



Bharat Heavy Electricals Limited, Jhansi

TRANSFORMER TESTING LABORATORY

Tender Enquiry No: TTL/TE/201

21.07.2021



TENDER DOCUMENT

For Tender Enquiry No.: **TTL/TE/201**

Date: **21.07.2021**

For

Works Contract for “Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory” at BHEL Jhansi.

Contact Person:

Name: ANSHUMAN SHARMA

Designation: Dy. Manager (Trfr-MM)

Email: anshuman.sharma@bhel.in

PH: 0510-2412784 Mob. 08004939537

Tender Due Date: **13.08.2021** at 13:15 Hrs.

Tender Opening Date: **13.08.2021** at 14:00 Hrs.

TRANSFORMER TESTING LABORATORY

BHEL, PO: BHEL, Jhansi 284120 (UP)



Bharat Heavy Electricals Limited, Jhansi

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DETAILS OF TENDER DOCUMENT

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Nature of work: Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory at BHEL Jhansi works

1. BHEL JHANSI is in the process of finalizing the Works Contract for “Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory at BHEL Jhansi works”
2. The tender document has been detailed as follows:

- a) Notice Inviting Tender (Annexure A)
- b) Work Specifications (Annexure B)
- c) Qualifying Requirements (Annexure C)
- d) Documents Required (Annexure D)
- e) Performa for submitting Technical bid (Annexure E)
- f) Blank price bid (Annexure F(a))
- g) Price bid (Annexure F(b))
- h) General Terms & conditions to Bidder (JHS 2055B R01, Attached)
- i) Forms & Formats (Annexure I, II, III & IV)
- j) Self-declaration (Annexure V)
- k) Contract Agreement (Annexure VI)
- l) Indemnity Bond (Annexure VII)
- m) Checklists of documents for enquiry (Annexure VIII)
- n) Performa of Bank guarantee (Annexure IX)

The duly filled in Technical and Price / Rate bids along with General Terms and Conditions and all other attachments with the signature of the tenderer on all the pages and complete in all respects super scribed as “Quotation for Tender No **TTL/TE/201/R00** dated **21.07.2021**” should reach us in a sealed cover on or before **XX/XX/21** (13.15 hours) through Registered / Speed post or the same may be dropped in the tender box available at the following address:

Tender Box
CISF Control Room/Office
Administrative Building
Bharat Heavy Electricals Limited
Jhansi-284 120

Note: (i) Incomplete offers are liable for rejection.
(ii) Technical bid and price bid should be submitted in separate sealed envelopes. In case the bids are found in one single envelope then the “bids” are liable to be rejected.

*GTC- General Terms & conditions of enquiry



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TENDER DOCUMENT FOR

“Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory at BHEL Jhansi works”

The tender document has been detailed as follows:

SN	Description	Annexure No.	Page No.	No.of Pages
01.	Notice Inviting Tender	A	4-5	2
02.	Work Specification, Scope of work and Payment	B	6-10	5
03.	Qualifying Requirements	C	11	1
04	Documents Required	D	12	1
05	Performa for submitting Technical Bid	E	13-14	2
06	Blank price bid	F(a)	15-17	3
07	Price bid	F(b)	18-20	3
08	General Terms & conditions of enquiry (JHS 2055B R01)	Copy Enclosed	21-34	14
09	Annexure (I,II,III & IV) Forms	I,II,III & IV	35-38	4
10	Self-declaration on company's letter head	V	39	1
11	Contract Agreement	VI	40-42	3
12	Indemnity bond	VII	43	1
13	Checklist of documents	VIII	44	1
14	Performa of bank guarantee	IX	45-48	4
	TOTAL			45



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Annexure 'A'

