Bharat Heavy Electricals Limited

High Pressure Boiler Plant Tiruchirappalli – 620 014. India Civil Engineering Department (Township)

TENDER DOCUMENT (QUALIFICATION BID)

Name of work : Improvement & Modification works for the

proposed BHE-ECB Branch at No.1 Good

Shed Road, Trichy - 2.

Value of work : Rs. 8.88 Lakhs + (Applicable GST)

Tender Notice No. : CT: TN: 011 / 17 - 18

Tender Schedule No. : CT: TS: 011 / 17 - 18

Period of Contract : 02 (Two) Months

EMD : **Rs. 17,800/-** (One Time EMD is no more

applicable. Hence tenderers who had previously remitted one time EMD shall have necessarily take full amount of EMD in the

form of DD)

Issue to : M/s

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI – 620 014 CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

BHE: C: P: T: 09: Dt. 05.08.2017

To

The Tenderer,

Dear Sirs,

Sub: Improvement & Modification works for the proposed BHE-ECB Branch at No.1 Good Shed Road, Trichy - 2.

Ref:

Tender Notice No. CT: TN: 011 / 17 - 18
 Tender Schedule No. CT: TS: 011 / 17 - 18

Please find enclosed / attached non - transferable tender document containing

- ✓ Qualification bid consisting of Preamble, Specifications, General Conditions of Contract, Norms for Qualification and Qualification Pro forma.
- Price Bid consisting of Preamble, Bill of Quantities to offer your most competitive rates for all the items.

Tender for the work should be submitted in a sealed cover consisting of 4 (four) inner sealed covers such as

- a. Qualification bid cover
- b. Price bid cover
- c. EMD cover and
- d. Cover with DD towards cost of tender document (if the document is downloaded as described in 2nd para in SI. No. 1 below) all super scribing the name of work, Tender Notice No., Tender Schedule No., the contents etc.,
- 1. EMD cover shall contain requisite EMD (Rs. 17,800/-) in the form of DD. <u>Tender without Tender document cost will be summarily rejected and the respective qualification bid shall not be opened.</u>

In case of tender documents downloaded from website, tender shall accompany the tender cost of Rs.750/- (Rs. 825/- per document if required by post) in the form of Demand Draft (separate cover) in addition to the EMD amount in the form of Demand Draft.

All Demand Draft shall be drawn in favour of **BHEL**, **Trichy** payable at Tiruchirappalli.

- 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. 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 rate in Percentage Below (100-X%) / At par (100%)/ Above (100+X%) of the rates provided in Bill of Quantities appended below at page No. 13 to 24 in price bid.

(Important Note: One time EMD is no more applicable for tender, as per recent corporate guidelines. Hence tenderers who had previously remitted one time EMD, shall have to necessarily take EMD of specified amount mentioned for this tender)

The completed qualification bid and price bid along with requisite EMD of Rs. 17,800/- for the work in the form of Demand Draft in favour of BHEL, Trichy shall reach the office of the undersigned on or before 21 08 2017 at 14:00 hrs. EMD in any other form will not be accepted. The qualification bid will be opened on the same day at 14:00 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 or the details of reverse auction if any 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 with authorization letter for Tender opening.

The tenderers who are desirous of sending their tender documents through your authorized representative/ by post / by courier are advised to send the same well in advance so as to reach the office of **Sr. Mgr. / Civil / Plng. D & QC, Bldg. 53, BHEL, Trichy – 620 014**, Tamil Nadu on or before **21 08 2017** at 14:00 bre

The late tenders received after the tender submission / opening time will be summarily rejected and will not be considered for any reason.

Clarification if any, can be obtained contacting following phone No. 0431 – 257 5347 / 257 1214. Fax No. : 0431 – 2520710. Email id: shamalam@bheltry.co.in / ravi@bheltry.co.in

Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, changes, Errata, Modifications, Revisions, etc., to the Tender Specifications will be hosted in BHEL webpage (www.bhel.com --> Tender Notifications --> View Corrigendum) and not in the newspapers. Bidders to keep themselves updated with all such information. One set of tender documents shall be retained by the bidder for their reference.

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

Thanking you,

Yours faithfully For and on behalf of BHARAT HEAVY ELECTRICALS LIMITED,

Sr. Mgr. / Civil / Plng. D & QC

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI – 620 014 CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

Value of work: Rs. 8.88 Lakhs Period of Contract: 02 (Two) Months

PREAMBLE

- 01. The scope of work includes Improvement & Modification works for the proposed BHE-ECB branch at No.1 Good Shed Road, Trichy 2.
 - i. The existing BHEECB branch office is located at Clives Building, Nandhi koil street, Trichy-2. Now this office is proposed to be shifted to the new place located at M/s Tiruchirappalli District Amaravathi Consumers Cooperative Wholesale stores Ltd, No.1, Good shed road, Trichy-2.
 - ii. The work involves Civil, electrical as well as removing and replacing the furniture items and MS Grill from old office to the new office, as specified in the Bill of quantities, in three parts.
- 02. The tender value <u>includes</u> cost of all materials, labour, taxes involved in Civil, Electrical, Miscellaneous works etc. The vendor should furnish the materials and execute the work, confirming to relevant latest IS specifications as per instructions of Engineer in charge.
- 03. Time is the essence of the contract. Being a time bound project, the contractor should make all efforts to complete the work in time. Even though the overall completion period is indicated as **2 (Two) months**, the works shall be completed progressively and handed over as per mutually agreed schedule.
- 04. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (twenty percentage).
- 05. The contractor has to execute any item of work irrespective of the quantity available in the tender without any reservation till the contract value does not vary more than 20%.
- 06. Quoted rate shall be firm throughout the contract period of 02 (Two) months or till completion of work and no cost escalation is allowed on any account.
- 07. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The Percentage rates quoted shall be deemed to be inclusive of all such contingencies.

08.

1) Taxes & Duties:

The percentage rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, establishment, services, revenue expenses, overheads, profits & all other incidentals etc., complete. Rate quoted shall include all royalties, terminal taxes, Octroi duties, and any other taxes leviable under the State or Central Government rules. Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect.

The percentage rate quoted shall not include applicable GST.

- a. Response to Tenders will be entertained only if the contractor has a valid GST registration number which should be clearly mentioned in the offer.
- b. The Contractor shall mention their GST registration number in all their invoices and invoices shall be in the format as specified / prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice No., commercial invoice No. etc., then the Invoice No. which is linked / uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN / SAC Code, etc.

- c. All invoices shall bear the SAC code (Services Accounting Code) & HSN Code (if applicable) for each item separately (Harmonized System of Nomenclature).
- d. Payment shall be effected only after submission of declaration to the effect that all invoice particulars are / were uploaded in the GSTN network / portal & All tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If it is not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL.
- All documents like Work completion certificate and any other document mentioned in PO, shall be submitted.

For all works executed within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle (if Input Tax Credit is applicable). In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the works executed, in such case availing of tax credit will be deferred to next month or so.

- f. In case of discrepancy in the data uploaded by contractor in the GSTN portal or in case of any shortages or rejection in the works executed, then BHEL will not be able to avail the tax credit (if Input Tax Credit is applicable) and will notify the Contractor of the same. The Contractor has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections, within the calendar month notified by BHEL.
- g. For any such delay in availing of tax credit for reasons attributable to the Contractor (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills.

All taxes and duty other than GST & GST Cess

The contract price shall be inclusive of all (save the specific exclusions as enumerated in this contract) taxes, fees, license charges, deposits, duties, tools, royalty, Octroi, commissions or other charges which may be levied on the input goods consumed and output goods delivered in the course of Works Contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from the contractors bills or otherwise as deemed fit.

Goods and service Tax (GST) & Cess

The contractor shall submit the proof of GST registration to BHEL at the offer stage. Contractor's price/rates shall be exclusive of GST & GST Cess (if applicable) herein after termed as GST. Contractor shall submit to BHEL the GST compliant tax invoice/debit note / revised tax invoice on the basis of which BHEL will claim the input tax credit in its return (if Input Tax Credit is applicable). GST charged in the tax invoice / debit note/revised tax invoice by the contractor shall be released separately to the contractor only after contractor files the outward supply details in GSTR-1 on GSTN portal and input tax credit of such invoice is matched with corresponding details of outward supply of the supply and has paid the GST at the time of filing the monthly return.

In case of deduction / excess in completion certificate/measurements credit note / debit note shall be issued within the time limit prescribed in GST law and accordingly contractor shall adjust his tax liability.

If GST will be payable on reverse charge, then the same shall be payable directly to Govt. by BHEL under reverse charge.

In case BHEL has to incur any liability (like interest, penalty etc.) due to denial or reversal of input tax credit for the reasons attributable to the contractor or any such delay in availing of tax credit for reasons attributable to the Contractor, the same shall be recovered from the contractor.

In case BHEL is deprived off the Input tax credit due to any reason attributable to contractor, the same shall not be paid to the contractor or will be recovered from the contractor.

TDS under GST (as & when applicable) shall be deducted at prevailing rates on applicable value from the running bills.

New Taxes / Levies - In case the Government imposes any new levy / tax on the output service / goods / after price bid opening, the same shall be reimbursed by BHEL at actual.

In case any new tax / levy / duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of Price Bid. Claim for any such impact after opening the Price Bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.

- 09. The tenderers are advised to visit the sites and get themselves acquainted with the site conditions before submitting the offer.
- 10. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of BHEL. In such case, it is to be carried out in the presence of BHEL officials or their authorized persons.
- 11. The work shall be carried out as per Department Work & Safety procedure, AWS / BIS specifications, standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities provided in the Price Bid. <a href="Tenderer has to quote Common single Percentage Rate (Below (100-X)% / At Par(100)% / Above(100+X) %) to be Quoted with respect to the rates provided in the Bill of Quantities provided in the Price Bid. Individual item rates shall be derived based on the quoted common single percentage shall be deemed to be the contracted rates for various BOQ items for all purposes.
- 12. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract in force.
- 13. After award of work the contractor has to furnish the security deposit, as per clause 13 of Tender Notice, attached in the Tender Document. Also it is to be noted that after award of work the contractor has to furnish 50% of security deposit before the commencement of work.
- 14. For any clarification on the tender document, the bidder may seek the same in writing or through email, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- 15. The contractor should bring the construction earth moving machineries like Poclain, Paver, road Roller, JCB etc., as and when required for the work without any delay if necessary. Also required number of the following tools & plants / instruments shall be made available at site for the works as and when required
 - a) Precise Levelling instruments and theodolite.
 - b) Full load mixture machine / mini batching.
 - c) Petrol / Kerosene driven vibrator / mechanical vibrator
 - d) Cube moulds
 - e) Inter carting vehicle (tractor, hand trolley etc.)
 - f) Hydra cranes
 - g) Power operated winches
 - h) Mobile / Hydraulic crane
 - i) Welding machine etc.
- 16. The contractor has to arrange sufficient number of lorries to collect & transport the surplus earth construction debris generated etc. at site. Otherwise would clear the debris at the contractor's risk and cost.
- 17. In the event of any conflict between requirement of any clause of this specification / documents / drawings/ data sheets etc. of requirements of different codes / standards specified the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error / missing pages / other clerical errors in the tender documents, noticed must be pointed out before submission of offer, else BHEL's interpretation shall prevail.
- 18. Order of Precedence

In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below.

- Amendments / Clarifications / corrigenda / errata etc. issued in respect of the tender documents by BHEL.
- b. Notice Inviting Tender (NIT)
- c. Price Bid
- d. Qualification Bid
- e. General Conditions of Contract.
- 19. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
- 20. The following eligibility criteria shall be complied to fulfill the Qualification Bid:
 - i) The tenderer should have EPF, ESI, PAN & GSTIN No., proof of having submitted IT returns acknowledged by IT office, Profit & Loss account and balance sheets certified by the auditor for the last 3 (three) financial years (2013-14, 2014-15, 2015-16).
 - ii) Average annual turnover for the last 3 (three) financial years (2014–15, 2015-16, 2016-17) ending 31st March, shall be at least 30% of the estimated cost.
 - iii) Experience of having successfully completed Civil works during last 7 (Seven) years ending (i.e.) from 01st August 2010 to 31st July 2017 should have successfully completed works either
 - a) Three Similar completed works costing not less than the amount equal to 40% of the estimated cost.

(or)

- b) Two Similar completed works costing not less the amount equal to 50% of the estimated cost. (or)
- c) One Similar completed work costing not less than the amount equal to 80% of the estimated cost
- iv) Experience of having successfully completed Electrical works during last 7 (Seven) years ending (i.e.) from 01st August 2010 to 31st July 2017 should have successfully completed works either
 - a) One similar completed work costing not less than the amount equal to 30% of the estimated cost.
- v) Latest Solvency Certificate (obtained before 6 months from the date of tender opening) from Nationalized / Scheduled Bank shall be at least for a value of 40% of the estimated cost.
- 21. Documentary evidences (Xerox copies Gazetted officer attested & self-attested) for turnover, works experience, EPF, ESI, Service tax and Balance sheet ,Profit & Loss account & IT returns for the last three years etc., all as required & indicated in the tender document should be furnished, without which it will not be taken into account. The tenderers shall produce original document for verification if so decided by BHEL.
- 22. The norms for qualification is attached in the Qualification Bid Document. Evaluation will be done accordingly.
- 23. The contractor may be required to undertake works at remote places and in such cases the contractor should make own arrangement for safety of BHEL materials, water required for the work and power etc. without extra claim from BHEL.
- 24. The contractor has to carry out all the works on all days except Sundays and BHEL holidays under normal circumstances. However sweeping of all shop floors has to be done in Sundays and BHEL holidays, if required.

- 25. The works executed in the own name of the tenderer only will be considered for eligibility criteria. The nominated committee may also visit the works executed by the contractor / tenderer to ascertain the nature of work relating to similar works before qualifying.
- 26. The contractor shall strictly adhere to various labour laws in force.
- 27. The tenderer has to ensure payment of Minimum Wages as per Tamil Nadu State Minimum Wages as applicable under law from time to time.

The labourers engaged in this contract shall be paid additional payment as mentioned below in addition to the payment of Minimum wages as stated above.

a) Unskilled Worker Rs. 3200 per month b) Semi-skilled Worker Rs. 3700 per month c) Skilled Worker / Supervisor Rs. 4100 per month

Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

At present the Tamil Nadu State Government Minimum wages declared is enclosed for your reference (Page No. 15). Normally the revision will be with effect from 1st April of every year. Tenderers are requested to quote their offer after taking into account of the above factor also.

The contractor has to disburse the salary / wages for their workmen preferably through Bank. If wages are paid through Banking channel, the relevant Bank statement / proof for Bank payment should also be produced along with PF and ESI challans to Welfare Section every month."

- 28. The contractor shall ensure compliance of EPF & MP Act 1952, by the subcontractors, if any engaged by the contractor.
- 29. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex including biometric system.
- 30. The offers of the tenderer / bidders who are on the banned list and also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site (www.bhel.com → Tender Notification → List of Banned Firms).
- 31. 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. The contract should arrange for surveying construction site at his own cost.
- 32. BHEL reserves its right to reject the offer on account of unsatisfactory past performance by the present tenderer / his group / group of companies / any member in the consortium in case of consortium in another project / sister unit awarded under different enquiry. The tenderer has to declare the facts of performance with his customers and their contact details with phone & e-mail ids in his letter head. BHEL reserves its right to cancel the tender without assigning any reason.
- 33. Tenderers are requested to furnish the duly filled in E format (attached as separate in the Qualification Bid) sheet along with a cancelled cheque leaf to accept Electronic Fund Transfer / RTGS transfer for any payment from BHEL, Trichy.
- 34. The contractor has to submit the organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.
- 35. The contractor should submit the programme for the completion of work and the list of machineries and site personnel to be deployed for the work along with tender.

- 36. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor in the last week of every month or as required by the department for processing bill.
- 37. The contractor should establish his own site office, labour colony, fabrication yard, handling facility, storage facility etc., for which vacant land will be allotted on specific request for which the rent will not be cancelled.
- 38. The contractor is required to carry out construction activities as directed by the department officials. It is required to engage certain minimum strength of staff for effective supervision of works as indicated below.

Min. of Supervisor - 1 No. Min. of Graduate Engineer - 1 No.

In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.

- 39. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site.
- 40. The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled Mason, Carpenter, Plumber, Welder, fitter, Mistry, Electrician, Technically Experienced, etc. so as to execute the works simultaneously in all areas of work. The Technical persons with experience shall have to produce valid certificate for verification.
- 41. Expertise labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, watersupply, railway track laying and aligning works, sewerage system work etc.
- 42. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
- 43. All the works shall be executed as per the standard specifications as provided in TNBP / BIS.
- 44. All the materials to be used in the work and the nature of work shall confirm to the respective TNBP & BIS and National Building Organization, Standard Specifications forming part of "ALL INDIA STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
- 45. With regard to specifications not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or Electrical specifications approved by Bharat Heavy Electricals Limited, shall apply.
- 46. The contractor should use only the materials of brand and quality as approved by BHEL.
- 47. All materials and consumables brought by the contractor should have manufacturer's certificate.
- 48. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
- 49. The contractor should maintain proper accounts for cement, reinforcements, Structural steel and other materials if any and these should be available at the site of work for verification and check by the Officials of this Organization at any time.
- 50. All tools and plants including jack hammer with silencer & bits, rock drilling machine, etc., required for all the works covered under this contract will have to be brought by the contractor.
- 51. To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.

- 52. All safety measures are to be followed during execution of work. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure like railway lines if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department.
- 53. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
- 54. The contractor should extend fullest co-operation with the third party agencies engaged, if any by BHEL, to adhere the Quality Control Procedures ensuring quality.
- 55. The contractor should extend full 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.
- 56. The Contractor has to make his own arrangements for water, electrical energy and Compressed Air etc., to the work.
- 57. Bank Guarantee format can be obtained after award of work by the successful tenderer.
- 58. Bank guarantee format and the list of consortium banks are enclosed for BG submission against Security Deposit.
- 59. No advance / No mobilization advance will be given and the part-payment or advance for raw materials brought by the successful tenderer will not be paid. The payment for the finished items of works only will be paid after incorporating the required raw materials into the work, if any.
- 60. No over Run charges shall be applicable under any circumstances.
- 61. LD / Penalty clause is applicable as per General Conditions of Contract in force.
- 62. BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
- 63. In all matters of dispute, the decision of General Manager BHEL, Tiruchirappalli 620 014 is final and binding on the successful tenderer.
- 64. Any claim or dispute arising from the tender stage, till / after completion of the work under the terms and conditions stipulated in the tender document / contract agreement shall only be enforced or settled in the courts at Tiruchirappalli, tamilNadu only.
- 65. **Force Majeure clause**: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non-performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by BHEL subject to prompt notification by the tenderer to BHEL of the particulars of the events and supply to the BHEL if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.
- 66. The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.
- 67. Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.

- 68. In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be binding on both the parties to the business.
- 69. Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalization of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.
- 70. If, in case of opening of price bids, when there is a Tie in the percentage rates quoted by the tenderers, the ranking will be decided based on Lot System, in the presence of the bidders who witness the price bid opening.

71. Deviations

The contractor shall not make any alteration in addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer-in-charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the contract.

The Accepting Officer may deviate either by way of addition or deduction, from the work so described, provided that the contract sum be not thereby varied on the whole by more than the percentage set out in the tender documents. The value of all addition and deductions will be added to, or deducted from the contract sum. Whenever the Accepting Officer intends to exercise such a right, his intention shall specify the deviations which are to be made, the lumpsum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the entire contract.

Any objection by the Contractor to any matter concerning the order shall be notified by him in writing to the Engineer-in-charge within **Seven days** from the date of such order, but under no circumstances shall the work be stopped (unless so ordered by the Engineer-in-charge) owing to differences or controversy that may arise from such an objection. In the absence of such a notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein. In the event of the contractor failing to agree with the Engineer-in charge regarding the terms of the proposed deviation, the objection shall be referred to the Project Manager whose decision shall be final conclusive and binding on the Contractor.

72. Arbitration:

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Executive Director / General Manager of BHEL and if ED is unable or unwilling to act, to the sole arbitration of some other person appointed by the ED / General Manager, willing to act as such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Manager / Senior Engineer / Engineer-in-charge is expressed in the contract to be final and conclusive.

There will be no objection if the arbitrator so appointed is an employee of B.H.E.L and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such Executive Director / General Manager as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

Subject as aforesaid the provision of the Arbitration & Reconciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

The arbitrator(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

The work under the Contract shall, if reasonably possible, continue, during the arbitration proceedings and no payment due or payable, to the Contractor shall be withheld on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of first hearings.

The arbitrator shall give a separate award in respect of each dispute or difference referred to him.

The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply the provisions of BPE office memorandum No. BPE/CL 001/ 76MAN / 2 (1.10) 75-BPE (GM-1) dated 1st January 1976 or its amendments for arbitration shall be applicable.

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or in relation to interpretation of any provision of the contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Executed Director, BHEL, Trichy.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be *Tiruchirappalli*, *TamilNadu*.

Subject to the arbitration in terms of Clause, the Courts at *Tiruchirappalli, TamilNadu* shall have exclusive jurisdiction over any matter arising out of or in connection with this contract.

Notwithstanding the existence or any dispute or differences and / or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in the terms of this Contract.

In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India incharge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be

applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator."

73. MSE vendors can avail EMD / Tender Document cost waiver benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format shown below). Tenders without EMD / Tender Document cost / MSME proof will be summarily rejected.

Certificate by Charted Accountant on letter head

This is to certify that M/s	(hereinafter referred to as "company") having its
registered office at	is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part II))	dtd, Category :(Micro/Small). (Copy
enclosed).	
Further verified from the Books of Accounts that the ir financial year as per MSMED Act 2006 is	
	in plant and machinery (i.e. original cost excluding land inistry of Small Scale Industries vide its notification No.
furniture, fittings and other items not directly under the MSMED Act 2006):	ipment (original cost excluding land and building and related to the service rendered or as may be notified
`Lacs	hichever is not applicable)
(Strike on w	inchever is not applicable)
The above investment of ` Lacs for	Lacs is within permissible limit of Micro / Small (Strike off which is not applicable)
Category under MSMED Act 2006.	,
Or	
and the date of graduation of such enterprise from its is within the period of 3 years from the date of grad	egory (Micro / Small) (Strike off which is not applicable) original category is (dd / mm / yyyy) which uation of such enterprise from its original category as blished in the gazette notification dated 04.11.2013 by
Date: (Signature) Name: Membership number: Seal of Chartered Accountant	
Place:	
Date:	



BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI - 14 HUMAN RESOURCE MANAGEMENT

CIRCULAR

No.BHEL: HR: WEL: MW

Date: 31.03.2017

ALL CONTRACT EXECUTING/AWARDING OFFICIALS

Sub. : Minimum Wages Act 1948 - Fixation of Minimum rates of wages

for the employment in "General Engg, and Fabrication Industry"

Revision of DA Reg.

Ref. : Notification No. Z3/5309/2017 dated 27.03.2017 from the Commissioner

of Labour, Chennal, 600 006

Consequent upon the increase in Dearness Allowance payable under the Minimum Wages Act from Rs. 5196,00 to Rs.5417.00 per month to those employed in "General Engineering and Fabrication Industry", the Minimum Wages payable by the Contractors to their workmen engaged in the following categories would be as follows with effect from 01/04/2017:

SL No.	Category	Minimum Basic Wages per day	Minimum DA per day	Total Minimum Wages per day	Minimum Basic Wages per- month	Minimum DA per month	Total Minimum Wages per month
1	Unskilled Worker	Rs.123.00	Rs.209.00	Rs.332.00	Rs.3690.00	Rs.5417.00	Rs.9107.00
2	Semi-Skilled Worker	Rs.133,00	Rs.209.00	Rs.342.00	Rs.3990.00	Rs.5417.00	Rs.9407.00
3	Skilled Worker	Rs.139.00	Rs.209.00	Rs.348.00	Rs.4170.00	Rs.5417,00	Rs.9587.00
4	Supervisor	-		:	Rs.3956.00	Rs.5417,00	Rs.9373.00

Contract Awarding / Executing Executives are requested to ensure that the contractors make payment to their workers not less than Minimum Wages as stated above.

Fig. 12. 30/3/17

SDGM (IIR-Welfare and Recruitment)

Ce:

All HR Executives DGM/HR/PPPU/Thirumayam DGM/HR/PC/Chennai AGM/Finance GM/Finance AGM/HR GM/HR

Guidelines for Suspension of Business Dealings with Suppliers/ Contractors

PREAMBLE

In order to protect the commercial interests of BHEL, it becomes necessary to take action against suppliers / contractors by way of suspension of business dealings, who either fail to perform or are in default without any reasonable cause, cause loss of business/ money/ reputation, indulge in malpractices, cheating, bribery, fraud or any other misconduct or formation of cartels so as to influence the bidding process or influence the price etc. Suspension of Business Dealings could be in the form of "Hold" or "Banning" a supplier/ contractor or a bidder or an applicant for registration as a registered supplier. For this purpose, the following guidelines shall be followed across all BHEL units/ divisions/ regions (here in after referred to as Units). These guidelines are not exhaustive but enunciate broad principles governing action against such suppliers/ contractors.

SCOPE

- a. For the purposes of these Guidelines, Company means the Bharat Heavy Electricals Limited.
- b. These Guidelines will be applicable to Supplier (which will include vendors, suppliers and contractors) i.e. to say:
 - i. An entity that has applied for registration in any Unit of the Company for any material/service category.
 - ii. A bidder in a tender notified by the Company;
 - iii. An entity which has been awarded a contract.

Note: The term "Tender" or "Contract" referred to in sub-clause (ii) and (iii) as above, refers to tender or contract notified or awarded, as the case may be, by the Company.

- c. Any action under these Guidelines shall be without prejudice to all remedies available under the contracts with the Suppliers or other legal provisions.
- d. If a Supplier, who has participated in a tender/ entered into a contract with BHEL as an Agent/ Trader/ Dealer/ Stockist/ Distributor/ Channel partner etc. (hereinafter referred to as Agent) of an identified Principal/ OEM/ Mills/ Works/ Plants (hereinafter referred to as Principal) for that bid/ contract, then action as per these guidelines can be undertaken against the Principal as well as Agent as appropriate.
- e. In case of the supplier being a Sole Proprietorship firm or a Partnership firm, action under these Guidelines shall be taken against both
 - i. The Sole Proprietorship firm and the Sole Proprietor; or, as the case may be;
 - ii. The Partnership firm and all the partners thereof.

Accordingly, action will be taken under these guidelines against any other Sole Proprietorship firm owned by the same Sole Proprietor. Similarly action under these guidelines will also be taken against another Partnership firm comprising of the same or some of the same Partners (but not including any new Partner) or a Sole Proprietorship firm owned by the same Partner(s).

f. In respect of consortiums and unincorporated Joint Ventures/ Association of Persons (AOP)/ Body of Individuals (BOI), action under these guidelines shall be taken against the defaulting consortium partners and defaulting members of the unincorporated Joint ventures/ Association of Persons (AOP)/ Body of Individuals (BOI).

1. Suspension of business dealing with Suppliers

The following category of suspensions have been provided in these guidelines depending upon the gravity of the omission or commission by the Supplier.

- a) Hold within the unit for specific item(s)/ material category (ies) / type of work(s) for one year.
- b) Hold within the unit for all item(s)/ material category (ies)/ type of work(s) for two years

c) Banning across BHEL for all items/ material category (ies)/ type of work(s) for three years. The Supplier may be either put on hold or banned, as detailed hereinafter on the basis of one or more of the category wise reasons as enumerated hereunder:

The supplier may be either put on hold or banned, as detailed hereinafter on the basis of one or more of the category wise reasons as enumerated hereunder.

