet. 3. Maintaining material records. 4. Sending of breakdown reports to maintenance etc.
5.0	PREPARATION OF INSULATION AT BAY 7	
Sl. No.	Work Nature	Details of activity involved
5.1	Insulation items preparation of Power / Special Transformers	<ol style="list-style-type: none"> 1. Preparations of Winding Insulation and Coil Assy Insulation of Power and special transformers. It includes preparation of Spacers, Block, washers, cleats, gaskets, Bend washer, cylinders, edge block, Scarf cylinders, center block, Wrap, Barrier, Circular Barriers, F G Insulation, Crimp washer etc. and other insulation items of Transformers, as per BHEL drawings. 2. Preparations of coil Supports Top rings, Bottom rings, Ring segments, Base plate, packing, etc. as per BHEL drawings. 3. Preparation of Core Insulation and Tank Insulation items of Power and Special Power Transformer. It includes Separator, yoke Insulation, E Type Packing, Feet Insulation, Square Bar Packing, End Frame Packing etc. 4. Preparation of T G Insulation of Power and special Transformer. It includes Cleats, Packing, closing piece, Horizontal and vertical cleats, Template based items of PCB and Perma wood etc. 5. Preparation of Gasket and CT Insulation of Power and Special Transformers. It includes Gasket items of erection, shipping, tanking and outside fittings of transformer tank and accessories and C T Insulation of Transformer Tanks. 6. All manufacturing activities of insulation items which involve operation of Circular saw cutting, Finishing, Marking, Drilling, Grinding, Guillotine machine shearing, Spacer Cutting machine, Gumming/ Pasting, rolling, Bending, Scarfing, circle cutting, Jig Saw machine, Die Punching Machine, Gasket Surface grinding, Hand Circular Saw, Hand Jig Saw etc. 7. Material movement from Stores to Shop Floor and from one work center of shop floor to another. 8. Segregation and stacking of prepared material and keeping its record. In-house handling of prepared material/Raw material. 9. Handing over and Maintaining the record of Dispatch Items to different Sections after getting checked from Shop Supervisors. 10. Proper keeping the offcuts for further Utilization to prepare items. 11. Stacking, Tieing, Packing and Placing of finished insulation Items in proper place as directed. 12. Maintaining the housekeeping and cleaning of work area and machines on regular basis and maintain the 5S in the Shop Floor. 13. Attendance of workers, Production Records, daily Work progress sheets etc. to be maintained. 14. If Required Operation of overhead crane for loading of material on machine or at work place and fork lifter operation for material movement such as Placing Pre-Compress Pressboards and Perma wood sheets and coil supports, picking raw material from store, scrap bins delivery to scrap yard etc.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department

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5.2	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> 1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. 2. Cleaning of machines, tools & tackles and shop must be on regular basis. 3. All items are to be placed with identification and at allocated/Defined place. 4. '5S' is to be maintain in the shop.
5.3	Office work	<ol style="list-style-type: none"> 1. Maintaining attendance of workers regular (daily and monthly) basis. 2. Maintaining production records and daily work progress sheet. 3. Maintaining material records of insulation items, fiber glass items etc. 4. Sending of breakdown reports to maintenance etc.
6.0	PREPARATION OF CORE ASSEMBLY, UNLACING & RE-LACING WORK, CORE TO COIL ASSEMBLY (BAY 9 & 10 - BTG)	
Sl. No.	Work Nature	Details of activity involved
6.1	Core assembly	<ol style="list-style-type: none"> 1. Drawing availability. 2. Material Availability as per drawing. 3. Collection of hardware/consumable material from store/CRX/Insulation Shop 4. Layout of cradle beam & end-frame, cleaning of thread (taping) of end-frame etc. 5. Preparation of insulation item of core. 6. Shifting of lamination from store to core layout, 7. Core build up, clamping, preparation of belts, tightening, & lifting of core 8. Application of blue –lacquer & Epilux hardener, application of resin-glass belt & curing, 9. Paint touch up, cleaning of core & readiness for testing.
6.2	Core coil assembly	<ol style="list-style-type: none"> 1. Drawing availability. 2. Material Availability as per drawing. 3. Collection of hardware/consumable material from store/CRX/Bay-7 4. Station preparation, unlacing of core, bottom ring assembly arrangement. 5. yoke shunt preparation if any & assembly 6. lead preparation, assy of block washer and spacer, lowering of coil etc into core as per drawing, 7. end frame and pressure bolt mounting after taping, 8. preparation of job to be sent for process 9. cleaning of job before loading for processing.
6.3	Unlacing	<ol style="list-style-type: none"> 1. Drawing availability. 2. Material Availability as per drawing 3. Collection of hardware/consumable material from store/CRX/Bay-7 4. Station preparation, unlacing of core.
6.4	Re-lacing	<ol style="list-style-type: none"> 1. Pressing to achieve required re-lacing level & re-lacing of job after process 2. Additional work if required in case level not achieved as per CQX/ TRE /Shop guidelines. 3. placement of insulation items & tightening of end-frame, application of pressure, mounting of cover support bolt etc. 4. cleaning of job
6.5	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> 1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. 2. Cleaning of machines, tools & tackles and shop must be on regular basis. 3. All items are to be placed with identification and at allocated/Defined place. 4. '5S' is to be maintain in the shop.
6.6	Office work	<ol style="list-style-type: none"> 1. Maintaining attendance of workers regular (daily and monthly) basis. 2. Maintaining production records and daily work progress sheet.

