

Tender Enquiry No: TRM/PT/WC/2021-22/001 Date: 04.12.2021



TENDER DOCUMENT For Works Contract For Tender Enquiry No: TRM/ PT/WC/2021-22/001

For TRANSFORMER MANUFACTURING

Contact Person:

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Tender Due Date 17.12.2021 at 13:15 Hrs Tender Opening Date: 17.12.2021 at 14:00 Hrs

Rev	Short details of revision (In case of revision in tender document, otherwise NA
Date	

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



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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.

(कृपया निविदा प्रपत्र के साथ संलग्न किये गये अपने दस्तावेजो पर निविदा प्रपत्र के क्रम में पेज में सबसे नीचे पेज संख्या अंकित करे)

S.No	Particular	Detail		
1.	Name of the firm			
2.	Name of the Proprietor/Partners			
3.	Address			
4.	Mobile No-			
5.	E-mail ID-			
	Essential Docu	iments		
	Particular	Detail	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 decleration as per as per annexure V on Rs 100 stamp paper .	Submitted/ Not submitted		
13.	Copy of ownership of firm (Refer page 11 point 11)	Submitted/ Not submitted		
14.	Reciept of tender fees deposition	Amt-		
15.	Reciept of EMD deposition	Amt-		



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15.	Copy of turn over for last three year (refer point 8 of page 10) i. 2018-19 ii. 2019-20 iii. 2020-21	Submitted/ Not submitted
16.	Work Experience (refer point 9&10 page 11) i. Work order ii. Completion Certificte iii. Relevant TDS/TRACES (in case of Experience in private sector)	Submitted/ Not submitted
	Desirable Docu	ments
17.	i. F.Y 2018-19 ii. F.Y 2019-20 iii. F.Y 2020-21	Submitted/ Not submitted

We will fulfill all the obligations of the contractor and abide by the terms & Conditions mentioned in the enquiry.

Date:-

Signature With Name & Seal



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PARTII: PRICE BID

(Separate envelope)

S. No.	Section	Page nos.
1.	PRICE BID	1-page



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NOTICE INVITING TENDER





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1- NOTICE INVITING TENDER

S. No.	Particulars	Details
1	Name of work	Transformer Manufacturing
2	Tender Evaluation Criteria	(As per GTC issued by "Central Contracting Cell" of BHEL Jhansi.
3	Duration of the Contract	Four Months
4	Last date of receipt of the Tender	(as on page # 1)
5	Date of opening Tender	(as on page # 1)
6	Address for submitting the tender	(as on page # 7)
7	Earnest Money Deposit (EMD)	Rs 1.43 lacs /- only
8	Cost of tender (Non refundable)	NIL
9	Validity of Offer	120 days

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" & "www.bheljhs.co.in"

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

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 'Transformer Manufacturing'. Similarly the Price-bid must be duly signed and sent in a sealed envelope boldly super-scribing "PART-II PRICE BID FOR 'Transformer Manufacturing'. Both these envelopes shall be placed inside 3rd sealed envelope super-scribing" duly signed and sent in a sealed envelope boldly super-scribing "Transformer Manufacturing".



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The tender shall be addressed to as follows:

Tender Box
CISF Control Room/Office
Administrative Building
Bharat Heavy Electricals Limited
Jhansi-284120 (U P)

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 As per price bid

Brief Description of work

1) <u>Scope of work:</u> In Power Transformer Manufacturing shops following work is to be carried out:

S. No.	Description of work
1.	Manufacturing activities of Insulation items of Power and Special Transformer.
2.	Manufacturing activities of Machined items of Power and Special Transformer.
3.	Manufacturing of activities of CRGO Lamination items of Power and Special Transformer.
4.	Manufacturing of activities of Windings of Power and Special Transformer.
5.	Manufacturing activities of core building, coil assy, T G Assy of Power Transformer.
6.	Manufacturing activities of Tanking , Servicing & Case Fittings of Power Transformer