1.1. Hold

1.1.1.Hold within the unit for a specific item(s)/ material category (ies)/ type of work(s) shall be imposed in the following cases, if

In the last three consecutive supplies of a specific material category, average quality rating, as provided in the supplier performance rating (SPR) as per SEARP, falls below 80% of the quality weightage. This is irrespective of supplies against PO(s) having single/multiple delivery schedules.

Note: Not applicable in cases for erection works of Power Sector Regions, where separate guidelines for evaluation of capacity of bidders is being followed.

- II. Two consecutive delays, for reasons of delay attributed to the Supplier, in execution of the contracts where delay occurred is such that
 - a) prescribed maximum LD time limits of the contracts is exceeded or
 - b) Delay period has equalled / exceeded half the original delivery period specified in the contracts whichever among the above is earlier.

Ш

- a) Overall SPR (Supplier Performance Rating) in that particular Unit in line with SEARP falls below 60% of the specific material category.
- b) Bids of contractors (in PS-MSX portal) shall not be considered (if average score of last six months falls 60% or below as per guidelines for evaluation of capacity of bidders formula).

Note: – for (b), No specific period of hold shall be applicable.

IV. Supplier works are under strike/ lockout for a period of more than three months.

1.1.2 Hold within the unit for all item(s)/material category (ies)/ type of work(s) shall be put in the following cases, if

- i) Supplier tampers with tendering procedure affecting ordering process.
- **ii)** Supplier has misused BHEL documents/ drawings/ technical information or has breached the confidentiality agreement with BHEL.
- iii) after placement of order, Supplier fails to execute the contract.
- iv) within warranty period as per contract, Supplier continues to supply low/ less/ non-performing equipment/ services, repetitive failures, remains non-responsive.
- v) Wherever risk purchase clause (amounting to more than 5% of contract value) has been invoked.

1.2 Banning across BHEL shall be imposed in following cases, if

1.2.1

i) After price bid opening but before placement of order, Supplier withdraws his offer or varies it in any manner within the validity period.

- **ii)** Supplier is found to be responsible for submitting fake/ false/ forged documents, certificates, or information or misrepresentation/ wilful suppression of facts, or has resorted to unethical, illegal means.
- iii) In spite of warnings, the Supplier persistently violates or circumvents the provisions of labour laws/ regulations/ rules or other statutory requirements.
- **iv)** Supplier is found to be involved in cartel formation or in any other act so as to influence the bidding process or influence the price.
- v) The Supplier has indulged in malpractices or misconduct such as bribery, corruption and fraud, pilferage, coercion etc.
- vi) The Supplier is found guilty by any court of law for criminal activity/ offences involving moral turpitude in relation to business dealings.
- vii) Supplier is found to have obtained any internal information/ documentation of BHEL by unauthorized means.
- viii) The foreign Principals along with the representing Agent shall be banned together if information submitted by them about their precise relationship, commission/ remuneration etc. payable/ receivable and other particulars as asked by BHEL, as per the extant guidelines regarding dealing with Agents of Foreign Suppliers is found false/ incorrect, at any stage.
- ix) Supplier has substituted, damaged, failed to return, or unauthorised disposed off free issue materials/ tools etc. of BHEL.
- **1.2.2** A Supplier can also be banned with the approval of Director (E, R&D) provided a direction to this effect has been received from the administrative ministry of the Government.
- **1.0** Reason(s) for putting a Supplier under hold/ ban as above are only illustrative and not exhaustive. Depending upon the gravity, the competent authority may decide to put a Supplier under hold/ ban for any other adequate and sufficient reason.

3.0 Procedure

3.2) If prima-facie evidence or sufficient grounds exist for suspension, a 'show-cause notice' shall be issued to the Supplier giving a notice period of 15 days.

3.4) Interim Suspension:

In appropriate cases for justifiable reasons, fresh enquiries (including consideration of existing offers) can be stopped by the Unit from the date of issue of show-cause notice pending final decision. In case a Supplier submits a representation requesting for lifting of the Interim Suspension, then, the same shall be considered.

Note: Amongst others, in cases where recommendation for suspension of a supplier has been received from CBI/ Vigilance or any other investigating agency or the cases covered under clause 1.1.1 i), the supplier may be immediately put on Interim Suspension for all fresh enquiries in the concerned unit pending final decision.

- **3.6)** If no response to the show cause notice is received from the Supplier within 15 days, BHEL may decide to recommend suspension of business dealings or otherwise on the basis of the available evidence on record.
- 3.7) If the Supplier responds, BHEL will consider the reply.
- **3.8)** Personal hearing would be provided to the Supplier, if so requested by the Supplier or if so required. The minutes of the discussions shall be signed immediately with the supplier after conclusion of such discussions. In case, the supplier does not sign the minutes or, as the case may be, does not attend the personal hearing, then, record notes of discussion shall be issued to the Supplier on the same day duly recording such facts.

- **3.10)** In case more than one act or omission is alleged to have been committed by the Supplier, then, the case shall be dealt with for all such acts or omissions together as a case of higher category of suspension (as applicable). The suspension to be imposed on the Supplier will be as per the highest category of act or omission that is/are established ultimately.
- **3.11)** The onus shall be with the Supplier to inform BHEL regarding the corrective/ preventive actions taken to address the reasons which has led to its suspension and the hold/ ban will not be lifted automatically after the period mentioned in the order.

Note: In cases of Fraud (as defined in the Fraud Prevention Policy available at www.bhel.com), unit may also consider appropriate action as per BHEL's Fraud Prevention Policy. In addition, if misappropriation/ forgery is established, unit to consider filing of police complaint/FIR.

- **4.0** The suspension order shall become effective from the earlier of the following events:
 - a) the date of its issuance;

Or.

b) In case fresh enquiries have been put on Interim Suspension as stipulated in para 3.4 then, from the date when the Interim Suspension was implemented.

5.0 Contractual obligations:

- 5.1 Treatment of Contracts with Suppliers in Hold cases (applicable for the user unit only):
 - **5.1.1** Contracts already entered into with a Supplier before the date of issue of the order of Hold shall not be affected.
 - **5.1.2** Depending upon the type of hold, in ongoing cases where Techno-commercial Bids are under evaluation and any of the participant Supplier has been put on Hold, then the tender may be processed excluding the bid of that Supplier. However, if Price Bid has been opened and that Supplier happens to be L-1, then re-tendering is to be resorted to, excluding the Supplier.
 - **5.1.3** The case of running framework agreement (FA) where multiple POs are placed against a single FA and if the Supplier has been put on hold, further purchase orders against this FA are not to be placed on the Supplier during the period of hold depending on the type of hold.

5.2 Treatment of Contracts with Suppliers in Ban cases (applicable across BHEL):

5.2.1 All existing contracts with the banned Supplier shall normally be terminated by BHEL. Once the order for banning is passed, existing offers/ new offers of the Supplier shall not be entertained.

6.0 Lifting of Suspension

Lifting of suspension will not be automatic on completion of specified period as causes for putting on suspension should be removed/ addressed before lifting of suspension. The Supplier, under suspension may submit explanations to the initiating unit regarding corrective/ preventive actions taken by him.

- 9.0 List of banned Suppliers shall be hosted on BHEL's website.
- 12.0 Registration of banned supplier shall be deemed to have been cancelled automatically. Supplier once banned shall have to seek fresh registration in the respective BHEL unit(s) on lifting of ban.

(TO BE STAMPED IN ACCODANCE WITH STAMP ACT)

BANK GUARANTEE FOR SECURITY DEPOSIT

1.	THIS DEED OF GUARANTEE made this day of(month)(year) By(Bank 's full address) in favour of M/s Bharat Heavy Electricals Limited, Unit: Thiruverumbur, Tiruchirapalli 620 014, having its Registered Head Office at BHEL House, Siri Fort, New Delhi 110049.
2.	WHEREAS M/s Bharat Heavy Electricals Limited (hereinafter called the "COMPANY") have placed work order(s) which are pending as on date and also proposes to place further work order(s)) (hereinafter called the "CONTRACT") upto (Date) for fabrications/ for machining/supply of pressure and non – pressure parts with M/s(CONTRACTOR'S Full address) (hereinafter called the "CONTRACTOR /SUPPLIER") and as per the terms of the contract, the company has issued /proposes to issue raw materials to the contractor to enable them to complete the work.
3.	AND WHEREAS one of the conditions for placing such contract(s) is that the Contractor/ Supplier shall provide the Company a Bank Guarantee for Rs
4.	AND WHEREAS the Contractor/ Supplier approached the(Bank) and at their request and in consideration of the arrangement arrived at between the said Contractor / Supplier and the said Bank,
5.	We(indicate the name of the bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) 'failure to perform' the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
6.	We(Bank), further assure that the Contractor/ Supplier shall be responsible for the safe custody and protection of the raw materials that have been supplied/and to be supplied by BHEL under the contract(s) already placed but pending as on date and to be placed upto(date) against all risks till they are delivered back as finished products to BHEL as per the terms and conditions of the Contract or as they may direct and until such time, the Contractor/ Supplier shall hold the raw materials in trust for BHEL and shall not alienate the same in any manner whatsoever by way of sale or mortgage or charge or hypothecation etc. in favour of any one else including the bank herein or any other banks /financial institutions etc.
	The raw materials shall always remain the property of BHEL and the Bank shall indemnity BHEL against the loss, damage or deterioration whatsoever in respect of the said raw materials while in the possession of the Contractor/Supplier. The raw materials of BHEL shall always be open for inspection by any Officer authorised by BHEL. The liability under this Guarantee is a continuing one covering all contracts already placed but pending as on date and to be placed up to(date) and should any loss or damage occur on account of the breach of the terms and conditions of the said contract(s) by the Contractor/ Supplier or should any surplus raw materials become due to the Company under the Contract(s) and remains undelivered by the Company, the Bank shall indemnify the Company for the loss /damage for the value of raw materials for Rs/- (RupeesOnly) and this is without prejudice to any other remedies which may be otherwise available to the Company by deduction from any sum due or any sum which at any time hereinafter become due from the Contractor/ Supplier under this or any other Contract(s).
7.	We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute

	and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
8.	We(indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or tillOffice / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
9.	(i) Unless a demand or claim under this guarantee is made on us in writing on or before the we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.
(ii)	For the purpose of this clause, any letter making demand on the Bank by M/s. BHEL dispatched by Registered Post with Ack.Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.
10.	We(indicate the name of Bank), further agree with the company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would but for this provision have effect of not so relieving us.
11.	This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
12.	It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.
13.	Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli.
14. 15.	The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authorities granted to him/them by the the guarantor. We(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.
	In witness whereof we, (indicate the name of Bank) have hereunto setout Bank Seal thedaymonth 200
	Bank Phone No. Bank e-mail ID Bank FAX No

The Bank Guarantee bonds (BG) are to be submitted on non-judicial stamp paper of Rs. 100/- and should be only from any one of the below mentioned Banks in India.

LIST OF CONSORTIUM BANKS IN INDIA

(as on 15.12.2011)

List of Consortium Bank							
	Nationalised Bank	Nationalised Bank					
1	Allahabad bank	19	Vijaya Bank				
2	Andhra bank		Public Sector Banks				
3	Bank of Baroda	20	IDBI				
4	Canara Bank		Foreign bank				
5	Corporation bank	21	CITI Bank N.A				
6	Central bank	22	Deutsche Bank AG				
7	Indian Bank	23	The Hongkong and Shanghai Banking Corporation Limited				
8	Indian Oversea Bank	24	Standard Chartered Bank				
9	Oriental bank of Commerce	25	The Royal Bank of Scotland N.V.				
10	Punjab National Bank	26	J P Morgan				
11	Punjab & Sindh Bank		Private bank				
12	State Bank of India	27	Axis Bank				
13	State Bank of Hyderabad	28	The Federal Bank Limited				
14	Syndicate Bank	29	HDFC				
15	State Bank of Travancore	30	Kotak Mahindra Bank				
16	UCO Bank	31	ICICI				
17	Union Bank of India	32	Indusind Bank				
18	United Bank of India	33	Yes Bank				

- (1) It should be typed in the Rs. 100 value of stamp paper.
- (2) It should be <u>signed by TWO bank officials</u> with Rubber stamp containing names & employee numbers of bank officials.
- (3) It should be submitted with bank covering letter with sign and seal of the bank official.

REVERSE AUCTION

BHEL reserves the right to go for a Reverse Auction (RA) instead of Opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions governing RA are given below.

GENERAL TERMS AND CONDITIONS OF RA

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

- 1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit "online sealed bid" in the Reverse Auction. Non-submission of "online sealed bid" by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
- 4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 6. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
- 7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
- 8. Reverse auction will be conducted on scheduled date & time.
- 9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
- 11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL"s standard practice.
- 12. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the "Business Rules of Reverse Auction", which will be communicated before the Reverse Auction.
- 13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
- 14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.

- 15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.
- 16. BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.
- 17. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).
- 18. The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates
- 19. If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com)."
- 20. "Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL".
- 21. In case of tie for H1 bid (identical online sealed bids), 15 minutes additional time shall be provided and all the participating bidders shall be informed by mail/ message on bidding screen to enable bidders submit revised online sealed bids so as to break the tie.



BHARAT HEAVY ELECTRICALS LIMITED (A Government of India Undertaking) TIRUCHIRAPALLI – 620014 CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

NOTICE INVITING TENDER

01. Name of work	:	Improvement & Modification works for the proposed BHE ECB City Branch at No. 1 Good Shed Road, Trichy – 2.
02. Estimated Cost	:	Rs. 8.88 Lakhs + (Applicable GST)
03. Earnest Money Deposit	:	Rs. 17,800/-
04. Completion Time	:	02 (Two) Months (From the date of commencement of the work which will be reckoned from the date of handing over to the contractor)
05. Cost of Tender Document	:	Rs. 750/- (including Sales Tax) (This amount will not be refunded in any circumstances)
06. Last date for receipt of tenders	:	14:00 hrs. <mark>21 08 2017</mark>
07. Date of Tender opening	:	14:00 hrs. <mark>21 08 2017</mark>
08. Maintenance period	:	NIL
Tender document contains 117 pages of Quantities, EFT format etc.,	s in Qua	lification Bid and 29 pages in Price Bid including Bill
Issued to Messrs. / Thiru	:	

ISSUING OFFICER

INSTRUCTIONS TO TENDERERS

- 1. The tender is open to all Contractors. The Contractors not borne on the approved list of contractors of this organization must submit the following testimonials simultaneously with their tenders.
 - i. A Certificate to establish that the tenderer is an independent contractor working on his own.
 - ii. At least two certificates from responsible Officers of Government of Firms of repute, regarding the tenderer's capacity to undertake and carryout the work tendered for or similar work satisfactorily.

NOTE:

- a. Copies of testimonials unless attested by a Gazetted Officer will not be accepted.
- b. Non Submission of the above testimonials simultaneously with the tenders may result in the tender being rejected
- 2. The tenders should be accompanied by a list of contracts already held by the contractor at the time of submitting the tender and giving the following particulars
 - a) Value of each contract
 - b) The balance value of work to be done on the same.
- 3. The tenderer is advised to obtain the tender documents in person or by a messenger duly authorized to do so. The BHARAT HEAVY ELECTRICALS LIMITED will not under any circumstances accept responsibility for the non receipt of delay in the receipt of the tender documents by the tender.
- 4. The common percentage Rate all items of the tender schedule should be quoted in FIGURES and in WORDS. In case of any difference in the rates quoted in figures and in words, the lower of the two rates will be taken as the tendered rate. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
- 5. The percentage rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete.
 - The percentage rate quoted shall not include **GST**. However the **GST** as applicable for this contract work can be claimed from BHEL along with their monthly bills for further payment to be made to the authorities concerned. The contractor has to submit the **GST** paid details as a documentary proof of having paid the **GST** for which payment has to be processed.
- 6. Quoted rate shall be firm throughout the contract period of **02 (Two) months** and no cost escalation is allowed on any account including extended period if any.
- 7. The work contract to be entered in to with the contractor will be governed by the BHEL Revised General Conditions of contract in force.
- 8. Should a tender find discrepancies or omissions in the drawings or any of the tender documents or should be in doubt as to their meaning, he should at once address the authority inviting the tender for clarification. Every endeavor is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently by discovered and shall make no subsequent claim on account thereof.
- 9. Tenders submitted by post should be sent "Registered Post with Acknowledgement due". These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date and time of opening, tenders are liable to be rejected.
- 10. Where the tender called for covers only the building work and excludes internal services such as sanitary and water supply installations, electrification etc., the building contractor will have to leave pockets, holes,

etc., as required for other works and will have to phase his work to ensure smooth progress of the work of other agencies also as directed by the Engineer – in – charge.

- 11. Where the tender schedule contains special items of work such special floor finishes, foam concrete for insulation, special water proofing treatment to roofs etc., it will be entirely at the discretion of the Project Authorities to allot these items of work to other contractors specialized in these works. In such cases, the main building Contractor will have to tender all necessary co-operation to the agencies involved so as to ensure the smooth progress of all work.
- 12. The contractor's responsibility under this contract shall commence form the date of receipt of the LOI by the tenderer. The scheduled period of completion for this work will be as mentioned in **page No. 25**, and the Contractor will have to plan his work accordingly.
- 13. Generally, the maintenance period for any work under BHEL organization will be SIX (6) MONTHS.

14. Earnest Money Deposit:

- 14.1) EMD is to be paid by tenderers for securing fulfilment of any obligations in terms of the NIT. Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him.
- 14.2) Rates of EMD shall be as under:

For works / services costing up to Rs. 10 Crs.	2% of the estimated cost					
For works/ services with costing more than Rs. 10 Crs.	Rs. 20 lakhs plus 1% of the estimated cost over Rs. 10 Crs					

14.3) Mode of Deposit:

The EMD may be accepted only in the following forms:

- i) Cash deposit as permissible under the extant Income Tax Act (before tender opening)
- a. Electronic Fund Transfer credited in BHEL account (before tender opening)
- b. Banker's cheque / Pay order/ Demand draft, in favour of BHEL ,Trichy (along with offer)

In case total EMD amount is more than Rs. 20 Lakh, the amount in excess of Rs. 20 lakh may be accepted in the form of Bank Guarantee from scheduled bank. The Bank Guarantee in such cases shall be valid for at least six months.

(Important Note: <u>One time EMD is no more applicable for tender, as per recent corporate guidelines.</u>

<u>Hence tenderers who had previously remitted one time EMD, also shall have to necessarily take EMD of specified amount mentioned for this tender)</u>

14.4) EMD by the Tenderer will be forfeited if,

- a. After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.
- b. The Contractor fails to deposit the required Security deposit or commence the work within the period as per LOI / Contract.
- 14.5) EMD by the tenderer shall be withheld in case any action on the tenderer is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers / contractors' and forfeited/ released based on the action as determined under these guidelines.
- 14.6) EMD shall not carry any interest.
- 14.7) EMD of successful tenderer will be retained as part of Security Deposit
- 15. Should a tenderer or a contractor on the list of approved Contractors have a relative, or in the case or a film or Company of contractors any of its shareholders or shareholder's relative, employed in a gazetted capacity in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender, may be

- disqualified or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.
- 16. If tenderer expires after the submission of his tender or after the acceptance of his tender the BHEL may, at their discretion, cancels such tender. If a partner of a firm expires after submission of tender or after the acceptance of the Tender, BHEL may cancel such Tender at their discretion unless the firm retain its character.
- 17. 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 firm made subsequent to the execution of the contract. They may however recognize such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contract concerned.
- 18. If the tenderer deliberately gives wrong information in his tender or creates conditions favourable for the acceptance of his tender, the Bharat heavy Electricals Limited, reserves the right to reject such tender at any stage.
- 19. Words importing the singular number shall also be deemed to include the plural number and vice versa where the context so requires.
- 20. The expenses for completing and stamping the agreement shall be paid by the contractor.
- 21. The General and special conditions are complementary to each other and where they are conflict the Special Conditions shall prevail. In regard to matters not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by the Bharat Heavy Limited, Shall apply.
- 22. Tenderers shall not increase their quoted rate in case the Bharat Heavy Electricals Limited, negotiates for negotiation for reduction of rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rate originally quoted shall be binding on the tenderers for a period of three months from the date of opening of tenders.
- 23. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 24. If in case of opening of price bids, when there is a Tie in the percentage rates quoted by the tenderers, the ranking will be decided based on Lot system, in the presence of the bidders who witness the price bid opening.

TENDER NOTICE

NAME OF WORK: Improvements and modifications works for the proposed BHE-ECB branch at No 1, Old Good shed road, Trichy- 2

ESTIMATED COST: Rs 8.88 Lakhs + (Applicable GST)

- SEALED TENDERS for the above noted work are hereby invited from contractor experienced in works of similar kind and magnitude. Tenders will be received by Sr. Mgr. / Civil / Plng. D&QC, 53 Building, Bharat Heavy Electricals Limited, Tiruchirappalli 620 014. Up to 14.00 hrs. on 21 08 2017 and will be opened on the same day at 14.00 hrs. at the Office of the Sr. Mgr. / CIVIL / PLANNING D&QC, Building 53, in the presence of such of those tenderers. Or their agents who may choose to attend.
- 2. TENDER FORMS and other particulars regarding the proposed work can be obtained on any working day from 8.00 A.M. to 4.30 P.M. up to 19 08 2017 on payment of the prescribed sum of Rs.750/ per set (including Sales Tax) Amount not refundable.
- 3. TENDERS must be submitted in sealed covers and should be addressed to **Sr. Mgr. / Civil / Plng. D&QC**, **Building 53**, with full name and address of the tenderer and the name of work being noted on the cover.
- 4. All entries in the tender documents should be in one ink. Erasures and over writings are not permitted. All cancellations and insertions should be duly signed by the tenderer concerned.
- 5. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attached there to before submitting their tender.
- 6. Percentage rate 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 finished work in site. Amount of each item and the total page by page and also the grand total amount of the whole contract should be filled in by the tenderers. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
- 7. QUANTITIES shown in the attached schedule are only approximate and are liable to variation without entitling the contractors to any variation in the Quoted rates till 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 account all factors including any fluctuations in the 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 prevalent conditions position of materials and labour, General and Special Conditions of Contract. Instructions to tenders, drawings and Specifications and all other documents which form part of the Agreements to be entered into.
- The rate quoted in the tender shall remain valid for a period 03 (THREE) MONTHS from the date of opening of tenders.
- 11. In the event of tender being submitted by firm the tender must be signed separately and legibly by each partner of 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.
- 12. Every tender must be accompanied with EMD for the amount as mentioned in "Instruction to Tenderers". This Earnest Money will be refunded to the unsuccessful tenderers within fifteen days of finalization of the award of work. In case of the successful tenderer, the Earnest Money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause 16 of the General Conditions of Contract

NOTE: Cheques, Currency Notes and Money Orders will not be accepted in lieu of the deposit receipt referred to above.

13. Security Deposit

13.1 The Security Deposit shall be collected from the successful tenderer. The total amount of security deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

At least 50% of the required Security Deposit, including the EMD has to be furnished by the contractor before commencement of the work.

<u>Failing which the recovery of interest will be made at prime lending rate of SBI plus 2% for the period of default.</u>

- 13.2 Security Deposit may be furnished in any one of the following forms:
 - i. Cash (as permissible under the extant Income Tax Act)
 - ii. Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/
 Electronic Fund Transfer in favour of BHEL
 - iii. Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
 - iv. Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).
 - v. Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL)

(Note: 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)

13.3 Security Deposit can also be recovered at the rate of 10% of the gross amount progressively from each of the running bills till the total amount of the required Security Deposit is collected. 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.

(Note: In case of (a) small value contracts not exceeding Rs 20 lakhs or (b) SAS jobs, work can be started before the required Security Deposit is collected. However, payment can be released only after collection/ recovery of initial 50% Security Deposit).

The Security Deposit shall not carry any interest.

- **NOTE:** Acceptance of Security Deposit against SI. No. (iv) and (v) 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.
- 14. Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para 13 above within Seven 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 his tender withdrawn.
- 15. If after tender opening if tenderer revokes his tender or increases his earlier quoted percentage rate or after acceptance of his tender does not commence the work in accordance with the instruction of the Engineer-in-charge, the Earnest Money deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.

- 16. The Bharat Heavy Electricals Limited reserved the right to reject any or all the received or accept any tender or part thereof without assigning any reason thereof. In the case acceptance of part of tender, time for completion may also be reduced to the extent considered appropriate by the Accepting Authority.
- 17. Conditional and Un witnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
- 18. Tenders not submitted on the prescribed form are liable to be rejected.
- 19. The work must be completed within a period as mentioned in Notice Inviting Tender.
- 20. The Chairman / General Manger / Deputy General Manager / Deputy Manager / Senior Engineer shall be Accepting Officer, herein after referred to as such for the purpose of this contract.
- 21. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
- 22. The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for 'Health & Safety of Contract Labourer' in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.
- 23. The bidder along with its associate / collaborators / sub contractors / sub vendors / consultants / service providers shall strictly adhere to BHEL fraud prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of the management about any fraud or suspected fraud as soon as it comes to their notice.

ISSUING OFFICER



BHARAT HEAVY ELECTRICALS LIMITED, UNIT: TIRUCHIRAPALLI - 620 014 CIVIL ENGINEERING DEPARTMENT (TOWNSHIP) NORMS FOR QUALIFICATION

Name o	Name of work: Improvement & Modification works for the proposed BHE-ECB branch at No.1 Good Shed Road, Trichy - 2.							
Tender Schedule No.: CT: TS: 011 / 17 - 18 Rs. 8.88 La								
SI. No.	ELIGIBILITY:							
1.	The tenderer should have ESI, EPF, PAN, GSTIN No., IT returns acknowledged by IT office, Profit & Loss account and balance sheets certified by the auditor for the last 3 (three) years (2013-14, 2014-15 & 2015-16).							
2.	Average annual turnover for the last 3 (three) financial years (2014–19 ending 31 st March, shall be at least 30% of the estimated cost.	5, 2015-16, 2016-17)						
3.	Experience of having successfully completed Civil works during last 7 (Seven) years ending (i.e.) from 01 st August 2010 to 31 st July 2017 should have successfully completed works either a. Three similar completed works costing not less than the amount equal to 40% of the estimated cost. (or) b. Two similar completed works costing not less than the amount equal to 50% of the estimated cost. (or) c. One similar completed work costing not less than the amount equal to 80% of the estimated cost.							
4.	4. Experience of having successfully completed Electrical works during last 7 (Seven) years ending (i.e.) from 01 st August 2010 to 31 st July 2017 should have successfully completed works either a. One similar completed work costing not less than the amount equal to 30% of the estimated cost.							
5.	Latest Solvency certificate (obtained before 6 months from the date of tender opening) from Nationalized / Scheduled Bank shall be at least for a value of 40 % of the estimated cost							
	Qualified Staff to be deputed: holding valid Competency Certificate Min. of Supervisor - 1 No. Min. of Graduate Engineer - 1 No.							