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		<ol style="list-style-type: none"> Maintaining material records. Sending of breakdown reports to maintenance etc.
7.0	TERMINAL GEAR ASSEMBLY, SERVICING & CASE-FITTING WORK	
Sl. No.	Work Nature	Details of activity involved
7.1	Terminal Gear Assembly	<ol style="list-style-type: none"> Drawing availability. Material Availability as per drawing. Collection of hardware/consumable material from store/CRX/Bay-7 Removal of enamel of CTC conductor. cleat fitting, preparation of copper cable/bus bars and its crimping/brazing with winding conductors, cleaning of brazing joints OLTC assy. mounting of OLTC bracket & OLTC, connection of copper cables with OLTC, finishing of complete active part in all respect, cleaning & readiness for testing. Additional work if required in case any testing failure
7.2	Tank and turret preparation	<ol style="list-style-type: none"> Drawing availability. Material Availability as per drawing. Collection of material from store/CRX/Bay-7. Assy of items, valves, hardware, cord, gaskets etc. as per drawing. Assy of CTs in turret and tank as per drawing. CT board assy. Mounting of turrets on tank. Copper earthing of turret with tank and top& bottom tank to be done as per requirement. Shunt and barrier assy to be done as per requirement in drawing. BHEL Shop/Quality/TRE/Customer shall inspect the job at any point of time and their bookings to be attended. Store Keeping for raw materials & hardware. Tank TG to be done as per requirement in drawing.
7.3	Trial Tanking	<ol style="list-style-type: none"> OLTC flange to be removed. Transformer to be placed in tank. Top tank to be placed. Ferrule brazing /lug crimping in low voltage winding, intermediate winding, high voltage winding to be done as per drawing /suit to assembly. Locking channel fouling/resting to be checked and rectified to suit to assembly. Flange matching to be checked for the OLTC bracket down/up scope.
7.4	Servicing	<ol style="list-style-type: none"> Servicing (all hardware/permalite tightening, core padding, pressure by dash pot/bolt etc.) of transformer to be done as per technology. Any other requirement related to SCT jobs to be done as per instruction BHEL Shop/Quality/TRE. Any mechanical/testing failure to be taken care by contractor. Testing will be done by testing department, any issue faced (testing failure) will be taken care by contractor. Required earthing of core, end frame, and tank to be done after successful testing.
7.5	Tanking	<ol style="list-style-type: none"> After point 3 transformer to be placed in its respective tank. Clearances etc. to be taken by BHEL Shop/Quality/TRE/Customer and their bookings to be attended. Tank to be tightened by giving specified torque using torque wrench.

