

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt.of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES DEPARTMENT)

☎: (0431) 2575380 Fax: (0431) 2521416 CELL:9442631203

e-mail: kpvel@bheltry.co.in



PREAMBLE

01. The scope of work includes operation and maintenance of 110/11 KV Substation switchyard consisting of isolators, SF6 breakers, lightning arrestors, Transformers, PT, CT 11KV VCB Panels, RTCCs, Relay panels, station batteries AC/DC DBs, Station transformers, line conductors etc. in the newly constructed Sub-station.
02. The period of Annual Maintenance Operation contract is for one year, on three shifts basis including Sundays & Holidays. .
03. Contractor should deploy sufficient man power as per our schedule to operate and maintenance substation to ensure uninterrupted power supply on all three shifts throughout the year including Sundays & Holidays.
04. The tenderers are advised to visit BHEL Factory at Tiruchirappalli and studied the existing condition of the systems before submitting the offer.
05. The following eligibility criteria shall be complied to fulfill the qualification bid:-
 - a) Contractor should have valid ESA Contract License issued by Tamilnadu and other states.
 - b) Only those contractors who have done O&M of similar capacity 110KV substation or higher size EHT substation of satisfactory for minimum 2 years only will be considered for this O&M contract. Documentary evidence of the satisfactory performance certificate should be enclosed along with the offer.
06. Contractor should have separate Registration code no. for ESI & PF.
- 07 Documentary evidences (Xerox copies – attested), works experience, P.F. ESI registration etc., all as indicated & required in the tender document should be furnished without which it will not be taken into account.

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08. The works executed in the own name of the tenderer only will be considered for eligibility criteria.
09. PAN & ITCC for the past three years.
10. Tender value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by (+ / -) 20% (twenty percentage).
11. The work shall be carried out as per the scope of work .
12. After award of work the contractor has to furnish the security deposit, as per Clause 16 of THE GENERAL INSTRUCTIONS TO TENDERERS (REVISED).
13. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
14. The contractor shall strictly adhere to various labour laws in force.
15. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex.
16. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot.
17. The contractor has to submit the organization chart of their set up for the works and any change thereafter in the organization set up should be intimated to BHEL.
18. The tenderer shall carryout health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
19. It shall be the responsibility of the contractor to see the workmen do not utilize the departmental canteen facilities. Contractor has to make his own arrangement to provide refreshment for the workmen.
20. The works contract to be entered into with the successful tenderer will be governed by the BHEL General Conditions of contract in force.

21. Contractor's materials such as tools , testing equipments etc., shall have to be brought inside factory /switch yard with proper documents /voucher and make necessary entry in the security gate. They should maintain proper record for tools equipments, materials etc. brought inside the factory complex.
22. The contractor should extend fullest co-operation with the third party agencies engaged, if any by BHEL to adhere the statutory regulations.
23. The contractor should extend fullest co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
24. Water, Electricity and compressed air will be provided by this organization at free of cost. at site .
25. No advance / mobilization advance will be given.

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39-300
ISO 9001

BHE: M&S:ELE.CONT. PLNG: 01

Date:26.09.2009

Sub: Operation & Maintenance of 110/11KV Substation - ARC

Ref: Enquiry No:9250900154

Dated 26.09.2009.

*** **

Tender of the following work should be submitted in a sealed cover consisting of three inner sealed covers such as 1) EMD cover, ii) Qualification and technical bid cover & iii) Price bid cover, all super scribing the name of work, enquiry number etc.

- 1) EMD cover shall contain requisite EMD in the form of DD. Tenderers who had already remitted one time EMD should furnish the details of cash receipt No. date, on the top of EMD cover. Tender without EMD / one time EMD reference will be summarily rejected and the qualification bid & price bid shall not be considered.
- 2) Qualification bid cover shall contain duly filled in qualification bid document signed by the tenderer in all the pages with documentary evidences for pre-qualification such as experience, value of work executed in the similar nature of work etc. Any bid without proper documentary evidence for pre-qualification shall not be considered for further evaluation.
- 3) Technical bid; One set of **un priced bid** of Contract Work Schedule duly signed by the tenderer for accepting the work content (BOM) should be submitted along with the qualification bid for technical evaluation.

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- 4) The price bid cover shall contain price bid document duly filled in and signed by the tenderer in all the pages. The tenderer has to quote most competitive rates for all the items given in the Bill of Quantities in price bid. The completed qualification bid and price bid along with requisite EMD of Rs.40,000 /- for this work in the form of Demand Draft in favour of BHEL shall reach the office of the undersigned on or before 19.10.2009 at 14.30 Hrs. Tenderers who had already remitted one time EMD should furnish the details of cash receipt no..... date..... on the top of EMD cover. EMD in any other form will not be accepted. The qualification bid will be opened on the same day at 15.00 hrs. In case of opening day falls on holiday or happened to be declared as a holiday the receipt and opening of the tender shall automatically fall on the same timing of the next working day. Date and time of opening of the Price Bid shall be intimated only to the bidders those who have qualified after evaluation of the qualification bid. You / Your authorized representative may participate in the tender opening.

Clarification if any, can be obtained from the undersigned.

Kindly acknowledge the receipt of the entire set of tender document.