NOTE:

1. All the required document's copies should be attested by the Gazzeted officer & self-Attested.

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI - 620 014

CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

QUALIFICATION PROFORMA

1.	Name of applicant	:	Shri / M/s				
2.	Nationality	:	Indian				
3.	Address	:					
4.	Telephone No.	:					
	Fax No.	:	E-mail:				
5.	Constitution	Individu	ual Sole Proprietorship concern				
		Partner	ship Firm Private Ltd. Company				
		Public I	Ltd. Company				
6.	In case of Limited Liability Company or Company :Limited by Guarantees.A) amount of paid-up-capital						
7.	Enclose a chart showing Company Organisation indicating various factories / workshops / sites / divisions etc., with levels and names of key personnel and clearly depicting the reporting and functional relationships. Also give brief write-up on the functions and responsibilities of each entity.						
8.	Details of Owner / Partners / Directors (Strike out whichever is not applicable)						

SI. No.	Name & Designation	Occupation Address	Telephone No.	Fax No.	E-mail
	To be furnished in separate sheet -				

- 9. Value of property owned, Certificate to be produced from the Revenue Department.
- 10. Does the applicant maintain any office for preparing designs, drawings, bills, etc.
- 11. Does the applicant posses facility to set up laboratory for Quality Control at site of work. If so please furnish full details of organisation, equipments, tools, etc.
- 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 t years	wo	Yes		No	
(e)	Director or partner of any other company / firm enlisted with CPWD or any other department		Yes		No	
(f) 13.	Member of Parliament or any State Legislative Assembly If answer to any of the above 'Yes", furnish details on a separate sheet Name of person holding power of attorney. (Copy to be enclosed)	Yes		No		
	(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. 2. 3.	2015- 2014- 2013-	·15		
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. 2. 3.	2015- 2014- 2013-	·15		
21.	Value of fixed assets of the business in the last three years	1. 2. 3.	2014-	·15		
22. 23.	Guarantee limits (if any) enjoyed by the firm. Over-draft limits (if any) enjoyed by the firm.	٥.	_0.0			
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 :-

SI. No.	Nam	e and Designation	Qualification	Experience and Specialisation	Remar	ks if any					
26.	Whether the details of T & P, Machinery, Yes No Equipments and work shop as per Annexure – I given.										
27.	Whether enlisted with any other Department Yes No (a) If yes, give details:										
	(i) (ii)	Name of Departme Money limit	nt & address								
	(iii)	Enlistment No. & da	ate								
	(iv)	Valid upto									
28.		nce No. and validity ector of Factories / A		-	ıf						
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.		ate Central / Local Numbers and PAI		cise Duty 1. 2. 3. 4.	CST LST ED PAN						
32.		y person working wit relative of the Office		<u> </u>	No						
(a)	If yes	, give details									
	(i)	Name									
	(ii)	Staff No.									
	(iii)	Designation & I	Department								
	(iv)	Unit									
33. 34. 35.	shee Certi	ils of similar works of tas per Annexure-Il ficates from clients i ficates:	l.)		•	•					
(i)		(including all partne shall abide by them.		We have read the Pi	reamble & Te	rms and conditions					

- (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.

ANNEXURE - II

DETAILS OF SIMILAR WORKS COMPLETED DURING THE LAST SEVEN YEARS (FROM 01 08 2010 TO 31 07 2017)

SI. No.	Name of work &	Date of commence	Date of co	mpletion	Reasons for delay &	Work order Value	Gross cost o	f completion	Name, designation &
.13.	Agreement No.	ment	Stipulated	Actual	compensation levied, if any		Including cost of cement, steel reinforcement & strl. steel	Excluding cost of cement, steel reinforcement & strl. steel	complete address of the authority for whom the work was done

DETAILS OF WORK: COMPLETION CERTIFICATES, WORK ORDERS ETC. ARE TO BE FURNISHED

ANNEXURE - III

CLIENT'S CERTIFICATE REGARDING PERFORMANCE OF CONTRACTORS

Name 8	& 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)(ii) Amount of work paid on reduced rate basis, if any	: Outstanding/V.Good/Good/Poor		
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 (b) Financial Soundness (c) Mobilisation of adequate T & P (d) Mobilisation of manpower (e) General behaviour	 : Outstanding/V.Good/Good/Poor : Outstanding/V.Good/Good/Poor : Outstanding/V.Good/Good/Poor : Outstanding/V.Good/Good/Poor : Outstanding/V.Good/Good/Poor 		

NOTE: All columns should be filled in properly.

Signature of the Certifying Officer with Official seal.

GENERAL AND SPECIAL CONDITIONS OF CONTRACT

GENERAL CONDITIONS

- 1. No night work will be permitted without the written permission of the Engineer in charge.
- 2. Bulkage test on the sand to be used on the work should be conducted periodically to arrive at the correct quantity of sand to be mixed for the different proportions as and when required.
- 3. Items of work other than those mentioned in the Bill of Quantities (Tender Schedule) attached hereto will be carried out at the rates to be fixed by this organization as per relevant clauses of the General Conditions of Contract.
- 4. (a) On the written request from the contractor Water required for the work may be provided by this organization at only one point at the site of the work at free of cost. In case of failure of water supply, the Contractor will have to make his own arrangements for water without any extra claims until supply is restored. BHEL does not accept any liability whatsoever for non-supply or delay in the supply of water under any circumstances. The contractor shall ensure that there is no wastage of water otherwise supply of water, is liable to be stopped at contractor's risk and cost.
- On the written request from the contractor Electrical energy required for the work may be given by this organization at any one point at the site of work at free of cost. BHEL does not accept any liability whatsoever for non-supply, delay in supply or failure of supply of electrical energy. Contractor shall ensure that there is no wastage of electrical energy otherwise supply is liable to be stopped at contractor's risk and cost. The contractor shall make leak proof / fire proof shed and provide control panel board of required capacity and lay the required cables at their own cost for further distribution.
- 6. Permission for erection of temporary work sheds etc., at site will have to be obtained from BHEL in writing in advance.
- 7. The works contract to be entered into with the successful tenderer will be governed by the BHEL revised General Conditions of Contract in force.
- 8. The successful tenderer / Contractor shall observe all safety regulations and take necessary safety precaution as called for under the "BHEL General Conditions of Contract and Safety Precautions" enclosed herewith.
- 9. In all matters of dispute, the decision of the General Manager, Bharat Heavy Electricals Ltd., Tiruchirappalli 620 014. shall be final and binding on the tenderer / contractor.
- 10. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The rate quoted shall be deemed to be inclusive of all such contingencies.
- 11. All the materials to be used in the work and nature of work shall confirm to respective TNBP, IS and National Buildings Organization Standard Specifications and shall be got approved by the engineer-in-charge before actual incorporation in the work.

The Contractor should engage technical persons and workmen with the following qualifications for works as detailed below and the contractor shall carry out the health Performance check at his cost for the workmen engaged in the work through a registered medical practitioner and produce the certificate on demand.

GENERAL AND SPECIAL SPECIFICATIONS

1. Site Clearance

All the area upon which the construction is to be carried out and areas which are required by the Contractor for his construction facilities are to be cleared off all rubbish and objectionable matter at Contractor's own cost. Trees, if any, shall not be uprooted or cut without the prior approval of the Engineer-in-charge. All spoils, unserviceable materials and rubbish shall be burnt or removed from site. Usable materials, saleable timber, fire-wood etc., shall be stocked properly at work site in the manner as directed by the Engineer-in-charge. The cost of clearing the areas shall be deemed to have been included by the tenderer in his general rate.

2. Earthwork for Foundations

Earthwork excavation for foundations and filling in foundations shall conform to TNBP 23 and 24. The area to be excavated or filled in with excavated materials shall be clearly demarcated in the field by the Contractor. Excavation shall be done to lines and levels defined. Excavation shall be carried out to such widths, lengths, depths, profiles and grades as shown in the drawing or as may be specified by the Engineer – in – charge. Rough Excavation may be carried out up to a depth 15 cm less than the final level but the balance shall be excavated to precise level with special care. All soft pockets of soil met with even below the final level shall be removed and the excavation filled up as directed by Engineer-in-charge. The methods of excavation shall in every case be subject to the approval of the Engineer-in-charge and the contractor shall ensure the safety and stability of the excavations, being executed by him as well adjacent buildings, structures, services and other works in the vicinity of the site of work. Wherever necessary Engineer-in-charge may direct that the sides of the excavation should be timbered and shored at the contractor's own cost, adopting a proper method approved by the Engineer-in-charge. Notwithstanding the above, should any slip occur, the contractor shall remove all the slipped materials from the excavated pit, at his own cost. He shall also make good at his own all damages caused to the work as well as adjacent buildings, structures etc., as a result of the slip, referred to.

All excavation work shall be subject to inspection and approved by the Engineer-in-charge before any further works in the excavated areas allowed to commence. Should any excavation be carried out beyond the specified depth, the contractor should fill it up at his own cost with the same type and class of material as it is proposed to be laid over the excavated portion. No payment will however be made to the contractor on his account. The contractor shall ensure that the excavations and the structures under construction are kept free from water logging at all stages of construction. He shall take all necessary precautions and 'streams, acquifers, springs, surface flows etc., are excluded effectively so as to ensure that the works are carried out in a reasonable dry conditions in accordance with the construction schedule. Back filling around the foundations, trenches, plinth and under the floor shall be done in accordance with TNBP 24 and 25. The finished level of the plinth filling shall be trimmed to the slope required to be given to the finished floor. Back filling, watering and consolidation of excavated earth in layers etc., complete as per specifications shall be done unless otherwise stipulated in the tender schedule.

Removal of Hard rock by Blasting

This shall include all rock occurring in large masses which cannot be removed except by blasting. Blasting shall be done in conformity with TNBP 19 & 23 and as instructed by the Engineer-in-charge. When rock blasting has to be done adjacent to structures, the following precautions shall be observed.

- (1) All blasting should be completely muffled to prevent damage by flying pieces.
- (2) Blasting within 3 meters of the structures shall be avoided
- (3) No blasting should be done within 1.5 meters of concrete / masonry structures.
- (4) An isolated boulder extending under the existing structure but projecting within the area of blasting should be blasted.
- (5) The contractor shall be responsible for all damages caused by blasting and shall replace or repair the damaged structures at his own cost.

3. Plain and Reinforced Cement Concrete Works:

All design and construction shall be performed in accordance with the Indian standard code of Practice for plain and reinforced concrete – IS 456 and TNBP 30. Any Special requirements noted on the drawings or bill of quantities shall govern over the provisions of this specifications. Controlled concrete shall be used wherever specified in the schedule of items complying with all requirements of IS: 456 and as per special specifications appended herewith. The coarse aggregate to be used shall be of hard broken granite stone jelly of various sizes as specified under respective items in the Bill of Quantities, conforming to IS 383 latest edition. The Engineer-in-charge may require the contractor to carryout moisture content tests in both fine and coarse aggregates. For determination of moisture content IS – 2386 shall be referred to. The amount of water to be added shall be then adjusted to compensate for any observed variation in the moisture contents. Proper control of mixing water is deemed of paramount importance. Mixtures with automatic water measuring drums shall be used or else. Water should be measured by volume in calibrated buckets. All measuring equipments shall be maintained in a clean serviceable condition and the accuracy periodically checked and got certified by the Engineer-in-charge. The contractor shall carryout slump tests apart from taking test cubes at regular intervals. All such methods of sampling and analysis of concrete shall be in accordance with IS – 1199.

Mixing of concrete shall be strictly carried out in an approved type mechanical mixer. The mixing equipment shall be capable of combining the aggregates, cement and water within the specified time (not less than 2 Minutes) into a thoroughly mixed and uniform mass and of discharging the mixture without segregation. Mixing shall be continued until there is a uniform colour and consistency, Concrete shall be handled from the place of mixing to the place of final deposit as rapidly as practicable by methods which will prevent segregation or loss of any of the ingredients. Before depositing the concrete, all debris and dirt shall be removed from the space to be occupied by concrete. Concreting shall not be done unless the formwork conform to the shapes, lines and dimension as shown in the drawings.

Unless otherwise approved, concrete shall be placed on single operation to the full thickness of slabs and beams and similar members and not exceeding 1 metre deep in walls, columns and similar members. Concrete shall be placed continuously until completion of the part of the work between construction joints or as directed by the Engineer-in-charge. The concrete after being laid shall be compacted by means of vibrators of approved type under proper supervision as directed by the Engineer-in-charge. Care should be taken to avoid segregation and formation of air bubbles. The whole process starting from the mixing of concrete to the placing and compaction shall not take more than 20 minute and the process shall be completed before the initial setting takes place. Curing shall be accomplished in accordance with IS-456 by keeping the concrete covered with a layer of sacking, canvas or similar absorbent materials and kept constantly wet for the period as directed by the Engineer-in-charge.

Reinforcement

All reinforcement shall be clean and free from pitting, loose mill-scales, dust, loose rust and coats of paint, oil or other coatings which may destroy or reduce bond. General construction details and workmanship relative to reinforcement including bar bends, lap splices and installation shall be in accordance with the IS-2502 as well as IS-456. All bars be bent as per the bar bending schedules indicated in the drawings or supplied separately relevant to particular drawing. The contractor shall in all cases verify himself the correctness of schedules, giving the number, length and the bending details of the bars. The numbers, sizes, shape and position of all the reinforcement shall, unless otherwise, directed or authorized by the Engineer-in-charge be strictly in accordance with the drawing. The reinforcement shall be adequately held in position by 18 / 20 SWG soft black annealed binding wire. The contractor must obtain the approval of Engineer-in-charge for the reinforcement placed, before any concrete is placed in the form. All reinforcing bars shall be so tied as to form a rigid cage to prevent displacement before or during concreting. Rate quoted for reinforcement should include cost of transporting M.S. Rods / CTD bars from BHEL Store to site of work, cleaning, cutting, bending, placing, binding with contractor's own binding wire and providing necessary cover blocks of concrete but excluding cost of steel which shall be supplied free of cost at BHEL Stores.

Form Work

Formwork shall conform to the shape, lines and dimensions of concrete and RCC structures as shown in the drawings and shall be well within the permissible tolerance. Formwork for concrete shall be of plywood, steel, good seasoned timber or other approved materials, properly designed easy for removal and cleaning. They shall be of sufficient strength and rigidity to maintain their position and shape under loads incidental

to placing concrete. The number of props, their sizes and dispositions shall be such as to able safely carry the full dead load area constructional loads. The arrangement and alignment of formwork shall be got approved by the Engineer-in-charge prior to concreting. However this shall not relieve the contractor from his responsibility for proper work and safety. Formwork shall be sufficiently tight to prevent loss of cement slurry from the concrete. All joints and holes in the formwork shall be caulked with putty jute cloth or other approved materials to the satisfaction of the Engineer-in-charge. The stripping time for the shuttering and the formwork shall in general conform to the provisions in the relevant clauses of IS 456. Unless otherwise specified rates for reinforced cement concrete shall include cost of centering, shuttering charges also.

Expansion and Other Joints

Expansion Joints in concrete structures shall be provided at specified places as indicated in the drawings. The material shall be as specified by the Engineer-inc-charge, expansion joints, with or without metal strip shall be as shown on drawings the filler shall be "EXPANDEX JOINT FILLER" premoulded non – extrudent type fibrous joint filler impregnated with bitumen conforming to IS: 1838. The filler shall be durable, waterproof, compressible and shall have a high degree recovery after compression is released, ensuring thereby that no free space develops in the expansion joints. The top 25 mm, or as specified in the drawings, shall be sealed with "SHALITEX SEALING COMPOUND" or equivalent after application of approved primer.

4. Stone Masonry

General: Stone masonry shall conform to TNBP 35. Stone shall be obtained from the approved quarry and shall be free from decay and weathering. All stones shall be thoroughly wetted before use. The mortar used for jointing shall be as specified under the respective items of the 'Bill of Quantities'. The walls shall be carried up truly plumb. Every stone shall be carefully fitted to the adjacent stones so as to form neat and closed joints.

To give sufficient lateral bond, vertical joints shall be avoided. Prescribed number of headers as required shall be provided to give sufficient transverse bond. At junctions of wall the stones each alternate course shall be so carried into each of the respective walls as to unite the work thoroughly. Where breaks are unavoidable in carrying up the work continuously in horizontal course sufficiently long steps shall be left to joint the old and new work building of two thin faces and filling up the middle with small stuff or dry packing shall be strictly avoided. When plastering or raised pointing is not required to be done joints shall be struck flush and finished simultaneously.

Coursed Rubble Masonry

Coursed rubble masonry shall conform to TNBP 35-H, I and J. Faces shall be accurately squared and all face joints shall be dressed at right angles. This bushing on the facing stones shall not project more than 38mm.

Face stones shall be laid alternate headers and stretchers. Depth of each course shall not be less than 150 mm. No course shall be greater than any course below. The height shall not exceed the breadth of stones of face. No stone shall tail into the wall less then its height. No pinning shall be allowed on the face. The stones shall be solidly bedded set full in mortar with joints not exceeding 12 mm in thickness.

Random rubble masonry

Random rubble masonry work shall conform to TNBP 35-L and J. Stones shall be hammer dressed at faces and joints to enable them to come into close proximity with each other. The face stone shall be laid headers and stretchers alternately, so as to break joint by at least 75mm. Thickness of joint shall not exceed 12mm. No pinning shall be used on the face and face stone shall extend well back into the headers. Stones less than 130 mm. in height shall not be used on the face.

Bond stones running through the wall shall be provided at 1.8M intervals in walls up to 0.60 M. thickness and if the wall is more than 0.60 M. thick a line of headers shall be laid from face to back each header overlapping the other by at least 150 mm.

5. Brick Masonry:

First class Bricks: Brick shall be sound, hard, tough, rectangular in shape and size, well burnt of uniform deep red or copper colour and conform to IS – 1077. Brick shall be free from cracks, chips, flaws, stone or humps of any kind. Bricks shall be homogeneous in texture and evict a clear ringing sound on being struck

and shall have a minimum compressive strength of 50KG / sq.cm. and shall not absorb water more than 20% of its weight, when soaked cold water for 24 Hrs. All bricks shall be table moulded. Second Class Bricks: These shall be ground moulded but should otherwise conform to the specifications of first class bricks except for some surface cracks are allowable. These shall have minimum compressive strength of 50 Kg./sq.cm.Samplesof each type of brick, shall be got approved by the Engineer-in-charge before being used. All subsequent deliveries shall be up to the standards of the approved samples. Brickwork shall conform to TNBP31 and IS -2212. Brick works shall be classified as first or second class according to the classification of bricks used and the method of laying. The thickness of joints shall not exceed 6 mm. In first class brickwork and 10 mm in second class brick work. Bricks shall be well soaked before use on works for at least 6 hrs. The soaked bricks shall be kept on wooden planks or platform. Brick required for masonry with clay or lime mortars shall not be soaked. Brickwork shall be laid with specified mortar to be prepared in accordance with IS -2250. Brick works shall be laid in English Bond unless otherwise specified. Half or cut bricks shall not be used except when needed to complete the bond. Each course shall be taken up truly plumb, if battered, the batter is to be truly maintained. The level of brickwork shall be checked up at every one metre interval. Bricks shall be laid with frogs upward, while laying bricks shall be thoroughly bedded and flushed in mortar and taped into position with a wooden mallet and the superfluous mortar removed. Walls of all structures shall be carried up regularly in all cases, leaving no part, one metre lower than the other. Where the masonry of one part has to be delayed, the work shall be raked back according to bond (and not toothed) an angle not exceeding 45 Deg. But the raking back should not start within 60cm. of a corner vertical joints in alternate courses shall come directly over one another. The brickwork shall not be raised more than 14 courses per day. All iron fixtures, pipes, conduits, drains, sleeves, bolts, holdfasts of doors and windows etc. which are required to be built in walls shall be embedded in cement mortar or cement concrete as specified, in their correct position as the work proceeds.

Joints

Joints shall be restricted to 6 mm in first class brickwork and 10mm in second class brick work. All bed joints shall be normal to the pressure upon them, radial in arches and at right angles to the face in battered retaining walls. Care shall be taken that all joints are fully mortared (proportion as specified in the schedule items) well flushed up and in case where no pointing to be done, neatly struck at the work proceeds. The joints in faces which are to be plastered or pointed shall be squarely raked out to a depth of 12 mm while the mortar is still green. The raked joints shall be well brushed to remove loose particles. After the work the faces of work shall be cleared well by brush so as to remove any splashed mortar during the course of raising the brickwork.

Curing

Green work shall be protected from rain by suitable covering. Masonry work shall be kept thoroughly well watered on all faces for atleast 10 days after completion. In case of fat lime mortar curing shall commence two days after laying of masonry and shall continue for seven days.

6. Scaffolding

Scaffolding will generally be single but may be double if warranted for the particular work as approved by the Engineer-in-charge. The contractor shall take all measure to ensure safety of work and the working people. Payment for brickwork shall be made on cubic metre basis on the volume of actual work done. Half brick wall and brick on edge wall shall be paid on square metre basis. The rate of brick work shall include scaffolding and all items mentioned above and no extra payment will be made for cutting bricks if required either for openings or for rounding or insertions or for recesses at the time of brick wall construction.

7. Damp Proof Course

Damp proof course shall either be with cement concrete or with cement mortar of specified thickness as mentioned in the relevant item of schedule. Damp proof course shall not be carried across doorways. It shall be laid for all walls except verandah retaining wall or for particular wall only directed by the Engineer-in-charge. It shall be laid flush with floor level or as instructed by the Engineer-in-charge. Damp proof course with cement concrete shall be of 25 or 38 mm thick in cement concrete M15/M20 as specified using 12mm. and down size aggregate well rammed and smoothened with trowel. It will be kept wet for 40 hours and after it has dried, two coats of hot bitumen shall be applied over it and allowed it to dry after which sand shall be sprinkled over it. Damp proof course with cement mortar shall be 12 or 20 mm thick in cement mortar 1:3 well mixed with crude oil at 5% by weight of cement used.

8. Cement Plastering:

Cement plastering shall be in accordance with IS – 1661 and TNBP –56 & 57, Cement mortar shall conform to IS – 269. The mortar of specified mix and thickness shall be used.

The surface to be plastered shall be thoroughly cleaned so that it is free from dust, oil, salts etc., the joints of masonry shall be racked out to a depth of atleast 12 mm. On cement concrete surfaces the surface shall be cleaned with wire brush and scarified by lines with trowel or hacking done. The surfaces in both cases shall be washed properly and kept wet for 4 hours before plastering is commenced. Plastering shall be started from top and gradually worked down towards the floor. It shall not at any place be thinner than specified. To ensure even thickness plaster of about 15 cm X 15 cm shall be first applied horizontally and vertically at not more than 2 metres intervals over the entire surface to serve as gauges. The surface of these gauges shall be truly in the plane of finished surface. The mortar shall then be laid in the wall or other surfaces between the gauges and finished even. All corners shall be rounded to a radius of 24 mm unless otherwise directed. The contractor shall not be paid for any extra thickness of plaster done than as specified. Plaster, when more than 15 mm thick shall be applied in two coals, a base coat followed by the finishing coat. Thickness of the base coat shall be just sufficient to fill up unevenness in the surface, no single coat, however, shall exceed 12mm in thickness. The under coat shall be roughened or scratched before it is fully hardened. Curing shall start 24 hours after the plaster is laid. It shall be kept wet for 14 days. During this period it shall be suitably protected from all damages at the contractor's cost by such means as approved by the Engineer-in-charge. Anycracks which appear in the surface shall be cut out in rectangular shape and redone as directed by the Engineer-in-charge. Wherever specified standard waterproofing compound as approved by the Engineer-in-charge shall be added to the mortar at the rate of 2% or as specified by the manufacturer by the weight of cement for which the rate shall be paid separately. The rate for plastering shall include cost of scaffolding, swing etc., needed for the work with labour and material all complete.

9. Steel Door, Windows and Ventilators:

All steel doors, windows and ventilators shall conform to IS-1038, IS-1361 and IS-1081 or equivalent as mentioned in the bill of quantities and as approved by the Engineer-in-charge. Rolled steel sections shall conform to IS-226. The sections shall be cold straightened and finished goods shall be free from bends and other defects. Materials used in the fabrication shall be the best procurable and conforming to relevant IS specification. Thickness and specification of the glass to be provided shall be as indicated in the relevant item of the bill of quantities. Glass shall be free from flaws, specks, bubbles, etc., Bolts, nuts, screws, peg stays and other mild steel fittings shall be treated for corrosion as per relevant Indian Standards. Putty for glazing shall conform to IS-420.

Doors, windows and ventilators, etc., shall be truly square and free from twist and warp. They shall be constructed of sections which have been cut to the required lengths and welded or riveted at the corners as per standard specifications.

All steel surfaces shall first be thoroughly cleaned free of rust scale or dirt and mill scale by approved means and shall be painted with one coat of approved primer conforming IS – 102 before despatch. Alternatively if specified they may be galvanised by the "Hot dip" zinc spray or electro galvanising process described IS – 1361. Doors, windows and ventilators shall be fixed in positions, as specified under IS 1081.

Whenever contractor is required to supply the doors, windows and ventilators etc., he shall first submit to the Engineer-in-charge, the details about source of supply, detailed drawing and specifications etc, for prior approval.

10. M.S Rolling Shutters:

It shall be of approved quality, made out of 18 gauge 75 mm black laths mechanically operated by reduction gear type mechanism. It shall be fitted with two self-aligning ball bearing with locking arrangements (both inside and outside) including M.S pressed side guides bottom rails brackets and top rolling spring pressed etc., complete provided with locking arrangements for padlocks, pulling hooks, handles, top cover etc., It shall be painted with one coat of approved primer conforming to Is-102 before dispatch.

11. Wooden Doors, Windows and Ventilators:

All wood work for doors, windows, ventilators cup board, shelves, etc., conform to relevant IS specification and TNBP 82 and shall be well seasoned teak wood or well seasoned country wood (pillamarudu or karumarudu) as the case may be. Timber shall be best quality and shall be free from knots, injurious open shales, bore holes, decay, soft or spongy spots, hollow pockets and all other defects and blemishes. Timber

shall conform to IS 1003 (Part 1). Size of doors, windows and ventilators shall as specified in the relevant item of schedule and detailed drawings and generally in conformity with IS – 1003, part I and part II. The rates for doors, windows and ventilators etc., shall be for the finished work inclusive of fixing them in position with necessary iron hold fasts and furniture fitting of oxidized iron or aluminium or oxidized brass as stated in the description of the relevant items of the bill of quantities and as directed by the Engineer-in-charge. Fittings and furniture shall be of best quality and machine made and robust type. Wherever glazed shutters are to be provided, the cost of glass panes of specified thickness and fixing them in position should be included in the quoted rate. All glass shall be of superior quality from approved manufacturer. In case of solid core flush doors, they should conform to IS: 2202 Part I and Part II. The flush door shutters should have a finished thickness as specified in the scheduled item. Flush door shutters shall be obtained from firms of repute as approved by the Engineer-in-charge.

12. ROOFING:

(A) R.C.C Slabs:

Roof slab shall be of RCC of specified mix conforming to IS: 456, with adequate main tensile, transverse and adhesive reinforcement of ribbed steel bars of mild steel rounds. Unless otherwise mentioned the rates for RCC slab shall include cost of concrete, centering and shuttering charges, vibration charges, rounding of corners, curing and finishing etc., complete. Expansion joints in reinforced cement slabs shall be as per TNBP 30. The ceiling should be finished as per Clause 30 of TNBP. No extra payment shall be made towards cost of ceiling plaster necessitated on account of defective centering materials used or poor workmanship.

The top of roof slab shall be finished with weathering course treatment if so specified. The weathering course work shall conform to TNBP 44-HJ and consist of concrete with broken brick in neat slacked lime of specified thickness finished with one course of pressed split tiles / pressed tiles of specified thickness and size as described in the bill of quantities.