The details of activity involved in the above said work is given in **Annexure-J.** The total work will be limited to 158517.3 **technology hrs.**

- 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 all the sections, against this contract need to be present full day and supervise the activities
- 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.
- Contractor have to collect all required material, drawings and manufacturing information from shop SPC/contracting department. Required space, tools & tackles and facilities like material handling equipments, 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, 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.
- All the material, electricity, compressed air, consumable and tools available with BHEL shall be provided by BHEL free of cost.
- EOT crane shall be provided by BHEL free of cost, however the assistance in operation of the same i.e. crane operator and slinger, shall be the responsibility of contractor. However, in contingency in order to meet the job requirement, any additional resources if required shall be arrange by the contractor at their cost.
- All the job after manufacturing will be inspected by CQX/contracting department/customer and if any default/defect occurs, the same has to be rectified by contractor at free of cost.
- 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.
- The house keeping of the work area and maintaining work discipline shall be the contactors' responsibility.



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• Contractor is advised to visit the work place to know the work content before submission of quotation. The required documents/ drawing/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 J

SCOPE OF WORK

SI No.	WORK NATURE	DETAILS OF ACTIVITY INVOLVED	AREA / SECTION
1	Insulation	Preparations of Winding Insulation and Coil Assy Insulation of	BAY- 7
	items	Power and special transformers. It includes prepration of Spacers,	INSULATION SHOP
	preparation of	Block, washers, cleats, gaskets, Bend washer, cylinders, edge block,	
	Power / spl	Scarf cylinders, center block, Wrap, Barrier, Circular Barriers, F G	
	-	Insulation, Crimp washer etc. and other insulation items of	
	Transformers	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. Prepration of Core Insulation and Tank Insulation items of Power	
		and Special Power Trfr. 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 Trfr. It includes	
		Cleats, Packing, Closing piece, Horizontal and vertical cleats,	
		Template based items of PCB and Permawood etc.	
		5. Preparation of Gasket and C T Insulation of Power and Special	
		Transformers. It includes Gasket items of errection, shipping,	
		tanking and outside fittings of transformer tank and accessories	
		and CT 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 5 S in the Shop Floor.	
		13. Attendance of workers, Production Records, daily Work progress	
		sheets etc. to be maintained.	
		14. 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.	



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2	Prepration of	1. Preparations of copper TG items for Power, dry type, Esp and	BAY-3 MACHINE
	machine shop	special transformers. It includes preparation of copper Bus bar,	SHOP
	Items of Power	flexible jumper, earthling links and strips, Neutral grounding other	
	/ Spl Trfr Assy.	miscellaneous items of Transformers, as per BHEL drawings.	
	, 55	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, slot drill, hot dip tinning, brazing,	
		heat treatment of copper sleeves and other items.	
		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	
		such as small eathing links, strips and other small items.	
		11. Stacking, Tieing, counting, Packing and Placing of finished Items in proper place as directed.	
		12. Maintaining the housekeeping and cleaning of work area and	
		machines on regular basis and maintaing the 5 S in the Shop Floor.	
		13. Operation of overhead crane for loading of material on machine or	
		at work place and fork lifter operation for material movement such	
		as withdraw of heavy steel and copper raw material from store,	
		scrap bins delivery to scrap yard etc.	
		14. Attendance of workers, Production Records, daily Work progress	

sheets etc. to be maintained.



