



R.C.PURAM, HYDERABAD

Tender Document
HY/ES/EDT/RATE CONTRACT/2013

**TWO PART BID TENDER - RATE
CONTRACT FOR ELECTRICAL
DIAGNOSTIC TESTING OF POWER PLANT
EQUIPMENTS UP TO 500 MW.**

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Annexure 'A'

NOTICE INVITING TENDER

1.	Scope of Work :	RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW
2.	Tender Evaluation Criteria :	As per Annexure – D
3.	Duration of the Contract :	Two years from the date of the award of the contract .
4.	Last date of receipt of the Tender	29.05.2013 before 11.00 hrs
5.	Date of opening of Technical Bid	29.05.2013 at 13.30 hrs
6.	Address for receipt of Tender	Vendor Complex Bharat Heavy Electricals Limited Ramchandrapuram, Hyderabad, A.P.
7.	Earnest Money Deposit :	Rs.1,00,000/- (Rs One Lakh only) payable in the form of Demand Draft/Banker's Cheque favouring BHEL, Hyderabad. (1. In case of successful bidder(s) EMD shall be converted and adjusted against the security deposit. 2. In case of others the EMD shall be returned within 15 days of acceptance of award of work by the successful Tenderer.)
8.	Cost of tender documents :	Tender documents are to be downloaded from BHEL web site. Rs 500/- (Rs Five Hundred) payable in the form of Demand Draft/Banker's Cheque favouring BHEL, Hyderabad shall be attached with tender document.

TECHNO-COMMERCIAL BID AND PRICE BID SHOULD BE SUBMITTED IN SEPARATE SEALED ENVELOPES. IN CASE THE BIDS ARE FOUND IN ONE SINGLE ENVELOPE THE "BIDS" ARE LIABLE TO BE REJECTED.

I/We agree with the above
Signature of Contractor with Seal

Executive Incharge



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Annexure'B'

QUALIFYING REQUIREMENTS

1. The rate contract qualification will be on two part bid tender basis.
 - a. Technical bid
 - b. Financial bid.
2. Companies / parties in business of manufacturing similar range of products/ services like new winding jobs as of BHEL are technically not qualified to participate.
3. Since, BHEL is an ISO certified organization; BHEL prefers to have ISO 9001:2008 certified contractors to maintain the quality of their services.
4. BHEL will consider the testing service contractors who are having their own test equipment and should show proof.
5. Since BHEL carries out overhaul operations simultaneously at number of sites , would prefer the testing service companies who are having minimum two or more sets of state of the art test equipment of each category so that the overhaul work will not effect for want of test equipment.
6. Must have experience of conducting such tests in at least 10 sites belonging to Govt. / Undertaking organizations in last 5 years with their own test equipment. Out of the jobs executed minimum five jobs should be more than 200 MW set.
7. BHEL may have a long term rate contract with the testing service companies that are having product knowledge and long experience in testing on large TG sets of rating up to 500 MW`. To validate their experience, contractors should produce work orders and work completion certificates from the public sectors organizations like BHEL, NTPC, NHPC, NPC etc. with their offers.
8. Contractors should have qualified engineers with good product knowledge on BHEL products. List of engineers & technicians with their resumes are to be submitted while submitting their offer. **All engineers / technicians should be covered under ESI / Insurance / Workman Compensation.**
9. **If more than two bidders are qualified in all respects, L1 rates will be counter offered to other qualified bidders also; order will be given on rotation basis to the qualified bidders, subject to their acceptance of L1 rates arrived in tendering process.** The successful vendors shall have to sign a confidentiality agreement (Non-Disclosure Agreement) with BHEL to maintain the confidentiality of the information passed on to them by BHEL



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- during the execution of the contract. The proforma of 'Non-Disclosure Agreement' is attached as Annexure-H.
10. **Bidders should have experience in execution of RLA studies on Generators up to 200 MW capacities for Govt. sector like BHEL, NTPC etc.**
 11. Applicant must have achieved an average annual turnover of Rs.50.00 Lakhs or more per year for the last three financial years (FY) ending on 31/03/2013 and Net worth of the applicant must be at least 50 % of the paid up capital in case of companies.
 12. Should have valid PAN based Service Tax registration No.
 13. Should have Income tax PAN Number.
 14. Income Tax Return for the last three years.
 15. **Self-certificate that he is not blacklisted by any of the BHEL Unit and other organization where he worked.**
 16. Declaration that he is not guilty by a Court of Law in India for any offence involving fraud, dishonesty and moral turpitude.
 17. **The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the service of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.**