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		<ol style="list-style-type: none"> All the inspection covers except on top to be tightened for oil filling purpose. OLTC flange matching, diverter insertion and necessary connection of bushing, earthing lead, CT leads etc. to be done. Necessary earthing at required places to be done.
7.6	Case fitting	<ol style="list-style-type: none"> Bushing assy of various rating to be done on transformer. Lead taping to be ensured up to bushing bowl. MDU mounting and coupling with OLTC to be done. All the inspection covers to be tightened properly. Locking channel insulation packing. Top up of the job with mobile conservator and any leakage point to be attended. Leakage point during oil pressure to be attended. Removal and mounting of bushing for shifting from testing to impulse and vice versa.
7.7	Dismantling	<ol style="list-style-type: none"> Dismantling of all the bushing and turrets. Proper tying of leads/jumper with polyester. Cleaning of tank and active parts from inside. Epoxy plate mounting & connection and tightening.
7.8	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. Cleaning of machines, tools & tackles and shop must be on regular basis. All items are to be placed with identification and at allocated/Defined place. '5S' is to be maintain in the shop.
7.9	Office work	<ol style="list-style-type: none"> Maintaining attendance of workers regular (daily and monthly) basis. Maintaining production records and daily work progress sheet. Maintaining material records. Sending of breakdown reports to maintenance etc.
8.0	VAPOUR PHASE OPERATION AND RL01(HEAT RUN PREPARATION)	
Sl. No.	Work Nature	Details of activity involved
8.1	Vapour phase plant Operation	<ol style="list-style-type: none"> Opening door of various vessel, rail line removal, oil change in various vessel, hydraulic oil change, trolley sling etc. Cleaning and general maintenance of vessels and oil filtration plants. Loading and unloading of job to/from the vessel. Data capturing like temperature & vacuum at regular intervals. Filling of oil into vacuum pumps. Emptying of oil tanker to storage tank. Oil filtration of raw oil as per requirements. Filling and emptying of oil from transformers/tankers Gas Filling in transformers
8.2	RL01: Heat Run Preparation	<ol style="list-style-type: none"> Main transformer preparation as per outside fitting & OGA etc. for dispatch. Radiator, Fan and Fan support mounting and dismantling. Header, A Frame and Pipework assy and dismantling. Oil pump and motor assy and dismantling. Conservator and conservator pipework assy and dismantling etc. Paint touch up. Oil leakage test of transformer.
8.3	Cleaning, Housekeeping and '5S'	<ol style="list-style-type: none"> Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. Cleaning of machines, tools & tackles and shop must be on regular basis. All items are to be placed with identification and at allocated/Defined place.

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		4. '5S' is to be maintain in the shop.
8.4	Office work	5. Maintaining attendance of workers regular (daily and monthly) basis. 6. Maintaining production records and daily work progress sheet. 7. Maintain material records. 8. Sending of breakdown reports to maintenance etc.
9.0	SHIPPING WORK	
Sl. No.	Work Nature	Details of activity involved
9.1	Activities of Shipping	1. Foundation bolt, Hardware, Roller preparation. 2. Breather bracket, m box bracket, shim, tool kit, tie bar, valve preparation and testing. 3. Gasket, MDU, OLTC gear and shaft preparation. 4. PRV, buchholz relay, RPR, OTI & WTI, 0.6 Kg/cm ² pressure gauge, 1.6 kg/cm ² pressure gauge, OFI, WFI, OFM, WFM, oil sampling bottle, breather with silica gel preparation. 5. Ladder assembly, cable box preparation. 6. Turret, Radiator, Fan and Fan support Assy preparation. 7. Header and its pipework, A frame preparation. 8. Oil pump and motor preparation. 9. Conservator and its pipework preparation. 10. OLTC conservator and its pipe work preparation. 11. Terminal Connector for HV and LV bushing preparation. 12. Post insulator and its support, expansion joint preparation. 13. Copper items and Oil preparation. 14. Cable marking, cutting and cable tray preparation. 15. Marshelling box, RTCC, MFB preparation and testing. 16. Thermosyphen, Alumina, Cooler preparation. 17. Hydraulic jack preparation. 18. All Types bushing preparation. 19. NIFPS, NGR preparation. 20. Online DGA and Online IODS preparation. 21. Instruction manual preparation. 22. Paper work between store, QC, CDC and shipping. 23. Crane, battery trolley, fork lifter operation. 24. Welding & brazing activity. 25. Store activity. 26. Transportation of material from store to shipping and from shipping to CDC. 27. Painting and touch up. 28. Office activity etc.
9.2	Cleaning, Housekeeping and '5S'	1. Proper upkeeping of items and housekeeping is to be maintain in the shop, office and specified area. 2. Cleaning of machines, tools & tackles and shop must be on regular basis. 3. All items are to be placed with identification and at allocated/Defined place. 4. '5S' is to be maintain in the shop.
9.3	Office work	1. Maintaining attendance of workers regular (daily and monthly) basis. 2. Maintaining production records and daily work progress sheet. 3. Maintaining material records.
Note:		
1. For all above activities, BHEL Shop/Quality/TRE/Customer shall inspect the job at any point of time and their bookings to be attended		
2. Indicative total 9,36,013 technology hours involved in execution of above said scope of work comprising of 3,92,733 (42%) technology hours for unskilled works, 2,98,913 (32%) technology hours for semiskilled works and 2,44,367 (26%) technology hours for skilled work, for execution of work in TRM Power		
3. Supervisor for each section to be deputed in both A and B shift. Also, C shift operation to be planned as and when required.		