(B) Roofing and Side Cladding with A.C. sheets:

The A.C. sheets shall be of specified and approved quality and shall conform to IS 459-1962 in all respects. The sheet shall be laid with the smooth side upwards and with a minimum end lap of 15cm. and for every flatter slopes this should be 20cm. The laying operation shall include scaffolding works involved. Sheets shall be secured to the purlins by means of 8mm galvanized iron J or L hook bolts and nuts. The gripof the hook bolt on the side of the purlin shall be not less than 25mm. Each bolt shall have a bitumen washer and galvanized ironwasher placed over the sheet before the nuts are screwed down from above. Hole for hook bolts etc., shall be drilled and not punched in the ridges of the corrugations in the exact positions. The diameter of these holes shall 1.5 mm more than the diameter of the fixing bolts. The payment will be square metre basis of the laid area.

13. A.C. Rain Water Pipes

The pipes shall be of standard quality conforming to IS 1628. These shall be straight, true smooth and regular in thickness. They shall be free from cracks and other flaws. The supply shall include all necessary pipe fittings and accessories.

All pipes shall be fixed to wall or columns by standard M.S butt holder clamps of approved make. The spigot of the upper pipe shall be properly fitted into the socket of the lower pipe, such that there is uniform annular space for filling with the jointing materials. One third depth of this annular space is to be filled with spun yarn soaked in bitumen of approved quality and properly pressed with caulking tool. The remaining two, third depth of the joint is to be filled with Cement Mortar 1:2 (1Cement: 2 coarse sand) and shall be pressed with caulking tool and finished smooth at the top at an angle of 45 Deg. sloping up. The rate shall include supplying and fixing pipes with specials and accessories, including sizing as required, jointing, testing, cutting of walls and making good necessary scaffolding etc., complete.

14. Flooring:

Flooring shall consist of a base course of cement concrete of specified thickness and proportion laid over the compacted earth or sand filling as specified and a finishing layer of concrete, mosaic, glazed tiles or any other material as specified to be laid. Flooring work for Factory shop floors as well as mosaic flooring shall be done as per the special specifications. The bed flooring shall be prepared either level or sloped as per relevant drawing or as instructed by the Engineer-in-charge. Filling in basement with earth or sand shall be in accordance with TNBP 25. On the prepared bed, cement concrete of specified mix and thickness shall be laid and well consolidated.

A. Ellis pattern, 1st Sort Flooring

On the clean wet surface of the concrete base before it has set, will be laid a layer of cement concrete to give a finished depth of 20/25 mm over the base concrete. The cement concrete will be of 1:3 proportion (one cement and 3 hard broken stone chippings 3 to 10 mm Size). To make a coloured floor red oxide iron powder or other approved materials should be mixed with cement at the rate 10% of the weight of cement or as directed by the Engineer-in-charge. Ellis pattern flooring shall be done as described under clause 41-G of TNBP.

B. Glazed Tile Flooring

The tiles shall be of ceramic white or coloured and of specified dimensions as described in the schedule item. The top surface of tiles shall be glazed with a neat finish of uniform colour and texture and free from flaws, cracks, craze, specks or other imperfections. Tiles shall be true and shape with straight edges, non-absorbing and non – fading. Samples of tiles together with manufacturer's literature shall be submitted to the Engineer-in-charge for approval. Tiles shall conform to IS 177 latest.

Over the prepared surface of the floor a bedding layer of Cement Mortar (1:3) of specified thickness shall be laid-in-proper level and slope using screed patterns. The bedding layer shall be deeply scratched while it is set. A mortar set bed of 6mmthickness incement lime mortar 1:1:3 (one cement one lime putty and three sand), shall be laid over the bedding layer. After mortar setting, bed has been leveled, a skin of neat cement shall be trowelled to the mortar setting bed immediately before the tiles are set. As soon as the mortar setting bed has sufficiently hardened, all tiles shall be finally secured in place and gently beaten in and finished surface brought to desired level. When grouting the glazed tiles, special care shall be taken to prevent scratching of the glazed surface. Joints shall be pointed with white or coloured cement to match the tile surface and cured. No joint shall be more than 1.5 mm thick.

15. White Washing and Colour Washing

White washing and colour washing shall be done as per clauses 63 and 64 of TNBP. The surface shall be thoroughly cleaned off mortar drops and foreign matter. All patchings must be scraped properly. The white washing shall be done from pure shell lime / Janathacem. Samples of lime

shall be got approved by the Engineer-in-charge. The wash shall be applied with a brush, the coats being laid on vertically and horizontally alternatively, each coat being allowed to dry before next coat is applied. For colour washing the desired shade shall be obtained by mixing approved quantity of colouringmatter or distemper with shell lime solution and applied as per white. The contractor shall take every precaution to prevent white wash being splashed on wall, floor and other places and articles not to be white washed. No colour wash shall be done unless a sample pattern of the mixed colour has been approved by the Engineer-in-charge. The rates shall be inclusive of scaffolding charges, cost of ladder etc,

16. Painting

All painting work shall be done in accordance with TNBP-66 and the relevant Indian Standard Specifications. Paints, varnishes, cement paints etc., shall be the highest grade products of well known approved manufacturer and shall be delivered to site in original sealed containers. It is desired that materials of one manufacturer only shall be used as far as possible. Colours shall be uniform and nonfading. Samples of all colours selected shall be submitted to the Engineer in charge for approval before bulk purchase is made. All finished work shall match corresponding samples kept with the Engineer.

Preparation of Surface:

Before painting wooden surfaces, protruding timber fibres shall be removed andnail marks shall be covered with putty. The surface shall be thoroughly cleaned and sand prepared. In case of steel work it shall be scraped, well brushed and cleaned free of rust, scale dirt. Base preparation for painting concrete, masonry and plastered surfaces shall be carried out as per IS 2395 – Part I. Before actually proceeding with the work of painting the concrete, masonry and plastered surfaces, it shall be verified that the surfaces shall be completely dry, free from efflorescence and alkaline effect.

Application

The primer shall be applied with brushes and spread as evenly and as smooth as possible. For steel work a priming coat of Red Oxide / Zinc Chromate paint shall be applied. Painting shall be done by skilled labourers in a work-man like manner. All coats shall be of proper consistency and shall be well brushed out, so that no brush marks are visible. The under coating should be nearest to the specified colour of the finishing coat. Unless otherwise specified ready mixed synthetic enamel paints shall be used for painting, wood and steel work. Under coats should be completely dry before finishing coat is taken up. Priming coat

and under coat shall be rubbed with sand paper and dusted clean. The finished coat of approved paint shall then be applied.

17. Cement Painting

Cement Paint solution shall be applied to the surface with hair brushes in a number of coats to get uniform finish. After the first coat of paints has hardened, it shall be cured with water atleast for 24 hours. The surface shall be wetted again before the application of the second coat. Atleast 24 hours should lapse betweenthe two coats, number of coats shall be as specified in the schedule of quantities. It shall be kept dampatleast for seven days.

18. French Polish

French polish to be used shall comply with IS 348. Polishing shall be obtained by dissolving 1 lbs, of shellac in one gallan of methylated spirit without applying any source of heat. After the shellac has dissolved ¼ lbs of cobalt, ¼ lbs of lobano and 0.4 oz of crystals of desired pigment shall be added. The solution shall be applied with a pad of fine muslin cloth tied as per general practice. The pad shall be dipped into the solution and wrung with fingers and be rubbed hard on the surface in this way, the first coat is to be given after this gets dried up, the successive coats shall be given in the same fashion till the mirror like surface is obtained. The wood to be polished shall be first applied with filler composed of 1.25 Kg. of whiting mixed with one litre of methylated spirit and then sand papered when dry. The finished surface shall have uniform texture and gloss. Approved transparent sealer shall only be used in base preparation.

SPECIAL SPECIFICATIONS FOR ELECTRICAL WORKS AT BHEL

1. SCOPE:

The Specifications provide for the manufacture, testing before shipment, delivery at site, erection and setting to work of the electrical installation of the buildings of BHARATH HEAVY ELECTRICALS LIMITED. The requirements are set out below.

Unless otherwise specified in this specification, the work shall be carried out in accordance with the "GENERAL SPECIFICATION FOR ELECTRICAL WORKS IN BHARAT HEAVY ELECTRICALS LIMITED" and under the terms laid down in the "General conditions of contract".

2. LOCATION:

The location is shown in the attached blue print. The exact location will be shown by the Engineer at site.

3. ATMOSPHERIC CONDITIONS:

The equipment supplied shall be suitable for operation under the following atmospheric conditions at site.

Maximum temperature in shade = 120° F Maximum temperature in the sun = 150° F Humidity = 60-90

4. LAYOUT:

The electrical installations proposed is shown in the enclosed drawing. Other Particulars are given in the statement enclosed.

5. LEVELS OF ILLUMINATIONS:

The contractor is at liberty to put forward his own specific recommendations after taking into consideration all factors.

The illumination shall be uniformly distributed, harsh shadows prevented and direct and reflected glare avoided. Proper directions of light shall result in adequate and comfortable illumination.

6. SPECIFICATION FOR WIRING:

Wiring points and run of mains as per IS 732 or any relevant IS specification and Indian Electricity rules. The wiring and mains, unless otherwise stated in the tender shall be carried out in multi core copper cable PVC insulated PVC sheathed of approved make on 18mm to 25mm and 1.8mm to 2.0mm thickness PVC tube. The cable size for the main shall be 6sq.mm multi core copper cable.

GI clamp manufactured by any approved firm with the prior permission of the Engineer shall be used. Cable of size about 6sq.mm multi core copper cable.

The wiring shall be carried out on the looping – in system. The teakwood boxes of approved pattern shall be used on the job.

7. MATERIALS AND WORKMANSHIP:

All materials used for the work shall be approved manufacturer and shall be suitable for the special purpose for which they are employed. They shall be of first class and capable of satisfactory operation in tropics with humid atmospheric conditions.

Unless otherwise specified they shall conform to the requirements of the appropriate Indian Standards / B.S.S where these are not available the American Standards shall be followed. The workmanship shall be high grade and the entire installation shall be carried out in accordance with best mode of practice. The main cables and all wiring and accessories used shall be of the highest quality throughout. The wiring mains, cables and accessories required for a block or building should be of the same pattern, kind and quality throughout. Different kinds of wires etc., of different manufacturers will not be permitted on the job.

- a. The switches and plug and sockets may be of approved make
- b. The ceiling roses may be of approved make.
- c. The lamp holders for all fittings may be of approved make.
- All teak wooden boards, round blocks should be varnished with two coats of best quality varnish.

8. FITTINGS AND FIXTURES:

The fittings and fixtures should be dust proof and those for out – door should be watertight and weather proof in conditions. They shall be capable of easy maintenance and shall allow easy renewal of bulbs. All accessories shall be of the enclosed type with terminals brought out for easy inspection and maintenance.

Installation of fitting, distribution boards etc., shall include any internal wiring of such fittings, mountings and connection to point wiring switches etc., shall be complete in all aspects. Unless otherwise specified all fittings shall be provided with bulbs and shades.

9. EARTHINGS:

The earthing of the metal clad switches, cable boxes and accessories shall be in a manner approved by the Engineer and shall be bare No.8 GI wire with GI earth electrode. Suitable arrangements for disconnection should be provided above and ground for testing purposes. All metal clad switches, distribution boards etc., should be earthed efficiently and above work should be carried out by contractor's expenses. No .separate rate will be paid for the earthing of the entire system as per ISI codes of practice.

10. SUPPLY SYSTEM:

The supply system will be A.C.440 volts 3 Phase 50 cycles 250 volts between Phase and neutral.

11. ADDITIONS & DEVIATION WORK:

The contractors will be required on receipt of notice in wiring to carry out additions or deviations found necessary during or prior to the execution of the work at the accepted rates.

The layout of the lamps, fittings, etc., indicated in the specification, drawings are only tentative. The tenderer shall base the offers as far as possible on the layout set out in this specification.

In the event of the tenderers finding the specification not in line with their manufacturers normal design practice and wish to depart in any respect for this specification they may do so subject to the condition that such departure will not result in the safety of the installation being violated in any respect but ensure more economical, efficient and modern installation.

12. MODE OF WORK:

- i. The Contractor should post a Resident Engineer with full powers for entering into agreements and receiving payment etc.,
- ii. The Contractor should adhere to the following programme of work.
 - c. As soon as plastering in each room is completed, battening have to be started.
 - d. After completion of battening the Contractor will wait till the white washing is completed.
 - e. Immediately after white washing is over, wiring should be completed. Fittings should be installed after the doors and windows are provided.
- iii. All the materials and men should be collected and kept at site as the work has to be progressed very fast and in step with the civil progress at every stage. If the work is not in progress as per a programme given by BHEL, penalty clause will be applicable unless of course the building is not ready to start the work.
- iv. The Contractor should closely watch the progress in each building and should start the work without further reference.

v. Recovery towards materials not provided for in Schedule will be made at stores issue rates plus departmental charges at 20 % or the market rates, whichever is higher plus sales tax if any. The issue of such materials will be made only to the extent available.

13. CONTRACTOR'S LICENCE AND COMPETENCY CERTIFICATE FOR SUPERVISORS AND WIREMEN:

Tender received only from the licensed Government Contractors will be considered. The electrical installation works should be carried out only by Supervisors and or Wiremen only in possession of the Competency Certificate issued by the Government. The tenderers should furnish invariably along with the tenders, their contractor's license No, as issued by the Government whom the Contractor is going to employ on the electrification work.

The work is to be carried out only by the Contractor and not through sub-contractor or any other Agencies.

The contractor should possess a minimum of five years experience in executing major contract works in PVC conduit wiring if its open or concealed, in Government organization and projects after obtaining the Contract License from the Government.

- **14.** Completion Report should be submitted in the proforma as per appendix, 'F' of IS 732, if required.
- **15.** The contractor should be present at the time of inspection of the installation by the Electrical inspector. Any defects should be rectified by the contractor at free of cost.
- 16. If the cable has to be laid in ground, the following specification should be followed. For one run of cable, trench should be excavated to such a depth, the cables will be laid at a minimum depth of 0.75 meter. A layer of sand should be spread below as well as above the cable and covered with one layer of brick. If two or more cables are run, they should be laid in a horizontal plane and the cables be separated by placing a brick between them and 0.075 meter deep layer of sand should be spread below as well as above the ground level. The trench should be duly covered after laying of cables, spreading of brick etc., In case where cable have to be taken across the road, pipe will be issued by BHEL free of cost at store. However if pipes are already available across the road, then cable will have to be taken through that only. Cable route / joint indicators should be provided at suitable distances.
- 17. In case of open trench / walls / column cables have to be taken with proper clamping either in cable rack / walls / columns. The clamps have to be supplied by the contractors.
- **18.** End terminations for the cable includes supply and using solderless crimping type tinned copper lugs, glands and if necessary cable adopter boxes with 8SWG 7/20 GI wire.
- **19.** Cubicle / Floor mounting switch board should be manufactured by the reputed manufacturers who have sufficient experience in the manufacture of electrical switch boards. The switch board has to be approved by us before despatch to workspot.
- 20. The cement, unless otherwise specifically mentioned will not be supplied by BHEL.
- 21. Switches, fuse distribution board, switch fuses should be of any one of the following makes,
 - a. M/s. English Electric Co., of India Ltd.,
 - b. M/s. Larson & Turbo Ltd.,
 - c. G.E.M. f. Siemens
 - d. Anchor g. Standard

- e. Kundan h. G.E.C.
- **22.** Light Fitting should be of either one of the following makes.
 - a. Philips d. G.E.C.
 - b. Havells e. Crompton
 - c. Bajaj
- 23. Ceiling fans should be either of the following makes. confirming to IS 374 / 1979
 - a. Orient d. Usha.
 - b. Crompton e. Bajaj
 - c. Khaitan
- **24.** The DP switches, SP switches and switches, Plugs, sockets shall be of standard make agreeable to the Engineer-in-charge and should be certified by I.S.
- 25. All the wiring materials supplied by the contractor should conform to the relevant IS / BS specifications. In case of PVC / Steel conduit wiring, the switches, plug sockets, regulators and other controls should be mounted on metal / teakwood boxes. These boxes as well as all metal boxes used for street light control should fabricated as per IS 5133 (Part I) 1966.

26. SAFETY MEASURES:

- a. A list containing the name of persons who are working, their age, designation, 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 contractor's supervisor and prior permission should be obtained from the concerned supervisor and the section before starting the work.
- c. In case of cable laying work, the 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 the proper precautions are taken.
- d. While digging the road, a good barricade and proper sign boards should be provided in the area.
- e. While erecting the poles, proper safety precautions such as supporting the poles, tieing with ropes, suitable lifting tackles etc., are to be adhered.
- f. While working at heights, proper platform, ladders, safety belts, etc., should be used.
- g. The necessary safety equipments such as gloves, lineman's belt, helmet etc.,must be issued to the workers and to be used at work.
- h. If Contractor's workmen are found to violate the safety regulations, punitive action will be taken by withholding a sum of Rs.100/- to 500/- for each violation.

i. These safety measures shall be deemed to form an integral part of the work order / agreement.

27. RETURNING OF OLD MATERIALS:

In case of removal of old materials, they have to be returned to our stores by the contractor at his cost.

Important Note:

All the specifications **related to <u>Electrification work is</u>** applicable. Remaining conditions not applicable.

TERMS AND CONDITIONS REGARDING COMPLIANCE WITH VARIOUS LABOUR LAWS BY THE CONTRACTORS FOR BHEL

- 1. The Contractor shall not employ in connection with the work any person who has not completed 18 years of age.
- 2. The Contractor shall in respect of labour employed by him either directly or through subcontractors, comply with or cause to be complied with the following statutory provisions and rules and in regard to all matters provided therein.
 - a) The Contract Labour (Regulation & Abolition) Act 1970 and the related Tamil Nadu Rules.
 - b) The Minimum Wages Act 1948 and the related Tamil Nadu Rules.
 - c) The Payment of Wages Act 1936 and the related Tamil Nadu Rules.
 - d) The Factories Act 1948 and the related Tamil Nadu Rules.
 - e) The Employee's Provident Fund & Miscellaneous Provisions Act 1952.
 - f) The Employees State Insurance Act 1948.
 - g) The Workmen Compensation Act 1923.
 - h) The Industrial Disputes Act 1947.
 - i) The Payment of Bonus Act 1965.

and any other law or modifications to the above or to the Rules made thereunder from time to time.

REGISTRATION AND LICENSING

- 3. Every Contractor shall register his name with the Welfare Section of BHEL before taking up the work awarded to him by giving the following information and getting a Code Number:
 - a) The Name of the Contractor.
 - b) Nature of Contract Work
 - c) Period of work
 - d) Number of maximum labour employed by him on any one day.
 - e) License No. & Date (Applicable in case of contractor employing 20 or more workers)
 - f) Whether enrolled for PF, ESI, etc., and enrolment No.

This information is called for, for the purpose of informing the Inspectorate of Factories whenever they call for information regarding contracts.

- 4. The Contractor employing 20 or more workmen is required to obtain license from the authorities (The Deputy Chief Inspector of Factories / Assistant Commissioner of Labour as the case may be). The license shall be amended and / or renewed wherever, there is an increase in the workmen employed by him or in the event of contract being extended or renewed. The Contractor shall inform the license number to the BHEL Management before taking up the work.
- 5. The Contractor (Licensed or unlicensed) shall promptly furnish every information and document required by BHEL authorities for the purpose of fulfilling their obligations as Principal Employer and / or Occupier of the Factory and shall render all necessary assistance for the same.

WAGES

The tenderer has to ensure payment of Minimum Wages as per Tamil Nadu State Minimum Wages as applicable under law from time to time.

The labourers engaged in this contract shall be paid additional payment as mentioned below in addition to the payment of Minimum wages as stated above.

Normally the revision will be with effect from 1st April of every year. Tenderers are requested to quote their offer after taking into account of the above factor also.

a) Unskilled Worker Rs. 3200 per month b) Semi-skilled Worker Rs. 3700 per month c) Skilled Worker / Supervisor Rs. 4100 per month Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

At present the Tamil Nadu State Government Minimum wages declared is enclosed for your reference.

- 6. The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall exceed one month.
- 7. The Contractor shall ensure payment of wages to the contract labour employed by him within three days from the end of wage period in case the wage period is one week or a fortnight and in all other cases before 10th day of the following month.
- 8. All Payment of wages shall be made on working days at the work site and during the working time and on date notified in advance. In case the work is completed before the expiry of the wage period final payment shall be made within 48 hours of the last working day.
- 9. Where the employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the second working day from the day on which his employment is terminated.
- 10. Wages due to every worker shall be paid to him direct or to the person authorized by him in this behalf. All wages shall be paid in current coin or currency in both.
- 11. The Contractor shall ensure the disbursement of wages in the presence of such authorized representative of BHEL Management.
- 13. A certificate of payment shall be furnished in duplicate by the Contractor to the Engineer in charge each month in Form 'A'.
- 14. A notice showing the wage period and the place and time of disbursement of wages shall be displayed at the place of work and a copy to be sent to the Welfare Department by the Contractor under acknowledgement.
- 15. Notices showing the rate of wages, weekly rest days, hours of work, wage period, date of payment of wages, names and addresses of the Inspector having jurisdiction, the date of unpaid wages shall be displayed in Tamil and English in conspicuous places at the establishment and at work site by the Contractor. The Contractor shall inform the BHEL Management every month the details of contract labour engaged for contract in this following form:
 - a) Serial Number
 - b) Location
 - c) Period of work
 - d) No. of contract labour engaged during the month
 - e) No. of days worked
 - f) No. of men worked
 - g) Wages paid to workers

The above statement shall be furnished to BHEL Management at the end of every month

REGISTERS AND RECORDS AND COLLECTION OF STATISTICS

- 16. The following documents / formats under Contract Labour (Regulation & Abolition) Act 1970 and Tamil Nadu Rules thereunder shall be maintained by each contractor.
 - a. Register of persons employed by the Contractor.
 - b. Employment Card
 - c. Service Certificate
 - d. Muster Roll, Wage Register, Deduction Register, Wage slip, Overtime Register, Register of Fines, Register of Advances etc.,
- 17. The Contractor shall display the abstract of the Contract Labour (Regulation Abolition) Act and the Rules thereunder both in English and Tamil.
- 18. Half yearly Return shall be sent by the Contractor in duplicate to the Licensing Officer.
- 19. The Contractor shall submit the returns required under the Contract Labour (Regulation & Abolition) Act 1970 periodically to BHEL Management.
- 20. The Contractor shall without fail give up to date information in writing of the attendance of the workers employed by him.
- 21. The Contractor shall ensure that his workers keep and produce their Employment Card when coming to duty and take them back when leaving duty.
- 22. All the above registers and records shall be preserved in original for a period of three years. All the registers, records and notice maintained under the Act and rules shall be produced on demand by Inspector or any authority under the Act.

WORKING HOURS AND WORKING CONDITIONS

- 23. No worker shall be required or allowed to work on Sunday unless he has or will have a holiday on anyone of the three days before or after the said day.
- 24. The Contractor shall inform BHEL Management in the prescribed form details of the contract workers scheduled to work on Sunday, the day of rest and also indicate the substituted holiday in lieu thereof. This shall be intimated two days in advance before his workmen are booked for work on Sunday.
- 25. The contract labour working for more than nine hours in any day or for more than 48 hours in any week shall be paid wages at the rate of twice the ordinary rate of wages in accordance with the provisions of Sections 59 of the Factories Act 1948.
- 26. The Contractor shall provide all safety devices and personal protective equipment to his workmen at his own cost and shall ensure that his workmen wear / use such devices or equipment provided to them while doing the work and there should not be any relaxation on this.
- 27. The Contractor shall give four paid National Holidays to his workers, viz., 26th January, 1st May, 15th August and 2nd October.
- 28. The Contractor shall ensure that his workmen vacate the premises after the shift is over.
- 29. The Contractor shall give leave with wages to his workmen who have worked for a period of 240 days or more in the Factory premises during a calendar year. This leave shall be allowed during the subsequent calendar year at the rate of one day for every 20 days of work performed by the worker during the previous calendar year. The worker whose services commences on a day other than the first of January shall be entitled to leave with wages at the above rate (One day for every 20 days of work) only if he had worked for a minimum of 2 /3 of the total number of days in the reminder of the calendar year. This leave will be admissible only during the subsequent calendar year.
- 30. No woman worker shall be required or allowed to work in the Factory except between the hours of 6.00 A.M. and 7.00 P.M.

31. The Contractor shall comply with the provisions relating to Welfare and Health facilities as provided in the Contract Labour (Regulation and Abolition) Act 1970 read with the Tamil Nadu Contract Labour Rules 1975.

NOTICE OF ACCIDENTS

- 32. Notwithstanding anything contrary to this, in the event of accident the contractor shall be required to fill injury report and submit the Engineer in charge immediately and ensure the compliances of ESI / Workmen's compensation Act, Factories Act and Rules made thereunder. He shall also maintain a register of accident as per the Act.
- 33. The Contractor shall get the contract labour engaged by him insured under Workmen's Compensation policy from General Insurance Corporation of India before actually starting the work of contract. The insurance coverage should be for the entire period of Contract. The Contract shall comply with the provisions of the Workmen's Compensation Act 1923. (This should be read in conjunction with the provisions of ESI Act.)

COVERAGE UNDER THE ESI ACT / PF AND MISCELLANEOUS PROVISIONS ACT

- 34. The contractor shall ensure that all his workmen are covered under the Employee's State Insurance Act and produce to BHEL such Registration Number / Enrolment Number before executing the contract work.
- 35. The Contractor shall regularly pay the amount of contribution. i.e., employer's contributions as well as employees' contribution pursuance of the above scheme as fixed from time to time. The Contribution payable presently is 1.75% wages to be recovered from his workmen and 4.75% of wages to be contributed by the Contractor. Contributions recovered from employee and contribution made by the contractor may be rounded to the next higher multiples of five paise.
- 36. The Contractor shall take note of any amendment that may be brought forth in the above contribution rate and act accordingly.
- 37. The contractor shall ensure that his workmen are covered under the EPF & Miscellaneous Provisions Act 1952 and accordingly produce to the BHEL Management the registration / enrolment number before awarding of contract work. As per the existing provisions every worker shall be entitled and required to become a member of the fund. The employee's contribution payable at present is 12% of wages which will be recovered by the contractor from the wages of his workmen and the contractor should pay equal contribution. The contractor is also liable to pay any administrative charges in this behalf that may be decided from time to time. It will be the responsibility of the contractor to ensure such contribution payable in respect of workmen employed through sub-contractors also.
- 38. The Contractor shall take note of any amendment in the rate of contribution payable under the scheme from time to time.
- 39. The Contractor shall within seven days of the close of every month submit to BHEL a statement showing the amount of contribution payable / paid for employees engaged by him or through him and shall also furnish to BHEL such information as Principal Employer is required to furnish under the provisions of the ESI Act and PF as well as the schemes made thereunder to the authorities concerned.
- 40. Whenever any sum of money is found to be recoverable from or payable by the contractor under the above Act, the sum shall be deducted from any sum that may be due or which at any time thereafter may become due to the Contractor under this contract or under any other contract or from his security deposit. In case the recoveries are not sufficient to satisfy the claim, the contractor shall pay the balance thereof on demand. In case any recoveries are made under this clause from security deposit, the contractor shall immediately thereafter pay such further sums as may be required to replenish the shortage caused by such recoveries in amount of security deposit.
- 41. The Contractor shall abide by all the labour and other laws applicable to contract labour / worker under this contract and shall at all times keep BHEL indemnified against all loses, claims, prosecutions under any law.