Thanking you,

Yours faithfully,
For Bharat Heavy Electricals Limited,

Encl:

- 1) General Instruction to tenderers
- 2) Price bid (BOM)

Deputy General Manager
Planning & Contracts
Maintenance & Services

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NOTICE INVITING TENDER

01.	Name of work	Operation & Maintenance of 110/11KV Substation – ARC (Annual rate contract)
02.	Estimated Cost	Rs. 15.3 Lakhs.
03.	Earnest Money Deposit	Rs. 0.40 lakhs
04.	Duration of the contract	One year(12 month period)) (From the date of commencement of the work which will be reckoned from the date handing over the site to the contractor)
05.	Last Date for Receipt of Tenders	14.30 Hrs on 19.10.2009
06.	Date of Qualification & Technical Bid Opening	15.00 Hrs on 19.10.2009
07.	Date of Price Bid Opening	Will be intimated to those who are qualified separately.
08.	Guarantee Period	Not applicable

The Tender documents can be down loaded from BHEL website / govt. website at free of cost.

Tender document contains 27 Pages in qualification Bid including Bill of Quantities & 2 pages in Price Bid .

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**BHARAT HEAVY ELECTRICALS LIMITED
HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI – 620 014
TAMILNADU / INDIA**

**M & S CONTRACTS (Electrical)
GENERAL INSTRUCTIONS TO TENDERERS**

- 1) Sealed Tenders enclosed for the work are hereby invited from valid and experienced contractors. In similar kind of work.
- 2) Tenders should be addressed to the DGM / M&S. Bharat Heavy Electricals Limited. Tiruchirapalli- 620 014 the full name and address of the Tenderer and the name of the work being noted on the cover with tender No & due date of opening.
- 3) All entries in the tender documents should be made in one ink. Erasure and over-writing are not permitted. All cancellations and insertions should be duly signed by the Tenderer concerned.
- 4) Tenderers should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents also sign each and every page of the tender document including the drawing attached there to while submitting their tender.
- 5) Unit rates should be quoted in figures as well as in words with reference to each item and for all the items shown in the attached schedule. These rates shall be for the furnished work in site. Amount of each item and the totals page by page as also the grand total amount of the whole contract should also be filled in by the Tenderers.
- 6) Rates for each item of the tender schedule should be quoted in Rupees and paise only, In case any difference in rates quoted to figures and in words, the lower of the rates will be taken as the tendered rate.
- 7) Quantities shown in the attached schedule are only approximate and are liable to variation without ending the contract to any compensation, provided the total value of the contract does not vary by more than 20% (Twenty percent)
- 8) In quoting their rates the tenderers are advised to take into account all factors including any fluctuations in market rates etc. No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
- 9) Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other relevant conditions, position of materials and labour. , General Instructions to Tenderers, Drawings and specifications and all other documents which form part of the agreement to be entered into.

TENDERERS ARE REQUESTED TO COVER THEIR EMPLOYEE UNDER PF/ESI/CONTRACT LABOUR REGULATIONS ACT:

- 10) Rates quoted shall include all royalties, terminal taxes, Octroi duties, General or provincial Excise tax, Sales Tax and any other taxes livable under the state or Central Government Rules. The Bharat Heavy Electricals Limited, Tiruchirapalli will not entertain any claim what so ever in this respect.
- 11) Quoted rate shall be firm throughout the contract period of 6 months and extended contract period also and no cost escalation is allowed on any account.
- 12) Should a tenderer find discrepancies or omissions in the drawings or any of the tender documents should be in doubts as to their meaning; he should at once address the authority inviting the tender for clarifications. Every endeavor is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall taken upon himself to provide for the risk or any error which may be subsequently discovered and shall make no subsequent claim on account thereof.
- 13) In the event of tender being submitted by the firm, the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of attorney on behalf of the firm concerned. In the latter case, a copy of the power of attorney duly attested by a Gazetted Officer must accompany the tender.
- 14) Every tender must be accompanied by Demand Draft for the amount mentioned in this tender notice as Earnest Money Deposit, pledged to BHEL, Tiruvermbur in any of the forms mentioned in para 15 of the General Instructions to tenderers. This Earnest Money Deposit will be refunded to the unsuccessful tenderers within 15 days on finalizations of the award of work. In the case of successful tender, the earnest Money Deposit will be retained as part of the Security Deposits for satisfactory completion of the work in accordance with clause 16 of the General Conditions of contract as amended up to date.

Note : “Cheque, Currency Notes or Money Order will not be accepted in lieu of the Demand Draft referred to above”.

15) EARNEST MONEY DEPOSIT:

The Earnest Money Deposit shall be furnished in the form of Demand Draft only. EMD shall not carry any interest.

16. SECURITY DEPOSIT:

1. The amount of security Money to be deposited for proper fulfillment of the contract will be as follows:

- | | |
|--|--|
| a. For Contract Valued up to Rs. 10.00 Lakh. | 10% of the Contract value |
| b. For Contract Valued above Rs. 10.00 Lakh upto Rs. 50.00 Lakhs | 1 lakh plus 7.5% on the balance of the Contract value. |
| c. For Contracts valued above Rs. 50.00 Lakhs | Rs.4 lakhs + Plus 5% on the balance of the contract value. |

2. The contractor whose tender may be accepted shall, within seven days of receipt by him of the notification of acceptance of his tender, deposit with BHEL, Unit: Tiruverumbur, the prescribed sum as per Clause 16 (i) above towards Security Deposit.

