



Part A (Techno-Commercial Bid)

SECTION – I

QUALIFYING CRITERIA

Comparative Statement LT Distribution Panel With respect to the following

The BIDDER / VENDOR has to compulsorily meet the following requirements to get Qualified for submitting an offer. The Vendor's Response Column has to be necessary filled in by the Bidder in the prescribed format as following.

S. No.	REQUIREMENTS				Indentor's Remark
1	<p>1.1 Only those vendors, who have supplied and commissioned at least ONE Machine of Our Rated capacity or more in the past five years and such machine is presently working satisfactorily for more than one year after commissioning (on the date of opening of Tender), should quote.</p> <p style="text-align: center;">OR</p> <p>1.2 if such machine has been supplied to BHEL, then it should be presently working satisfactorily for more than six months after its commissioning and acceptance (on the date of opening of Tender) in BHEL.</p> <p>1.3 Performance certificate from the customers (minimum 2) regarding satisfactory performance of machines supplied to them should be sent along with technical offer.</p>				
2.0	<p>BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.</p>				
3	<p>In case the bid is submitted by authorized agents/distributors, appropriate authorization certificate from Principals to be attached</p>				



Part A(Techno-Commercial Bid)

SECTION – I I

Comprative Statement LT Distribution Panel With respect to the following

The BIDDER has to give complete details against each clause in the table given below, with additional sheets those may be attached (giving clear reference number) to furnish and cover the requisite details / documents. In case of any deviation the same should be clearly mentioned.

Sl. No.	PARTICULARS				Indentor's Remark
1	Profile of the Company bringing-out the years of Experience of the BIDDER in the field of				
2	Number of machines supplied, installed and commissioned till date for same/similar applications (with details on machine type / model, configuration, customer and quantity)				
3	YEAR of supply of latest machine for same/similar applications and the Technical Specifications of the Machine supplied [Details to be furnished]				
4	Details on the Firm's Registration and the FINANCIAL STRENGTH of the COMPANY (Balance Sheet for the last 3 years) shall be				
5	Details on International Standards / Design Process Codes followed in Design and Manufacture of the				
6	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centers in India. Competency &				
7	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment				



Part A(Techno-Commercial Bid)

SECTION – III

Comparative Statement LT Distribution Panel With respect to the following

The BIDDER has to comply with the following, for accepting the Technical Offer for Scrutiny by the Purchaser:

Sl. No.	REQUIREMENTS				Indentor's Remark
1	The BIDDER / VENDOR shall submit the offer in TWO PARTS- Technical & Commercial Bid (PART A) and Price Bid(Part B)				
2	The Technical Offer shall be supported by Product Catalogues and description.				
3	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by				
4	The BIDDER / VENDOR shall assure a continuous support for the supply of SPARES and SERVICE for Seven Years from the date of commissioning of equipment at BHEL Works.				
5	<p>Two Parts Bid-The quotation is invited in Two Parts Bid i.e.</p> <p>(1) As per our Formats Part A - Section I, Part A- Section II, Part A- Section III & Part A- Section IV(Techno-Commercial Bid) containing the Technical offer along with all Commercial Terms & Conditions mentioning clearly Delivery Terms, F.O.R./Ex Works, Govt Duties(%), Levies(%), Taxes(%) etc. PLUS Unpriced copy Of prescribed Price Bid in separate sealed envelopes and super scribing on it Part- A (Techno-Commercial Bid) &</p> <p>(2) Part- B (Price -Bid) containing only Basic Price with break up of the items, accessories, tooling, attachments, auxiliary parts, spares, consumables, etc. with the main and basic equipment , Erection & Commissioning charges (if any) in separate sealed envelope super scribing on it Part- B (Price- Bid) &</p> <p>(3) And then these two envelopes put inside a</p> <p>Third Big envelope super- scribing Price- Bid And Techno- Commercial Bid against Tender Notice No. ----- Dated----- Due for opening on Dated----- .Offers received in Single Bid will not be considered.</p>				