3	Prepration of	Preparations of CRGO Laminations for power transformer, dry type	BAY-5 CORE AND
	CRGO	transformer, Traction transformer, ESP transformers including	PUNCH
	Lamination	laminations for ACR core. which involves all manufacturing	
	Lammation	activities of slitting, cropping and punching of laminations on CNC	
		cropping line, CNC slitting line, RedMan machine, guillotine	
		machines, punching machines and manual slitting machine in bay 5	
		and new bay 7. This also includes the operation of applying blue	
		lacquer (the anti-rust compund).	
		2. Preparation of ring core for power transformer, rectifier	
		transformer & special transformers. This involves winding, welding,	
		annealing, testing, varnishing.	
		3. Preparations of yoke shunt for power transformer and cropping of	
		wall shunt laminations.	
		4. Stacking of laminations by counting the number of sheets for each	
		and every job.	
		5. CRGO sample preparation as per BHEL quality plan.	
		6. Additional work for CRGO shortage preparation by assembly shop.	
		7. Segregation and proper keeping the offcuts for further Utilization	
		to prepare dry type, esp transformer laminations.	
		8. Packing and dispatch of all finished product.	
		9. Segregation and stacking of prepared material and keeping its	
		record. In-house handling of prepared material/Raw material.	
		10. Handing over and Maintaining the record of Dispatch Items to	
		different Sections after getting checked from Shop Supervisors.	
		11. Material movement from Stores to Shop Floor and from one work	
		center of shop floor to anothers and un-packing of CRGO roll.	
		12. Maintaining the housekeeping and cleaning of work area and	
		machines on regular basis and maintaing the 5 S in the Shop Floor.	
		13. Operation of two overhead crane in bay 5 and one overhead crane	
		in new bay 7 in each shift for loading of material on machine or at	
		work place and fork lifter operation for material movement such	
		as withdraw of CRGO coils from store , pallets movement at work	
		place, lamination pallet delivery and scrap bins delivery to scrap	
		yard etc.	
		14. Attendance of workers, Production Records, daily Work progress	
		sheets etc. to be maintained.	
4	Power Trfr-	Setting of mold as per required diameter.	BAY 4 & 11
-	Pasting of edge	2. Loading of pressboard items of edge blocks and cylinder into oven	
		for C.O. house	
	blocks, Scarf	3. Taking out the items from oven and pasting as per requirement.	
	cylinder	4. Curing for 8 hours and then smoothening the joint part by grinding	
		from both inside and outsides.	
		5. Removing cylinder/Edge block from mold. Cylider sent to machine	
		and edge block sent to insulation shop for edge cutting. ETC.	



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5	Power TRFR-	All below activities before start of each coil	BAY 4 & 11
	Starting of coil	2. Collect all required material from SPC store.	
		3. Setting of mold as per required diameter.	
		4. Operating winding machine (both helical and vertical)	
		Wrapping or lowering of cylinder as per ES/Dwg.	
		6. Marking and dressing with Dovetail spacer and dovetail blocks.	
		7. Checking of Copper size as per ES.	
		8. Lead preparation as per ES/Dwg and lead mounting	
		Etc.	
		9. Quality check points are to be strictly followed.	
6	Power Trfr-	Check Copper reels as per ES	BAY 4 & 11
-	Winding of	2. Pasting of rider dummy, marking of rider/step dummy and cutting as	
		required.	
	plain RS and	3. Starting of coil from first section and moving continue as per	
	interleaved	ES/Dwg/Cross over Diagram.	
	coils	4. Operating resistance brazing machines. 4. Operating resistance brazing machines.	
		5. Joitning copper as per design standard.	
		6. Making of standard transposition, strand transposition and block	
		transposition as per standard.	
		·	
		7. Preparations of all leads of the coil as per standard.	
		8. For interleaved sections conductors sequence to be checked with	
		buzzer before joining them in presence of BHEL person.	
		9. Sequence of conductors in PID coil must be check as per given check	
		list.Etc	
		10. Quality check points are to be strictly followed as per check list.	
7	Power Trfr-	 Complete first layer winding as per above activities. 	BAY 4 & 11
	Winding of	2. Alignment of the winding, lead preparation and then wrapping as per	
	double layer	ES/Dwg.	
	and composite	3. Starting winding of second layer winding as per given above	
	_	activities.	
	coils	4. Completing the winding and unloading Etc.	
		5. Quality check points are to be strictly followed as per check list.	
8	Power Trfr- Coil	1. Unloading coil from machine and shifting it to clamping area.	BAY 4 & 11
	final	2. Alignment and rectification of the coil and followed by QC check.	
	preparation,	3. Clamping the coil and loading it to vessel for heating.	
	Rectification,	 After heating as per standard taken out coil for pressing. 	
		 Pressing the coil and maintaining its CD. 	
	Clamping and	_	
	pressing	6. Shifting the coil to Bay-4 area.	
		7. After testing wrapping the coil with polyfilm.	
		8. Handing over the coil assembly shop.	
		Quality check points are to be strictly followed as per check list.	
9	Winding of	Collection of material (Copper/insulation items, cylinder and other)	BAY 4 & 11
-	three phase	required material)	
	_	 Pasting of dovetails strips on FG cylinder as per ES/Dwg. 	
	Freight loco coil	3. Loading cylinder on mold and start winding as per ES/Dwg. 3. Loading cylinder on mold and start winding as per ES/Dwg.	
		 Joints in copper must be as per TRE Standard. 	
		5. Complete the coil winding and then lock from outside with dovetails	
		locking strips.	



