

BHARAT HEAVY ELECTRICLES LIMITED
(A government of India undertaking)
Unit: High-Pressure Boiler Plant, boiler project P.O
TRICHIRAPALLI-14
COMBINED CYCLE DEMONSTRATION PLANT

NOTICE INVITING TENDER

01. Name of work : Power House Operation & Maintenance: 2014-15
02. Tender No. : O&M:CCDP:14-15/PR.89870715
03. Value of contract : Rs. 55 lakhs (approx)
04. EMD : Rs. 1.5 Lakhs.
05. Contract period : One Year
06. Last date for receipt of tenders : 14.00 Hrs. / 03.03.2014.
07. Date of tender opening : 14.30 Hrs. / 03.03.2014.
(Technical bid)
08. Tender should be addressed to : **THE SENIOR MANAGER,
MAINTENANCE & SERVICES / PLANNING,
2&4 BUILDING, BHARAT HEAVY ELECTRICALS LIMITED,
HIGH PRESSURE BOILER PLANT,
TIRUCHIRAPPALLI – 620 014,
TAMILNADU – INDIA.**

This document contains Covering letter, Specification, General Conditions, Security Deposit details, Part-I (Technical qualification bid) and Part-II (Price bid).

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PART –I (TECHNICAL BID)

SECTION - I / QUALIFYING CRITERIA		
TENDER NO.:		
The bidder has to meet the following requirements to get qualified for submitting tender for “Gasifier/Gas cleaning Operation Maintenance:2014-15”		
SL.NO.	REQUIREMENTS	BIDDER'S RESPONSE
1	Years of experience in the similar function(minimum one year required)	
2	Similar functions executed earlier, if so, cite examples(Use separate sheet if required, including feedback letters from customers)	
3	Possess adequate manpower for deployment with required qualification/experience (Furnish details)	
4	Approximate (average) quantum of business per annum (For the past three years)	
5	Number of contracts under execution at present	
6	Any instance of termination of contract in the middle	
7	Will you ensure TN Govt min. wages (April 2013) plus Additional wages (as per corporate guidelines) and PF,ESI, Bonus (both TN Govt. min. wages and additional wages)	
8	PAN card No.	
9	ESI No.	
10	PF. Account No.	
11	Service Tax No.	
12	Whether visited the plant for assessing work content for finalizing the offer(If plant visit certificate is not enclosed offer will be rejected)	
13	Bidder should be capable of engaging manpower for estimated man days required for completing the Scope of work.	
14	Permanent address of the Firm with contact person name and phone no	

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SECTION – III**BID/OFFER FORMAT**

The Bidders to note the following

SLNo.	REQUIREMENTS	BIDDERS COMPLIANCE
1	The Bidder shall submit the offer in TWO PARTS in two separate covers	
	1.COVER- 1 -- Technical and Commercial (Part-I)	
	2.COVER- 2 -- Price Bid (Part-II)	
	(Covers should be superscripting Tender No.)	
2	COVER- 3 -- D.D for E.M.D shall be submitted in a separate cover and superscripting the cover 'EMD'. (The Tender without EMD is liable for rejection.)	DD No. & Date
3	All the above 3 covers put into a large single cover and superscripting Tender Notice No:	
4	The Part-I Technical and commercial bid alone will be opened on the Tender opening date	
5	Part-II Price Bid of technically suitable bidders alone will be opened after giving prior intimation.	
IMPORTANT POINTS TO BE TAKEN CARE OF WHILE SUBMITTING OFFER		
a	Should a bidder find discrepancies or omissions in the tender documents or should there any doubt as to their meaning, he should at once address the authority inviting the tender, for clarification well before the due date, so as to submit his tender in time. (No extension of time shall be given for submission of the tender on any account).	
Pre-bid discussion for clarifications in the tender conditions will be held on 30.01.2014 at M&S conference hall,Bldg.2&4, BHEL,Trichy-620 014.		
b	Conditional and late tenders, tenders containing prima-facie absurd rates and amounts, tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions herein contained and the tenders not in original ARE LIABLE TO BE REJECTED	
c	All entries in the tender documents should be in one ink. Erasures and overwriting are not permitted. All cancellations and insertions should be duly attested by the bidders concerned.	
d	Rates should be quoted as per the Work / Rate schedule. Rates quoted in any other form will not be accepted and will be rejected.	
e	Unit rates should be quoted in figures as well as in words for all the items shown in the attached schedule. Wherever there is a difference in the two, the rates in words will be taken as final.	
f	The tender must be signed separately and legibly by Partner /Director of the Firm or by the person holding the Power of Attorney on behalf of the Firm concerned. In the latter case, a copy of Power of Attorney, duly attested by a Notary Public must accompany the tender.	
g	If a bidder deliberately gives wrong information in his tender or creates conditions favourable for the acceptance of his tender, the BHEL RESERVES THE RIGHT TO REJECT SUCH TENDER AT ANY STAGE.	
h	Words imparting singular number shall be deemed to include plural number and vice-versa where the context so requires.	
i	Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the Bidders who resort to canvassing will be liable for rejection.	