- a. Shall be furnished in the form of Demand Draft in favour of BHEL.
- b. Securities available from Post offices such as National Savings Certificates, Kisan Vikas Patra etc. (Certificates should be held in the name of the contractor furnishing the security and duly pledged in favour of BHEL, Trichy and discharged on the back).
- c. Bank Guarantee from Nationalized, 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 other form of security. The bank guarantee format should have the approval of BHEL.
- d. Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act . The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- e. 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 will be collected before start of the work and the balance 50% may be recovered from the running bills.
- f. EMD of the successful tenderer shall be converted and adjusted against the security deposit.

- g. NO INTEREST SHALL BE ALLOWED ON SECURITY DEPOSITS. BHEL, shall not be responsible for any loss of securities due to liquidation or any other reason whatsoever or any depreciation in the value of the Securities while in their charge or for any loss of interest thereon.

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.

3. All compensation or other sums of money payable by the contractor to BHEL under the terms of this contract or under any other contract with BHEL, may be deducted from the Security Deposit or realized by the sale of the securities or from the interest arising there from or from any sums which may be due or may become due to the contractor payable by BHEL, on any account whatsoever against this contract or any other contract with BHEL and in the event of his Security Deposit being reduced by reason of such deductions or sale as aforesaid, the Contractor shall within seven days thereafter make good in cash or in securities endorsed as aforesaid, any sum or sums by which the security Deposit has been so reduced.
4. Security Deposit may be refunded on completion of the work and after the expiry of the maintenance period. In case no maintenance period is applicable, then 100% of security Deposit will be refunded after payment of final prescribed format.
- 17) Unless the Contractor, whose tender is accepted, signs the contract agreement within seven days (7 days) of the date of the order directing him to do so, the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of the tender withdrawn.
- 18) If after opening of tenders, a tenderer revokes his tender or increases his earlier quoted rates or after acceptance of his tender does not commence the work in accordance with the instructions of the Engineering-In-Charge, the Earnest Money Deposited by him will be forfeited and acceptance of his tender withdrawn. In only, a part of the work included in the tender withdrawn. In only, a part of the work included in the tender has been awarded to the tenderer and the tenderer refuses to take up the work the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
- 19) The BHARAT HEAVY ELECTRICALS LIMITED, reserve the right to reject any or all the tenders received or accept any tender or part thereof without assigning any reason therefore. In the case of acceptance of the part of tender, time for completion may also be reduced to the extent considered appropriate by the accepting officer.
- 20) Tenders not submitted on the prescribed forms are liable to be rejected.

21)The Contractors not borne on the approved list of contractors of this organization must submit the following documents simultaneously with their super scribed.

(Testimonials of Shri Messer's)

In connection with tender, for the work of _____

1. A certificate to establish that the tender is an independent contractor working on his won.
2. At least 2 certificates from responsible officers of Govt. or firms of repute. Regarding the tenderer's capacity to undertake and carryout the work tendered for or similar work satisfactorily.
- 3.A certificate from a Bank of Standing of Magistrate regarding the tenderer's financial position.
4. License details of the firm and that of the contractor & his employees.

NOTE: a.) Copies of testimonials unless attested by a Gazetted Officer will be accepted.
b.) Non-submission of the above documents simultaneously with the tenders may result in the tender being rejected.

22)The tenders should be accompanied by a list of contracts already held by the contractor at time of submission of the tender and giving the following particulars:

- a) The value of each contract.
- b) The balance of work remaining to be done on the same.

23)Tenders submitted by Post should be sent by "Registered Post with Acknowledgement Due". These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date of opening of tenders are liable to be rejected.

24)The Contractor's responsibility under this contract shall commence from the date of work order.

25)If a tenderer expires after the submission of his tender or after the acceptance of his tender, the BHEL may at their discretion cancel such tender.

26)The BHARAT HEAVY ELECTRICALS LIMITED, will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm. We made subsequent to the execution of the contract. They may, however, recognize such power of attorney and changed after obtaining proper legal advice, the cost of which will be charge above to the contractor concerned.

- 27) If the tenderer deliberately gives wrong information in his tender BHEL, reserve the right to reject tender at any stage.
- 28) Words imparting the singular number shall also be deemed to include the plural number and vice the context so required.
- 29) The general and Special Conditions of Contract are complementary to each other and where they are in conflict, the special conditions shall prevail.
- 30) The expenses for completing and stamping the agreement shall be paid by the contractor.
- 31) Tenderers shall not increase their quoted rates, in case the BHEL, negotiable for reduction of rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted shall be binding on the tenders for the period of three months from the date of opening of tenders.
- 32) All contractors will have to produce PAN/income tax clearance certificate from the Income Tax concerned along with their tender. These contractors whose Income is not taxable will be required to give affidavit for their income on the prescribed form. If the successful tenderer fails to produce the PAN/income tax clearance certificate within the stated period, the earnest money deposit and the Security Deposit of the tenderer may be forfeited and the contract terminated.
- 33) The contractor shall insure the work against loss or damage to the contractor works, temporary work and materials erected in performance of the contract on "all risks" basis from the time of arrival on site until taken over by BHEL on completion of the contract.
- 34) The cover shall also include wherever necessary the risks of testing including breakdown or explosion of plant and machinery undergoing testing, trial and commissioning operations. The insurance shall also specifically cover removal of debris cost. The Sum insured shall represent the estimated full value of the contract works inclusive of value of free supply materials by BHEL, transport charges, customs dues, express freight, overtime charges, cost of erection, value of constructional plants and machinery, removal of debris and escalation of costs where the contract includes a maintenance period. The insurance cover shall specifically include the contractor liabilities during the maintenance period. The insurance shall be effected in the name of BHEL and the contractor shall submit to BHEL a draft of the insurance policy for approval. The insurance shall also be extended to cover third party personal injury and property damage for a sum to be specified by BHEL. The policy when issued will be lodged with BHEL together with receipts of premium for such insurance and the contractor shall maintain such policies in force until the obligations of the contractor are fully discharged. If the contractor fails to comply with the term of this conditions the Accepting Officer may insure the work and may deduct the amount of premium from any money that may become payable to the contractor or may at his discretion