I/We agree with the above
Signature of Contractor with Seal

Executive In charge



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Annexure 'C'

INSTRUCTIONS TO TENDERERS

1. The tender is to be processed in two parts viz. Technical bid and price/rate bid. The Technical Bid Application (Annexure - F) and its enclosures along with the Contractor's Obligations, General Terms & Conditions duly signed and stamped must be submitted in one sealed envelope super scribed as **"Tender for RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW – Technical Bid"**. The second envelope duly sealed should contain the price bid (Annexure – G) only super scribed as **"RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW - Price Bid"**. **Any other enclosures, which the tenderer wishes to submit, must be enclosed with the Technical Bid only. The price bid envelope should contain the rates only.** Offers not in line with the above procedure or quoted in any other format will be rejected.

2. Both the technical bid and price bid sealed envelopes must be again put in a single envelope duly sealed and super scribed as **"Tender for RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW for EXTERNAL SERVICES DEPARTMENT, BHEL, R. C. PURAM HYDERABAD"**. The same should be dropped in the tender box kept in the Vendor Complex of Administrative Building, BHEL, BHEL, R. C. Puram, Hyderabad within the specified date and time by the representative of the tenderer. **Late offers / quote through e-mail / fax / courier will not be considered. Tenders by Registered / Speed post should also be addressed to Vendor Complex only and nowhere else. Tenders received before the cut of date and time of tender receipt only will be considered.**

3. All tenderers can witness the opening of the Technical Bid at the specified time in Vendor Complex. After evaluation of the Technical Bids which may involve visit to the tenderer's / clients place by authorised officials, price bids of only those tenderers who are technically/commercially found suitable will be opened on a subsequent date which will be informed to the concerned parties in advance for witnessing the Price Bid opening.

4. All entries in the tender document should be in one ink. Corrections, over writing, cuttings, etc. will not be permitted. All the columns in the tender form should be filled without leaving blank in any page of the tender and all the pages must be duly signed & stamped by the tenderer before submission. The price / rate should be quoted in figures as well as in words.



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Annexure'D'

TENDER EVALUATION CRITERIA

The evaluation of the Tender will be carried out as follows:

1. The tenders confirming to the Notice Inviting Tender, Qualifying requirements, Instructions to the Tenderers, Contractor's obligations, General Terms and Conditions, Technical and Price bids conditions only will be evaluated.
2. Such of those tenders which confirm to the technical bid (Annexure - F) only will be evaluated.
3. BHEL officials may visit the tenderer's office & their client's place to evaluate the capability and assess the performance.
4. Capability of the Contractor will be assessed on the basis of previous track record, experience in other organizations, etc.
5. Successful tenderers after the above process only will be invited for opening of the price bid.
6. **The bidders should quote rates for all tests listed in the price bid (i.e. in both categories UP to 110 MW as well as Above 110 MW) and Incomplete price bids will be disqualified.** The Contract shall be awarded on total, overall L1 basis. Sum of all individual Test Charges shall be added up for arriving at the total cost to BHEL and for evaluating the L1.
7. L1 rates will be counter offered to other qualified bidders also; order will be given on rotation basis to the qualified bidders, subject to their acceptance of L1 rates arrived in tendering process. In case counter offer is not accepted by other qualified bidders, L1 bidder has to carry out all the works in this tender during the entire contract period.

I/We agree with the above
Signature of Contractor with Seal

Executive In charge



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Annexure 'E'

TENDER DOCUMENT

Sealed tenders are invited for entering into a **RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW** rate contract for a period of two years for **EXTERNAL SERVICES DEPARTMENT, BHEL, R. C. PURAM HYDERABAD** for the tests given in the BHEL format.

IMPORTANT

The quotation should be in two parts (Part-A) Techno-commercial bid and (Part-B) the price bid.