- 42. In case of non-compliance of any of the provisions of the Acts and in case BHEL having complied with the same, BHEL will be entitled to recover the same from the contractor / sub-contractor.
- 43. Non-exercise of any of the powers or rights available to BHEL hereunder or under any law, shall not in any way operate as waiver thereof.

Note: The Specimen forms for the following are available in BHEL.

1) Form 'A' - Payment Certificate

2) Form IV - Application for License

3) Form XIII - Register of Workmen employed by contractor

4) Form XIV - Employment Card

5) Form XV - Service Certificate

6) Form XVI - Muster Roll

7) Form XVII - Register of wages

8) Form XIX - Wage slip

BHEL APPROVED BRANDS FOR THE FOLLOWING MATERIALS / ITEMS

SI.No.	Material	Manufacturing Co.	Brand
1.	Synthetic Enamel Paint	Asian Berger ICI	Apcolite Luxol Dulux gloss
2.	Aluminium Paint	Berger	Berger Aluminium
3.	Interior Emulsion	Asian Berger ICI	Royale Luxol Silk Supercote
4.	Exterior Emulsion	Asian ICI	ACE Supercote
5.	Distemper	Asian Berger ICI	Tractor Bison Maxilite
6.	Cement Paint	Snowcem Agsarcem	Snowcem Agsarcem
7.	A.C. Sheets	Everest India Ltd. Hyderabad India Ltd. Visaka Industries Ltd. Ramco	Everest I Charminar Visaka Ramco
8.	G.I. Pipes	TATA Zenith	TATA Zenith
9.	PVC Pipes	Avonplast Finolex Truebore Vignesh	Avonplast Finolex Truebore Vignesh

GENERAL CONDITIONS OF CONTRACT FOR LUMPSUM, ITEM RATES AND PERCENTAGE CONTRACT

CONTENTS

Condition No	Description
	CHAPTER – I
1	DEFINITION
	CHAPTER – II
	SCOPE OF CONTRACT
2	HEADING TO THE CONTRACT
3	CONTRACT DOCUMENTS
4	WORKS TO BE CARRIED OUT
5	PROVISIONAL ITEMS
6	DEVIATIONS
7	TIME
8	STORES & MATERIALS
9	DELAY & EXTENSION OF TIME
10	PATENT RIGHTS
11	OCTROI AND OTHER DUTIES
12	ROYALTIES
13	PLANT & EQUIPMENT
14	ASSIGNMENT OR TRANSFER OF CONTRACT
	a) SUB CONTRACT
15	COMPLIANCE TO REGULATIONS AND BYE-LAWS
	CHAPTER – III
	PERFORMANCE OF THE CONTRACT
16	SECURITY DEPOSIT
17	ORDERS UNDER THE CONTRACT
18	ADMISSION TO SITE
19	CONTRACTOR'S SUPERVISION
20	LABOUR
21	WATER
22	TEMPORARY WORKSHOPS, STORES ETC.
23	STORES & MATERIAL ON SITE
24	STATEMENT OF HIRE CHARGES
25	PRECAUTIONS AGAINST RISKS
26	NOTICE & FEES

27	SETTING OUT OF THE WORKS & PROTECTION & MAINTAINING
	SIGNALS AND WORKS
28	SITE DRAINAGE
29	EXCAVATIONS, RELICS ETC.
30	FOUNDATIONS
31	COVERING – IN WORKS
32	APPROVAL OF WORKS BY STAGES
33	EXECUTION OF WORKS
34	DAY WORKS
35	INSPECTION OF THE WORKS
36	RESPONSIBILITY FOR BUILDING
37	INSURANCE OF WORKS
38	DAMAGE AND LOSS TO PRIVATE PROPERTY & INJURY TO WORKMEN
39	COMPLETION
40	COMPENSATION FOR DELAY
41	LAWS GOVERNING THE CONTRACT
42	CANCELLATION OF CONTRACT FOR CORRUPT ACT
43	CANCELLATION OF CONTRACT FOR INSOLVENCY, ASSIGNMENT OR
	SUB LETTING OF CONTRACT
44	CANCELLATION OF CONTRACT FOR DEFAULT
45	TERMINATION OF CONTRACT FOR DEATH
46	SPECIAL POWERS OF DETERMINATION
47	FAIR WAGE
	CHAPTER – IV
	VALUATION AND PAYMENT
48	RECORDS & MEASUREMENTS
49	VALUATION OF DEVIATIONS
50	REIMBURSEMENT / REFUND ON VARIATION IN PRICE
51	ADVANCES ON ACCOUNT
52	FINAL BILL
53	PAYMENT OF BILLS
54	RECOVERY FROM CONTRACTOR
55	POST TECHNICAL AUDIT OF WORKS AND BILLS
56	REFUND OF SECURITY DEPOSIT
57	ARBITRATION
	ANNEXURE

BHEL CONTRACTOR'S LABOUR REGULATIONS MODEL RULES FOR LABOUR LAWS BHEL SAFETY CODE

CHAPTER- I

1. DEFINITIONS

In these General Conditions of Contract, the following terms shall have the meaning hereby assigned to them except where the context otherwise requires:-

- a) The "CONTRACT" means the documents forming the tender and acceptance thereof, together with all documents referred to therein including General and Special Conditions of Contract, Schedules 'A', 'B', 'C', 'D', 'E', and / or General Summary attached to the form of tender, the Bharat Heavy Electricals Limited, Schedule of Rates as amended and in force the Specifications and the Drawings. All these documents as applicable taken together shall be deemed to form one Contract and shall be complementary to one another.
- b) The "TENDER DOCUMENTS" means the form of Tender the applicable Schedules 'A', 'B', 'C', 'D', 'E', and / or General Summary, General and Special Conditions of Contract and the Specification and / or Drawings as given to Contractors on payment for the purpose of preparing their tenders.
- c) The "WORK" means the work described in the tender documents in individual work orders and/or accompanying Drawings and Specifications as may be issued from time to time to the Contractor by the Engineer–in– charge within the powers conferred upon them, including all modified or additional works and obligations to be carried out either at the site or at any Factory Workshop or other place as required for the performance of the Contract.
- d) The "SITE" means the lands and/or other places on, in into or through which the work is to be executed under the Contract or any adjacent land, path or street which may be allotted to or used for the purpose of carrying out the contract.
- e) The "CONTRACTOR" means the individual, firm or Company, whether incorporated or not undertaking the work and shall include the legal personal representatives of such individuals or the persons composing the firm or Company, or the successors of the firm or Company and the permitted assigns of such individual or firm or Company.
- f) The "Engineer-in-charge" means the Engineer who is incharge for the works referred.

CHAPTER II

SCOPE OF CONTRACT

2. Heading to the Contract:

The heading to these conditions shall not affect the interpretation thereof.

3. Contract Documents

The Accepting Officer shall furnish to the Contractor on demand "FREE OF COST" three copies of signed drawings and one copy of the signed agreement comprising of preamble to agreement, General and Special Specifications, Schedule 'A', 'B', 'C', & 'E', etc., (but excluding General Conditions of Contract and Drawings) and **three** copies of all further drawings issued during the progress of work.

However, for any additional copies of the agreement or drawings required by the Contractor the same will be supplied on payment at the specified cost.

The Contractor shall keep one copy of all the Drawings and the Specifications at the site and the Engineer-in-charge or his representative shall have access to them at all reasonable times.

None of these documents shall be used by the contractor for any purpose other than that of this contract.

The Contractor shall take necessary steps to ensure that all persons employed on any work in connection with this contract have noticed that the Indian official Secrets Act 1923 (XIX of 1923) applies to them and shall continue so to apply even after the execution of such works under the contract.

4. Works to be Carried Out

The Contract shall, except as provided under Schedules 'B' and 'C' include all labour, materials, tools, plants equipment and transport which may be required in preparation for, and in the entire execution and full completion of the work. Schedule 'A' shall be deemed to have been prepared in accordance with good practice and recognized principles and unless otherwise stated, the descriptions given therein shall be held to include waste on materials carriage and cartage, lead, return of empties, hoisting, setting, fitting in position and all other labour necessary in and for the entire execution and full completion aforesaid. Any error in description or quantity in schedule 'A' or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the work comprised therein according to the Drawings and Specifications, or from any of his obligations under the Contract. The insertion of the name of any firm of suppliers in the Tender Documents is for the purpose of obtaining a particular class or quality of materials or workmanship but the articles or materials specified may be obtained from any other firm subject to prior written approval of the Engineer – in – charge.

In the case of a discrepancy between Schedule 'A' the specification and / or the Drawing, the Accepting Officer shall be the sole deciding authority as to which shall prevail and his decision shall be final and conclusive. If neither Drawings nor Specifications contain any mention of minor details of construction, which in the opinion of the Accepting Officer whose decision shall be final and conclusive, are reasonable and obviously and fairly intended for the satisfactory completion of the work, such details shall be provided by the Contractor without any extra cost as if they were specially mentioned and shall be deemed to be included in the contract.

The contractor will be deemed to have satisfied himself as to the nature of the site, local facilities of access and all matters affecting the execution and completion of the work. No extra charges consequent on any mis-understanding in these respects or otherwise will be allowed.

5. Provisional Items

The full amount of provisional lumpsums and the value annexed to each provisional item inserted in the tender documents shall be deducted from the contract sum and the value of work ordered and executed thereunder shall be ascertained by measurement or valuation as for deviations.

No work under these items is to be begun without instructions in writing from the Engineer-in-charge. The extent of quantities or items described as "Provisional" shall not be held to guarantee or limit the amount and description of the work to be executed by the contractor either in respect of the items concerned or the work as a whole.

No addition or deduction shall be made by the Contractor to the amount of the provisional lumpsums as included in the tender documents.

6. Deviations

The contractor shall not make any alteration in addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer-in-charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the contract.

The Accepting Officer may deviate either by way of addition or deduction, from the work so described, provided that the contract sum be not thereby varied on the whole by more than the percentage set out in the tender documents. The value of all addition and deductions will be added to, or deducted from the contract sum. Whenever the Accepting Officer intends to exercise such a right, his intention shall specify the deviations which are to be made, the lumpsum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the entire contract.

Any objection by the Contractor to any matter concerning the order shall be notified by him in writing to the Engineer-in-charge within **Seven days** from the date of such order, but under no circumstances shall the work be stopped (unless so ordered by the Engineer-in-charge) owing to differences or controversy that may arise from such an objection. In the absence of such a notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein. In the event of the contractor failing to agree with the Engineer-in charge regarding the terms of the proposed deviation, the objection shall be referred to the Project Manager whose decision shall be final conclusive and binding on the Contractor.

7. 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 is to begin, 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/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 upto any time in relation to the entire work to be under the Contractor 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 an extension of time for completion not less than the period of suspension. However, no other claim in this respect for compensation or otherwise however will be admitted. Provided the cause for suspension is not attributable to any default on the contractor's part to proceed with or fulfill the contractual obligations. This may also be extended to allow for alteration of work made by the deviation order.

8. Stores and Materials

The Contractor shall, at his own cost and expense, provide all materials required for the works, other than those listed in Schedule 'B', which are to be supplied by Bharat Heavy Electricals Limited. All materials to be supplied by the Contractor shall be of the best kind as described in the specifications and the Contractor shall, if requested by the Engineer–in–charge, furnish proof to the satisfaction of the Engineer-in-charge, that the materials so comply with the specifications.

The contractor shall, at his own expense and without delay, supply samples of materials proposed to be used in the execution of the work for approval of the Engineer–in–charge, who may reject the materials not corresponding either in quality or character to the approved samples.

In the case of stores provided under Schedule 'B' the Contractor shall bear the cost of loading, transporting to site, unloading, storing under cover as required assembling and jointing the several parts together as necessary and incorporating or fixing these stores materials in the work, including all preparatory work of whatever description as may be required, and of closing, preparing, loading and returning empty cases or containers to the place of issue without any extra charges.

9. Delay and Extension of Time:

If, in the opinion of Engineer-in-charge the work is delayed:

- i) By reason of abnormally bad weather, OR
- ii) By reason of serious loss or damage by fire, OR
- iii) By reason of Civil commotion, local combination of workmen strike or lockout, affecting any of the trades employed on the work OR.
- iv) by delay on the part of the agency or tradesman engaged by BHEL in executing work not forming part of this contract, OR
- v) by reason of any other cause which in the absolute discretion of the Engineer-in-charge is (when he is the Accepting Officer of the Contract) beyond the Contractor's reasonable control, than in such case the Accepting Officer on the recommendation of the Engineer-in-charge (or higher authority) may make fair and reasonable extension in the completion dates of the individual items of work or the contract as a whole. Such extension which will be communicated to the Contractor by the Engineer-in-charge in writing shall be final and binding on the Contractor. No other claim in this respect for compensation or other-wise howsoever is admissible. Upon the happening of any such event causing delay, the

Contractor shall immediately given notice thereof in writing to the Engineer-in-charge but shall nevertheless

use constantly his best endeavour to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Engineer–in–charge to proceed with the work

10. Patent Rights:

The Contractor shall fully indemnify B.H.E.L or the agent, servant, or employee of B.H.E.L against any action, claim or proceeding relating to infringement or the use of any patent or design or any alleged patent or design rights, and shall pay any royalties which may be payable in respect of any article / or part thereof included in the contract.

In the event of any claims being made or action brought against B.H.E.L or any agent, or servant or employee of BHEL in respect of matters aforesaid the Contractor shall immediately be notified thereof for taking necessary action provided that payment of indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by the BHEL but the Contractor shall pay any royalties payable in respect of any such use.

11. Octroi and Other Duties:

All charges on account of Octroi, Terminal or Sales Tax and/or other duties on material obtained for the work (excluding materials provided by B.H.E.L on payment) shall be borne by the contractor.

In case any changes in taxes & duties as per Government notification including GST the same shall be applicable from time to time.

12. Royalties:

Royalties fixed from time to time as per prevalent local rules will be recovered for materials, which the Contractor may be allowed to remove from quarries situated on land which is in charge of the B.H.E.L authorities.

13. Plant and Equipment:

The Contractor, shall at his own expense, supply all tools, plant and equipment (here-in-after referred to as T & P) required for the execution of the contract other than those listed in Schedule 'C' which subject to their availability may be hired by B.H.E.L., to the Contractor or issued free for use in the execution of the work as specified in Tender Documents.

14. Assignment or Transfer of Contract:

The Contractor shall not, without the prior written approval of the Accepting Officer, assign or transfer the Contract or any part thereof, or any share, or interest therein to any other person. No sum of money which may become payable under the Contract shall be payable to any person other than the Contractor unless the prior written approval of the Accepting Officer to the assignment or transfer of such money is given.

(a) Sub Contract:

The Contractor shall not sub-let any portion of the Contract without the prior written approval of the Accepting Officer.

15. Compliance to Regulations and Bye Laws:

The Contractor shall conform to the provision of any statute relating to the work and regulations and bye-laws of any local authority and of any water and lighting Companies or Undertakings with whose system the work is proposed to be connected. He shall, before making any variation from the drawings or the specifications that may be necessitated for such connections give the Engineer—in—charge notice, specifying the variation proposed to be made and the reasons there for and shall not carry out any such variation until he has received instructions from the Engineer—in—charge in respect thereof. The contractor shall be bound to give all notice required by Statute Regulations or Bye-laws as aforesaid and to pay all fees, and taxes payable to any authority in respect thereof.

CHAPTER III

PERFORMANCE OF THE CONTRACT

16. Security Deposit

16.1 The Security Deposit shall be collected from the successful tenderer. The total amount of security deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

At least 50% of the required Security Deposit, including the EMD has to be furnished by the contractor before commencement of the work.

Failing which the recovery of interest will be made at prime lending rate of SBI plus 2% for the period of default.

- 16.2 Security Deposit may be furnished in any one of the following forms:
 - i. Cash (as permissible under the extant Income Tax Act).
- ii. Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL.
- iii. Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
- iv. Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL)
- v. Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL,Trichy)

(Note: 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)

16.3 Security Deposit can also be recovered at the rate of 10% of the gross amount progressively from each of the running bills till the total amount of the required Security Deposit is collected. 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.

(Note: In case of (a) small value contracts not exceeding Rs. 20 lakhs or (b) SAS jobs, work can be started before the required Security Deposit is collected. However, payment can be released only after collection/ recovery of initial 50% Security Deposit).

The Security Deposit shall not carry any interest

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.

50% of the Security Deposit / may be refunded on completion of the work after payment of the final bill and the balance 50% of the Security Deposit is refundable only after the expiry of the maintenance period of six (6) months from the date of completion of work as stipulated in the Contract concerned.

17. Order under the contract

All orders, notices etc., to be given under the contract shall be in writing typescript or printed and if sent by registered post to the address given in the tender of the contractor, shall be deemed to have been served on the date when in the ordinary course they would have been delivered to him.

The contractor shall carry out without delay all orders given to him.

18. Admission to site

The Contractor shall not enter on (other than for inspection purposes) or take possession of the site unless permitted to do so by the Engineer-in-charge. The portions of the Site to be occupied by the Contractor will be clearly defined and marked on the site plan, and the Contractor will on no account be allowed to extend his operations beyond these areas.

The Contractor shall provide, if necessary or required at the Site, temporary access there to and shall alter, modify and maintain the same as required from time to time. He shall take out and clear away the access route when no longer required and restoring the area to its original condition.

The Engineer-in-charge shall have power to execute other works (whether or not connected with the work in the contract agreement) on the site contemporaneously with the execution of the original work and Contractor shall give reasonable facilities for this purpose.

B.H.E.L reserves the right of taking over, at any time, any portion of the site which they may require and the Contractor shall at his own expense clear such portion forthwith. No photographs of the Site or of the work or any part there of shall be taken, published or otherwise circulated without the prior approval of the Engineer-in-charge.

No such approval shall however exempt the contractor from complying with any statutory provisions in regard to the taking and publication of such photographs.

B.H.E.L Officials connected with the Contract shall have the right of entry to the Site at all times.

Engineer - in charge shall have the power to exclude from the site any person whose admission there to may, in his opinion be undesirable for any reason whatsoever.

19. Contractor's Supervision

The Contractor shall either himself supervise the execution of the Contract or shall appoint a competent Agent approved by the Engineer–in–charge to act in his stead. The contractor shall employ an Engineer/Agent having at least a 'Degree of Bachelor of Civil Engineering' from a recognized University/on any work with a Contract value exceeding rupees two lakhs, and having at least a Diploma in civil Engineering from a recognised college, on work with a contract value exceeding Rs. 50,000/- but not exceeding rupees two lakhs.

The Employment of an Engineer/Agent as aforesaid shall not be necessary if the Contractor himself in possession of a recognized technical qualification and is in opinion of the Engineer-in-charge capable of receiving instructions of the Engineer-in-charge and of executing the work to the satisfaction of the Engineer-in-charge. If the Contractor fails to appoint a suitable Engineer/ Agent as aforesaid, the Engineer-in-charge shall have full powers to suspend the execution of work and stop payment of any advances that may have become due until such date as a suitable Engineer/Agent is appointed and the contractor shall be held responsible for the delay caused to the work and no extension of time on this account shall be given to him as stipulated in condition (9) above.

Orders given to the Contractor's Agent/Engineer shall be considered to have the same force as if they had been given to the Contractor himself.

The contractor or his Agent shall be in attendance at the site during all working hours and shall superintend the execution of work with such additional assistance in each trade as the Engineer–in - charge may consider necessary.

The contractor or his accredited agent shall attend when required and without making any claim for doing so, either the Office of the Engineer–in–charge or the work site to receive instructions.

The Engineer–in–charge shall have full powers, and without assigning any reason to require the Contractor immediately to cease to employ in connection with the Contract any Agent, servant or employee whose continued employment is, in his opinion undesirable.

The Contractor shall not be allowed any compensation on this account.

LABOUR

20. The Contractor shall employ labourer in sufficient numbers either directly or through sub-contractors to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-charge. The Contractor shall not employ in connection with the works any person who has not completed his fifteen years of age.

The Contractor shall furnish to the Engineer-in-charge at the intervals specified by him, a distribution return of the number and description by trades of the work people employed on the works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-charge a true statement showing in respect of the second half of the preceding month and the 1st half of the current month (i) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (ii) The number of female workers who have been allowed maternity benefit as provided in the Maternity Benefit Act, 1961 or Rules made thereunder and the amount paid to them.

The Contractor shall pay to labour employed by him either directly or through sub—contractors wages not less than fair wages as defined in the Contractor's Labour Regulations.

The contractor shall in respect of labour employed by him either directly or through sub – contractors comply with or cause to be complied with Contractor's Labour Regulations in regard to all matters provided therein.

The Contractor shall comply with the provisions of the Payment of Wages Act 1936, Minimum Wages Act 1948, Employers liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947, Maternity Benefit Act 1961 and Mines Act 1952, Contract Labour Regulation and Abolition Act 1970 or any modifications there of or any other law relating thereto and rules made thereunder from time to time.

The contractor shall be liable to pay his contribution and the employees' contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "The Employees" State Insurance Act, 1948" as amended from time to time. In case the contractor fails to submit full details of his account of labour employed and the contribution payable, the Engineer–in–charge shall recover from the running bills of contractor an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for Employees' State Insurance.

The Engineer–in–charge shall on a report having been made by an Inspecting Officer as defined in the Contractor's labour Regulations have the power to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by the worker or worker by reason of non-fulfillment of the Conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said Contractor's Labour Regulations.

The Contractor shall indemnify the B.H.E.L against any payments to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractor's Labour Regulations, as amended from time to time or furnishing any information or submitting or filling any form / Register/Slip under the provisions of these Regulations which is materially incorrect then on the report of the Inspecting Officers as defined in the Contractor's Labour Regulation, the Contractor shall without prejudice to any other liability pay to the B.H.E.L a sum not exceeding Rs. 50/- as liquidated damages for every default breach or furnishing, making submitting, filling materially incorrect statement as may be fixed by the Engineer–in–charge and in the event of the Contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs. 50/- per day for each day of default subject to a maximum percent of the estimated cost of works put to tender.

The Engineer in charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the Welfare Fund constituted under Regulations. The decision of the Engineer-in-charge in this respect shall be final and binding.

Model Rules for Labour Welfare

The Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour welfare as appended to these Conditions or rules framed by Government from time to time for the protection of health and for making sanitary arrangements for workers employed directly/or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer—in—charge shall be entitled to do so and recover the cost thereof from the Contractor.

Safety Code

The Contractor shall at his own expense arrange for the safety provisions as appended to these conditions or as required by the Engineer – in – charge, in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer– in–charge shall be entitled to do so and recover the cost thereof from the Contractor.

Failure to comply with model Rules for Labour Welfare, Safety Code, or the provisions relating to report on accidents and to grant of maternity benefits to female workers shall make the Contractor liable to pay to the B.H.E.L as liquidated damages an amount not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the Engineer—in—charge in such matters based on reports from the Inspecting Officers as defined in the Contractor's Labour Regulation as appended to these conditions shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

WATER

21. The Contractor shall allow in his Tender and provide at his cost all water required for the work or his employees on the work, together with all pipes and fittings or other means that may be necessary or required to ensure a proper and ample supply of water for all purposes connected with the work.

Water will be supplied from the BHEL supply system, or other sources at one point fixed by the Engineer-in-charge on the site of work at free of cost. The Contractor shall make necessary arrangement for lifting pumping, carrying or conveying the water as required at his own cost.

22. Temporary Workshops, Stores Etc.

The Contractor shall, during the progress of the work provide, erect and maintain at his own expense all necessary temporary workshops, stores, offices, etc., required for the proper and efficient execution of the work. The planning, siting and erection of these buildings shall have the approval of the Engineer-in-charge and the Contractor shall at all times keep them tidy and in a clean and sanitary condition to the entire satisfaction of the Engineer-in-charge.

On completion of the work all such temporary buildings shall be cleared away and the site restored and left in a clean and tidy condition to the entire satisfaction of the Engineer-in-charge.

23. Stores and Materials on Site

All stores and materials required for the work are to be deposited by the Contractor only in places to be indicated by the Engineer-in-charge.

Where in accordance with the contract stipulations certain Stores & Materials (for incorporation in the work) are to be issued to the Contractor by the BHEL as detailed under Schedule 'B' **such items will be so issued only to the extent required for the actual completion of the work** as stipulated in the contract. The decision of the Engineer-in-charge regarding the quantities to be issued as above shall be final and binding on the contractor. For any excess quantities consumed on the work upto 5% over the theoretical consumption will be charged at issue rates and excess consumption beyond this limit, their cost will be recovered from the Contractor at punitive rates which will be 100% (Hundred Percent) more than the issue rates of the BHEL as specified in the Instructions to the Tenderers.

In regard to the materials and stores which may be issued to the Contractor by BHEL the Contractor shall give the Engineer-in-charge reasonable notice in writing of his requirements of such stores and materials and on the approval of his demand being notified to him, he shall make immediate arrangements for drawing the same. Such stores and materials shall be transported by the Contractor at his own expense direct from the place of issue to the site of the work, unless prior written approval is obtained from the Engineer-in-charge to take them to a Store or Workshop elsewhere.

The Contractor shall have to build a weather proof shed for the storage of cement required for 15 days consumption of the work.

BHEL Officers connected with the Contract shall have the power at any time to inspect and examine any stores or materials intended to be used in or on the work, whether on the site or at any factory or workshop or other place where such stores or materials are being fabricated or manufactured or at any place where the same are lying and the contractor shall give necessary facilities for such inspection and examination.

The Engineer-in-charge shall be entitled to have tests made of any stores or materials supplied by the Contractor who shall provide at his own expense all facilities which the Engineer-in-charge may require for this purpose. If at the discretion of the Engineer-in-charge an independent expert is employed to make any such tests his charges shall be borne by the Contractor only if the test discloses that the said stores or materials are not in accordance with the provisions of the Contract.

Should the Engineer-in-charge consider at any time during the construction or re-construction, on prior to the expiry of the "MAINTENANCE PERIOD" that the stores or materials provided by the Contractor are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract (in respect whereof the decision of the Engineer-in-charge shall be final and conclusive) the Contractor, shall on demand, in writing from the Engineer-in-charge specifying the Stores or materials complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith remove the stores or materials so specified and provide other proper and suitable stores or materials at his own expense; to the entire satisfaction of the Engineerin-charge and in the event of his failing to do so within a period to be specified by the Engineer-incharge in his demand aforesaid the Engineer-in-charge may replace within others the stores or materials complained of at the risk and expense in all respects of the Contractor. The liability of the contractor under this condition shall not extend beyond the maintenance period aforesaid except as regards stores or materials which the Engineer-in-charge shall have previously given notice to the contractor to replace. (*MAINTENANCE PERIOD for any work under this Organisation will be SIX MONTHS FROM THE DATE OF ACTUAL COMPLETION of the particular work and handing over to B.H.E.L).

All stores and materials brought to the Site shall become and remain the property of B.H.E.L and shall not be removed from the site without prior written approval of the Engineer-in-charge. However, when the work is finally completed, the Contractor shall at his own expense forthwith remove from the site all surplus stores or materials originally supplied by him and upon such removal, the same shall revert in and become the property of Contractor. All B.H.E.L Stores and materials issued to Contractor for in-corporation or fixing in the work and which, making due allowance for reasonable

wear and tear/or waste, have not on completion of the work been so incorporated or fixed, shall be returned by the Contractor at his own expense to the place of issue.