refuse payment of any advances to the contractor until the contractor shall have complied with the terms of this condition. This provision does not, however absolve the contractor of his responsibility for taking up the insurances. The contractor is therefore, primarily responsible for taking up the insurance in time.

- 35) All the materials supplied by the contractor should conform to the relevant IS/BS Specifications and agreeable to the engineer-in-charge.
- 36) The wiring shall conform IS:732 or any other relevant Indian standard Specifications and Indian electricity rules.
- 37) In case of PVC/Steel conduct wiring, the switches, plug sockets, regulators, and other other controls should be mounted on metal boxes. These boxes as well as all metal boxes used for street light controls should be fabricated as per IS:6133(part-I) 1969.
- 38) Erection of equipments include testing and commissioning of equipments.
- 39) Completion reports should be submitted in the Performance as per appendix "F" of IS:732.
- 40) The contractor should be present at the time of inspection of the installation by the electrical inspector. Any defects pointed out by Electrical Inspector should be rectified by the contractor free of cost.
- 41) Final layout as well as foundation drawings should be submitted in advance for executing the civil works
- 42) Any covering letter and comments of the contractor should be submitted in duplicate along with the offer.
- 43) If the cable have to laid in ground, the following specification should be followed:
- 44) For one run cable, trenches should be excavated to such a depth the cable will be laid at a minimum depth of 0.75 meter, 0.075 meter deep layer of sand should be spread below as well as above the cable and covered with one layer of brick.
- 45) If two or more cables are run, they should be laid in a horizontal plan and the cable separated by placing a brick in between them and 0.75 meter deep layer of sand should be spread below as well as the above cable. The trench should be duly covered after laying of cables, spreading brick etc., in case where cables have to be taken across the road and the pipes have to be laid across the road and pipe will be issued by BHEL free of cost, at our stores. However if pipes are already available across the road the cables have to be taken through that only. Cables route joint indicators should be provided by the contractor at suitable distance.
- 46) In case of open trench/wall column, cables have to be taken with proper clamping either in cable racks/wall/column. The clamps have to be supplied by the contractor.
- 47) End termination of the cable include supply and using solderless crimping type tinned copper lugs, glands and if necessary cable adopter boxes etc., and earthing the glands and adopter boxes with 8SWG/720/GI wire.

- 48) The cement will be supplied by BHEL.
- 49) Cubical /Industrial type switch boards should be manufactured by any of the reputed manufacturer,if the make of the switch board is not specifically mentioned in he detailed specification of the board who have sufficient experience in manufacture of electrical switch boards. The switch board has to be approved by use before dispatch to work spot
- 50) For all sheet metal fabrication, pre-treatment of all metals with acid and rust preventing chemical has to be carried out and two coats of red oxide and one coat of stove enameling paint has to be applied by spray painting.
- 51) Contractor should have separate Registration Code No. for EPF & ESI.

52. SAFETY MEASURES:

- a. A list containing the name of persons who are working, their age, designations, pay, nature of work is to be furnished immediately on receipt of work order, in triplicate.
- b. The work should be carried out in the presence of contractors Supervisor and prior permission should be obtained from the concerned supervisor and the section before starting the work.
- c. Incase of cable laying work, should be carried out after getting the prior permission from the concerned electrical supervisor and civil department for digging the road when it is required to ensure that proper precautions are taken.
- d. While digging the road, a good barricade and proper sign boards should be provided in area.
- e. While erecting the poles, etc. proper safety precautions such as supporting the poles, tying with ropes suitable lifting tackles etc. are to be adhered.
- f. While working at heights, proper platform ladder, safety belts, etc. should be used.
- g. The necessary safety equipments such as gloves, lineman's belts etc. should be used.
- h. Any other safety measure as necessitated by the nature of work should be strictly followed
- i. If Contractor's workmen are found to violate the safety regulations punitive action will be taken by with-holding a sum of Rs. 100/- to Rs. 500/- for each such violation.
- j. These safety measures shall be deemed to form an integral part of the work order/agreement.

53. THE GENERAL INSTRUCTIONS TO TENDERERS shall be deemed to form an integral part of the work to be entered into.

General instructions to Tenderers-(Annexure- I)

1.TIME:

Time is the essence of the contract and is specified in the tender document or in each individual work order.