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Power Transformer (PT) Manufacturing Department

BHEL Jhansi-284120

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SPECIAL TERMS AND CONDITIONS

- 1) **Taxes and Duties:** GST shall be applicable @18 % of total contract value. In case of credit is not available as denied by GST portal due to improper documentation of wrong uploading of data by bidder, the same will be recovered from the bidder along with interest, if any.
- 2) **Payment Terms:** The work shall be measured in terms of technological hrs provided by the technology department of work completed and payment shall be made on ₹ / technological hrs. as quoted by successful lowest bidder. Finance department shall, on satisfactory compliance, and after deduction (if any) on account of defaults / Penalties / TDS, will make the due payment to the contractor.
- 3) **LD/Penalty Clause:** Any delay in execution of specified work will attract penalty. Contract has to deploy adequate number of workers to execute the quantum of work. The quantum of work will be monthly production plan which shall be reviewed/monitored on weekly basis. Delay if attributable to firm; penalty shall be imposed @0.5% per week for delayed work and maximum up to the ceiling of 10 % of the contract value for the delayed work. If any defect is noticed in the work at later stage, the firm shall repair the same, in short time free of cost. Cost of rework / rejection will be recovered from the contractor, if the same is found to be occurred due to negligence/lack of skill of the worker. Executive in charge shall keep proper records for above purpose. The Penalty shall be recovered from the EMD, Security Deposit, Contract amount and running bills etc.
- 4) For all technical operation only suitable skilled /semiskilled/Unskilled experience workers to be engaged.
- 5) **PVC:** Price variation with respect to statutory wages declared by the Government of UP, PF and ESI from the time to time will be permissible as per formula given below for bill processing:
For works contract, Revised rate without GST = Awarded rate per technical hour without GST X (1+ (Minimum wage during bill period for unskilled worker - Minimum wages at the time of tendering)/ Minimum wages at the time of tendering).

Example for rate calculation		
A	Awarded rate per Technological Hour (Rs)	50
B	Minimum wages as on tender opening date (Rs per day)	518.4
C	Minimum wages as on tender opening date (Rs/Hour) considering 8 hours a day (B/8)	64.8
D	Minimum wages rate in the month in which Hour were utilized (Rs per day)	538.00
E	Minimum wages rate in the month in which Hour were utilized (Rs/Hour) considering 8 hour a day (D/8)	67.25
F	Difference (E-C)	2.45
G	% Increase in minimum Wages (F/C)	3.78%
H	PVC rate for the month (A X G)	1.89
I	Billing rate per technological Hour (Rs) A+H	51.89
Figures are considered for example purpose only		

Minimum wage rate circular bearing Ref No – HR/CLC/MW-05/25 dt 27.02.2025 attached at page no -31

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- 6) **ORC (Over Run Compensation) /Bonus:** Not applicable. However, contractor to ensure statutory compliances wr.r.t. labour as per statute.: Not applicable. However, contractor to ensure statutory compliances wr.r.t. labour as per statute

Note:

- i. *Power Transformer Manufacturing activities are approximately 42% of Unskilled nature, 32% Semi skilled nature & 26% Skilled nature.*
 - ii. The contractor shall follow BHEL norms prevailing for wages to be paid to the Contract workers
 - iii. Records pertaining to deployed workers shall be maintained by contractor and same shall be verified with records of concerned manufacturing shop.
- 7) Quantity variation (Technological Man hours) is + 30%.
- 8) **Splitting of Contract:** Scope of work will be spilt among three bidders. The L1 price will be offered to L2 bidder, if L2 do not accept then will be offered to L3 and so on based on no. of qualified bidders and their acceptance. Splitting will be as **L1:L2:L3 approx. 45:35:20** respectively. If L1 rate not accepted by other bidders, then total quantity will be awarded to L1 bidder.
- 9) No relaxation in PQR for MSE vendor, however benefit to MSE vendor shall be available as per the attached Annexure-C and attached at page no -27.
- 10) In case there are multiple MSE vendors who satisfies the condition mentioned in sl.no "8" above, then the 25% qty allocation shall be limited to one MSE vendor who sequentially (i.e. L2, L3....) accepts the L1 vendor rates.