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		6. Quality check points are to be strictly followed as per check list.	
		7. Coil final preparation as per discussed in point no.6.	
10	Winding of DTT coils	 Mold readiness by applying mold releasing agent and loading on machine. 	BAY 4 & 11
		2. Issuing material from SPC store/Main Store	
		3. Start winding as per ES and Dwg.	
		4. Copper joints brazing must be as per Design standard.	
		5. Cleaning of segments and then applying releasing agent and then	
		putting on winding before start of second layer.	
		6. Use fiber glass mate and other insulating items as per requirement.	
		7. Completing the coil and sending it to for preparation.	
		8. Quality check points are to be strictly followed as per check list.	
11	DTT coil Casting	1. TG work of HV coils followed by terminal brazing.	BAY 4 & 11
		2. Jacketing of the coils.	
		3. Loading of coils in encapsulation plant.	
		4. Filling of 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.	
		7. Cutting and finishing of conductors and maintaining CD.	
		8. Testing of coils and handing over to Assy etc.	
		9. Quality check points are to be strictly followed as per check list.	
12	Core assembly	Drg availability.	BAY 9 & 10 (BTG)
	,	Material Availability as per drg.	,
		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	
		COTE	
		8. application of blue –lacquer & Epilux hardener, application of resin-	
		glass belt & curing, 9. paint touch up, cleaning of core & readiness for testing.	
13	Core coil	 paint touch up, cleaning of core & readiness for testing. Drg availability. 	DAV 0 9, 10 (DTC)
13		Material Availability as per drg.	BAY 9 & 10 (BTG)
	assembly	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.	
14	Re-lacing	1. Pressing to achieve required relacing level & re-lacing of job after	BAY 9 & 10 (BTG)
		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	
15	Terminal Gear	Drg availability.	BAY 9 & 10 (BTG)
	Assembly	Material Availability as per drg.	2711 3 00 20 (210)
	Assembly	Collection of hardware/consumable material from store/CRX/Bay-7	
		4. Removal of enamel of CTC conductor.	
		5. cleat fitting, preparation of copper cable/bus bars and its	
		crimping/brazing with winding conductors, cleaning of brazing joints	
		6. OLTC assy. mounting of OLTC bracket & OLTC, connection of copper	
		cables with OLTC,	
		7. finishing of complete active part in all respect, cleaning & readiness	
		for testing.	
		8. Additional work if required in case any testing failure.	
16	Tank and turret	Drg availability.	BAY 9 & 10 (ATG)
10		Material Availability as per drg.	DAT 3 & 10 (ATG)
	preparation	Collection of material from store/CRX/Bay-7.	
		4. Assy of items, valves, hardwares, cord, gaskets etc. as per drg.	
		5. Assy of CTs in turret and tank as per drg.	
		6. CT board assy.	
		7. Mounting of turrets on tank.	
		8. 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 drg. 	
		10. BHEL Shop/Quality/TRE/Customer shall inspect the job at any point	
		of time and their bookings to be attended.	
		11. Store Keeping for raw materials & hardwares.	
		12. Tank TG to be done as per requirement in drg.	
17	Trail Tanking	OLTC flange to be removed.	BAY 9 & 10 (ATG)
	Trail railking	2. Transformer to be placed in tank.	DAT 3 & 10 (ATG)
		3. Top tank to be placed.	
		4. Ferrule brazing /lug crimping in low voltage winding, intermediate	
		winding, high voltage winding to be done as per drg /suit to	
		assembly.	
		5. Locking channel fouling/resting to be checked and rectified to suit to	
		assembly.	
		6. Flange matching to be checked for the OLTC bracket down/up scope.	
18	Servicing and	Servicing (all hardware/permali tightening, core padding, pressure by	BAY 9 & 10 (ATG)
	tanking:	dash pot/bolt etc.) of transformer to be done as per technology. Any	2711 3 00 20 (711 0)
	talikilig.	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.	
	İ		
		. 3. Required earthing of core, end trame and tank to be none after	
		3. Required earthing of core, end frame, and tank to be done after successful testing.	
19	Tanking	successful testing.	RAY 9 & 10 (ATG)
19	Tanking	,	BAY 9 & 10 (ATG)