j	If a bidder withdraws his offer after submission of his tender before opening of the price bid or after acceptance of his tender, fails to start the work in accordance with the instructions of BHEL, the Earnest Money Deposited by him shall be forfeited.
k	Should a bidder's or a Contractor's or in the case of a firm or company of contractors/any of its shareholder's or shareholder's relative is employed in BHEL, the authority inviting the tenders shall be informed in writing of this fact at the time of submission of the tender, failing which the tender may be disqualified, or if such fact subsequently comes to light, the contract may be cancelled.
l	The bidder should sign and stamped in all pages of documents.
m	Submission of tenders by hard copy only.
n	The service provider should cover PF & ESI for all the drivers engaging for duty.

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WORK SPECIFICATION

(Power House, Boiler, DM Plant, Lab, Electrical/Instrumentation O&M contract)

Work details

The one year contract is planned as follows: (assuming 300 working days)

1. Total 45 days of CCDP - Power House, Boiler, Electrical/instrumentation, DM Plant, Lab Operation (in three shifts A,B &C) .
2. Total 255 days of CCDP - Power House, Boiler, Electrical/instrumentation, DM Plant, Lab Maintenance work (in two shifts A&B) .

As and when the plant is ready for trial run after modifications, plant will be operated in three shifts (A, B &C shifts). After trial runs for data collection, suitable plant modifications / maintenance will be taken up in two shifts for making the plant ready for next trial operation.

List of activities during plant operation

As per the instructions from Engineers & supervisors the following activities are to be carried out by the contract employees along with BHEL staff, during plant operation in three shifts.

1. Compressors : Process air compressors, service air compressors, Instrument air compressor, Drier operation .
2. Cooling tower operation and level maintenance.
3. Pumps operation : operation of cooling water pumps for cooling circuits to compressors, coolers/ Gasifier equipments.
4. Boiler operation: Auxiliary boiler starting, line up for use in gasifier/starting.
HRB boiler operation: Drum level control, condensed water removal from steam line periodically, maintaining steam pressure for using in gasification process.
Feed pump operation and maintaining de aerator level.
5. DM Plant : DM water generation, stocking, supply to boiler
6. Lab: Assistance for analyzing samples like coal, ash, water, steam, gas for data collection and report preparation.
7. Sampling : collection of samples for coal, bottom ash, fly ash, slurry ash, steam/DM water at specified intervals and assistance during analysis.
8. Data recording of running plant
9. PA system monitoring/fault attending
10. Battery backup system monitoring
11. Sub station monitoring
12. Lighting checking and attending the faults
13. Electrical motors, equipments starting /stopping and other electrical related work
14. Operation related Instrumentation work in all areas viz Gasifier, Gas cleaning, control room, power house, Lab, DM plant, Boilers.
15. Any on line maintenance work required during plant run
16. New equipment installation.
17. Stores material sorting, stocking assistance required for material collection from other stores
18. Disposing unwanted material to disposal stores.
19. General area House Keeping

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Repair and maintenance work

As per the instructions from BHEL Engineers & supervisors, the contract employees (Skilled and unskilled : Skilled should specify qualification viz electrician, instrument mechanic , fitters, Lab assistant (B.Sc qualified)) will carry out the following repair and maintenance / modifications work in two shifts (A&B), during system shut down period. Our employees and supervisor will coordinate with the contract employees for early completion and restarting the plant.