Credit for surplus stores and/ or materials returned by the contractor to B.H.E.L will be given to him at a price based on the prevailing market rate but not exceeding that at which the said stores and materials were originally issued to him but due consideration shall be given to the allowance claimed by B.H.E.L in respect or any depreciation or damage suffered by the stores and/or materials whilst in the custody of the Contractor regarding which the decision of Engineer-in-charge shall be final and conclusive.

If, in the opinion of the Engineer-in-charge (which shall be final and conclusive) any stores, supplied by B.H.E.L have either during currency of the work or after completion of the work whilst under the custody of the Contractor, become damaged to such an extent that they cannot be usefully utilized, either in the same work or in other works, the Engineer-in-charge shall not accept the stores and in the event of his rejection the contractor shall be charged for the said Stores at a rate as fixed by the Accepting Officer. The Contractor shall not be entitled to any claim whatsoever on this account.

24. Tools and Plants on site:

All tools, plants and equipment brought to the site shall become the property of B.H.E.L and shall not be removed from the site without the prior written approval of the Engineer-in-charge when the work is finally completed or the Contract is determined for reasons other than the default of the Contractor he shall forthwith remove from the site all tools, plants, equipments etc., (other than those as may have been provided by B.H.E.L) and upon such removal, the same shall in, and become the property of the Contractor.

25. Statement of Hire Charges:

A monthly detailed statement of the hire charge incurred in respect of B.H.E.L tools, plants, equipments etc., shall be given to the Contractor by the Engineer-in-charge.

26. Precaution Against risks:

The Contractor shall be responsible for providing at his own expense, for all precautions to prevent loss or damage from any and all risks and to minimize the amount of any such loss or damage and for the necessary steps to be taken for the said purpose until the works have been handed over complete in all respect of the Engineer-in-charge.

The Contractor shall provide all watchmen necessary for the protection of the site, the work, the materials, tools, plants, equipments and anything else lying on the Site during the progress of the work. He shall be solely responsible for and shall take all reasonable and proper steps for protecting, securing, lighting and watching, all places on or about the work and the Site which may be dangerous to any person whomsoever.

27. Notices and Fees:

The Contractor shall give all notices required by any Statutory provision or by the regulations and/or bylaws of any local Authority and/or of any Public Service, Company or Authority affected by the work or with whose system the same are or will be connected. The Contractor shall pay and indemnify B.H.E.L against any fees and charges payable under such Acts. Regulation and/or byelaws in respect of the work and shall make and supply all drawings and plans required in connection with any such notice.

28. Setting out of the Works and Protective and Maintaining Signals and Works:

The Engineer-in-charge shall supply dimensioned drawings, levels and other information necessary to enable the contractor to set out the work. The Contractor shall at his own expense set accurately according to the drawings and figured dimension thereon, all the work comprised in the contract and any extras or additions there-to and shall be solely responsible for their being so set out and executed. All bench marks, pegs, signals on the surface, alignment stones, milestones and all similar marks whether put in by B.H.E.L. Authorities for the purpose of checking the Contractor's work or

in the nature of permanent survey marks will during the tenure of the contract, be under the care of the Contractor who shall, at his own expense, take, all proper and reasonable precautions and care to preserve and maintain them in their true position. In the event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may, if deemed necessary, be replaced by the Engineer-in-charge at the Contractor's expense and the cost thereof deducted from any money then or thereafter becoming due to the Contractor.

Where requested by the Contractor, the level marks, center line and chainage pegs corresponding to those shown on the Drawing will be pointed out to the Contractor on the ground but all bench marks or chainage pegs additional to those shown on the Drawing will be set out by BHEL authorities.

29. Site Drainage:

All water that may accumulate on the site during the progress of the work or in trenches and excavations shall be removed to the entire satisfaction of the Engineer-in-charge and at Contractor's expense.

30. Excavations, Relics Etc.

Material of any kind obtained from excavation on the site shall remain the property of BHEL and shall be disposed off as Engineer-in-Charge directs.

All gold, silver, oil and other minerals of any description and all precious stones, coins, treasures, relics, antiques and other similar items which may be found in or upon the site shall be the property of Bharat Heavy Electricals Limited and the Contractor shall duly preserve the same to the satisfaction of the BHEL and shall from time to time deliver the same to such person or persons as the B.H.E.L may appoint to receive the same.

31. Foundations

The Contractor shall not lay any foundations until the excavations for the same have been examined and approved in writing by the Engineer-in-charge.

32. Covering-in Work

The Contractor shall give reasonable notice in writing to the Engineer-in-charge whenever any work is to be permanently covered up or concealed, whether by earth or other means so that it can finally be inspected or measured if necessary. In default of so doing, the Contractor shall, if required by the Engineer-in-charge uncover such work at his own expense.

33. Approval of works by Stages:

All work embracing more than one process shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice in writing to the Engineer-in-charge when each stage is ready. In default of such notice being received, the Engineer-in-charge shall be entitled to approve the quality and extent thereof at any time he may choose and in the event of any dispute, the decision of the Engineer-in-charge thereon shall be final and conclusive.

34. Execution of the Work:

The work shall be executed in a workman-like manner and to the satisfaction in all respects of the Engineer-in-charge.

The Engineer-in-charge will communicate or confirm his instructions to the Contractor in respect of the execution of the Work in a "Work Site Order Book" maintained at his office and the Contractor shall visit this office daily and shall confirm receipt of such instructions by signing the relevant entries in this book. Such entries will rank as order or notices in writing within the intent and meaning of these conditions.

35. Day Work:

No day-work shall be performed without the prior written instructions of the Accepting Officer.

The Contractor shall give to the Engineer-in-charge reasonable notice of the start of any work ordered to be executed by day-work and shall deliver to the Engineer-in-charge within two days of the end of each pay week a return in duplicate giving full detailed accounts of labour and materials for that payweek. One copy of each of these returns, if found correct, will be certified by the Engineer-in-charge and returned to the contractor and must be produced at the time of adjustment of accounts.

An invoice in duplicate signed by the Contractor or his agent shall be sent with each delivery of materials for day-work and the Contractor will be furnished with a receipt signed by the Engineer-incharge specifying the description, quantities weight or measurement (as the case may be) of the articles approved, reference will be made in this receipt in the return aforesaid and the Contractor's Bill.

In the case of Lumpsum Contracts, the rates to be charged and the percentage addition for profit and establishment charges, etc., will be agreed upon between the Accepting Officer and the Contractor prior to the execution of the work.

36. Inspection of the Work:

B.H.E.L Officers concerned with the Contract shall have power at any time to inspect and examine any part of the work and the Contractor shall give such facilities as may be required to be given for such inspection and examination Should Engineer-in-charge consider, at any time during the expiry of the

maintenance period, that any work has been executed with unsound, imperfect or unskilled workmanship or of a quality inferior to that contracted for or not otherwise in accordance with the contract (in respect) whereof the decision of the Engineer-in-charge shall be final and conclusive the Contractor shall on demand in writing from the Engineer-in-charge specifying the fault notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the work so specified in whole or in part as the case may be required at his own expense to the entire satisfaction of the Engineer-in-charge and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his demand as aforesaid, the Engineer-in-charge may carry out the work by other means at the risk and expense in all respects of the Contractor. However, the liability of the Contractor under this condition shall not extend beyond the maintenance period except as regards workmanship which the Engineer-in-charge shall have previously given notice to the Contractor to rectify.

37. Responsibility for Building:

In the event of any building or part of any building being handed over to the Contractor for the execution of work thereto under the provisions of the Contract, he shall give a written receipt for all fixtures, glass etc. and he shall be required to make good at his own expense all damages resulting from any cause whatsoever while in his charge and on completion of the work to deliver the said building or part thereof in a clean state complete in every particular to the entire satisfaction of the Engineer-in-charge.

38. Insurance

The contractor shall within one month after the date of the acceptance of the contract, insure the work against loss or damage to the contract 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.

The cover shall also include wherever necessary the risks of testing including breakdown or explosion of plant and machinery undergoing testing, trail 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 contractors' liabilities during the maintenance period. The insurance shall also be extended to cover third party personal injury and property damage for a sum to be specified by BHEL. 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 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 terms of this condition the Accepting officer may insure the work and may deduct the amount of premiums 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 insurance. The contractor is, therefore, primarily responsible for taking up the insurance in time.

39. Damage and loss to private property and injury to workmen

The contractor shall at his own expense reinstate and make good to the satisfaction of the Engineer—in-charge and pay compensation for any injury, loss or damage occasioned to any property or rights whatever including property and rights of **B.H.E.L**, (or agents, servants or employees of **B.H.E.L**) the injury loss or damage arising out of or in any way in connection with the execution or purported execution of the contract and further the contractor shall indemnify B.H.E.L, against all claims enforceable against B.H.E.L, or any agent, servant, or employee of B.H.E.L a private person, in respect of any such injury (including injury resulting in death loss or damage to any person) whosoever or property, including all claims which may arise under the workmen's Compensation Act or otherwise, or which would be enforceable against B.H.E.L.

40. Completion

The works shall be completed to the entire satisfaction 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, plants, equipments, temporary buildings and things shall be removed and the site and work cleared of rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the Engineer-in-charge at the Contractor's expense and/or before the Scheduled date of completion.

The B.H.E.L shall have power to take over from the Contractor from time to time each sections of the work as have been completed to the satisfaction of the Engineer-in-charge.

In case the Contractor fails to remove any of his properties, assets or fails to clear the rubbish and waste materials within 30 days of the completion of the contract, it is lawful for the contractee, that is BHEL to take such action as it deems fit to clear dispose of such properties, assets or such waste materials and charge the contractor any expenses incurred thereon.

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 maintenance period, where applicable.

41. Compensation for Delay:

If the contractor fails to maintain the required progress in terms of condition 7 or to complete the work and clear the site on or before the contracted or extended period of completion, he shall, without prejudice to any other right or remedy of the B.H.E.L 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 7 or that the work remains incomplete.

This will also apply to items or group 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-stipulated) -- at 1 percent per week.
 Not exceeding 6 months.
- b. Completion period (as originally-stipulated) -- at ½ percent per week
 Exceeding 6 months and not exceeding 2 years.
- c. Completion period (as originally-stipulated) -- at¼ percent per week
 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:

- a. Completion period (as originally-stipulated) -- 10 percent. Not exceeding 6 months.
- b. Completion period (as originally-stipulated) -- 7½ percent.
- Exceeding 6 months and not exceeding 2 years.
 c. Completion period (as original-stipulated) -- 5 percent.

Exceeding 2 years

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor

42. Laws Governing the Contract:

This contract shall be governed by the Indian Laws for the time being in force.

43. Cancellation of Contract for Corrupt Acts:

under this or any other contract with the B.H.E.L.

The Accepting Officer, whose decision shall be final and conclusive, shall, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to Bharat Heavy Electricals Limited, cancel the contract in any of the following cases and the Contractor shall be liable to make payment to B.H.E.L for any loss or damage resulting from any such cancellation for default.

If the Contractor shall:

- a. Offer or give or agree to give to any person in BHEL service any gift or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or forborne to do a day act in relation to the obtaining or execution of this or any other contract for BHEL service OR
- **b.** Enter into a contract with B.H.E.L in connection with which commission has been paid or agreed to be paid by him or with his knowledge, unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to the Accepting Officer, **OR**
- **c.** Obtain a contract with B.H.E.L as a result of ring tendering or by non-bonafide methods of competitive tendering without first disclosing the fact in writing to the Accepting Officer.

44. Cancellation of Contract for Insolvency, Assignment or Transfer or Sub-Letting of Contract:

The Accepting Officer, without prejudice to any other right or remedy which shall accrue thereafter to B.H.E.L shall cancel the contract in any of the following cases:

If the Contractor,

a) Being an individual, or if a firm any partner thereof shall at any time be adjudged bankrupt or have a receiving order or orders for administration of his Estate made against him or shall take any proceedings, for liquidation or composition under any Bankruptcy Act for the time being in force or make any conveyance or assignment of his effects of composition or arrangement for

- the benefit of his creditor or purport to do so, or if any application be made under any Bankruptcy Act for the time being in force for the sequestration of his Estate or if a trust deed be granted by him on behalf of his creditors, OR
- b) Being a Company, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a Receiver or Manager on behalf of the debentures holders shall be appointed or circumstances shall arise which entitle the court or debentures holders to appoint a Receiver or Manager **OR**.
- c) Assigns, transfers, sub-lets or attempts to assign, transfer or sub-let any portion of the work without the prior written approval of the Accepting Officer. **OR**
- d) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.

Whenever the Accepting Officer exercises his authority to cancel the Contract under this condition, he may complete the work by any means at the Contractor's risk and expense provided always that in the event of cost of the completion (as certified by Engineer-in-charge which is final and conclusive) being less than the contract cost, the advantage shall accrue to the BHEL and that if the cost of completion exceeds the money due to the Contractor under the contract, the Contractor shall either pay the excess amount ordered by the Engineer-in-charge or the same shall be recovered from the Contractor by other means.

Engineer-in-charge will have powers to take possessions of the site and any materials, constructional plant, implements, stores, etc, thereon and or carryout the work by any means at the risk and cost of the contractor.

In case the BHEL completes the work under the provisions of this condition the cost of such completion to be taken into account in determining the excess cost to be charged to the contractor under this Condition shall consist of the cost of materials purchased and/or labour provided by the BHEL with an addition of such percentage to cover superintendence and establishment charges as may be decided by the Project Manager/Project Engineer whose decision shall be final and conclusive.

If the contractor fails to pay the excess sum within a period of 30 days, the Engineer-in-charge shall have the right to sell any or all of the contractor's unused materials, constructional plant implements, temporary buildings, etc., and apply the proceeds of sale thereof towards the satisfaction of any sum due from the contractor under the contract and if thereafter be any balance outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.

45. Cancellation of contract in part or in full for contractor's default:

If the Contractor:

- (a) makes default in commencing the work within a reasonable time from the date of handing over of the site and continue in that state after a reasonable notice from Engineer-in-charge, OR 1
- (b) in the opinion of the Engineer-in-charge at any time, whether before or after the date or extended date for completion, makes default in proceeding with the work, with due diligence and continue in that state after a notice of seven days from Engineer-in-charge, OR
- (c) fails to comply with any of the terms and conditions of the contract or after 7 days notice in writing with orders properly issued there under, (OR)
- (d) fails to complete the work order and items of work individual dates for completion and clear the site on or before the date of completion or fails to achieve the progress as set out under clauses 7 of these General Conditions of Contract.

The Accepting Officer may, without prejudice to any other right or remedy which shall have accrued or shall accrue there after to B.H.E.L cancel the contract as a whole or in part thereof or only such work order or items of work in default from the contract. Whenever the Accepting Officer exercises his authority to cancel the contract as a whole or in part under this conditions he may complete the work at the Contractor's risk and cost, provided always that in the event of the cost of completion (as certified by Engineer-in-charge which is final and conclusive) being less than the contract cost the advantage shall accrue to the B.H.E.L if the cost of completion exceeds, the money due to the contractor under this contract, the contractor shall either pay the excess amount ordered by Project Manager or the same shall be recovered from the contractor by other means. Engineer-in-charge

will have power to take possession of the site and any materials, constructional plant, implements, Stores, etc., thereon.

In case the B.H.E.L completes the work or any part thereof under the provisions of this conditions the cost of such completion to be taken in to account in determining the excess cost to be charged to the contractor under this conditions shall consists of the cost of materials purchased and/or labour provided by the B.H.E.L with an addition of such percentage to cover superintendence and establishment charges as may be decided by the Project Manager/Engineer whose decision shall be final and conclusive.

If the contractor fails to pay the excess sum within a period of 30 days, the Engineer-in-charge shall have the right to sell any or all of the contractor's unused materials, constructional plant implements, temporary buildings, etc, and apply the proceeds of sale thereof towards the satisfaction of any sum due from the contractor under the contract and if thereafter be any balance outstanding from the contractor it shall be recovered in accordance with the provision of the contract.

46. Termination of Contract for Death

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the accepting Officer shall have the opinion of terminating the contract without compensation to the contractor.

47. Special Powers of Determination

If at any time after the acceptance of the tender B.H.E.L shall for any reason whatsoever not require the whole or any part of the work, to be carried out the project Manager/Engineer shall give notice in writing of the fact to the Contractor who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the foreclosing of the work.

He shall be paid at Contract rates, for the full amount of the work executed including such additional works, e.g. clearing of site, etc., as may be rendered necessary by the said fore closing. He shall also be allowed a reasonable payment (as decided by the Accepting Officer) for any expenses sustained on account of labour and materials collected but which could not be utilised on the work, as verified by the Engineer-in-charge. Neither shall the Contractor have any claim for compensation on account of any alterations having been made in the original specifications, drawings, designs and instructions, involving any curtailment of the work as originally contemplated.

48. Fair Wage

a) The contractor shall pay not less than the "Fair Wage" to labourers engaged by him on the work

"Fair Wage" means wage whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been notified the wages prescribed by the Project Manager/Engineer for the stations at which the work is done.

- b) The Contractor shall not with standing the provision of any contract to the contrary, cause to be paid a "Fair Wage" to labourers indirectly engaged on the work, including any labour engaged by the Sub-Contractors in connection with the said work, as if the labourers had been directly employed by him.
- c) In respect of labourers directly or indirectly employed on the work for the performance of the Contractors part of this Agreement, the Contractor shall comply with or cause to be complied with B.H.E.L Contractor's Labour Regulations (appended here to as Annexure 'A' to these conditions) in regard to payment of wages, wage period deduction from wages, recovery of wages not paid and deductions unauthorisedly made, maintenance of wage book, wage-slips publication of scale of wage and other terms of employment inspection and submission of periodical returns and all other matters of alike nature.

- d) The Engineer-in-charge concerned shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the contract or non-observance of the regulations.
- The Contractor shall be liable primarily for all payments to be made under the contract and for the observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- f) The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this Contract.

CHAPTER IV

VALUATION AND PAYMENT

49. Records and Measurements:

All items having a financial value shall be entered in the B.H.E.L Measurement Book so that a complete record is obtained of all works performed under the Contract.

Buildings, etc., priced in Schedule 'A' as a unit lumpsum will be entered by number at the unit lumpsum. Work carried out for agreed lumpsum will be described and similarly recorded.

Lumpsum omissions will be entered for deduction. Measurement shall be restricted to that required to ascertain the financial liability of B.H.E.L under the contract.

Work which fails to be measured in detail shall be measured physically, without reference to any local custom that may obtain excepting where it may otherwise be directed in the tender documents. The measurements shall be taken jointly by any person duly authorized on the part of the BHEL and by the Contractor.

The Engineer-in-charge shall give reasonable notice in writing to the Contractor of appointment for measurement.

The Contractor shall, without extra charge, provide assistance with appliance and other things necessary for measurement.

The Contractor shall bear all the cost of measurement of his work.

Measurement shall be entered in the B.H.E.L Measurement Book and signed and dated by both parties each day at the Site on completion of measurement. If the Contractor objects to any of the measurements recorded on behalf of the B.H.E.L a note to that effect will be made in the BHEL Measurement Book or against the item or items objected to; and such note shall be signed and dated by both the parties engaged in taking the measurement.

If, as a result of such objection, it becomes necessary to re-measure the work wholly or in part, the expense of such re- measurement shall be borne by the party requiring the measurement.

Measurement to be re-taken, provided that a net error is found by this remeasurement to amount to less than 5% (five percent) of the value as recorded by the first measurement. But, where the net errors amount to 5% and over of the said value, then the cost is to be borne by the other party. In any case, if the net value of errors found exceeds Rs. 500/- the expense of re-measurement is to be borne by the other party. If the Contractor's representative fails to attend when required, the Engineer-in-charge shall have power to proceed by himself to take measurement and in that case these measurements shall be accepted by the Contractor as final.

The contractor shall, once every month, submit to the Engineer-in-charge with a copy to the Civil Manager/Senior Engineer details of his claims for the work done by him up to and including the previous month which are not covered by his Contract Agreement in any of the following respects;

- Deviation from the items and Specifications provided in the contract documents.
- b. Extra Items/New Items of work.
- c. Quantities in excess of those provided in the contract schedule.
- d. Items in respect of which rates have not been settled. He should, in addition furnish a clear certificate to the effect that the claims submitted by him as aforesaid cover all his claim and that no further claims shall be raised by him in respect of the work done up to and including the period under report.

Except where any general or detailed description of the work in quantities expressly shows to the contrary, schedule of quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure set forth in the schedule of rates specification notwithstanding any provision in the relevant standard method of measurement or any general or local custom. In the case of items which are not covered by the schedule of rates / specification, measurements shall be taken in accordance with relevant standard method of measurement issued by the Indian Standard Institution or as per standard engineering practice.

50. Valuation of Deviations:

Rates for deviated items of work will be fixed as follows:-

- I. For any item of work required to be carried out after the contract has been awarded and which is not covered by Contractor's Schedule but is covered by B.H.E.L Schedule of rates the rate payable for such a fresh item will be derived from B.H.E.L Schedule by the method of proportion as follows:
 - a. In the same proportion to rate in B.H.E.L Schedule of Rates as the tendered rate for the nearest analogous item of work in Contractor's schedule bears to rate for the particular analogous item of work in B.H.E.L Schedule of rates.
 - b. If a single appropriate analogous item of work is not available in both Schedule (Contractor's and B.H.E.L Schedule) then the method of proportion will be applied to the nearest analogous group of items available in both the Schedules referred to i.e. in the same proportion as the total tendered cost of that particular group of items (the sum of the products of the tendered rates and the quantities for which orders are placed bears to the total cost of the same items and quantities at the B.H.E.L Schedule of Rates.
 - c. If even an appropriate analogous group of items is not available in Contractor's Schedule and B.H.E.L Schedule, then the methods of proportion will be applied to all those items of the whole work, which are available in both the Schedules and for which orders have been placed on the contractor, i.e., in the same proportion as the total cost of all these items of work (the sum of the products of the tendered rates and the quantities for which orders are placed) bears to the total cost of the same items and qualities at the B.H.E.L Schedule of Rates.
 - II. If any work not covered by any of the foregoing is ordered on the Contractor, the basis of payment shall be decided by the Accepting Officer whose decision shall be final and conclusive and binding on the parties.

The selection of analogous items or analogous group of items referred to above shall be done by the Engineer-in-charge. Where the rates for deviated items or new items of work can be derived by the selection of different analogous items or analogous group of items, the lowest of all such derived rates shall be taken as the correct rate.

In the case of the contracts for which the Engineer-in-charge is the Accepting Officer, all disputes regarding the settlement of rates of deviated or new items or work shall be referred to the Deputy Manager/Manager whose decision shall be final and conclusive as the case may be.

51. Reimbursement / Refund on Variation in Price, Materials:

If after submission of the tender and/or during the progress of the works, the price of any material (not being a material supplied from the B.H.E.L store in accordance with the Conditions of the Contract) is increased or decreased by an Act of Legislature (Central or State) and/or any notification there under or on account of new duties or levies such as octroi or on account of increase or

decrease in such duties affecting the price of materials required for incorporation in the works and made from materials of which the price has increased or decreased as aforesaid and the Contractor has thereupon to pay in respect of such material or item a price which is higher or lower than the price of that material or item as prevailing immediately before the passing of such Act or levying, increasing/ decreasing of such duty, the B.H.E.L shall incase of increase in price or the duty reimbursed to the contractor and incase of decrease in price, the B.H.E.L shall be entitled to a refund of the reduction price or the reduction in duty. Provided, however no reimbursement or refund shall be made if the increase/decrease is not more than 10% of the said price, and if so, the reimbursement or refund shall be made only on the excess over 10% provided always that any such increase shall not be payable if, in the opinion of the Deputy Manager/Manager (whose decision shall be final and conclusive) the increase is attributable to the delay in the execution of the contract within the control of the contractor or that any such increase has become operative after the contracted/or extended date of completion of the work or items of work in question.

The Contractor shall, for the purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase claimed or any reduction available and shall allow inspection of the same by any duly authorized representative of the B.H.E.L and further shall at the request of the Engineer-in-charge furnish for verification such other information of the Engineer-in-charge may require.

The Contractor shall within a reasonable time of his becoming, aware of any alteration in the prices of any such materials, give notice thereof in writing to the Engineer-in-charge stating that the rate is submitted in pursuance to this condition together with all information relating thereto which he may be in a position to supply.

52. Advances on Account:

No payment shall be made for work estimated to cost less than Rupees **FIVE THOUSAND** till the Whole of the work shall have been completed and a certificate of completion given by the Competent Authority.

In the case of work estimated to cost more than Rupees **FIVE THOUSAND** the contractor may at intervals of not less than one month or as otherwise provided for in the Contract Documents, counting from the date on which order to commence work is given by Engineer-in-charge submit claims on B.H.E.L forms for payment of advances on account of work done and of materials delivered in connection with the Contract.

The contractor shall be paid in respect of such claims to the extent approved and passed by the Engineer-in-charge subject a maximum of 90% of the value of the work actually executed to the satisfaction of the Engineer-in-charge. The certificate of the Engineer-in-charge regarding such approval and passing of the sums so payable shall be final and conclusive against the Contractor.

"After the full amount of Security Deposit is made up through the 10% deduction from On account" bills, 100% payment of all subsequent bills may be made to the Contractor.

The Contractor may also be paid during the progress of the work 75% of the value of any materials which are in the opinion of the Engineer-in-charge in accordance with the Contract, and are actually required for incorporation in the work and which have reasonably been brought to the site in connection therewith and are adequately stored and / or protected against damage by weather or other causes, but which have not at the time of payment of the advance been incorporated in the work on furnishing a formal hypothecation deed. Payment of such advances, however, shall be purely at the discretion of the Deputy Manager/Senior Engineer provided always that payments shall not be made under these periodical certificates in respect of perishable materials like lime, cement, timber, sand, kankar, etc., Any sums/due from the Contractor on account of Tools and Plant, Stores or any other items provided by B.H.E.L shall be deducted from the respective advances, the Engineer-in-charge shall from time to time certify the sums payable to the contractor after retaining the reserves.

Any certificate relating to work done or materials delivered may be modified or corrected by any subsequent interim certificate or by the final certificate and no certificate of the Engineer-in-charge supporting an advance payment shall itself be conclusive evidence that any work or materials to which it relates are in accordance with the contract. All such intermediate payments shall be

regarded as advances against the final payment only and shall not be considered as an admission of the due performance of the contract or any part there of in any respect or the accruing of any claim whatsoever.

Such intermediate payment shall not conclude, determine or affect in any way the powers of the Engineer-in-charge as to the final settlement and adjustment of the accounts or otherwise, or in any way vary or affect the contract.

53. Final Bill

As soon as possible after the completion of the work to the satisfaction of the Engineer-in-charge, the contractor shall forward a certified final account on BHEL form, in duplicate.

It shall be accompanied by all abstracts, vouchers etc., in support thereof and shall be prepared in the manner prescribed by the Engineer-in-charge.

No claims will be entertained after the receipt of the final bill.

The Contractor shall be entitled to be paid the final sum less the value of payments already made on account subject to certification of the final bill by the Engineer-in-charge. Any sums due from the contractor on account of Tools & Plant, Stores or any other items provided by BHEL not yet recovered from the contractor shall be deducted from the final sum aforesaid.

No charge shall be allowed to the Contractor on account of the preparation of the final bill.

54. Payment of Bills

All payment to be made to the Contractor under this contract shall be by "Crossed Cheque" marked 'A/C payee only (Within a reasonable time after the Certification by the Engineer-in-charge) at the State Bank of India or their subsidiaries located in the station where either the work is executed or service rendered or at their branch nearest to the station where the Officer of the Engineer-in-charge is located.