NOTICE INVITING TENDER

1	Scope of Work	Works Contract for "Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory at BHEL Jhansi works".
2	Tender evaluation criteria	As per General terms & conditions of the tender (see Sl. IV of annexure "General Terms & Condition of enquiry" attached)
3	Date and Time of Receipt of Tenders	Up to 13:15 hrs. on 13.08.2021
4	Date and Time of Opening of Technical bids	14:00 hrs. on 13.08.2021
5	Address for submitting the Tender	Tender Box, CISF Control Room/Office, Administrative Building, Bharat Heavy Electricals Limited, Jhansi-284120
6	Earnest Money Deposit (EMD)	Rs. 12,131/- (Rupees Twelve thousand one hundred thirty Only)
6(a)	The EMD may be accepted only in the following forms: (i) Electronic Fund Transfer credited in BHEL account (before tender opening) <i>BHEL account details: Bank Name: - SBI; A/c No.: - 10670828866 ; IFSC code:- SBIN0003807, A/c Holder Name:- BHARAT HEAVY ELECTRICALS LIMITED</i> (ii) Card swapping through POS machine at Cash section of BHEL Jhansi.)	
7(a)	In case of successful bidder, EMD will be converted and adjusted against the security deposit, if applicable.	
7(b)	EMD will be forfeited in following cases.	
(i)	After opening the tender, the bidder revokes his tender within the validity period or increases his quoted rate.	
(ii)	The bidder does not commence the work within the stipulated period as per LOI/ Contract. In case the LOI/contract is silent in this regard, then within 15 days after award of contract.	
(iii)	MSEs bidders may be exempted from submission EMD and tender cost, however, MSEs bidders must ensure regarding declaration of UAM number Central Public	



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	Procurement Portal (CPPP), failing which such bidders will not be able to enjoy the benefit of exemption of EMD and tender cost.			
7(c)	EMD given by all unsuccessful tenderers shall be refunded normally within 15 days of acceptance of award of work by successful tenderer.			
7(d)	EMD shall not carry any interest.			
8	Cost of Tender	Cost	Rs 400/-	The cost of tender documents will be payable in the form as mentioned in clause 7(a) above.
		GST(18 %)	Rs 72/-	
		Total	Rs 472/-	
		(Rupees Two hundred thirty six only)		
9	Validity of Offer	120 days from the date of opening of Technical Bid (Part-I)		
10	Security Deposit (SD)	As per General terms & conditions		
11	GST	present rate of Total Contract Value.		
12	Address for receipt/issue of Tender	Tender Box, Near Security Post, Adm Building, Bharat Heavy Electricals Limited Jhansi, PIN-284120		

Note: (i) The contractors may physically visit the work place before quoting their rates.

For relevant details please visit our website "www.bhel.com" &

www.eprocure.gov.in.

(ii) Bidder needs to fill GST % at clause no. 12.



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Annexure- 'B'

SCOPE OF WORK: Works Contract for "Calibration of Test point CTs & VTs, Std. CTs & CT Analyzer of Transformer Testing Laboratory at BHEL Jhansi works" in BHEL Jhansi.