1. Welding work required for any air/water /steam/coolant any other leak in pipe line, flange joints in LPC/HPC area, service compressor area, boiler area, DM plant area and pump house area.
2. Servicing /cleaning/maintenance of compressors/pumps/drier/AC plant components.
3. Servicing/cleaning/maintenance of Boilers & DM plant equipments.
4. Servicing/cleaning/maintenance of Lab Instruments.
5. Preparation for repair work: arrangement for approaching failure spots, scaffoldings, ladders, supports, Cleaning the lines, vessels, equipments, preparing of plates, pipes, gaskets, bolts and nuts. Preparation of surfaces for repair work, by cutting grinding, edge preparing. Arranging welding set, cutting set, electrodes gas cylinders etc.
6. Repair work: cutting, welding, grinding other repair work like bending, gland packing, replacing damaged portion with new pipes, tubes, plates etc. Dye penetration tests for welding repair and other quality control tests etc.
7. Assembly of system after repair work: assembly of vessels, flanges, pipe lines, equipments, dummies and tightening the manholes, flanges, equipments.
8. Checking the failure: After repair, the repaired area strength to be tested with leak check, hydraulic check or any other applicable test.
9. Putting back to service: After completing the repair work, the system to be put back to service. Ensure water supply by starting cooling water pumps.
10. For system improvements: Addition of air lines, water lines, steam lines, valves, equipment, fabrication of burners, vessels or any other additions required to be added on need basis.
11. All modifications/improvement works shall be completed before starting next trial run.
12. All electrical related repair/maintenance work of total CCDP plant.
13. All Instrumentation related repair/maintenance work of total CCDP plant.
14. All lab related sampling activities and other planning activities

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GENERAL CONDITIONS

(Power house / Instrumentation / Electrical / Boiler/DM Plant / Lab O&M work)

STATUTORY REQUIREMENTS: --

1. The contractor shall pay minimum wages to his labourers as per Tamil Nadu govt. latest circular. Any revision arises within one year period, it is the contractors responsibility to pay the revised min. pay as per norms.
2. The contractor shall pay additional wages also as per Corporate guidelines along with TN Govt. wages.
3. Contractor shall maintain attendance and acquaintance Registers and submit copies every month for both TN Govt. wages and additional wages.
4. The contractor shall pay Bonus to their employees as per minimum bonus act, for both TN Govt.-wages and additional wages (8.33% /one month pay).
5. The contractor shall remit PF and ESI (for both TN Govt. wages and additional wages) for the actual labourers engaged and produce the original challan every month along with bill for our verification and record.
6. The contractor shall not employ anyone who has not completed 18 years of age.
7. The contractor shall comply with all state and central laws, statutory rules, and regulations, labour and industrial laws, income tax, service tax etc. which are applicable from time to time. (Contractors without Service Tax number need not bid the contract).
8. Any increase in minimum wage by Tamil Nadu Government, shall be implemented by the contractor (including PF & ESI). For any reason, no increase in contract value shall be agreed by BHEL.
9. Necessary pass arrangement for gate entry shall be arranged by the contractor before commencement of the work. The authorized person / supervisor of the contractor is responsible for making the pass arrangement.
10. The supervisor shall be an experienced Diploma Holder
11. The contractor shall produce certificates for skilled workers engaged.
12. It is the sole responsibility of the contractor to ensure his workman against accident and injury while at work. They have to follow relevant pay compensation rules in case of accident/injury.

SAFETY

1. The contract employees shall follow safe working procedures by using appropriate safety equipments like safety shoes, safety helmets, safety belts, earplugs, nose filter cloth etc. All safety protective equipments mentioned above shall be supplied by the contractor.
2. All workers should compulsorily wear safety shoes and helmets at work site.
3. The contractor shall ensure that no damage is caused to any equipment at the site. If any such damage is caused, it is the responsibility of the contractor to make good the losses or compensate for the same.

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4. Scaffolding if required should be done by the contractor. Pipe, wooden planks & ropes will be provided by BHEL at free of cost.
5. The contractor shall strictly follow BHEL Engineers safety instructions whenever pointed out in addition to regular safety instructions.
6. Contractor shall provide First Aid Box with medicines required for meeting first aid requirements. Medicines shall be replenished as and when required.