6	<p>The Techno-Commercial bid & Price- Bid are required to be submitted strictly as per our attached formats. Each page of the BHEL's formats are to be duly signed & stamped by the tenderers at the bottom of formats as a token of un-equivocal acceptance of the terms & conditions of the Tender. Price Bid of only those Bidders will be opened, whose Techno-Commercial Bid is accepted.</p>				
7	<p>Soft copy if any, giving the salient features of the proposed machine with all sub-systems and auxiliaries, and /or showing live demo of an existing and working machine of similar configuration and capacity may be provided.</p>				
8	<p>BIDDER has to indicate the Country of Origin for the supply of equipment.</p>				
9	<p>In case of preliminary qualification of the offer, on technical grounds, the BIDDER may be called for a detailed technical discussion on the original technical offer at BHEL Works, with a 07 days notice period.</p>				
10	<p>Any Govt. Taxes/ Duties/ Levies to be mentioned here:</p> <p>(a) Custom Duty (if applicable) @ %-----</p> <p>(b) Excise Duty (if applicable) @ %-----</p> <p>© Cess on (if applicable) @ %-----</p> <p>(d) Sales Tax against Form C @ %-----</p> <p>(e) if Any other tax/ levy, mention name & %---</p>				
11	<p>Packing & forwarding charges, if any (%)-----</p>				
12.1	<p>Delivery terms Ex-supplier's works/FOR BHEL Rudrapur/Any other terms</p>				
12.2	<p>Validity of offer</p>				
12.3	<p>Delivery period as per offer</p>				



Bharat Heavy Electricals Limited

Part A (Techno-Commercial Bid) Section IV

Specification cum Compliance Certificate for LT Distribution Panel

Note:-

1. The 'Offered' Column and where applicable, the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous or unsustainable information against any of the clauses of the specifications / requirements shall be treated as non-compliance.

Scope: Supply, installation, testing & commissioning of LT Distribution Panel complying with the following specifications

S No.	Description - BHEL's Requirement	OFFERED/REMARKS	Deviation (if any)
1.0	Application and type		
1.1	<p>Application: Main electrical distribution panel</p> <p>Type: Indoor type LT Distribution Panel with associated control and accessory equipment mounted there in panel, cubical type single front type made out of CRCA 16 /14 gauge CRCA sheet steel powder coating paint with 7 tank process panel, suitable for 415V ±10%, 50 Hz, 3 phase 4 wire system. Cable entry from top.</p> <p>Base channel of 75x40x6 mm painted black colour provided to prevent corrosion of steel of cubicles due to cleaning / mopping of floors</p>		
1.2			
2.0	<p>Scope & Technical specifications</p> <p>Design, Fabrication, Supply, Erection, Testing and commissioning of Powder coated Main Distribution Panel fabricated out of 14/16 gauge CRCA sheet steel in cubical, compartmentalised free standing floor /wall mounted, dust and vermin proof, with reinforcement of suitable size angle iron, channel, T-iron or flats as required. Cable gland plates shall be provided on top. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels. Approval shall be taken for each panel before fabrication. (All hardware like nuts and bolts used shall be Galvanized and Zinc passivated) (Note: Contractor can select the next higher figure indicated within the bracket are required minimum fault level of that panel)</p>	<p>All switchgear & instruments used should be of Siemens, L&T, Schneider/ABB, C&S, make & all Indication lamps should be LED. If any of required switchgear or instrument is not available in above mentioned make the make of that should be mentioned by the bidder for BHEL approval.</p>	
2.1	<p>MAIN L.T. PANEL: INCOMERS</p> <p>Transformer 1: 1000KVA</p> <p>Transformer 2: 800KVA</p> <p>DG set 1: 320 KVA</p> <p>DG set 2: 125 KVA</p>		
2.1.1	INCOMER FROM TRANSFORMER 1 (1000 KVA)		