WORK SPECIFICATION

Table I

Sl. No	Equipment Name	Equipment SI No	Make	Range	Accuracy
1	176 KVPOINT CTS (3 NOS) SINGLE PHASE, ,	2470449, 2470450, 2470451	BHEL	100-50-25- 10/5A	± 0.1% at 15 VA
2	176 KV POINT VTS (3 NOS) SINGLE PHASE (H1 POINT)	7114/1/1/17, 7114/1/2/17, 7114/1/3/17	MEHRU	176000-88000- 44000/ $\sqrt{3}$ /110/ $\sqrt{3}$ V	± 0.2% at 30 VA
3	160 KVPOINT CTS (3 NOS) SINGLE PHASE	2447817 2447818 2447819	BHEL	100/1, 50/1, 25/1 ,10/1A	± 0.2% at 15 VA
4	160 KV POINT VTS (3 NOS) SINGLE PHASE (H1 POINT)	2447820 2447821 2447822	BHEL	160000-80000-40000/ $\sqrt{3}$ / 110/ $\sqrt{3}$	± 0.5% at 30 VA
5	132 KVPOINT CTS (3 NOS) SINGLE PHASE	6146401 6146402 6146403	BHEL	100-50-25- 10/1A	± 0.2% at 5 VA
6	132 KV POINT LOOSE VTS (3NOS) SINGLE PHASE (D1 POINT)	511-017 511-018 511-019	BHEL	132000/66000/33000/ $\sqrt{3}$ / 110/ $\sqrt{3}$	± 0.2% at 5 VA
7	66 KVPOINT CTS (3 NOS) SINGLE PHASE ,	2467005, 2467006, 2467007,	BHEL	100-50-25-10/5A	± 0.1% at 15 VA
8	66 KVPOINT CTS (3 NOS) SINGLE PHASE ,	6143810, 6143811, 6143812	BHEL	80/40/20/10/5/1	± 0.5% at 30 VA
9	66 KVPOINT CTS (3 NOS) SINGLE PHASE	2467002, 2467003, 2467004,	BHEL	1000-500-250/5A	± 0.1% at 15 VA
10	66 KVPOINT CTS (3 NOS) SINGLE PHASE	2451405 2451406 2451407	BHEL	1000/500/250/1A	± 0.2% at 30 VA
11	66 KVPOINT VTS (3 NOS) SINGLE PHASE	6145734, 6145735, 6145736	BHEL	66000-33000-16500/ $\sqrt{3}$ / 110/ $\sqrt{3}$	± 0.5%, 10VA
12	33 KV POINT CTS (3 NOS) SINGLE PHASE,	6145446, 6145447, 6145448	BHEL	200-100-50-25/1 Amp	± 0.2% at 30 VA



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13	33 KV POINT CTS (3 NOS) SINGLE PHASE,	6145443, 6145444, 6145445	BHEL	1000-500-250-125/1 Amp	± 0.5% at 30 VA
14	33 KV POINT VTS (3 NOS) SINGLE PHASE (J1 POINT)	6145731, 6145732, 6145733	BHEL	33000-165000-8250/√3 / 110/√3	± 0.2%, at 10 VA
15	11KV POINT CTs (3 NOS), SINGLE PHASE (K1 POINT)	6145560, 6145561, 6145562	BHEL	40-20-10-5/1 A	± 0.2%, 10VA
16	11KV POINT CTs (3 NOS), SINGLE PHASE	6145557, 6145558, 6145559	BHEL	200-100-50-25/1 A	± 0.2%, 10VA
17	11KV POINT CTs (3 NOS), SINGLE PHASE	6145554, 6145555, 6145556	BHEL	1200-600-300-150/1	± 0.2%, 10VA
18	11KV POINT CTS SINGLE PHASE *	506-088 506-089 506-090	BHEL	3000/1	± 0.5%, 10 VA
19	11 KVPOINT CTS (3 NOS) SINGLE PHASE ,	2226499, 2226500, 2226501	BHEL	40-20-10-5/1A	± 0.2%, 10VA
20	11 KVPOINT CTS (3 NOS) SINGLE PHASE ,	2226502, 2226503, 2226504	BHEL	300-150-75-37.5/1A	± 0.2%, 10VA
21	11 KVPOINT VTS (3 NOS) SINGLE PHASE	6145400, 6145401, 6145402	BHEL	11000-5500-2750/√3 / 110/√3	± 0.2%, 10VA
22	11 KVPOINT VTS (3 NOS), SINGLE PHASE , (C1 POINT)	96/59707 96/59708 96/59709	BHEL	11000-5500-2750/√3 / 110/√3	± 0.5%, 10 VA
23	Standard CTs			300, 400, 450, 500, 600, 750, 800, 900, 1000, 1100, 1200, 1250, 1500, 1800, 2000, 2400, 2500, 3000 / 1	± 0.05% at 2.5 VA
24	CT Analyser			ratio 2000/5 A, 200/5 A , 200/1 A, 2000/1 A	± 0.05% for ratio 1 to 2000 / 1 & 5

All the instruments should be calibrated as per IS 2705 part II at BHEL works. For Item no 2,4,18 mentioned in Table I of schedule B shall be calibrated at least 80% of the specified range.