WORKS

1. The contractor shall engage sufficient skilled workers (Daily three shifts for Plant Operation 45days and two shifts maintenance work for 255days, **each shift minimum Fitter 1, Instrument mechanic 1, Electrician 1, Lab assistant 1, unskilled workers 10 and supervisor 1**) to meet the work listed in specification. BHEL will provide welder for welding work
2. Pipe welding shall be done only after the edge preparation as per standard.
3. Proper electrode shall be used for welding joints based on grade/ type of material.
4. Preheating of electrode as recommended by the electrode manufacturer shall be carried out prior to welding.
5. Pipes, pipe fittings, bends, flanges, valves, gaskets, gland ropes, fasteners and spares etc. Consumables like welding electrodes, oxygen / acetylene cylinders, kerosene, paints, rustolene and other consumables like electric power supply shall be provided by BHEL at free of cost.
6. Welding machine, cutting set, drilling machine & accessories and special tools/sets shall also be provided by BHEL at free of cost.
7. All scrap materials shall be transferred to CCDP stores after inspection by the site in charge.
8. The contractor shall bring welding shield and arc welding holder for welding works.
9. The contractor shall bring two sets of tool boxes with spanners, hammers, chisels, cutters, wire brushes, steel tapes, bonds, shovels etc.,
10. Each fitters shall be provided with tool box containing spanner set from size 6mm to 36 mm and erection spanner size 30,36,41,55 and other tools like dot punch, center punch, gas lighter, gas cylinder opener, rough/smooth files, spare hacksaw blades/gas lighter etc.
11. The contractor shall supply to all their employees sufficient safety equipments like safety shoes, safety helmets, safety belts, earplugs, nose filter, welding goggles etc.
12. Since the contract employees are working around coal/ash dusty atmosphere, the contractor shall compulsorily provide them with nose mask, long towel, soap, 100ml coconut oil, once in a month.
13. The contractor shall engage sufficient skilled workers wherever necessary for, fitting, alignment, servicing, repair work of rotating parts, servicing of different types of valves and all other maintenance activities. The contract supervisor shall take care of this responsibility.

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14. Timely completion of work is very important. Hence the contractor shall engage sufficient no. of workers. If sufficient workers are not brought to the work spot, penalty will be imposed for the delay caused at 10% of value of such work and it may even be extended up to termination of contract.
15. During plant operation, every location has to be manned with sufficient man power, to the satisfaction of site engineer.
16. Any deficiency in the supply of required man power for operational needs will be met by Department from other agencies at your risk & cost.
17. The contractor's supervisor will control the man power and he is responsible for maintaining quality, speedy and smooth overall work completion.
18. Fitter, Electrician(with B licence), Instrument Mechanic & Lab Asst. should have qualified such as ITI and have min. 3 years industrial experience. Contractor has to submit the qualification certificate & experience certificate for verification.
19. Supervisor should have diploma qualification and submit the document proof at the time of starting the contract.

GENERAL

1. The contractor shall be responsible for the proper behavior and observing all rules and regulations by the labour employed by them.
2. BHEL rules will be applicable towards issue of refreshments /food which will be adhered by the contractor. As per existing procedure for Canteen facilities, the lunch coupon shall be issued @ Rs.5 (Rs. Five) per person. Sufficient and valid coupons are to be tendered for Tiffin, Tea, Coffee, Milk, etc. to the canteen staff. Rarely, if food could not be provided by BHEL due to administrative reasons, the contractor shall provide food to their labourers.
3. No advance payment will be arranged for the contract
4. Monthly bill shall be raised as per the measurement of actual work completed on pro-rata basis.
5. The contractor is directly responsible for the payment of wages to his workmen.
6. The contractor shall carefully quote their offer in the rate schedule.
7. All taxes & duties as applicable by central and/or state government will be reimbursed to the successful tenderer on proof of payment (like Service Tax, Surcharge etc. as applicable).
8. All tenderers to quote excluding taxes & duties. However they are requested to indicate the existing taxes & duties separately.
9. Plant Operation has three shifts per day (A,B&C) and Maintenance work has two shift/day (A&B) and general shift. Sometimes we may plan for General and night shift ie 8.00 hrs. to 16.30 hrs and 16.30 hrs to 01.00 hrs. In emergency, Sundays/ holidays also required to perform the work in three shifts.

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10. The contractor shall submit an acceptance letter for the above terms and conditions.
11. Qualification criteria : The tenderer should have executed a similar single contract of value not less than Rs.20 lakhs / year. Technical/Qualification competitiveness will be evaluated by technical committee and based on their recommendations only price bid will be opened. If the tenderer fails to satisfy qualifying criteria (both explicitly and implicitly stated) their offer will be rejected.
12. The contractor is required to visit the plant, assess the work, get the certificate of plant visit and enclose the certificate in the offer. Offer without plant visit certificate will be rejected.

