

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, Electrical, Instrumentation O&M contract : 2013-14
02. Estimate contract value : Rs. 48.00 lakh (approx)
03. Earnest money Deposit : Rs 1,00,000/-
04. Security Deposit : As per Works Policy
05. Operations & Maintenance period: One year
06. Cost of tender document : NIL
07. Last date for receipt of tenders : On or before 07.01.2013 at 14:00 hrs.
08. Date of tender opening : On 07.01.2013 at 14:30 hrs

This document contains Covering letter, Spec. and General conditions, Security Deposit details, Part-I (Qualification bid) and Part-II (Price bid).
For Qualifying criteria refer General Conditions under head General requirements

CONTRACTOR

ISSUING OFFICER

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 60 days of CCDP - Power House, Boiler, Electrical/instrumentation, DM Plant, Lab Operation (in three shifts A,B &C)
2. Total 240 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

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.

CONTRACTOR

ISSUING OFFICER

GENERAL CONDITIONS

(Power house / Boiler/DM Plant/Instrumentation/electrical/Lab Operation / Maintenance 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.
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.

7. WORKS

1. The contractor shall engage sufficient skilled workers (Daily three shifts for Plant Operation 60days and two shifts maintenance work for 240days, **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.
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, 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. The contract labourers should not indulge in any mass strike within CCDP/BHEL or strike outside CCDP gate. If any such things happen, BHEL has the right to terminate the contractor and all payments will not be paid.
4. No advance payment will be arranged for the contract
5. Monthly bill shall be raised as per the measurement of actual work completed on pro-rata basis.
6. The contractor is directly responsible for the payment of wages to his workmen.
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.
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.16 lakh/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

CONTRACTOR

ISSUING OFFICER

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:

- Upto Rs. 10 lakhs - 10% of work order value.
- Above Rs. 10 lakhs upto Rs.50 lakhs - 1 lakh +7.5% of the amount exceeding Rs. 10lakhs.
- 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 cheques 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.)
- V. Bank Guarantee from Scheduled Banks / 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.

CONTRACTOR

ISSUSING OFFICER

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

PART - 1

(TECHNICAL BID)

SL.NO	DESCRIPTION	VENDOR RESPONSE
01	Years of experience in the similar function (Minimum one year required)	
02	Similar functions executed earlier, if so, cite examples (Use separate sheet if required, including feedback letters from Customers)	
03	Posses adequate manpower for deployment with required qualification/experience (Furnish details)	
04	Approximate quantum of business per annum (For the last one year)	
05	Number of contracts under execution at present	
06	Any instance of termination of contract in the middle	
07	Will you ensure TN Govt minimum wages (April 2013) plus Additional Wages (as per corporate guidelines) and PF, ESI, Bonus (both TN Govt. minimum wages and additional wages)	
08	PAN card No.	
09	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	Permanent address of the Firm with contact person name and phone no.	

CONTRACTOR

ISSUING OFFICER

PART - II
(Price Bid)

Name & Address of the Contractor :

Sl.No	Contract details	Rate to be filled by the contractor
01	Gasifier/Gas cleaning Plant Operation work as per specification and conditions. Rate per day for three shifts (24 hrs) work	Rs.----- (Rupees) Plus applicable taxes
02	Gasifier/Gas cleaning Maintenance work as per specification and conditions. Rate per day for two shifts (6.00 to 14.00hrs and 14.00 to 22.00hrs) work	Rs.----- (Rupees) Plus applicable taxes

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 No. 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