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Qualifying Requirement

S. No.	NIT Terms	Brief work activities
1	Name of Work	1. Power Transformer Winding, Winding of three phase Freight Loco, Pre-coil Assembly 2. Dry Type Transformer winding 3. Transformer Machine shop work 4. Preparation of CRGO Lamination 5. Insulation of Power Transformer & Special Power 6. Core Assembly, Unlacing & re-lacing work, Core to Coil Assembly 7. TG, Servicing & Case-fitting Work, 8. Vapor Phase Operation and RL01 9. Shipping work
1.a	Proposed Technology hours	9,36,013
1.b	Type of Tender	OPEN
2	Financial Strength and Experience: PQR for financial strength and experience has been prepared as under	
3	Annual Turnover	
3a	The average annual financial turnover in the past 3 years, ending 31 st March 2025, should be at least X (Refer 3b for respective column for value of 'X') Contract), wherein the bidder(s) has to attach Income tax return along with balance sheet, Profit & Loss Account of last three financial years, ending 31 st March 2025, or Certificate of CA. Provisional /Actual Turnover for financial year 2024-25 duly certified by CA shall also be acceptable for evaluation purpose. If turn over details of 3 years are not available, then available years turnover shall be evaluated by dividing it by 3.	
3b	Annual Turnover X (Refer 3a above)	Rs 103.20 Lakhs
4	Experience	
	Experience of having successfully completed including partial completed similar works* (defined below) in past 7 years ending the month previous to the month of issuing tender enquiry either of the following:	
4a	Three similar completed/partial completed works each costing not less than	Rs 137.60 Lakhs
4b	Two similar completed/partial completed works each costing not less than	Rs 172.00 Lakhs
4c	One similar completed/partial completed works, each costing not less than	Rs 275.20 Lakhs

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4d	<p>In case of experience in Government Organization/ PSU/ Semi- Government, following documents must be attached:</p> <ul style="list-style-type: none"> i) Copy of Work order/ Purchase Order. ii) Copy of Work Completion Certificate. iii) TDS Certificate (For works other than BHEL) <p>In case of experience in Private Sector, following documents must be attached:</p> <ul style="list-style-type: none"> i) Copy of Work order/ Purchase Order. ii) Copy of Work Completion Certificate. iii) TDS Certificate <p>*Similar Work: Any works contract of requisite value even if the contract has not been completed or closed (in any PSU/CPSU/State govt./Central Govt./Private sector) involving manufacturing or assistance in manufacturing maintenance of electrical equipment.</p> <p>Documentary proof (Completion Certificate, Last raised Invoices if work is not complete, last payment receipt details and WO/PO/ LOI) & TDS certificate issued from TRACES (Form 16A or 26AS) for experience performance report issued by customer for successful execution of the requisite value is to be submitted. In case the value reflecting in TDS certificate are not matching with the value given in completion certificate/invoice etc. linking calculations will be provided by the bidder. BHEL may also approach customer for verification of details submitted by the bidder.</p> <p>In case experience is submitted for work done in BHEL, TDS Certificate (16A or 26AS) is not required.</p> <p>Benefits under Start up scheme: Considering critical quality aspects & technical specification implications for the work, no relaxation shall be given to start-up bidders on account of turnover criteria & prior experience.</p>
5	Contractor Should have an ESI Code number and PF number.
6	Contractor Should have PAN number.
7	Contractor Should have GST (PAN based)
8	Bidders are required to submit a self-declaration on their letter head as per the annexure-D at page no. 28
9	<p>The bidder should submit the required documents for the proof of their firm as legal entity under whose name and style Contractor has participated in the tender as given below:</p> <ul style="list-style-type: none"> i. Partnership Firm: Partnership Deed registered at the office of Registrar of Firms. ii. Company: Certified copy of Memorandum of Association, Article of Association and Incorporation Certificate. iii. Society: Registration certificate issued by Registrar of societies. iv. Sole Proprietor-ship Firm: Undertaking on oath (On Rs. 100/- Stamp Paper) that Proprietor is solely responsible for all rights and liabilities while working under the name and style of Sole Proprietorship firm namely (_____).