* Calibration of item 18 given in table I of schedule B may be completed using primary/secondary injection.



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Scope of Work and Payment

S. No.	Scope	Confirmation by Calibration Agency
1	Calibration of items description as per table I of annexure B.	Complied/ Not Complied
2	Calibration is to be done on mutually agreed date and time schedule.	Complied/ Not Complied
3	Calibration is to be done as per relevant Indian/International Standards at the points mentioned in table I of Schedule B and all items* should be calibrated using primary injection only.	Complied/ Not Complied
4	For Item no 2,4,18 mentioned in Table I of schedule B shall be calibrated at least 80% of the specified range.	Complied/ Not Complied
5	The instruments as given in table I of Schedule B shall be calibrated onsite i.e. at BHEL Jhansi works. Calibration Agency shall have valid NABL accreditation as per ISO 17025.	Complied/ Not Complied
6	The Standard Equipment/ Instruments used for calibration shall have capability (class/accuracy/stability) to maintain proper Test Uncertainty Ratio (TUR) during calibration and traceability to National/ International Standards. Calibration agency to specify in their offer.	Specified/ Not Specified
7	All Items/instruments /equipment required for calibration of the items mentioned in Table I of schedule B at BHEL Jhansi works shall be in the scope of contractor. BHEL shall provide single and three phase supply only.	Specified/ Not Specified
8	Calibration stickers bearing equipment details, calibration date, calibration status and next due date shall be put on the Instrument after calibration.	Complied/ Not Complied
9	Detailed calibration certificate of each instrument shall be prepared in line with ISO 17025 and should be submitted within 7 days from the date of completion of calibration.	Complied/ Not Complied
10	Calibration work should be completed as per BHEL requirement. In case of delay in completion of allotted work, penalty of 0.5% per week or	Agreed/ Not



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	part thereof, limited to maximum of 10% of contract value, shall be levied for delayed period.	Agreed
11	The payment shall be made after completion of work and submission of Final Invoice/ Bill.	Agreed/ Not Agreed
12	Offer shall be submitted separately in 2 sealed bids namely Technical Bid & Price Bid.	Complied/ Not Complied
13	Price Bid shall be called Item mentioned in Table I of schedule B.	Complied/ Not Complied
14	The Party shall confirm all the above points failing which their offer may not be considered.	Complied/ Not Complied
15	Lodging / Boarding Facilities may be provided on chargeable basis for 5-6 persons for 1 week by BHEL depending upon the availability of accommodation in our guest house.	Agreed/ Not Agreed
16	Award of contract for calibration of items mentioned in Table I of Schedule B may be made on the lowest bidder(s) on overall L1 basis.	Complied/ Not Complied
17	BHEL, Jhansi shall not be liable for any compensation what so ever in the event of accident/injury to the persons employed by the contractor, however, First Aid facility shall be rendered free of cost.	Complied/ Not Complied
18	After award of contract the subject work shall be started within the due date of award in line with Tender conditions.	Complied/ Not Complied
19	It is proposed to go for RA for this tender as per guidelines of Reverse Auction 2021.	Complied/ Not Complied
20	Deviation, if any, shall be clearly brought out.	Complied/ Not Complied

* Calibration of item 18 given in table I of schedule B may be completed using primary/secondary injection



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Annexure – 'C'