(a) Techno – Commercial bid for tender

All parties are required to submit techno commercial bid covering all the points covered under the head duly filled in and **signed** together along with the photocopies of their registration under the industry of state government and income tax return of last three years.

(b) Price bid for Enquiry:

The Price bid would be opened only for those vendors who would fulfil the technical, commercial and statutory requirements.

The vendor shall have to quote the rate for the tests as shown in price bid in annexure -G.

(B) COMMERCIAL AND STATUTORY REQUIREMENT:

(B1) All parties are required to submit the signed photocopies of PAN and Service tax registration and Income Tax returns of last three years.

(B2) Contractor has to make their own arrangements for transport and accommodation for their engineers at the places of testing.

(B2) CORRECTIONS, REWORKS:

In case if the results are ambiguous and BHEL / Customer feels that retesting has to be carried out during the same trip, the same to be repeated without any extra payment.



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(B3) DELIVERABLES & DELIVERY SCHEDULE:

A soft copy and a hard copy of the tests and results are to be submitted to customer as a preliminary report at site as soon as the tests are completed and Two nos. of soft copies and two nos. of hard copies are to be submitted to External services BHEL Hyderabad as a final report along with the additional colour copies of graphs to be attached as a report within 10 days after completion of the EDT at site.

(B4) PERIOD OF CONTRACT:

The contract will be valid for a period of two years from the date of award, however if need arises it can be further extended for one more year (at the contracted rates only) as per BHEL requirement.

(B5) BHEL reserves the right to terminate the contract at any time if it is found that the assigned work is not being promptly attended or that there is a deliberate negligence on the part of the vendor or BHEL equipments are being tampered by the vendor / their representatives /or confidentiality of the information is breached.

(B6) BHEL reserves the right to run parallel orders at its discretion with other Suppliers to expedite the work if considered necessary to do so.

(B7) PENALTY CLAUSE:

Failure to carry out the job given by BHEL in time, the supplier is liable to pay penalty of 0.5% of the price of the item in arrays per week or in part thereof limited to max 10% of the order value.

(B8) SUB LETTING:

The vendors will not sub-let the job allotted/ allocated to him.

(B9) EARNEST MONEY DEPOSIT (EMD)

The earnest money of Rs. 1,00,000/- (Rs One lakhs only) to be deposited through a demand draft in favour of BHEL Hyderabad, shall be submitted along with the offer. In case of successful bidder EMD shall be converted and adjusted against the security deposit and for unsuccessful bidder the EMD shall be returned after awardal of the work to the successful bidder.

(B10) SECURITY DEPOSIT:

(B10.1)The contractor shall deposit security deposit, as prescribed under Clause 8.2.1 of Works Policy of BHEL (Annexure-I). Security deposit should be in the form of demand draft in favour of BHEL Hyderabad. This security deposit shall be returned to contractor after successful completion of the contract, compliance of statutory obligations, submission of service tax challan, return of engineering design documents / drawings etc. supplied by BHEL.



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(B10.2) In case of non-satisfactory performance of the contract or abandoning the contract BHEL reserves the right to forfeit the security deposit which shall be final and binding on contract.

(B11) PAYMENT TERMS:

Payment shall be released within 60 days of the submission of final report and the invoice copies in triplicate in external services department.

(B12) TAXES AND DUTIES:

Service Tax will be paid additionally at the prevailing rates (Present rate of Tax: 12.36%). Income tax will be deducted at source and certificate will be issued accordingly.

(C) SAFETY:

The persons appointed by the contractor for the work should follow all safety instructions applicable by customer safety rules.

(D) ABANDONING THE WORK:

In the event of contractor abandoning the work BHEL reserves the right to get the unfinished work completed through others at contractor's risk and cost.

(E) STATUTORY

(E.1) The vendor shall be responsible for any statutory requirement of state /central Government pertaining to their staff such as Provident Fund, ESI etc.

(E.2) The vendor shall comply with the provision of all relevant rules enforced from time to time by Central Govt. / State Govt. / Municipal Corporation etc.

(F) ARBITRATION AND LAW:

The disputes if any shall be referred to the sole arbitration of the concerned divisional Head of BHEL or any person appointed by BHEL. The venue of arbitration shall be Hyderabad only.