NOTE: The contractor may contact BHEL welfare section for details regarding additional wages as per corporate guidelines, Tamil Nadu Govt. minimum wages and I PF & ESI

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WORKS POLICY

8.2 Security Deposit:

8.2.1 - Security deposit should be collected from the successful tenderer. The rate of security deposit will be as given below:

- Up to Rs. 10 Lakhs - 10% of work order value.
 - Above Rs. 10Lakhs up to Rs.50 Lakhs - 1 Lakh +7.5% of the amount exceeding Rs. 10 Lakhs.
 - Above Rs. 50 Lakhs Rs 4 Lakhs + 5% of the amount exceeding Rs. 50 Lakhs
- The security Deposit should be collected before start of the work from the contractor.

8.2.2 - Security Deposit may be furnished in any one of the following forms:

- I. Cash (as permissible under the Income Tax Act)
- II. Pay Order, Demand Draft in favour of BHEL.
- III. Local cheque of Scheduled Banks, subject to realization.
- IV. Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of contractor furnishing the security and duly pledged in favour of BHEL and discharge on the back.)Bank Guarantee from Scheduled Banks.
- V. Public Financial Institutions as defined in the companies act subject to a maximum of 50% of the total Security Deposit value. The balance 50% has to be remitted either by cash or in the form of security. The Bank Guarantee format should have the approval of BHEL.
- VI. Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in Companies Act. The FDR should be in the name of the Contractor, A/c BHEL, duly discharged on the back.
- VII. Security Deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.
- VIII. EMD of the successful renderer shall be converted and adjusted against the Security Deposit.
- IX. The Security Deposit Shall not carry any interest.

NOTE:

Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

Security Deposit shall not be refunded to the contractor except in accordance with the terms of the contract.

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PART – II (Price Bid)

RATE SCHEDULE

BHE:O&M:CCDP:14-15/PR.89870715

O&M contract for Power House, Electrical, Instrumentation, DM plant & Lab					
Sl no	Description	unit	Qty	Rate /unit (Rs)	Total (Rs)
1	vessels/heat exchangers/equipments repair & maintenance	Ton	500		
2	Pipe lines repair /maintenance/fabrication & erection	Run.m	2500		
3	Fabrication / erection / repair & maintenance of structural items like columns, beams, floor grills & plates, supports etc	Ton	100		
5	Equipments cleaning of material, ashes, dusts etc	Sq.m	1000		
6	Area cleaning floors, working area, surrounding area cleaning	Sq.m	20000		
7	Servicing of Rotating parts like pumps, compressors coal feeders, extractors, pumps, gear boxes, conveyors etc	No.	100		
8	No of electrical equipments maintenance work & operation during plant operation	No.	1000		
9	Valves dismantling, servicing & connecting back 2" equivalent	No.	1000		
10	Leak check & flow check through vessels, heat exchangers as a total system	No of times	10		
11	DM water generation, stocking & feeding	Ton	3000		
12	Analysis & reporting of gas , coal, ash, slurry samples	No.	500		
13	steam generation during plant running	Ton	3000		
(TOTAL IN WORDS:		TOTAL			

L1 will be finalized on cumulative total of the above quoted price.

The above quoted rates should be exclusive of taxes and duties.

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(WITH SEAL)

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CHECK LIST

Documents to be included in **Part I qualification bid (sealed cover)**

1. Documentary evidence as per qualification criteria (Order copy, Bill copy, payment voucher, site visit certificate, bank solvency certificate etc).
2. EMD as per Tender.
3. Tender documents signed in all pages.
4. Part-I Technical / Qualification bid.
5. Income tax PAN copy and latest IT return copy.
6. Service Tax number xerox copy.
7. Latest solvency certificate.

Documents to be included in **Part II Price bid (sealed cover)**

1. Part-II Price bid duly filled in with Address and Signature

PLANT VISIT CERTIFICATE

This is to inform you that I have visited the site on and fully understood the work nature. While arriving the rates, site requirements will also be considered and we will not ask for any revision of rates / contract value during the tenure of the contract.

Authorized person with seal

BHEL Engineer's Signature