As soon as possible after the contract is let or any substantial Work Order is placed and before work under it is begun, the Engineer –in-charge and the contractor shall agree to a Time and Progress Chart. The Chart shall be prepared in direct relation to the time stated in the Tender documents or the work order for the completion of the individual items thereof and/or the contract or Order as a whole. It shall indicate the forecast of the dates for the commencement of the various trade processes or sequences of the work, and shall be amended as may be required by agreement between the Engineer-in-charge and the Contractor within the limitation of the time imposed in the tender documents or order.

In the absence of any specific Time and Progress Chart to be agreed to between the Contractor and the Engineer –in – charge, the contractor shall ensure and maintain uninterrupted progress of the work such that the entire work shall be completed within the time imposed in the tender documents or Order and that the proportion of work completed up to any time in relation to the entire work to be done under the Contract or Order shall not be less than the proportion that the time elapsed bears to the total time of completion provided in the Tender documents or Order.

The Contractor shall suspend the execution of the work, or any part or parts thereof whenever called upon in writing by the Engineer-in-charge to do so, and shall not resume work thereon until so directed in writing by the Engineer-in-charge. The Contractor will be allowed on extension of time for completion not less than the period of suspension but no other claim in this respect for compensation or otherwise howsoever will be admitted. This may also be extended to allow for alteration of work made by the deviation order.

2. COMPLETION

The works shall be completed to the entire satisfactions of the Engineer-in-charge and in accordance with the Contractor's forecast of Time and Progress where operative, and all unused stores and materials, tools, plant, equipment, temporary Buildings, and things shall be removed and the site and work cleared or rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the Engineer-in-charge at the Contractor's expense on/or before the Schedule date of completion.

The BHEL shall have power to take over from the Contractor from time to time such sections of the work as have been completed to the satisfaction of the Engineer-in-charge.

The Engineer-in-charge shall certify to the Contractor the date on which the work is completed and the state thereof.

The Engineer-in-charge shall also certify to the Contractor the state of the work at the end of the maintenance period, where applicable.

The Engineer-in-charge shall also certify to the Contractor the state of the work at the end of the maintenance period, where applicable.

3.COMPENSATION FOR DELAY

If the contractor fails to maintain the required progress in terms of condition 1(TIME) or to complete the work and clear the site on or before the contracted or extended date period of completion, he shall, without prejudice to any other right or remedy of the BHEL on account of such breach, pay as agreed compensation an amount calculated as stipulated below or such smaller amount as may be fixed by the BHEL on the contract value of the work for every week that the progress remains below that specified in condition 1(TIME) or that the work remains incomplete.

This will also apply to items or groups of items for which separate period of completion has been specified. For this purpose the term 'Contract Value' shall be the value at contract rates of the work as ordered.

- a) Completion period (as originally – @ 1 Percent per week.
Stipulated) not exceeding 6 months.
- b) Completion period (as originally- @ ½ percent per week.
Stipulated) exceeding 6 months and
Not exceeding 2 years.
- c) Completion period (as originally- @ ¼ percent per week
Stipulated) exceeding 2 years.

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed the under noted percentage of the contract value or of the contract value of the item or group of items of work for which a separate period of completion is given:

- d) Completion period (as originally – @ 10 Percent.
Stipulated) not exceeding 6 months.
- e) Completion period (as originally- @ 7½ percent.
Stipulated) exceeding 6 months and
Not exceeding 2 years.
- f) Completion period (as originally- @ 5 percent

12. Is the individual/sole proprietor/any partner/directors of company:
- (a) Dismissed Government Servant Yes No
- (b) Having business banned/suspended by any government in the past Yes No
- (c) Convicted by a court of law Yes No
- (d) Retired Engineer / Official from Engineering Departments of Govt. of India within last two years Yes No
- (e) Director or partner of any other company / firm enlisted with TNEB or any other department Yes No
- (f) Member of Parliament or any State Legislative Assembly If answer to any of the above is 'Yes', furnish details on a separate sheet Yes No
13. Name of person holding power of attorney. (Copy to be enclosed)
- (a) Nationality Indian Other
- (b) Liabilities
14. Name of Banker with full address
(Note: Banker's report in original preferably in sealed cover, giving the financial capacity to handle works of the required magnitude should be enclosed)
15. Place of business
16. Date of commencement of business
17. Details of Income Tax paid during last three years. 1. 2008-09
2. 2007-08
3. 2006-07
18. State whether Income Tax Clearance Certificate from the appropriate authority in the prescribed form enclosed. Yes No
19. Contractor's capital in the business. (in case of partnership, please mention percentage of shares and amount)
20. Quantum of business done during last three financial years 1. 2008-09
2. 2007-08
3. 2006-07
21. Value of fixed assets of the business in the last three years 1. 2008-09
2. 2007-08
3. 2006-07
22. Guarantee limits (if any) enjoyed by the firm.
23. Over-draft limits (if any) enjoyed by the firm.