55. Recovery from Contractor:

Whenever under the contract any sum of money shall be recoverable from or payable by the contractor the same may be deducted from any sum then due or which at any time thereafter may become due to the Contractor under the contract or under any other Contract with BHEL or from his Security Deposit or he shall pay the claim on demand.

56. Post Technical Audit of Work and Bills:

BHEL reserves the right to carry out a post-payment audit and technical examination of the work and final bill including all supporting vouchers, abstracts etc., and to enforce recovery of any sums becoming due as a result thereof in the manner provided in the preceding sub-paragraphs provided however that no such recovery shall be enforced after three years of passing the final bill.

57. Refund of Security Deposit:

50% of the Security Deposit mentioned in condition 16 above, may be refunded to the contractor in respect of all contracts on completion of work and after payment of final bill and the balance 50% on expiry of the maintenance period, (described under clause 23) provided the contractor shall have rendered a "No-Demand" Certificate. In case of works where maintenance period is not involved 100% of the Security Deposit may be refunded after payment of final bill provided that the contractor shall have rendered a "No-Demand Certificate".

58. Arbitration:

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or

thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Executive Director / General Manager of BHEL and if ED is unable or unwilling to act, to the sole arbitration of some other person appointed by the ED / General Manager, willing to act as such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Manager / Senior Engineer / Engineer-in-charge is expressed in the contract to be final and conclusive. There will be no objection if the arbitrator so appointed is an employee of B.H.E.L and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such Executive Director / General Manager as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

Subject as aforesaid the provision of the Arbitration & Reconciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

The arbitrator(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

The work under the Contract shall, if reasonably possible, continue, during the arbitration proceedings and no payment due or payable, to the Contractor shall be withheld on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of first hearings.

The arbitrator shall give a separate award in respect of each dispute or difference referred to him.

The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply the provisions of BPE office memorandum No. BPE/CL 001/ 76MAN / 2 (1.10) 75-BPE (GM-1) dated 1st January 1976 or its amendments for arbitration shall be applicable.

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or in relation to interpretation of any provision of the contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Executed Director, BHEL, Trichy.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force

shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be *Tiruchirappalli, TamilNadu*.

Subject to the arbitration in terms of Clause, the Courts at *Tiruchirappalli, TamilNadu* shall have exclusive jurisdiction over any matter arising out of or in connection with this contract.

Notwithstanding the existence or any dispute or differences and / or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in the terms of this Contract.

In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator."

ANNEXURE 'A'

B.H.E.L CONTRACTOR'S LABOUR REGLUATIONS (See condition 20)

1. Definition:

In these regulations, unless otherwise expressed or indicated, the following words and expressions shall have the meaning hereby assigned to them.

- a) "Labour" means workers employed by a contractor directly, or indirectly through a subcontractor, or by an agent on his behalf on a payment not exceeding Rs.500 per month.
- b) "Fair Wage" means wages, which shall include wages for weekly day of rest and other allowances, whether for time or piece work, after taking into consideration prevailing market rates for similar employments in the neighborhood but shall not be less than the minimum rates of wages fixed under the minimum Wages Act.
- c) "Contractor" for the purpose of these Regulations shall include an agent or Sub-Contractor employing labour on the work taken on contract.
- d) "Inspecting Officer" means any Labour Enforcement Officer, or Assistant Labour Commissioners of the Chief Labour Commissioner's Organization.
- e) "Form" means a form appended to these Regulations.

2. Notice of Commencement:

The Contractor shall, within **SEVEN DAYS** of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information with copy to the Engineer-incharge.

- a) Name and situation of the work.
- b) Contractor's name and address.
- c) Particulars of the Department for which the work is undertaken.
- d) Name and address of sub-contractors as and when they are appointed
- e) Commencement and probable duration of the work
- f) Number of workers employed and likely to be employed,
- g) 'Fair wages' for different categories of workers.

3.

1. Number of hours which shall constitute a normal working day:

The number of hours which shall constitute a normal working day for an adult shall be **NINE** hours. The working day of an adult worker shall be so arranged that of intervals, if any, for rest it shall not spread over more than twelve hours on any day. When an adult worker is made to work for more than **NINE** hours on any day or for more than FORTY EIGHT hours in any week he shall in respect of overtime work, be paid wages at double the ordinary rate of wages.

2. Weekly day of rest: Every worker shall be given a weekly day of rest which shall be fixed and notified atleast TEN days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of five days immediately before or after the rest day. Provided that no substitution shall be made which will result in the worker working for more than ten days consecutively without a rest day for a whole day.

Where in accordance with the foregoing provisions a worker works on the rest day and has been given a substituted rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

NOTE: The expression 'Ordinary rate of wages' means the fair wage the worker is entitled to.

4. Display of Notice Regarding Wages, Weekly Day of Rest, Etc.:

The Contractor shall before he commences his work on contract display and correctly maintain and continue to display and correctly maintain in clean and legible condition in conspicuous places on the works, notice in English and in the local Indian languages, spoken by majority of workers, given the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy each of such notices to the Inspecting Officers and the Engineer-in-charge.

5. Fixation of Wage Periods:

The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall normally exceed one week.

6. Payment of Wages:

(i) Wages due to every worker shall be paid to him direct. All wages shall be paid in current coins or currency or in both.

Wages of every worker employed on the contract shall be paid where the wage period is one week, within, **THREE DAYS** from the end of the wage period, and in any other case before the expiry of the 7th day or 10th day from the end of the wage period according as number of workers does not exceed 1,000.

(ii) When employment of any worker is terminated by or on behalf of the contractor, the wages earned

by him shall be paid before expiry of the day succeeding the one on which his employment is terminated.

(iii) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal working time.

NOTE: The term "Working Day" means a day on which the work on which labour is employed is in progress.

7. Register of Workmen:

A register of workmen shall be maintained in the form appended to these regulations and kept at the work site or as near to it as possible, and the relevant particulars of every workmen shall be entered therein within **THREE** days of his employment.

8. Employment Card:

The Contractor shall issue an employment card in the Form appended to these regulations to each worker on the day of work or entry into his employment. If a worker has already any such card with him issued by the previous employer the contractor shall merely endorse that Employment Card with relevant entries. On termination of employment the Employment Card shall again be endorsed by the Contractor and returned to the worker.

9. Register of Wages etc.

- (i) A register of Wages-cum-Muster Roll in the Form appended to these regulations shall be maintained and kept at the work site or as near to it as possible.
- (ii) A wage slip in the form appended to these regulations shall be issued to every worker employed by the Contractor atleast a day prior to disbursement of wages.

10. Fines and Deductions which may be made from wages:

(i) Wages of worker shall be paid to him without any deductions of any kind except the following:

- a. Fines;
- b. Deductions for absence from duty, i.e., from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
- Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money which he is required to account for, where such damage or loss is directly attributable to his neglect or default;
- **d.** Deductions for recovery of advances or for adjustment of overpayment of a wages. Advance granted shall be entered in a register;

And

Any other deduction, which the B.H.E.L may from time to allow.

- ii. No fines shall be imposed on a worker save in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.
- iii. No fines shall be imposed on a worker and no deductions for damage or loss shall be made from wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- iv. The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in rupee of the wages payable to him in respect of that wage period.
 - i. No fine imposed on a worker shall be recovered from him in instalments, or after expiry of sixty days from the date on which it was imposed. Every fine shall deemed to have been imposed on the day of the act or omission in respect of which it was imposed.
 - ii. The Contractor shall maintain both in English and the local Indian language a list, approved by the Chief Labour Commissioner, clearly stating the acts and omissions for which penalty or fine may be imposed on a workman and display it in good condition in a conspicuous place on the work site.
 - iii. The Contractor shall maintain a register of fines and the register of deductions for damage or loss in the Forms appended to these regulations which should be kept at the place of work.

11. Register of Accidents:

The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

- 1. Full particulars of the labourers who met with the accident.
- 2. Rates of Wages.
- 3. Sex
- 4. Age
- 5. Nature of accident and cause of accident.
- 6. Time and date of accident.
- 7. Date and time when admitted in hospital.
- 8. Date of discharge from the hospital.
- 9. Period of treatment and result of treatment.
- 10. Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- 11. Claim required to be paid under Workmen's Compensation Act.
- 12. Date of payment of compensation.
- 13. Amount paid with details of the person to whom the same was paid.
- 14. Authority by whom the compensation was assessed.
- 15. Remarks.

12. Preservation of Registers:

The Register of Wages-cum-Muster Roll required to be maintained under these Regulations shall be preserved for 3 years after the date on which last entry is made therein.

13. Enforcement:

The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations, and send a report to the Engineer-in-charge specifying the amounts representing workers, dues and amount of penalty to be imposed on the contractor for breach of these Regulations, that have to be recovered from the contractor, indicating full details of the recoveries proposed and the reasons therefore. It shall be obligatory on the part of the Engineer-in-Charge on receipt of such a report to deduct such amounts from payments due to the contractor.

14. Disposal of amounts recovered from the Contractor:

The Engineer-in-charge shall arrange payment to workers concerned within **FOURTY FIVE** days from receipt of a report from the Inspecting Officer except in cases where the contractor had made an appeal under Regulation, 16 of these Regulations. In cases where there is an appeal, payments of workers, due would be arranged by the Engineer-in-charge, wherever such payments arise, within **THIRTY** days from the date of receipt of the decision of the Regional Labour Commissioner (R.L.C.).

15. Welfare Fund:

All money that are recovered by the Engineer-in-charge by way of workers, due which could not be disbursed to workers within the time-limit prescribed above, due to reasons such as where-about of workers not being known, death of a worker, etc., and also amounts recovered as penalty, shall be credited to a fund to be kept under the custody of B.H.E.L for such benefit and welfare of workmen employed by contractors.

16. Appeal against decision of Inspecting Officer:

Any person aggrieved by a decision of the Inspecting Officer may appeal against such decision to the Regional Labour Commissioner concerned within THIRTY days from the date of the decision, forwarding simultaneously a copy of his appeal to the Engineer-in-charge. The decision of the Regional Labour Commissioner shall be final and binding upon the Contractor and the workmen.

17. Representation of Parties:

- i. A workman shall be entitled to be represented in any investigation or enquiry under these Regulations by an Officer of a registered trade union of which the said trade union is affiliated or where the workman is not a member of any registered trade union, by an Officer of a registered trade union connected with, or any other workmen employed in the industry in which the worker is employed.
- ii. A Contractor shall be entitled to be represented in any investigation or enquiry under these Regulations by an officer of an association of contractors of which he is a member or by an officer of a Federation of Associations of Contractors to which the said association is affiliated or where the contractor is not a member of any association of employers, connected with, or by any other employer engaged in the industry in which the contractor is engaged.
- iii. No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these Regulations.

18. Inspection of Books and other Documents:

The Contractor shall allow inspection of the Register and other documents prescribed under these Regulations by Inspecting Officer and the Engineer-in-charge or his authorized representative at any time and by the worker or his agent on receipt of due notice at a convenient time.

19. Interpretation etc.

On any question as to the application, interpretation or effect of the Regulations the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner (Central) shall be final and binding.

20. Amendments:

Central Government may, from time to time, add to or amend the Contractor's Labour Regulations and issue such directions as it may consider necessary for the proper implementation of the Contractor's Labour Regulations or for the purpose of removing any difficulty which may arise in the administration thereof, based on which the B.H.E.L., Contractor's Labour Regulations herein contained shall be subject to revision.

MODEL RULES FOR LABOUR WELFARE (See Condition 20)

1. Definition:

- a) 'Workplace' means a place at which, on an average, twenty or more workers are employed.
- b) 'Large Workplace' means a place at which on an average, 500 or more workers are employed.
- 2. First Aid: At every workplace, there shall be maintained in a readily accessible place first-aid appliances including an adequate supply of sterilized dressings and sterilized cotton wool as prescribed in the Factory Rules of the State in which the work is carried on. The appliances shall be kept in good order and, in large work places, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

At large workplaces, where hospital facilities are not available within easy distance of the works First Aid posts shall be established and be run by a trained compounder.

Where large workplaces are remotely situated and far away from regular hospitals an indoor ward shall be provided with one bed for every 250 employees.

Where large workplaces are situated in cities, towns or in their suburbs and no beds are considered necessary owing to proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to these hospitals. At other workplaces, some conveyance facilities shall be kept readily available to take injured person or persons suddenly taken seriously ill, to the nearest hospital.

At large workplaces there shall be provided and maintained an ambulance room of the prescribed sizes, containing the prescribed equipment and in the in-charge of such medical and nursing staff as may be prescribed. For this purpose the relevant provisions of the Factory Rules of the State Government of the area where the work is carried on may be taken as the prescribed standard.

- **3. Accommodation for Labour:** The Contractor shall during the progress of the works provide, erect and maintain necessary temporary living accommodation and ancillary facilities for labour at his own expense and to standards and scales as approved by the Engineer-in-charge.
- 4. Drinking Water: In every workplace, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking. Where drinking water is obtained from an intermittent public water supply each workplace shall be provided with storage where drinking water shall be stored. Every water supply storage shall be at a distance of not less than 15 meters from any latrine drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and water-proof.

A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

- **5. Washing and Bathing places:** Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept in clean and drained condition.
- **6. Scale of Accommodation in Latrines and Urinals:** These shall be provided within the precincts of every workplace latrines and urinals in an accessible place, and the accommodation, separately for each of these, shall not be less than at the following scales:

No. of Seats

a) Where number of persons does not exceed 50

b) Where number of persons exceed 50 but does not exceed 100

c) For additional persons

No. of Seats

2

3

Per 100 or part thereof.

In particular cases, the Engineer-in-charge shall have the power to increase the requirement, where necessary.

7. Latrines and Urinals: Except in workplaces provided with water flushed latrines connected with a waterborne sewage system, all latrines shall be provided with receptacles on dry-earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in a strictly sanitary condition. Receptacles shall be tarred inside and outside at least once a year.

If women are employed, separate latrine and urinals, screened from those for men and marked in the vernacular in conspicuous letters "For Women only" shall be provided on the scale laid down in rule 6. Those for men shall be similarly marked "For Men only" A poster showing the figure of a man and of a woman shall also be exhibited at the entrance to latrines for each sex. There shall be adequate supply of water close to latrines and urinals.

- **8. Construction of Latrines:** Inside walls shall be constructed of masonry or other non-absorbent material and shall be cement-washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for the purpose and kept available for inspection. Latrines shall have at least thatched roof.
- 9. Disposal of Excreta: Unless otherwise arranged for by the local sanitary authority, arrangement for proper disposal of excreta by incineration at the workplace shall be made by means of a suitable incinerator approved by the local medical health and municipal or cantonment authorities. Alternatively local excreta may be disposed off by putting a layer of night soil at the Bottom of pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn into manure).

The contractor shall, at his own expenses, carry out all instruction issued to him by the Engineer-incharge to effect proper disposal of soil and other conservancy work in respect of Contractor's workpeople or employees on the Site. The Contractor shall be responsible for payment of any charges which may be levied by municipal or cantonment authority for execution of such work on his behalf.

- **10. Provision of shelters during rest:** At every workplace there shall be provided, free of cost, four suitable sheds, two for meals and two others for rest, separately for use of men and women labour. Height of each shelter shall not be less than 3 meters from floor level to lowest part of roof. Sheds shall be kept clean and space provided shall be on the basis of at least 0.5 sg.m. per head.
- 11. Crèches: At a place at which 20 or more women workers are ordinarily employed, there shall be provided at least one hut for use of children under the age of 6 years of such women. Huts shall not be constructed to a standard lower than that of thatched roof, mud floor and walls with wooden planks spread over mud floor and covered with matting.

Huts shall be provided with suitable and sufficient openings, for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two 'days' in attendance. Sanitary utensils shall be provided to the satisfaction of local medical, health and municipal or cantonment authorities. Use of huts shall be restricted to children, their attendants and mothers of children.

When the number of women workers is more than 25 but less than 50, the Contractor shall provide at least one hut and one Dais to look after children of women workers.

Size of crèche (s) shall vary according to the number of women workers employed. Crèche(s) shall be properly maintained and necessary equipment like toys, etc. provided.

- 12. Canteen: A cooked food canteen on a moderate scale shall be provided for the benefit of workers wherever it is considered necessary.
- Planning, setting and erection of the above mentioned structures shall be approved by the Engineer-13. in-charge, and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and sanitary condition to the satisfaction of the Engineer-in-Charge and at the Contractor's expense. The Contractor shall conform generally to sanitary requirements of local medical, health and municipal or cantonment authorities and at all times adopt such precautions as may be necessary to prevent soil pollution of the site.

On completion of the works the whole of such temporary structures shall be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the whole of site left clean and tidy to the entire satisfaction of the Engineer-in-Charge, and at the Contractor's expenses.

- 14. Anti-malarial precautions: The Contractor shall, at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-charge, including filling up of any borrow pits which may have been dug by him.
- 15. Enforcement: The Inspecting Officer mentioned in the Contractors Labour Regulations or any other officer nominated in his behalf by the Engineer-in-Charge shall report to the Engineer-in-Charge all cases of failure on the part of the Contractor and or his sub-contractors to comply with the provisions of these Rules either wholly or in part and the Engineer-in-Charge shall impose such fines and other penalties as are prescribed in the conditions.

B.H.E.L SAFETY CODE See Condition-20

- 1. Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except such short period of work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and hand-holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than \(\frac{1}{2} \) to 1 (\(\frac{1}{2} \) horizontal and 1
- 2. Scaffolding or staging more than 3.25 meters above the ground or floor, swung or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted, braced and otherwise secured atleast 1 meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3. Working platform, gangways, and stairways shall be so constructed that they do not sag unduly or unequally, and if height of a platform or gangway or stairway is more than 3.25 meters above ground level or floor level, it shall be closely bordered have adequate width and be suitably fenced, as described in 2 above.
- 4. Every opening in floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of 1 meter.
- Safe means of access shall be provided to all working platforms and other working places. Every 5. ladder shall be securely fixed. No portable single ladder shall be over 9 meters in length. Width between side rails in a rung, ladder shall in no case be less than 30 cm, for ladders up to and including 3 metres in length. For longer ladders this width shall be increased by atleast 6 mm for each additional 30 cm. of length. Uniform step spacing shall not exceed 30 cm. Adequate shall be taken to prevent danger from electrical equipment. No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The

Contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses of defence of every suit action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions, and pay any damages and costs which may be awarded in any such suit, action or proceeding to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.

6. Excavation and Trenching:

All trenches, 1.5 metres or more in depth, shall at all times be supplied with atleast one ladder for each 30 m length or fraction thereof. Ladder shall be extended from bottom of trench to atleast 1 metre above surface of the ground. Sides of a trench 1.5 metres or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated materials shall not be placed within 1.5 metres of the edge of trench or half the depth of trench, whichever is more. Cutting shall be from top to bottom. Under no circumstances shall undermining or undercutting be done.

- 7. **Demolition:** Before any demolition work is commenced and also during the process of the work:
 - a. All roads and open areas adjacent to the work site shall either be closed or suitably protected:
 - b. No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - c. All practical steps shall be taken to prevent danger to persons employed, from risk of fire or explosion, or flooding. No floor, roof, or other part of a building shall be so overloaded with debris or materials as to render it unsafe.
- 8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use and the Contractor shall take adequate steps to ensure proper use of equipment by those concerned.
 - a. Workers employed on mixing asphaltic materials cement and lime mortars/ concrete shall be provided with protective footwear and protective gloves.
 - b. Those engaged in handling any material which is injurious to the eye shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welder's protective eye-shields.
 - d. Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - e. When workers are employed in sewers and manholes which are in use, the

Contractor shall ensure that manhole covers are opened and manholes are ventilated atleast for an hour before workers are allowed to get into them. Manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.

The Contractor shall not employ men below the age of 18 and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken:

- i. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- ii. Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scraped.
- iii. Overalls shall be supplied by the Contractor to workmen and adequate facilities shall be provided to enable working-painters to wash during on cessation of work.

- 9. When work is done near any place where there is risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- 10. Use of hoisting machine and tackles including their attachments, anchorage and supports shall conform to the following:
 - a. i. These shall be of good mechanical construction, sound material and adequate strength and free from defects and shall be kept in good working order.
 ii. Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from defects.
 - b. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - c. In case of every hoisting machine and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall have the safe working load plainly marked there on, In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - d. In case of departmental machine, safe working load shall be notified by the Engineer-in-Charge. As regards contractor's machine the Contractor shall notify safe working load of each machine to the Engineer-in-Charge whenever he brings it to site of work and get it verified by the Engineer-in-Charge.
- 11. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards; hoisting appliances shall be provided with such means as will reduce to the minimum risk of accidental descent of load. Adequate precautions shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, working apparel such as gloves, sleeves and boots, as may be necessary shall be provided. Workers shall not wear any rings, watches carry keys or other materials which are good conductors of electricity.
- 12. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in a safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near the places of work.
- 13. These safety provision shall be brought to the notice of all concerned by display on a notice board at a prominent place at the work spot. Persons responsible for ensuring compliance with the Safety Code shall be named thereon by the Contractor.
- 14. To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the Contractor shall be open to inspection by the Engineer-in-Charge or his representatives and the Inspecting Officers as defined in the Contractor's Labour Regulations.
- 15. Notwithstanding the above conditions 1 to 14, the Contractor is not exempted from the operation of any other Act or Rule in force.

FORM OF REGISTER OF WORKMEN

(Regulation-7)

i.	Name and address of	the Cont	ractor									
b)	Number and date of the	ne WORK	ORDER & CO	NTRACT AGR	EEMENT							
iii.	Name and address of	the depa	tment awarding	g the contract						_		
iv.	Nature of the Contract	Nature of the Contract and location of the work										
٧.	Duration of the Contra	ct										
SI. No	Name and surname of the workers	-	Father's / Husband's Name	Nature of emp- loyment Desig- nation.	Permanent / Home address of Employee (Village, Distt. Thana).	Present address	Date of commen-cement of emp-loyment	ti le	Date of ermina-ion or eaving of emp-oyment	Signature or thumb impression of the employee.	Remarks	
1	2	3	4	5		6	7	8	9	10	11	

FORM OF EMPLOYMENT CARD (Regulation-8)

Nar Full	Name and Sex of the Father's / Husband Address	l's Name h vife/husband and c	hildren, if any, or of	f dependent	next of kin in case	the worker has r	no wife/ hust	pand or ch	 ild):-	
SI. No	Name & Address of employer (specify Whether a contractor or a sub contractor).	Particulars of location of worksite and description of work done	Total period for which the worker is employed from	Actual number of days worked	Leave taken (No. of days should be specified).	Nature of Work done by the worker.	Wage rate With Parti- culars of unit in Case of Piece work.	Total Wage earned by the Worker during the period shown Under Col.5.	REMARKS	Signature of the Employee
1	2	3	4	5	6	7	8	9	10	11

N.B:- For a worker employed at one time on piece-work basis and at another on daily wages, relevant entries in respect of each type of employment should be made separately.

FORM OF WAGE SLIP (Regulation-9)

i.	Name of the Contractor
ii.	Place
1.	Name of the worker with
	father's / husband's name.
2.	Nature of employment.
3.	Wage period.
4.	Rate of Wages payable
5.	Total attendance / Unit of work done.
6.	Dates on which overtime worked
7.	Overtime Wages.
8.	Gross Wages payable.
9.	Total deductions (indicating nature of deductions)
10.	Net wages payable.

Contractor's Signature / Thumb impression.

Employees' Signature/
Thumb impression.

FORM OF REGISTER OF FINES

(Regulations No.10 vii)

SI. No.	Name	Father's / Husband's name	Sex	Department	Nature and date of the offence for which fine imposed	Whether workmen showed cause against fine or not, if so, enter date	Rate of wages	Date and amount of fine imposed	Date on which fine realised	Remarks
1	2	3	4	5	6	7	8	9	10	11

FORM OF REGISTER OF WAGES-CUM-MUSTER ROLL

(Regulation – 9)

i.	Name and address of the Contractor
ii.	No. & Date of the Contract Agreement /Work Order
iii.	Name and address of the department awarding the Contract
iv.	Nature of the Contract and location of the work
٧.	Duration of the Contract
vi.	Wage period

							Fa Wag	ir Wag es pay paid	ge /able			vertin Vorked				iction vages							
Serial Number	Name and Surname of the worl	Father's/Husband's name	Sex	Designation and Nature of work	Daily attendance (No. of units worked 1,2,3,4,5,6,7,,31)	Total attendance Units	Basic	D.A. & other allowance	Basic	D.A. & other allowance	Date	No.of hours.	Overtime wages earned.	Total wages paid	*Fine	Deduction for damage or loss	House rent	Recovery of advances	Other deductions	Net wages payable	Date of payment	Signature of thumb impression of the worker	Remarks
01	02	03	04	05	06	07	80	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Reasons to be recorded in Column 24.

FORM OF REGISTER OF DEDUCTIONS FOR DAMAGES OR LOSS CAUSED TO THE B.H.E.L. BY THE NEGLECT OR DEFAULT OF THE EMPLOYED PERSONS

Regulation No 10 (vii)

SI.No	Name	Father's Husband's Name	Sex	Department	Damage or loss caused with date	Whether worked showed cause against deduction if so, enter date	Date & amount of deduction imposed	Number of Install- ment, if any	Date on which total amount realised	Remarks
1	2	3	4	5	6	7	8	9	10	11

GENERAL SAFETY PRECAUTIONS TO BE FOLLOWED AT WORK SITE DURING EXECUTION

The following safety measures should be strictly adhered to during execution of works at sites.

- 1. Providing the working platform with toe board and handrail for continuous working at heights.
- 2. Providing safety belt and life line at all times for men working at heights.
- 3. Providing dust or fume respirator in places where dust and fume concentration exists.
- 4. Providing goggles and welding screens.
- 5. Providing acid and alkali proof rubber gloves for handling acid and alkali and chemical which are corrosive.
- 6. Providing rubber gloves for working on electrical works.
- 7. Ensuring proper lashing of the components while being transported in vehicles.
- 8. The vehicles must have side supports or have body to support the materials conveyed.
- 9. The materials should not be allowed to extend or overflow the sides of the vehicles.
- 10. Materials should not be allowed to overhang from the rear edge of the body of the vehicle.
- 11. Driver of the vehicle must possess license.
- 12. Vehicle must not be overloaded prescribed limits.
- 13. Red flags and lights for parts projecting from the body of vehicle must be provided.
- 14. The speed restrictions within the factory premises must be strictly adhered to.
- 15. The gas cylinders must be always handled on trolleys or kept tied down not in use. They should never be rolled as Roller for conveying.
- 16. Cylinders should not be used without regulators.
- 17. All excavations must be barricaded and red lamps must be provided.
- 18. All electrical connections must be properly earthed.
- 19. No work should be taken up for execution inside shop floor, without obtaining necessary work permit.
- 20. Providing helmet, safety belt, etc., for high level work and sufficient number of Industrial Safety nets at appropriate level to safeguard the persons working at high level particularly nin trusses, girders, roofing etc., of industrial and high roof buildings.
- 21. The contractor should maintain a register regarding the driver license particulars.
- 22. All personal protective equipment conform with standard specification as per the details given in the code of conduct.

Contractor including their sub-contractors, agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measurers. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

SAFETY PRECAUTIONS TO BE OBSERVED WHILE TRANSPORTING MATERIALS

I. VEHICLE

- 1. Vehicles carrying material should have proper registration documents and must be produced on demand by our Security Staff.
- 2. The light on right side, i.e., over the drivers cabin shall be in working condition.
- 3. Both the head lights as well as park lamps must be in working conditions.