		3. Tank to be tightened by giving specified torque using torque wrench.								
		4. All the inspection covers except on top to be tightened for oil filling								
		purpose.								
		5. OLTC flange matching, diverter insertion and necessary connection								
		of bushing, earthing lead, CT leads etc. to be done.								
		6. Necessary earthing at required places to be done.								
20	Case fitting	Bushing assy of various rating to be done on transformer.	BAY 9 & 10 (ATG)							
		2. Lead taping to be ensured up to bushing bowl.								
		3. MDU mounting and coupling with OLTC to be done.								
		4. All the inspection covers to be tightened properly.								
		5. Locking channel insulation packing.								
		6. Top up of the job with mobile conservator and any leakage point to								
		be attended.								
		7. Leakage point during oil pressure to be attended.								
21	Dismantling	1. Dismantling of all the bushing and turrets. BAY 9								
		2. Proper tieing of leads/jumper with polyester.								
		3. Cleaning of tank and active parts from inside.								
		4. Epoxy plate mounting & connection and tightening.								
22	NOTE	For all above activities from SI No 12 to 21, BHEL	BAY 9 & 10 (ATG							
		Shop/Quality/TRE/Customer shall inspect the job at any point of time and	& BTG both)							
		their bookings to be attended								

- 2. <u>LD Clause:</u> 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.
- 3. For all technical operation only suitable skilled /experience workers to be engaged.



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Qualifying Requirements

SI No	Description of Qualifying Requirements
1.	Average Annual financial turnover during the last 3 years ending 31 st March 2021, should be at least Rs. 24.59 Lakhs approx. (Please attached <i>Income tax return along with balance sheet and along with Profit & Loss Account of last three financial years, ending 31st March 2021, or Certificate of CA). Note-Provisional /Actual Turnover for financial year 2020-21 duly certified by CA shall also be acceptable for evaluation purpose. If T/o details of 3 years are not available, then available years T/o shall be evaluated by dividing it by 3.</i>
2.	2.1: Work Experience: (Bidder should fulfill any one of the following):
	Experience of having successfully completed similar works* (defined below) during last 7 years ending 30.11.2021 should be either of the following: -
	 a. Three similar completed works each valuing not less than the amount equal to Rs 32.79 Lakh OR
	 Two similar completed works each valuing not less than the amount equal to Rs 40.99 Lakh OR
	c. One similar completed works each valuing not less than the amount equal to Rs 65.58 Lakh
	*Similar Work: Any service or works contract of requisite value in any PSU / CPSU / State govt. / Central Govt./ Private sector involving manufacturing/maintenance or assistance in manufacturing/maintenance activities of electrical equipment.
	Documentary proof (Completion Certificate and WO/PO / LOI) for the experience performance report issued by Customer for successful execution of the contract to be submitted. In case of experience in Private Sector, in addition to above, relevant TDS Certificate must be attached as evidence.
3.	Contractor Should have an ESI Code number and PF number.
4.	Contractor Should have PAN number.
5.	Contractor Should have GST (PAN based)
6.	Bidders are required to submit a self-declaration on their letter head as per the Format enclosed in Annexure V of tender enquiry.
7.	Blank Price Bid as per annexure "X".