Vendor to confirm/specify

S No.	Description - BHEL's Requirement		OFFERED/REMARKS	Deviation (if any)
i)	1 no. 1600A 4 pole, 65KA MDO ACB having microprocessor based O/L,S/C,E/F Protection LSIG releases with Single phase preventer			
ii)	The ACB shall be complete with all accessories like neutral link, 3 nos. 1600A/5A, 15VA CTs for protection & 3 nos.15 VA, class -1 for metering etc.			
2.1.2	INCOMER FROM TRANSFORMER 2 (800 KVA)	Vender to confirm/specify		
i)	1 no.1250A 4 pole, 65KA MDO ACB having microprocessor based O/L,S/C,E/F Protection LSIG releases with single phase preventer			
ii)	The ACB shall be complete with all accessories like neutral link, 3 nos. 1250A/5A, 15VA CTs for protection & 3 nos.15 VA, class -1 for metering etc.			
2.1.3	INCOMER FROM DG 1 (320 KVA)	Vender to confirm/specify		
i)	1 no. 630A 4 pole, 36KA MCCB having microprocessor based O/L,S/C,E/F Protection LSIG releases with single phase preventer			
ii)	The MCCB shall be complete with all accessories like neutral link, spreader links, 3 nos. 630A/5A, 15VA CTs for protection & 3 nos.15 VA, class -1 for metering etc.			
2.1.4	INCOMER FROM DG 2 (125 KVA)	Vender to confirm/specify		
i)	1 no.200A 4 pole, 36KA MCCB having microprocessor based O/L,S/C,E/F Protection LSIG releases with single phase preventer			
ii)	The MCCB shall be complete with all accessories like neutral link, spreader links, 3 nos. 200A/5A, 15VA CTs for protection & 3 nos.15 VA, class -1 for metering etc.			
2.2	Bus Coupler	Vender to confirm/specify		
	Bus Coupler 1600A 4P,65 KA MDO ACB 01 No. with ON/OFF Indication lamps			
2.3	INTERLOCKING.	Vender to confirm/specify		
	Incomer from Transformers, Incomers from D.G. sets & bus coupler shall be electrically & mechanically interlocked. Coupling between these shall be such that at the time when power from electricity board is available, only one of the transformer is supplying the bus and when supply is from DG, only one DG is supplying in the bus. But in no case the D.G.panel incomers shall be paralleled with transformers supply.			
2.4	Main Bus			

S No.	Description - BHEL's Requirement	OFFERED/REMARKS	Deviation (if any)
	<p>1 Set of 2000A TPN Main Aluminium busbar (e.g. 100x10x2) suitable for above mentioned requirements & 2000 Amp current carrying capacity TPN with heat shrinkable sleeve to indicate various phase in busbar and the busbar of difference face housed in busbar chambers with suitable separators & connection arrangement with feeders. Earthing busbar 50x5 mm Al strip through the length of panel along at rear side with 10 mm hole for grounding purposes. All metallic bus through suitable size of copper wire.</p>	Vender to confirm/specify	
2.5	Incomer Panel metering Indicators	Vender to confirm/specify	
2.5.1	1 No. Load Analyser cum digital Multifunction Meter (as per rating of Bus Bar) for all incoming side		
2.5.2	Indicating LED lamp for all the incomers RYB, ON OFF indication		
2.6	OUTGOING Feeders	Vender to confirm/specify	
i)	6 No. 630A TPN MCCB (36 KA) thermal release with neutral link & O/L, SC Protection along with all accessories		
ii)	1 no. 500A TPN MCCB (36 KA) thermal release with neutral link & O/L, SC Protection along with all accessories		
iii)	9 no. 400A TPN MCCB (36 KA) thermal release with neutral link & O/L, SC Protection along with all accessories		
2.7	All Outgoing Metering & Indication		
2.8	Digital VIF meter for Each outgoing feeder along With CTs, ON OFF indicators	Vender to confirm/specify	
1.8.1	Fully compartmentalized type, switchgear components for each load housed in one compartments each feeder comprising of MCCB's, Compartments door interlocked such that it shall not be possible to open the doors with switch in ON position	Vender to confirm/specify	
2.9	Wiring		
1.9.1	All the wiring inside LT Panel should be of Cu/Al. conductor of adequate size to suit the rated circuit current, to carry out power wiring of the circuit. Control wiring PVC insulated standard wire size of 1.5 sq.mm copper	Vender to confirm/specify	
2.10	Size of Panel (Max. 4000(L)X2000(D)X3000(H))	Vender to confirm/specify	
3.0	Pre-dispatch inspection and acceptance		