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Annexure 'F'

PROFORMA FOR SUBMITTING TECHNICAL BID FOR “Tender for RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW rate contract for a period of two years for EXTERNAL SERVICES DEPARTMENT, BHEL, R. C. PURAM HYDERABAD”.

1. Name of the firm :
2. Name of the Proprietor :
3. Address and Contact Numbers :
4. Service Tax Registration Number : Enclosed / Not Enclosed
Copy of the Certificate :
5. PAN Number :
6. Income Tax Return for last 3 years : Enclosed / Not Enclosed
7. 3 years Audited annual accounts : Enclosed / Not Enclosed (in support of Turnover)
8. 5 years' Experience Certificate : Enclosed / Not Enclosed
(Of similar work)
9. Self-Certificate : Enclosed/Not Enclosed
(As per Qualifying Requirement clause 8)
10. Declaration : (As per Qualifying Requirement clause 9) Enclosed/Not Enclosed
11. Earnest Money Deposit : Rs 1,00,000/-
12. Tender Cost : Rs 500/-
13. Any other relevant information :

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

Signature with Name
& Office Seal Date:



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PRICE BID

Annexure 'G'

PROFORMA FOR SUBMITTING PRICE BID “Tender for RATE CONTRACT FOR ELECTRICAL DIAGNOSTIC TESTING OF POWER PLANT EQUIPMENTS UP TO 500 MW rate contract for a period of two years for EXTERNAL SERVICES DEPARTMENT, BHEL, R. C. PURAM HYDERABAD”.

1. Name of the firm :
2. Name of the Proprietor :
3. Address and Contact Numbers :

S. No.	Description	Lumpsum test charges per Machine (Rs.)	
		UP to 110 MW	Above 110 MW
I	GENERATOR STATOR		
01	IR & PI Test with 5 kV Microprocessor Megger		
02	DC Winding Resistance Measurement		
03	Tan delta / Power Factor & Capacitance Measurement		
04	Computerised Digital ELCID Test i) For Turbo Generator ii) For Hydro Generator		
05	Partial Discharge Test a) Partial Discharge Probe test b) Offline Partial Discharge Analysis with noise separation		



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06	DC Leakage Current / Step Voltage Test		
07	Stator Slot wedging system check (Wedge Tightness Mapping) i) By Wedge Deflection Test if the ripple springs are installed ii) Wedge Knocking Test		
08	RTD Elements Check		
09	IR with 1000V DC Source and Amp. Meter.		
10	Natural Frequency Test on End Winding		
11	Rated Core Flux test / Core Loss Measurement		
12	Fibro scope Inspection with Video recording facility of Stator core and Winding		
II	GENERATOR ROTOR		
01	IR & PI		
02	Digital RSO Test		
03	AC Impedance Measurement		
04	DC Winding Resistance Measurement		
05	Voltage balance test		
06	NDT on Retaining Rings and Fan Blades		
07	MPI on Retaining Rings and Fan Blades		
08	Fibro scope Inspection with Video recording facility of Rotor Winding		



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III	GENERATOR EXCITER		
01	IR & PI		
02	DC Winding Resistance Measurement		
03	Pole Impedance Test		
04	Pole Drop Test		
05	Diode Wheel Check		
IV	Online Tests on Generator		
01	PD measurement / Analysis on power equipment rotating machines and other generator components by UHF method		
02	Online flux probe measurements to assess the rotor winding		
V	TRANSFORMERS (Dry Type/Oil Type)		
A	WINDING		
01	Tan delta / Power Factor & Capacitance Measurement		
02	DC Winding Resistance Measurement		
03	High Voltage Excitation Current Test		
04	Turns Ratio Test		
05	Short Circuit Impedance Test		
06	Magnetic Balance Test		
07	IR & PI Test with 5 kV Megger		