Sl.No.	Description of Qualifying requirement	Copy enclosed
1.	Average Annual financial turnover during the last 3 years, ending 31st March 2020, should be at least ₹ 1,81,958.40. If all the financial statements are not available for all the three years then the average shall be calculated by dividing the sum of turnover of submitted certificate from CA/Financial statement by three. Duly audited financial statement /Balance sheet /Certificate from CA to be submitted as a supporting document.	Yes/No
2	<p>Work Experience: (Bidder should fulfill any one of the following):</p> <p>2.1 Experience of having successfully completed similar works during last 7 years ending 30.06.2021 should be either of the following: -</p> <p>a) Three similar completed works each costing not less than the amount equal to ₹2.42 Lakhs.</p> <p style="text-align: center;">Or</p> <p>b) Two similar completed works each costing not less than the amount equal to ₹3.00 Lakhs.</p> <p style="text-align: center;">Or</p> <p>c) One similar completed work, each costing not less than the amount equal to ₹4.85 Lakhs.</p> <p>* Experience in Govt./Public Sector: Documentary Proof (Copy of WO/PO/LOI and Work completion certificate) in support of above eligibility, criteria shall be submitted along with techno commercial bid.</p> <p>** Experience in Private Sector: Documentary Proof (Copy of WO/PO/LOI and work completion certificate along with TDS Certificate – Form 16A – Traces) in support of above eligibility criteria shall be submitted along with techno commercial bid.</p> <p>Similar works means bidder has experience in calibration of CTs and VTs.</p>	Yes/No
3.	<p>3.1) Calibration agency shall have valid NABL accreditation as per ISO 17025 in concerned parameter and range. Calibration agency shall have to submit the valid certificate of accreditation.</p> <p>3.2) The scope of accreditation of calibration agency shall cover all the ranges of instrument/s for which the instrument is to be calibrated and for which the agency submits the offer.</p>	



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QUALIFYING REQUIREMENTS

ANNEXURE –D

OTHER DESIRABLE DOCUMENTS

1. The bidder should have PAN/TAN number.
2. The bidder should have VAT/TIN No. if material is supplied/consumed.
3. Undertaking duly signed, with seal and stamp of the Bidder **as per annexure V**.
4. Documentary proof in support of above eligibility criteria along with EMD shall be submitted along with Techno Commercial Bid.
5. Blank Price Bid as per Annexure – F(a).
6. The documents required for legal entities under whose name and style Contractor has participated in the tender are as follows:
 - (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 (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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ANNEXURE E

PROFORMA FOR SUBMITTING TECHNICAL BID

1	Name of the firm (Essential)	
2	Address and Contact Numbers (Essential)	
3	Name of the Proprietor (Essential)	
4	Registration Number of the Firm (Essential)	
	Copy of the Certificate	Enclosed / Not Enclosed
5	Labour License Number (Desirable)	
	Copy of the License	Enclosed / Not Enclosed
6	PF Code Number (Desirable)	
	Copy of PF registration	Enclosed / Not Enclosed
7	ESI Code Number (Desirable)	
	Copy of ESI registration	Enclosed / Not Enclosed
8(1)	PAN/TAN Number (Essential)	
8(2)	Income tax return last 3 yrs. (Essential)	Enclosed / Not Enclosed
9	GST Number(PAN Based) (Essential)	
10	Experience Certificate (Along with balance sheet & profit and loss account/ turnover certificate issued by CA) (Essential)	Enclosed / Not Enclosed
11.	No. of Workers including Supervisors on the rolls of the firm (Essential)	



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12.	Earnest Money Deposit (Essential)	Rs. 12,131/-
	Receipt No. & Date	
	Electronic fund Transfer no. (Bank)	
13.	Tender Cost (Essential)	Rs. 472/-
	Receipt No. & Date	
	Electronic fund Transfer no. (Bank)	
14.	Validity of offer	120 days from the date opening of technical bid
15	Blank Price bid format (Essential)	Enclosed / Not Enclosed
16	Valid E-Mail Id (Essential)	
17	Acceptance of RA	Essential
18	Proprietorship/ partnership deed	

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