CONTRACTOR

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24. State whether Audited report for Profit and Loss Account & Balance Sheet for last three years enclosed. Yes No

25. Details of Technically qualified staff :-

Sl. No.	Name and Designation	Qualification	Experience and Specialization	Remarks if any

26. Whether the details of T & P, Machinery, Equipments and work shop as per Annexure – I given. Yes No

27. Whether enlisted with any other Department (a) If yes, give details: Yes No

(i) Name of Department & address

(ii) Money limit

(iii) Enlistment No. & date

(iv) Valid upto

28. License No. and validity of license obtained from Dy. Chief Inspector of Factories / Assistant Commissioner of Labour

29. Whether the applicant has registered his workmen under Employees' State Insurance Act. If so, code number may be furnished. If applied, attested copy of application for registration acknowledged by ESI Authorities.

30. Whether the applicant has registered his workmen under Employees' Provident Funds and Miscellaneous Provisions Act ?. If so, the code number may be furnished. If applied, attested copy of application for registration with acknowledged by PF Authorities.

31. Indicate Central / Local Sales Tax, Excise Duty code Numbers and PAN. 1. CST
2. LST
3. ED
4. PAN

32. Is any person working with the applicant as a near relative of the Officer / Official of BHEL Yes No

(a) If yes, give details

(i) Name

(ii) Staff No.

(iii) Designation & Department

(iv) Unit

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33. Details of similar works completed during the last seven years (To be submitted in separate sheet as per Annexure-I.)
34. Certificates from clients in original as per proforma given in **Annexure -II** for all eligible works.
35. Certificates:
 - (i) I/We (including all partners) certify that I/We have read the Preamble & Terms and conditions and shall abide by them.
 - (ii) I/We certify that the information given above is true to the best of our knowledge. I/We also understand that if any of the information is found wrong, I/We am/are liable to be debarred.
 - (iii) I/We certify that I/We will not get myself / ourselves registered as contractor(s) in BHEL under more than one name.
 - (iv)
 - (a) I certify that I did not retire as an Engineer of Gazetted rank or as any Gazetted Officer employed on Engineering or Administrative duties in any Engineering Department of the Government of India during the last two years. I also certify that I have neither such a person under my employment nor shall I employ any such person within two years of his retirement except with the prior permission of the Government. (For Individuals seeking enlistment in their own name).
 - (b) We certify that none of the partners/directors retire as an Engineer of Gazetted rank or as any Gazetted Officer employed on Engineering or Administrative duties in last two years. We also certify that we have neither under our employment any such person nor shall we employ any person within two years of his retirement except with the prior permission of the Government. (For partnership firms and limited companies).

Signature(s) of the applicant(s) Name	Signature	Address (Seal in case of Firm)
1.
2.
3.
4.
5.

Date:

- NOTE:** 1) All the relevant certificates, details etc. should be attached with the application.
 2) The terms that are not applicable may be scored out.

Details of documents attached:-

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

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ANNEXURE - I

DETAILS OF SIMILAR WORKS COMPLETED DURING THE LAST SEVEN YEARS (2001-2002 TO 2007-2008)							
S.NO	Name of work & Agreement No	Date of commencement	Date of completion		Reasons for delay & compensation levied, if any	Work Order Value	Name, designation & Complete address of the authority for whom the work was done
			Stipulated	Actual			
DETAILS OF WORK COMPLETION CERTIFICATED, WORK ORDER ETC. ARE TO BE FURNISHED							

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CLIENT'S CERTIFICATE REGARDING PERFORMANCE OF CONTRACTORS

Name & Address of the Client

.....
.....

Details of works executed by Shri . M/s

- 1. Name of work with brief particulars :
- 2. Agreement No. and date :
- 3. Date of commencement :
- 4. Stipulated date of completion :
- 5. Actual date of completion :
- 6. Details of compensation levied for delay, if any:
- 7. Tendered amount :
- 8. Gross amount of the work completed :
- 9. Name and address of the authority under whom work executed :
- 10. Whether the contractor employed qualified Engineer/Overseer during execution of work? :
- 11. (i) Quality of work (indicate grading) : Outstanding/V.Good/Good/Poor
(ii) Amount of work paid on reduced rate basis, if any :
- 12. (i) Did the contractor go for arbitration ? :
(ii) If yes, amount of claim :
(iii) Amount received :
- 13. Comments on the capabilities of the contractor
 - (a) Technical Proficiency : Outstanding/V.Good/Good/Poor
 - (b) Financial Soundness : Outstanding/V.Good/Good/Poor
 - (c) Mobilisation of adequate T & P : Outstanding/V.Good/Good/Poor
 - (d) Mobilisation of manpower : Outstanding/V.Good/Good/Poor
 - (e) General behaviour : Outstanding/V.Good/Good/Poor

NOTE: All columns should be filled in properly.

Signature of the Certifying Officer
with Official seal.

ANNEXURE III

ANNUAL RATE CONTRACT FOR OPERATION AND MAINTENANCE OF 110 / 11 KV SUBSTATION.

SCOPE:

Carrying out day to day operation and Maintenance works in 110/11 KV switch yard , Electrical control panel room, 11KV VCB panels , 11KV/415 V station transformer, and other auxiliary equipments installed in the SS by deploying operation & maintenance staff with necessary safety equipments & tools . The O&M should be performed for 24 Hrs (3 shifts) for 365 days .

Note:

1. The contractor should engage qualified & experienced operating & maintenance personnel. The total staff proposed for this contract should be mentioned separately for O&M in their offer
2. Clubbed Accommodation for the O&M staff will be provided free of cost at BHEL township wherever available .
3. Spares and other electrical consumable items will be supplied free of cost at site.
4. Required Transportation for O & M staff to be arranged by the contractor on their own.
5. PF & ESI other statutory conditions should be taken care by the contractor.