We hereby accept the above (Sign & Seal of Bidder)

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Manner of Splitting of Work

All the eligible bidders will be categorized from L1 to Lh bidder (Lh will be the bidder who quoted highest rate) on the basis of their quoted rates. In case of equal rates at the same level, toss/lottery shall be drawn among all the contractors having quoted equal rates for grading from lower to higher rates. This list shall be referred for award of work.

The contract shall be split maximum among three bidders as illustrated below:

P	L1	L2	L3	Total
1	100	-	-	100
2	55	45	-	100
3	45	35	20	100

Where P is the accepted number of qualified responses.

Note:

The distribution shall be done on the acceptance given by the bidder(s) to the L1 price counter offered to them. In case, none of the bidders accepts the counter offer (L2 to Lh), the entire work order will be awarded to lowest bidder.

We hereby accept the above (Sign & Seal of Bidder)

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GENERAL TERMS AND CONDITIONS OF ENQUIRY (JHS2055C R02)

UPLOADED IN SPERATE FILE -PAGE NO 01 TO 14
(To be signed by contractor and submitted along with bid.)

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department
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Annexure-B

DECLARATION BY BIDDER

We declare that the following family firms or sister concern affiliates / subsidiary firms are participating in the tender No NIT:

1.0.....

2.0.....

3.0.....

.....

I..... , hereby declare on behalf of M/s..... and the family firms or sister concern affiliates / subsidiary firms listed above that we are not indulging in cartel formation for tender No NIT:.....

Name & signature of the bidder
(Seal)

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department

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Annexure-C

- 1 .0 Benefits earmarked for Micro & Small Enterprises (MSEs)**
- 1 .1 Tender documents shall be issued free of cost & no EMD wherever called for will be insisted upon. MSE bidders shall submit along with bid relevant documents w.r.t. their respective MSE status as per extant norms. Date to be reckoned for determining the deemed validity will be the last date of Technical bid submission. Non- submission of such document will lead to consideration of their bid, at par with other bidders and MSE status of such bidders shall be shifted to Non- MSE supplier till the supplier submit these documents.
- 1 .2 In tender, participating MSEs quoting price within price band of L1+15% shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 25% of total tendered value. In case of more than one such MSE, the supply shall be shared proportionately. A quantum of 6.25% out of 25% quantity, so earmarked, will be reserved for MSE's owned by SC / ST entrepreneurs who submit their bid with relevant documents provided that in event of failure of such MSE(s) to participate in tender process or meet tender requirements and L1 price, 6.25% sub-target for procurement earmarked for MSE(s) owned by SC or ST entrepreneurs shall be met from other MSE(s). In case of indivisible tender the full quantity shall be awarded to MSE.
- 1 .3 Minimum 3% reservation for women owned MSEs within the above mentioned 25% reservation.
- 1 .4 If an enterprise falling under MSE category as defined in the MSMED Act 2006, graduates to a higher category from it's original category or beyond the purview of the Act, it shall continue to avail all non-tax benefits of it's original category notified by the Ministry of Micro, Small and Medium Enterprise for a period of three years from the date of such graduation to the higher category.
- 1 .5 MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (As per BHEL Format, where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefits shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Power Transformer (PT) Manufacturing Department
BHEL Jhansi-284120**

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Annexure-D

Self-Declaration

1. I / We have not been found guilty by a Court of law in India for any crimes of fraud, dishonesty or moral turpitude.
2. I / We are not been blacklisted/under hold/banned or delisted by BHEL Jhansi or any Unit/office of BHEL or any other organization, before or till, on the date of tender opening.
3. I / We shall not be influenced by anyone in deployment of labour, for this contract.
4. I / We will deploy persons preferably with experience developed in BHEL Jhansi, for this contract.
5. I/ We will ensure that the manpower deployed for this contract shall be competent to carry out the assigned task.
6. I / We shall deploy manpower after acceptance of the Head of the Executing Department.
7. I / We agree that BHEL shall reserve the right to reject any labour deployed – if found not having the requisite documents, proficiency, experience, etc. for the relevant task, or if found involved in any misconduct.
8. I / We undertake that we shall pay minimum wages to the labour employed by us for this contract, and also undertake to abide by all statutory and regulatory requirements, as also to the references, terms and conditions mentioned in the tender document, while carrying out work at BHEL Jhansi.