SI No	Description of Qualifying Requirements
8.	The documents required for legal entities under whose name and style Contractor has participated in the tender are as follows:
	8.1) Partnership Firm: Partnership Deed registered at the office of Registrar of Firms.
	8.2) Company: Certified copy Memorandum of Association, Article of Association and Incorporation Certificate.
	8.3) Society: Registration certificate issued by Registrar of societies.
	8.4) 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 ().

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GENERAL TERMS AND CONDITIONS OF ENQUIRY (JHS2055B R01)

UPLOADED IN SPERATE FILE -PAGE NO 01 TO 14

(To be signed by contractor and submitted along with bid.)

गेट पास आवेदन प्रपत्र



Tender Enquiry No: TRM/PT/WC/2021-22/001 Date: 04.12.2021

ANNEXURE "X"

Price Bid

SI. No.	Description of Work	Total Technology Hrs	Rate per technology hrs (in Rs.)
(A)	(B)	(c)	(D)
1	Manufacturing activities of Insulation items of Power and Special Transformer.		
2	Manufacturing activities of Machined items of Power and Special Transformer.		
3	Manufacturing of activities of CRGO Lamination items of Power and Special Transformer.	158517.3	
4	Manufacturing of activities of Windings of Power and Special Transformer.		
5	Manufacturing activities of core building, coil assy, T G Assy of Power Transformer.		
6	Manufacturing activities of Tanking and Servicing of Power Transformer		

Rate per technology hours in words: Rs.....

Note:

- 1. Rate per technology-hour (exclusive of GST / other Govt. taxes as applicable) shall be quoted for the above work in the enclosed prescribed format only.
- 2. The rate should be quoted both in words & figure. In case of discrepancy the value in words will be Considered final.
- 3. Any loss / delay of credit to BHEL due to the reason attributable to the contractor shall be recovered from them along with applicable interest.
- 4. Price shall be quoted including Basic wages, PF, ESIC, all other statutory liabilities, expenses on PA Insurance, uniform, helmets, safety items, Bonus, Earned leave etc. Bonus shall be payable as per Payment of Bonus Act 1965.
- 5. Technical Hrs provided by Technology Department will be final for the booking of activities and payment thereof.
- 6. Monthly/ Weekly Plan will be provided to your supervisors from all sections of TRM for manufacturing activities as per Annexure K.
- 7. Bill will be raised as per completion of work / Monthly basis.
- Contractor may visit the workplace to know about the activities before quoting in tender.

Name & Signature	OI LITE	טוט ב	luei			
(Seal)						
Name of the Firm:						
	/~:			 21 : 1	-	_



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ANNEXURE: "K"

MEASUREMENT BOOK

SL	ACTIVITIES	W O NO	JOB	JOB SI	START	END	ACTUAL	TECH HRS	VALUE
NC	WORK		SL NO	NO	DATE	DATI	COMPLETIC	AS PER	@ PER TECH
							DATE	TECHNOLG	HRS

NOTE: End date shall be increased subject to the delay in availability of material/machine.

CONTRACTOR SECTION INCHARGE QUALITY TECHNOLOGY