DETAILED TECHNICAL SPECIFICATION :

OPERATION

- 1.1 Observing and recording the voltage, current, KVA demand, temperature , OLTC system, Tap position of the three 10/12.5 MVA Transformers and maintaining the correct supply voltage at the Transformers out going as required.
- 1.2 Inspection of all the switch yard equipment as indicated in the single line diagram and noting **down any abnormalities of the system and inform to Engineer-in-charge for appropriate direction.**
- 1.3 Checking of all the earth pit, connections and watering periodically for its healthiness.
- 1.4 Cleaning of the yard free from vegetation regularly.

- 1.5 Checking the Transformer for its normal working condition and inspect the Transformer for its leaking of oil, conservator oil level, changing of silica gel etc.
- 1.6 Checking the SF6 breakers daily for the gas pressure position and ensure its safe operation.
- 1.7 Inspect the total sub station Bus bar & conductor junction clamps and its connection for healthiness & effectiveness.

2. 110 KV CONTROL PANEL ROOM.

- 2.1 Regular Cleaning of all the 11 KV HT SWG Panel, control Relay, Panels, battery charger, ACDB,DCDB,RTCC panel,110 KV yard control box,control panels,push button station,CT,PT& BAY control junction boxes and RTCC panels
- 2.2 Checking the DC Battery & Battery Charger for its proper functioning.
- 2.3 During fault condition, observe the flag indication of the protective relays connected with 110 KV and 11 KV panels (Viz. Distance protection, Restricted Earth, Earth fault, Differential protection, Over Load etc) and take corrective steps to resume the power as early as possible as directed by engineer -in-charge,
- 2.4 Take immediate action to rectify the fault. By taking corrective action and it has to be recorded(Like IR values and other relevant readings to healthiness satisfaction.) Before restoring power Obtain clearance from the Engineer / shift-in-charge,
- 2.5 Record of all the activities and its safe operating condition in the SS log book thoroughly.

3. MAINTENANCE OF SUB STATION :

- 3.1 During maintenance work, the following works to be carried out at 110 KV Substation yard / 11 KV panels.
 - a) Required line clearance to be obtained for switching OFF 110 KV breakers /isolator /11 KV VCB,
 - b)Draw out breaker, opening of switches to ensure safety to work in the system.
- 3.2 Resume power ('ON') after removing of Earth Rod, inspect the line / panels free from materials / tools and return the LC.

3.3 Preventive maintenance to be carried out for the following equipments once in a year and respective preventive maintenance check list has to be filled in and recorded.

- (a) 3 X 10 / 12.5 MVA Transformer
- (b) Earth pits and mat connections healthiness
- (c) Analog Relays in 11 KV SWG, 110 KV C&R and other panels
- (d) 4 Nos. SF6 Breaker in 110 SS Yard
- (e) control and Relay Panel Setting & its function
- (f) 3 Nos. Potential transformers
- (g) 4-Sets Current transformers
- (h) 5 Nos. of Isolators with and with out earth switch
- (i) Out going cables on transformers and 11 KV SWG panel
- (j) 22 Nos. of M/s ABB make 11 KV VCB panel
- (k) Battery and battery charger of M/s Amara Raja make
- (l) OLTC panel of M/s Volt Amp make
- (m) Marshalling Box (BMK)
- (n) Marshalling kiosk (Trans)
- (o) ACDB & DCDB
- (p) Yard Lighting system
- (q) RTCC panel

3.4 In case of major breakdown or emergency cut OFF power supply to the faulty section, the same to be informed to BHEL Engineer-in-charge.

3.5 Keeping in touch with TNEB / ALUNDUR staff for any instructions regarding Operation during power failure / tripping well in advance and inform BHEL Engineer-in-charge.

3.6 All the electrical complaints should be attended and recorded immediately.

3.7 Maintenance of AC & DC distribution boards and panels of the equipments wherever required.

3.8 Proper Safety procedure should be followed by using safety shoes, safety hand gloves etc. as per the instructions while executing the service works in 110 KV yard, 11 KV panel room & Battery room.

3.9 The contractor may specifically note that the scope of work as detailed above are only indicative of the probable nature of work and the entire scope of work is not limited to the information furnished above.

3.10 Required spares will be issued by BHEL free of cost at BHEL stores.

4. QUALIFICATION & EXPERIENCE OF THE MANPOWER

4.1 Site Engineer:

Degree in Electrical engineering OR Diploma in Electrical Engineering with minimum 2 year Experience of 110 KV SS operation and maintenance .

4.2 Supervisors:

Diploma in electrical Engineering OR, ITI in Electrical trade with minimum of 5 year experience in EHT sub station operation and maintenance with valid C license issued by electrical licensing Board.

4.3 Skilled Technician:

ITI in Elect. Trade with minimum 5 year experience in EHT SS operation and maintenance with valid B license issued by electrical licensing Board.

4.4 Semi skilled Technician:

Matriculation / non metric with 2 years of experience in EHT SS operation and maintenance.

5. 110 / 11 KV SUB STATIONS -- EQUIPMENT LIST

Following are the equipments available in the SS.