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

Note: On Rs. 100/- Stamp paper.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department

BHEL Jhansi-284120

Works Contract Tender Enquiry No: TRM/PT/TW/25/01 dt 14.05.2025

Annexure-E

Blank Price Bid-JS 146

Price Bid Sheet for Works Contract						
Sl. No.	Description of Work	% Allocation (Item-wise)	Unit of Measurement	Quantum of Work	Rate per Unit (in Rs.)	Amount (in Rs.)
(A)	(B)	(C)	(D)	(E)	(F)	(G=E*F)
1	1. Power Transformer Winding, Winding of three phase Freight Loco, Pre-coil Assembly 2. Dry Type Transformer winding 3. Machine shop work 4. Preparation of CRGO Lamination 5. Insulation of Power Transformer & Special Power Transformer 6. Core Assembly, Unlacing & re-lacing work, Core to Coil Assembly 7. TG, Servicing & Case-fitting Work 8. Vapor Phase Operation and RL01 9.Shipping work	100.00%	Technology Hours	9,36,013		-
	GROSS TOTAL	100.00%				
	Total price in words:	-				
Note						
a	Bidders to quote rate per Hour (exclusive of GST / other Govt. taxes as applicable) in column F					
b	Splitting of Jobs among successful bidders shall be as per tender documents.					
c	Evaluation of the lowest one bidder shall be on lowest rate per hour basis (Column F).					
d	For the purpose of payment measurement books shall be maintained as per technology Hours consumed monthly basis work order wise duly certified by shop in charges					
e	Technical Hrs provided by Technology Department will be final for the booking of activities and payment thereof					
f	Monthly/ Weekly Plan will be provided to your supervisors from all sections of Power TRM for manufacturing activities.					
g	Bill will be raised as per completion of work activity and on Monthly basis					
h	Contractor may visit the workplace to know about the activities before quoting in tender.					

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department
BHEL Jhansi-284120

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Instructions to Bidders

1. Bidders have to download the excel sheet in .xls format and fill the value in column F only (on computer) before taking print out of the price bid.
2. All the other cells of excel sheet are locked and non-editable.
3. Bidders must not fill the price bid manually after taking print out, else the price bid shall be rejected.
4. After filling the price bid and taking print out, bidder has to sign (with seal) at the designated place on the price bid.
5. Price bid have to kept in separate sealed envelope with tender name and tender no. written on the top of it.
6. Bid lower than 80% of estimated Technical hour rate/total estimated value as mentioned in NIT shall be rejected.
7. 42% unskilled workers, 32% Semi skilled worker & 26% skilled worker required in Power transformers manufacturing.
8. Wages shall be pay to labours as per above percentage.
9. Records of contractor shall be verified with details records of workers in concern manufacturing shop.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

Power Transformer (PT) Manufacturing Department
BHEL Jhansi-284120

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BHARAT HEAVY ELECTRICALS LIMITED: JHANSI
(Human Resource Management)

From : Gaurav Sahu
Engineer (HR)

To : All GMs/AGMs/HODs

Ref: HR/CLC/MW-05/25

Date: 27.02.2025

Sub : Minimum Wage Rates

On the aforesaid subject, as a result of DA revision, the wage rates as applicable for Engineering Industries in Uttar Pradesh employing more than 50 workmen, shall now be as follows: -

<u>Category</u>	<u>Wage rate per day</u>
SW	622.08 (Rs. Six Hundred Twenty Two & Eight Paise)
SSW	570.24 (Rs. Five Hundred Seventy & Twenty Four Paise)
USW	518.40 (Rs. Five Hundred Eighteen & Forty Paise)

The above rates shall be applicable in BHEL, Jhansi w.e.f. 01 February 2025 to 31 July 2025.


(Gaurav Sahu)

Power Transformer (PT) Manufacturing Department
BHEL Jhansi-284120

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Regarding conflict of interest of bidders-

*"A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. **The bidder found to have a conflict of interest shall be disqualified.** A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:*

- a) they have controlling partner (s) in common; **or***
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; **or***
- c) they have the same legal representative/agent for purposes of this bid; **or***
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; **or***
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid; **or***

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- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:*
- 1. The principal manufacturer directly or through one Indian agent on his behalf; and*
 - 2. Indian/foreign agent on behalf of only one principal;*
- or***
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or*
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business."*