S No.	Description - BHEL's Requirement	OFFERED/REMARKS	Deviation (if any)
3.1	BHEL shall conduct pre-dispatch inspection of the panel and witness the tests at the works of the vendor. Dispatch clearance for the panel shall be given by BHEL after witness of all the tests and acceptance of the test results.	Vendor to confirm	
4.0	Tests & Inspection		
4.1	During manufacture and on completion, the panel and major components shall be subject to Routine Tests at the manufacturer's works.	Vendor to agree	
4.2	The test certificates of the panel shall be furnished to BHEL for approval before dispatch. For accessories and other major components, copies of manufacturer's test reports will be submitted for approval.	Vendor to agree	
5.0	Installation, Testing and Commissioning		
5.1	The installation includes providing & fixing of suitable size lugs with all cable termination work, fixing of cable tray(cable tray shall be provided by BHEL) and any other job required to be carried out for installation of the panel. The bidder shall arrange to conduct all the required pre-commissioning tests. Power cables & cable tray shall be supplied by BHEL.	Vendor to agree	
5.2	Supplier shall be responsible for carrying out the start up, testing of panel, it's control & all types of other supplied equipment, etc. Service requirement like power, air & water shall be provided by BHEL	Vendor to agree	
5.3	Successful working of full capacity of the panel and its components by the supplier shall be considered as part of commissioning.	Vendor to agree	
5.4	Tools, Tackles, instruments and other necessary equipments required to carry out all above activities should be brought by the supplier.	Vendor to agree	
5.5	Commissioning spares, required for commissioning of the panel within stipulated time, shall be brought by the supplier on returnable basis(if not required for I&C). No additional charges shall be payable if used in I&C	Vendor to agree	
5.6	Aesthetics: Portion, if any, of the panel, accessories and other supplied items where paint has rubbed off or peeled during transit or erection should be repainted and merged with the original surrounding paint by the vendor.	Vendor to agree	
5.7	Schedule of Erection and Commissioning shall be submitted with the offer.	Vendor to agree	

S No.	Description - BHEL's Requirement	OFFERED/REMARKS	Deviation (if any)
6.0	Packing		
6.1	Rigid packing for all items of complete panel with all Accessories and other supplied items to avoid any damage/loss in transit. When panel is despatched in containers, all small loose items shall be suitably packed in boxes.	Vendor to confirm	
7.0	Guarantee		
7.1	Guarantee for 12 months from the date of acceptance of the machine at BHEL works. During this Guarantee period at least 2 visits in a year and/or whenever called by BHEL (within 24 hours of call) by the service engineer of the supplier to be made & the parts, items, spares etc. needing replacement to be replaced by the supplier free of cost. In support a Performance Bank Guarantee of 10% of Basic Value of P.O. valid for 12 months from the date of commissioning will have to be furnished by supplier	Vendor to confirm	
8.0	Drawings and documents to be furnished by the tenderer		
8.1	Three sets of following documents (Hard copies) in English language should be supplied along with the machine. Only originals shall be supplied. Photocopies will not be accepted.		
8.1.1	To be provided along with the offer		
8.1.1.1	Typical general arrangement drawing showing construction features, base dimensions and details and assemblies/sub-assemblies/parts including Electrical circuit diagrams.	Vendor to confirm	
8.1.1.2	Type test certificates of similar type panel, as tested.	Vendor to confirm	
8.1.1.3	Technical leaflets of all other major components and BOIs.	Vendor to confirm	
8.1.1.4	Complete Master List of parts used in the machine	Vendor to confirm	
8.2	To be provided after placement of order		
8.2.1	Complete dimensional assembly drawings showing plan, elevation, section views and weights	Vendor to confirm	
8.2.2	Plan showing exact location and details of the structural steel base, anchor points and terminations of power bus and control cables (location of terminal blocks)	Vendor to confirm	
8.2.3	Detailed control wiring drawings	Vendor to confirm	
8.2.4	Elementary or schematic diagrams	Vendor to confirm	

S No.	Description - BHEL's Requirement	OFFERED/REMARKS	Deviaion (if any)
8..2.5	Installation, operation and maintenance manual.	Vendor to confirm	
9.0	Spares		
	Itemised breakup of (1) standard/essential mechanical, electrical and electronic accessories & spares (included in Basic machine cost), (2) Optional in sufficient quantity as per recommendation of Vendor for 5 years (After initial 12 month's Guarantee period) for trouble free operation should be offered by vendor. (Unit Price of each item of spare should be offered in the price bid)	Vendor to confirm	
10.0	General		
10.1	Model	Vendor to confirm	
10.2	Total weight(gross & net)	Vendor to confirm	
10.3	Detailed catalogues, sketch/photographs of the m/c and accessories/ attachments should be submitted with the offer.	Vendor to Submit	