- 5.1 90 KV LIGHTING ARRESTOR-12 nos.
- 5.2 ISOLATORS 110 KV MOTORISED WITH EARTH SWITCH-2nos
- 5.3 ISOLATORS 110 KV MOTORISED WITH OUT EARTH SWITCH-3 nos.
- 5.4 110 KV LINE CURRENT TRANSFORMER 500 / 1 Amps WITH 3 SINGLE PHASE SECONDARY-1set.
- 5.5 110 KV TRANSFORMER BAY CURRENT TRANSFORMER 100 / 1 Amps WITH 3 SINGLE PHASE SECONDARY-3 sets.
- 5.6 POTENTIAL TRANSFORMER FOR BUS PT -110KV / $\sqrt{3}$ /110V/ $\sqrt{3}$ --1set.
- 5.7 110 KV 2000 A SF6 CIRCUIT BREAKER 3 PHASE-1no.
- 5.8 110 KV 1250 A SF6 CIRCUIT BREAKER 3 PHASE-2nos.
- 5.9 **110 KV 800 A SF6 CIRCUIT BREAKER 3 PHASE-1no**
- 5.10 110 / 11 KV, 10 / 12.5 MVA capacity POWER TRANSFORMERS Dyn. 11-3nos.
- 5.11 11 KV Switch Board(12 Panels)-- 2-Set.
- 5.12 Maintenance free 110V DC 100AH BATTERY -1set.
- 5.13 BATTERY CHARGER-1no.
- 5.14 ACDB Panel -1no.
- 5.15 DCDB Panel -1no.

6. Contractor Pre qualification condition :

6.1) LICENSE:

- a) Valid ESA contract License issued by TamilNadu OR other states.

6.2 POSSESSION OF TESTING FACILITY & TOOLS

- a) Automatic 3 phase relay testing unit to test numerical relays.
- b) HV capacitance & tan delta test kit to test power transformer.
- c) Micro ohm meter for contact resistance measurement.
- d) Transformer winding resistance meter.
- e) Transformer turns ratio meter.
- f) primary current injection test kit up to 2000A for CT test.
- g) 3 Pole / 1 Pole time interval meters for breaker timing test.
- h) Digital / motorised insulation resistance tester up to 10 KV.
- i) Battery operated digital / soil resistivity test kit.
- j) 3 Phase Energy Meter Test kit for Energy meter testing.
- k) Single Phase Automatic / Manual relay test kit for testing numeric / static / Electromagnetic relays.
- l) Transformer oil filtration machine.
- m) Transformer oil test kit.

6.3 EXPERIENCE

- a. The contractor should have min 3 year experience in operation and maintenance of similar or higher capacity EHT SS with work order /performance certificate should be furnished with the offer for considering the tech . suitability of the offer.
- b. In case the contractor happen to operate and maintain the sub station with required spares and consumables, the list of spares and consumables with their price, manufactures of the consumable etc. to be indicated(OPTIONAL).
- c. The contractor can visit and study our BHEL 110 / 11 KV before quoting the contact if necessary.

7.PAYMENT TERMS:

Quarterly payment at the end of every quarter.

BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI-14

MAINTENANCE & SERVICES

NAME OF THE WORK: ANNUAL RATE CONTRACT FOR OPERATION AND MAINTENANCE OF 110/11KV SUBSTATION.

Enquiry no:9250900154 dt :26/09/2009

Due date:19/10/2009 15.00 Hrs.

Sl. No	Description of the work	UOM	Qty	Value in Rs.
1.	Carrying out the Operation And Maintenance of 110/11KV Sub- station for one year as specified in the Annexure III (Note:) The quoted rate shall be exclusive of Service Tax.	AU	1	

General terms and conditions

- 1 Payment terms: Agency shall submit the bill for every quarter (every three months)with all necessary supporting documents and payment shall be made after certification of the submitted bills.
- 2 Validity period : This order is valid for period of one year from the date of order.
- 3 Contractor shall take all safety precautions are provide adequate supervision by competent person in order to do the job safely and without damage to the plant ,personnel, equipment and the environment.
- 4 Tax deduction will be made from the every bill at the prevailing rate as per the government rule and regulation from time to time.

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- 5 Detailed scope of work and other terms and conditions are specified in the Annexure I.
- 6 All statutory compliance about the contractor staff will be in your responsible.
- 7 The contractor shall ensure the display of monthly duty chart /shift roster maintenance schedule, maintenance progress and data chart of all the important parameters to be monitored periodically as per the Annexure.
- 8 The work carried out this contract shall be though out the year(including Sundays and other declared holidays).contractor shall note that the contact workmen engaged paid holidays on Annual National and Festival Holidays as granted to BHEL other than optional Holidays.
- 9 The scope of the work is only indicative of the probable nature of the work and the entire scope of work is not limited to the information furnished above.
- 10 The contractor shall obtain at his expanses an ESI,PF for the work men employed by the contractor.
- 11 The Tenders will be invited into 2parts viz,, Techno-commercial Bid and Price Bid. You are required go through all the conditions and other details pertaining to the work like Detailed technical specification, general conditions, special conditions etc,.
- 12 In order to facilitate the tenderers to clearly understand scope of work and also terms and conditions of tender
- 13 You shall also produce power of attorney in original, in favor of your representative who will deal with all the matters relating to the contract and works.