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08	Core Ground Test		
09	Sweep Frequency Response Analysis (SFRA)		
B	BUSHINGS		
01	Tan delta / Power Factor & Capacitance Measurement		
VI	Current Transformers		
	CT Analysis <ul style="list-style-type: none"> • Tan delta / Power factor & Capacitance Measurement • Insulation Resistance Measurement • Excitation Characteristics / Knee Point Voltage (KPV) Measurement • CT Winding Resistance • Burden • Turns Ratio Test • Other Parameters as per IEC 60044-1 and IEC 60044-6 		
VII	Potential Transformers		
	Winding Checks: <ul style="list-style-type: none"> • Tan delta / Power Factor & Capacitance Measurement • DC Winding resistance measurement • Turns ratio test • IR & PI test with 5KV Meggar 		
VIII	Tan delta / Power Factor & Capacitance Measurement on CVT		
IX	Watt loss measurement on Surge Capacitor		
X	Watt loss measurement on Circuit Breaker		



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XI	Online Tests		
A	Online Partial Discharge Survey on Switchboard equipment like Transformers, Switchgears, Surge Arresters etc.		
XII	Online Infrared Thermography services on Power Equipment like Transformers, Generators, Switchgears, Lighting Arresters, Surge Arresters, Sure Capacitors etc.		
XIII	Online Leakage Current test on Surge Arrestors		
XIV	MOTORS		
A	Offline Tests		
01	IR & PI Test with 5 kV Megger		
02	DC Winding Resistance Measurement		
03	Tan delta / Power Factor / Capacitance Measurement		
04	Partial Discharge Test		
05	DC Leakage current / Step voltage Test		
06	Surge Test		
B	Online Tests		
01	Automatic Online Motor Current Signature Analysis		
02	Vibration Analysis		



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03	Infrared Thermography		
XV	TURBINE		
01	Natural Frequency Test on LP Turbine Rotor free standing blades from 120 MW – 500 MW rating		
02	Magnetic Particle Inspection on Blades		
	Total	(A)	(B)
	Grand Total (A+B)		

Service tax @ _____ extra

(Sign of Authorized Signatory with date & stamp)
Date:



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Annexure'H'

BHARAT HEAVY ELECTRICALS LIMITED UNIT NAME: BHEL HYDERABAD THIRD PARTY NON-DISCLOSURE AGREEMENT

I, _____, on behalf of the
(Name of Company), acknowledge that the information received or generated, directly or indirectly,
while working with BHEL on contract is confidential and that the nature of the business of the BHEL is
such that the following conditions are reasonable, and therefore:

I warrant and agree as follows:

I, or any other personnel employed or engaged by our company, agree not to disclose, directly or indirectly, any information related to the BHEL. Without restricting the generality of the foregoing, it is agreed that we will not disclose such information consisting but not necessarily limited to:

- Technical information: Methods, Drawings, processes, formulae, compositions, systems, techniques, inventions, computer data/configuration and research projects.
- Business information: Customer lists, project schedules, pricing data, estimates, financial or marketing data,

On conclusion of contract, I, or any other personnel employed or engaged by our company shall return to BHEL all documents and property of BHEL, including but not necessarily limited to: drawings, blueprints, reports, manuals, computer data/configuration, and all other materials and all copies thereof relating in any way to BHEL's business, or in any way obtained by me during the course of contract. I further agree that I, or any others employed or engaged by our company shall not retain copies, notes or abstracts of the foregoing.

This obligation of confidence shall continue even after the conclusion of the contract also.

I acknowledge that the aforesaid restrictions are necessary and fundamental to the business of the BHEL, and are reasonable given the nature of the business carried on by the BHEL. I agree that this agreement shall be governed by and construed in accordance with the laws of country. I enter into this agreement totally voluntarily, with full knowledge of its meaning, and without duress.

Dated at _____, this _____ day of _____, 20 ____ .

NAME SIGNATURE DATE SEAL OF COMPANY



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Annexure 'I'

SECURITY DEPOSIT:

Upon acceptance of his tender, **the successful Bidder must deposit 50% of Security Deposit including EMD amount**, within the time specified in the letter of intent, with the Accounts Officer / Sales, Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad-32 either in cash, or in the form of Government or other approved securities endorsed / pledged to the said Accounts Officer / Sales, a sum which together with the Earnest Money already paid by him will amount to the following depending upon the value of the work.

Up to Rs. 10 Lakh	10% of the quoted value
Above 10 Lakh to 50 Lakhs	1 lakh + 7½ % of the amount exceeding Rs.10 Lakh.
Above 50 Lakhs	4 lakh + 5 % of the amount exceeding Rs.50Lakh.