II. MOVEMENT OF VEHICLE

- 1. The vehicle should not travel at more than 20 km.ph in our premises.
- 2. The Driver of the vehicle must possess heavy duty license and produce on demand by the Security Staff.
- 3. Vehicles carrying inflammable liquids in the tank containers should have grounding chain or the tank should be coated with insulating material also to avoid Static Electricity.
- **4.** In road junctions, speed breakers and railway crossing, the speed should be lowered and vehicle should proceed cautiously.
- **5.** The driving should 'KEEP TO THE LEFT' at all places.
- **6.** The vehicle should not be parked in road which could obstruct the vehicular traffic.
- 7. No person other than driver should be allowed to sit or stand on the prime mover or trailer.
- **8.** The vehicle should pass only through the approved routes. Short cuts should be forbidden.
- **9.** There must be a safe distance behind another moving truck.
- **10.** The driver should avoid making quick starts, jerky stops or quick turns at excessive speed.

III. SHIPPING

- 1. Strong side supports should be provided on both sides of the trailer. The side supports should be fixed in such a way that it cannot be removed even temporarily.
- 2. Adequate packing must be given for easy slinging operation. The packing materials should be good enough to withstand the load.
- 3. The stacking of loads in the truck should be evenly placed. The load should not be heaped together or dumped over the chassis.
- 4. The loaded materials should be fastened tightly with 'WIRE ROPE'. Manila rope or coir rope should not at all be used. There must be side packing such as gunny or rubber tyre between the sharp edge of the job and wire rope in order to avoid cut in the wire rope.
- 5. There must be minimum two fastenings and it should be more in case of lengthier loads.
- 6. The wire rope should be in sound conditions i.e., there should not be links, knots or bristles etc.,
- 7. The wire rope ends should be clamped with 'U' clamps.
- 8. The load on the truck should not be beyond its standard capacity. The carrying capacity must be clearly marked on the trailer also.
- 9. The loose pieces should be bundled before loading on the truck.

- 10. There must be red flags or red lamps for the lengthy loads which extend beyond chassis.
- 11. The load should not be over hanging more than 3 ft. from the end of the body.
- 12. The materials should not be stacked too high to avoid hitting against live electric lines.
- 13. While transporting the scraps, there must be wire knitting cover to prevent falling of scrap.

IV. GENERAL

The vehicles should not be moved directly inside the production building in case the materials are to be unloaded there. But the vehicle should be parked outside the building and the driver should ascertain the passage as well as the unloading points with the help of shop officials. This will avoid the congestion of blocking of traffic in the gangway.

Following are the points to be ensured for the safety of contract employees.

I. Identity and Entry:

- The contractors to give identity card to their employees with full details like employee name, company name, age, blood group, contact person with phone no. etc.
- 2. The contractors not to employ people whose age is below 18 years.
- 3. HR/Welfare will issue passes to the trained employees only.
- Welfare has to arrange for necessary infrastructure (biometric entry) for enrolment of new contract workers. Biometric entry system will be made available in North Gate and Unit 2 initially.
- 5. The data of daily entry of contract workers through biometric will be made available online to the contract awarding departments HR/Welfare.

II. Training:

- Safety, first aid and fire fighting training to be given to two responsible persons in each contract and they should take care of their groups on day to day working.
- 2. This shall be done within a period of 2 weeks after awarding of fresh contract.
- For ongoing contracts the contractors has to identify the persons to be trained within a period of 2 weeks.
- Driving/operation of Crane/jumbo/Fork lift etc are to be done only by authorized persons.

III. Dress Code:

- Male employees should enter gates only with Safety shoes, Pants-Shirts, (Dothi, Lungi not permitted).
- Female employees should enter gates only with Safety shoes. Loose dress must be avoided. (A shirt over saree / chudithar is a must).
- Normal shoes are acceptable for office area work only.
- Employees working in canteens can wear sandex.
- Welfare will finalize and indicate a color coding to be provided in the dresses used by contract employees for uniformity and easy identification of the contract workers.

IV. Procedures:

- 1. Smoking, audio-playing (mobile phone, iPod, inbuilt music systems etc in the vehicles.) are banned within the factory premises.
- 2. Moving to unrelated areas must be strictly avoided by the contract employees entering to the other areas only with knowledge of concerned department.
- 3. Procedure (SOP) given from user departments are to be adopted for all operations and maintenance e.g. tank cleaning, ET plant maintenance, Sewage maintenance, Oxidation pond maintenance, operation of substation, transformer maintenance etc. User departments agreed to generate procedures incase if not available already (Snake catching, Monkey catching, Honey comb removal etc.).
- 4. Adequate precautions to be taken while waste removal like paint sludge removal, chromic sludge removal, phenol and tar removal by contract employees.
- 5. The contractor should clearly inform the hazards involved to the employees MSDS to be displayed.
- 6. The contract employees involved in tank cleaning, ET plant maintenance, Oxidation pond maintenance should know swimming and strict monitoring should be ensured.
- 7. Line clearance(LOTO)procedure to be followed during bulb changing, electrical substation maintenance, DSL maintenance, furnace instrumentation etc.
- 8. Work permits to be obtained for jobs like work at height, excavation, blasting, hot work, pipe line work, roof light maintenance, work at confined space like cellar.
- 9. Users agreed to initiate the permits for all the works mentioned in the table given below to safety mgt for clearance.

Work Permit Instructions

SI No	Works	Instruction
1	Construction, erection & Commission of new and modification of existing civil structure	The contract workers employed shall have sufficient job knowledge shall follow the procedures and dress code
2	Periodical Civil maintenance work at height	Only experienced people shall be allowed to carry out the work at height. Physically fit without any vertigo problem. Wear safety belt and use life line, Net etc.
3	Work at height - including roof light maintenance and furnace work	Only experienced and qualified electrician shall be allowed to carry out the work at height. Physically fit without any vertigo problem. Wear safety belt and use life line, Net etc.
4	Welding work at process plant including pipe lines, PG and acetylene plant	Only experienced people shall be allowed to carry out the work at height. Shall take care of nearby pipeline, remove all flammable materials. Get help from fire service.
5	Crane erection and modification work	Only experienced people shall be allowed to carry out the work. Wear safety belt and use life line. Net etc. Remove all loose material
6	Excavation and Blasting.	Some lapse is noticed obtaining Excavation permit, shall be strictly followed. Only licensed holder shall carry out blasting, accountability shall be properly maintained for the explosives, unauthorised/unapproved explosives shall not allowed. Only authorised equipment shall be used for blasting
7	Fragile roof work	Only experienced people shall be allowed to carry out the work at the fragile roof. Physically fit without any vertigo problem. Wear safety belt and use life line. Net etc. They shall be properly instructed before going to the roof.
8	Confined space work, cellars, furnace ducts	Oxygen level to be checked before work, proper breathing apparatus to be used. Only experienced people shall be allowed to carry out the work at cellars/confined space

- 10. Specified Speed limit 20 kmph to be followed by all the vehicles entered in factory premises.
- 11. Procedure given by user departments for spray painting, brush painting and dip painting should be followed. Paint sludge removal, empty tin removals etc. are to be periodically carried out and sent to disposal stores.

V, Equipments:

- All the equipments used by the contractors are to be in good condition with all safety provisions and to be checked and certified by the department officials.
- Electrical supply to be taken through the M&S department. Unauthorized connections taken any will be viewed seriously.
- Welding machines are to be used with proper earth connection. Cables should be in good condition. Insulation to be checked regularly and maintained.
- 4. Qualified electricians are only to be used for giving connections.
- Good quality Electrical equipments and tools are to be used with valid certificates. These certificates must be shown on demand.
- 6. For portable electrical equipments supply to be taken using plugs points.
- 7. Wires / cables extension box should be in good condition.
- 8. Proper earthing should be maintained.
- Mobile Crane, Fork lift, Trailers; JCB etc. should be in good condition with specified capacity and should not cause any untoward incident while in use.
- 10. Fitness Certificate issued by competent person approved by Govt. authorities, insurance and emission certificate etc. should be in possession and should be shown on demand.

VI All contractors:

A. Gas Plant:

- Contractors to use only trained persons for working in LPG installations with separate identity and to furnish valid documents for working in LPG area.
- If LPG is used, hazards, safe handling methods, etc., are to be clearly explained to the employees and safety measures are to be taken.
- People working in LPG line, furnace, and installation are to be aware of LPG properties; hazards involved and should work with adequate precautions and
- assistance. Hot work permit to be obtained any welding/cutting work in this area. No spark or flame is allowed.
- Awareness on PG Plant, Inflammable stores for contract employees should be ascertained by the contractors. Contract employees authorized by safety are only to be allowed. Others not allowed.
- Adequate precautions must be taken by contractors for their employees working in the PG area. (Gas generation, coal handling, poking operation, booster area, ash handling, tar and phenol handling, pipe line work etc.)

B. Electrical Contractors:

- 1. Must ensure proper care before working on electrical lines.
- Must have obtained line clearance/work permit for all electrical work, panel board cleaning, roof light changing, cable trench works and works in confined areas.
- 3. After completion of the work the line clearance/ permits must be closed.
- Must remove all the left out choke, bulbs, tools, fasteners etc. after completion of the work (working on height).
- 5. Portable machines, lines drilling machines must be with proper plug points.
- Unused new cables and fittings are to be returned to the concerned. Old cables/ used cables are to be removed and returned properly.

C. Painting Contractors:

- 1. Must know the characters of paints, thinners, solvents etc before handling.
- User departments and the contractor must provide Materials Safety Data Sheets (MSDS) for the contract employees involved in painting work.
- 3. Contractors should provide respirators to the employees doing painting work.
- User departments should ensure training for contract employees in Fire prevention, fire fighting etc.
- 5. The training shall be through Fire/Security department.
- Contract employees must take adequate precaution to prevent fire while working.

D. Civil Contractors:

- 1. Employees working in Civil constructions should be familiar with the relevant work viz masonry work construction, tiles, partition, floor elevated work etc.
- Tools, equipment pertaining to their works must be in good condition and with valid certificates. The workers employed must be skill ful enough to complete the work-roof work, work at height, excavation blasting etc.
- Contractors must check the health of employees specific to occupation periodically and furnish evidence to welfare department/BHEL. This is a must for the works like working at height, Jack hammering, sewage cleaning etc.
- Vehicles used for construction works like lorries, excavation equipments (JCB),
 Mixing machines etc., are sound in operating condition.

- 5. User departments should ensure that the applicable procedures are clearly understood by contract employees involved in civil maintenance viz flooring, floor cleaning, building maintenance, water line, pipe lines, storm water, ETP Maintenance etc. The adherence to the procedures must be ensured by contract supervisor.
- The operators should be licensed, trained and authorized persons. Valid certificates/ documents must be shown on demand.
- Employees should remove the waste materials from the work spot after completing the works.

E. Transport Contractors:

- Vehicles carrying materials should have proper registration documents and must be produced on demand to BHEL security staff.
- The driver of the vehicle must possess valid heavy duty license, vision Test certificates & relevant valid vehicle documents as per the factory Rules and to be produced on demand to the security staff.
- The cleaner should be knowledgeable enough to give correct direction. Also should not drive inside or take training inside. Every vehicle should have pair of skilled driver and cleaner.
- No persons other than driver should be allowed to sit or stand on the Prime Movers of the trailer.
- 5. Should not do Cooking, Bathing, Vehicle cleaning etc. within the premises.
- 6. The lights on right side (i.e.) over driver's cabin should be in working condition.
- Both the head lights as well as park lamps must be in working condition.
- 8. The tire, brake, horn, turning lamps, etc must be in good conditions.
- The vehicle should not be parked in the road in such a way to cause obstruction to vehicular traffic.
- 10. There must be a safe distance behind another moving truck.
- 11. If vehicle got break down, they should attend maintenance work and ensure to avoid oil and grease spillage & traffic issues.
- 12. Drivers should not do material handling activities.
- 13. Must not stand under/close to load while lifting the materials
- 14. Speed limit 20 km/hr to be maintained inside the factory premises.

F. Shipping:

- Strong side supports should be provided on both sides of the trailer. The side supports should be fixed in such a way that it cannot be removed even temporarily.
- 2. Adequate packing must be given for easy slinging operations. The packing materials should be good enough to withstand the load.
- The stacking of loads on the truck should be evenly placed. The load should not be heaped together or dumped over the chassis.
- The load on the truck should not be beyond its standard capacity. The carrying capacity must be clearly marked on the trailers also.
- The loaded materials should be fastened tightly with wire rope. Coil rope should not at all be used.
- There must be side packing such as gunny, rubber-tire between the sharp edges of the job and Wire rope in order to avoid cut in the wire rope.
- 7. There must be minimum two fastening and it should be more in case of lengthier loads.
- 8. The loose pieces should be bundled before loading on the truck.
- There must be red flags or red lamps for the lengthy load which extend beyond chassis.
- 10. The materials should not be stacked too high to avoid hitting against live electric lines.
- Must not lift beyond the capacity (SWL) of mobile cranes.
- 12.Must keep valid certificates for the individual (inclusive of vision Test certificates) and lifting equipment.
- 13. Should not use mobile cranes for transporting and dragging

VII Travels/Taxi Contractors:

- Must have valid documents like Driving license, RC, Insurance, FC, Vision Test Certificate.
- Max speed limit 20 KM/Hr must be followed, Timing prescribed for entry and exit to be strictly followed. Not to overtake inside the Premises.
- 3. Seat belt must be worn by taxi drivers, Park cars only in the permitted areas.
- Using mobile phones while driving and playing iPod, inbuilt music systems etc in the vehicles. are banned within the factory premises.

VIII Welfare:

- The contractors are directed to generate PF number and ensure PF contribution remittance for all contract workmen engaged by them.
- Bio-Metric Entry for Contract Workmen: Contractors have been directed to cover all the contract workmen engaged by them through Bio-Metric Entry System

XI Health Check up

Contractors must check the health of employees specific to occupation periodically and furnish evidence to welfare department/BHEL for updating. Specific test is a must apart from General Health checkup for the works like

- 1. Working at height- Vertigo test
- 2. Mobile crane operator- Vision test, audiometric test
- 3. Vehicle drivers- Vision test, audiometric test
- 4. Shot blasting operations- Lung function test, audiometric test
- 5. Canteen employees- Dermatitis
- 6. Jack hammering- Lung function test, audiometric test
- 7. Sewage cleaning- Lung function test,
- 8. Electro-plating-Skin and respiratory tract
- 9. Grinding Lung function test, audiometric test
- 10. Spray painting Skin and respiratory tract

X. Safety Equipment:

Contract employees must wear the PPEs relevant to the nature of work in addition to the safety shoes.

- Welding Welding Shield and goggles
- 2. Gas cutting Aprons, Gas cutting goggles
- 3. Painting PVC gloves, PVC apron, respirators
- 4. Electrical work Electrical Resistance gloves, gum boots (during rain)
- 5. Work near hot furnace Heat resistant gloves & Apron
- 6. Glass wool related works Respirators, Barrier Cream
- 7. Slag removal, cleaning and grinding work Goggles / dust respirators.
- 8. Handling of rough and sharp surfaced objects Leather gloves
- 9. Sanitary work Hand gloves, Gum boots
- 10. Concrete preparation Gum boots Electrical
- 11. Work at height Rubber gloves, Safety Belt, Fall arrestors, Life line Rope.

BHEL-Trichy: Contractor Safety Guidelines

Xl. Violations:

The following will be treated as serious violations and appropriate actions are to be initiated by the users.

- 1. Employing people whose age is below 18 years.
- Not wearing safety shoes or normal shoes (Contract employees will not be permitted after the security gates).
- 3. Not wearing PPEs.
- 4. Working without proper work permit.
- 5. Possession of mobile phones other than taxi drivers..
- 6. Using mobile phones while driving .
- 7. Unauthorized electrical connections.
- 8. Driving/operation of Crane/jumbo/Fork lift etc by unauthorized persons.
- 9. Unauthorized operation/driving of lorries, mobile cranes etc.
- 10. Smoking, alcohol, audio-playing etc.
- 11. Moving to unconnected areas.
- 12. Any willful act that creates unsafe conditions .

The Contractor should engage technical persons and workmen with the following qualifications for works as detailed below and the contractor shall carry out the health Performance check at his cost for the workmen engaged in the work through a registered medical practitioner and produce the certificate on demand.

CHECK FOR HEALTH PERFORMANCE

SI. No.	Activity	Hazard	Exposure Consequence	Check for	Periodicity
1	Concrete Dismantling	Emission of Dust & Noise	1	Lung function	Once in a Year
2	Concrete Mixing	Emission of Dust & Noise	1	Lung function	Once in a Year
3	Painting	Painting Emission of Dust 1 & fumes		Lung & throat function	Once in a Year
4	Cutting & Welding	Emission of fumes and gas. Exposure to Live wire	3	Eyes & Lung function	Once in a Year
5	Working on AC sheets	Emission of Dust	3	Lung function	Once in a Year
6	Sweeping of Roads	Emission of Dust	2	Lung function	Once in a Year
7	Collection and disposal of Sanitary waste	Foul smell & susceptibility to decease.	3	Lung function and skin irritation	Once in a Year
8	Handling of Oxygen & Acetylene Cylinders	Leakage of gas	4	Throat irritation	Once in a Year
9	Cleaning of Manholes	Exposure to poisonous gas	4	Suffocation	Once in a Year
10	Cleaning of Overhead tank	Emission of Dust	1	Suffocation & skin irritation	Once in a Year

NOTE: Exposure Consequence

- 1. Slightly harmful
- 2. Harmful
- 3. Very harmful
- 4. Extremely harmful

SCHEDULE 'B'

1. The following materials will be issued FREE of cost to contractor at BHEL Stores / Stock yard.

SI.No.	DESCRIPTION	PLACE OF ISSUE
	NIL	

- 2. It will be the responsibility of the Contractor to submit his demands for the above stores in writing at least seven days in advance of the actual requirement.
- 3. Issue of Stores is subject to the availability at the place of issue cited above, items of stores to be issued by BHEL which are not available at the time of indenting by the contractor may be supplied by BHEL after necessary procurement. The contractor shall not be entitled to any claim of compensation for delay in the supply of stores by BHEL under any circumstances.
- 4. The materials will be issued only during the working hours of the BHEL Stores Department (8.00 a.m. to 4.30 p.m.). Contractor shall have to transport them as soon as they are issued to him to the site of work at his own cost.
- 5. The steel materials if issued will be in random lengths and sizes as stocked by the BHEL and the cost of all cutting, conversion, substitution and fabrication as well as wastage shall have to be borne by the Contractor.
- 6. The contractor shall from time to time render proper account of all materials issued to him by BHEL. If he fails to do so, no further issue of materials will be made to him and he will be held responsible for any delay in the execution of the work which may occur on this account.
- 7. Where A.C. Sheets and accessories, Doors, Windows, Sanitary fittings, Special glasses or other items are issued free of cost to the contractor, the contractor will have to make good at his own cost any loss or damage to any part or whole of the items issued to him as above. All wastage within the premises limits as fixed by BHEL will be charged for at the prescribed issued rates of BHEL. Excess wastage will be charged for at punitive rates which will be 100% higher than the issue rates.
- 8. All surplus materials in good condition which are not returned to the BHEL. Stores as also quantities of materials consumed in excess of the max. Permissible limit as fixed by BHEL shall be charged for at punitive rates.
- The decision of the Senior Engineer / Dy. Manager / Manager as to the extent to which materials have been rendered surplus or consumed in excess of the actual requirements shall be final and conclusive and binding on the contractor.

SCHEDULE 'C'

ISSUE OF TOOLS AND PLANTS TO CONTRACTORS

SI.No.	Qty.	Particulars	Details of BHEL Crew Supplied	Place Issue	of	Remarks
			Nil	 		

- c) Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.
- d) All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the contractor at his own expense.

SCHEDULE 'D'

NOTE: All Drawings are to be signed by the Contractor as well as the officer entering into contract.

SL. No.	DRAWING NUMBER	DESCRIPTION
01	2 – TP – CEG – 01973 (R0)	PROPOSED LAYOUT OF ECB AT AMARAVATHY BUILDING
02	3 – TP – CEG – 02047 (R0)	PROPOSED ELECTRICAL LAYOUT OF ECB AT AMARAVATHY BUILDING

SCHEDULE 'E'

LEAD STATEMENT

SI. No.	Name of Material	Name of Source	Lead Particulars both for Factory and Factory
1		NIL	

C.ADate	ditions of Contract)							
AUTHORITY TO TENDER								
Tender Notice No.TN No CT: TN: 011 / 17 - 18	Office of the Sr. Mgr. / CIVIL / PLANNING D & QC, 53 Building Ground Floor, BHARAT HEAVY ELECTRICALS LIMITED TIRUCHY – 14.							
Tender Schedule No. TS No CT: TS: 011 / 17 - 18								
Item rate tender for work required in Improvement & Modification works for the proposed BHE-ECB Branch at No. 1 Good Shed Road, Trichy – 2.								
above work. The Tender is to be delivered at the Offic Ground Floor, BHEL, Trichy – 620 014 up to 14.00 h	are / is hereby authorized to tender for the ce of the Sr. Mgr. / Civil / Plng. D & QC, Bldg. No. 53, rs. on 21 08 2017 addressed to the Sr. Mgr. / Civil / Plng.							
D & QC , Bldg. No. 53, Ground Floor, BHEL, Trichy - above.	- 620 014 superscripting the name of works as mentioned							
Any correspondence concerning this tender should be Schedule No. and other relevant particulars.	addressed as indicated above quoting the Tender Notice,							
BHARAT HEAVY ELECTRICALS LIMITED DO NOT B TENDER.	IND THEMSELVES TO ACCEPT THE LOWEST OR ANY							
Issuin	g Officer with Designation							

CONTRACTOR

Contract Agreement No							
TENDER							
То							
Sr. Mgr. / Civil / Plng., D & QC, 53 Building Ground floor Bharat Heavy Electricals Limited Unit: Tiruverumbur TIRUCHIRAPPALLI – 620 014.							
I / We hereby offer to carry out the work of Improvement & Modification works for the proposed BHE-ECB Branch at No. 1 Good Shed Road, Trichy – 2.							
I / We hereby carefully perused the following documents connected with the above noted work and agree to abide by the same.							
 Specifications (General & Particular) Drawings attached separately (Civil- dwg. Ref. No. 2 TP CEG 01973 Rev 00; + Electrical – dwg. Ref. No. 3 TP CEG 02047 Rev 00) Schedule 'B', 'C', 'D' & 'E' & BOQ attached hereto. Schedule of Rates 							
5. BHE Ltd., General & Special Conditions of Contract, Tender Notice and Instructions to Tenders attached hereto.							
I / We forward herewith the sum of Rs							
I / We further agree to execute all the work referred to in the said documents upon the terms & conditions contained or referred therein and as detailed in Schedule 'A' and Bill of Quantities annexure thereto and to carry out such deviations as may be ordered, vide conditions 6 of the BHEL Ltd., General Conditions of Contract up to a maximum of 20% of the tendered amount of Rs							
I / We further agree to refer all disputes, as required by condition 62 of the General conditions of Contract to the sole arbitration of an Officer, to be appointed by the General Manager, B.H.E Ltd., in his sole discretion whose decision shall be final and binding.							
WITNESS Signature of the Contractor							
Date:							

1.

2.

			GENERAL S	<u>SUMMARY</u>			
1.	(a) Net Cost of works 'A' and Bill of quantiti	s or building	g etc., from Sched d thereto	lule	Rs.		
2.	Provisional sum				Rs.		
			Total		Rs.		
•	es			/ 		Shri	
				in	the	capacity	of
			/ 			authorized by me	/ use to
sign	the	tender	for	and	, ou	behalf	of
letters)		SIGNATURE OF			(ir	n block
Witnes	/itness: Postal Address:						
1	Address			Telephone No			
2							

Address

				6	alternations hav	ve been mad	de in the Te	∍nder
Document a	and as eviden	ce that these alte	ernations wer	e made befor	e the execution	n of contract	agreement,	, they
have	been	initialed	by	the	Contract	or a	and	the
			is her	eby authoriz	ed to sign an	d initial on	my behalf	the
documents	forming part of	of this contract (N	umber of alte	ernation in figu	ures and words	to be given	me)	
The above	tender is acc	epted by me on I	behalf of the	e Bharat Hea	vy Electricals	Limited, Unit	t Thriuverur	nbur,
Tiruchirappa	alli –	620	014.	for a	a sum	of		Rs
						at the item ra	ates as indi	cated
in the Bill of	Quantities a	ttached to Sched	ule 'A'.					
Signature			Date.					
Designation	١							

To <u>E FORMAT</u>

THE PURCHASE / CONTRACT EXECUTING AGENCY / BHEL

ACCEPTANCE FOR ELECTRONIC FUND TRANSFER / RTGS TRANSFER

01	Name & Address of the Supplier / Sub-contractor											
02	VENDOR CODE assigned by BHEL											
	D	etails o	of Ban	k Acc	ount:							
03	NAME & ADDRESS OF THE BANK											
04	NAME OF THE BRANCH											
05	BRANCH CODE											
06	MICR CODE											
07	ACCOUNT NUMBER		•						•			
08	TYPE OF ACCOUNT		CURR	ENT	A/C	/	OD	/	CA	ASH (CRED	IT
09	BENEFICIERY'S NAME											
10	IFSC CODE OF THE BRANCH											
11	EMAIL ID											
12	TELEPHONE/MOBILE NO.											
Natio Bank of the for th	e hereby agree to receive the payments nal Electronic Funds Transfer and/or Faccount. I/We also agree that paymer liability of Bharat Heavy Electricals Lime above mode of transfer. A copy of the nt herewith.	RTGS T nts mad nited. I	om Bl Fransfo de to th / We	HARA er mo ne ab also a	ode by ove n agree	cred nention to be	dit to oned a ear th	my Accor	/ our unt is plicat	abovo a val ole Ba	e mer id disa ank Cl	ntioned charge harges
			A	AUTH	IORIS	SED S	SIGN	ATOF	RY W	'ITH N	NAME	SEAL
	<u>Bar</u>	ker's	Certifi	catio	<u>on</u>							
accou	onfirm that we are enabled for receiving R and number of							nd IF				hat the ——— Branch
PLAC DATE		gnature	e Unde			mp a		ame				
				(Telep	hone	/ Mo	bile I	No.)			
	arded to Accounts Dept. confirm the above details are verified	with 1	the re	cords	ava	ilable	with	us.				

Signature of the BHEL Executive with Name Seal (Operating the Contract/Services)

Bharat Heavy Electricals Limited

High Pressure Boiler Plant Tiruchirappalli – 620 014. India Civil Engineering Department (Township)

TENDER DOCUMENT (PRICE BID)

Name of work : Improvement & Modification works for the

proposed BHE-ECB branch at No.1 Good

Shed Road, Trichy – 2.

Value of work : Rs. 8.88 Lakhs + (Applicable GST)

Tender Notice No. : CT: TN: 011 / 17 - 18

Tender Schedule No. : CT: TS: 011 / 17 - 18

Period of Contract : 02 (Two) Months

EMD : **Rs. 17,800/-** (One Time EMD is no more

applicable. Hence tenderers who had previously remitted one time EMD shall have necessarily take full amount of EMD in the

form of DD)

Issue to : M/s

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI – 620 014 CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

Value of work: Rs. 8.88 Lakhs Period of Contract: 02 (Two) Months

PREAMBLE

- 01. The scope of work includes Improvement & Modification works for the proposed BHE-ECB branch at No.1 Good Shed Road, Trichy 2.
 - i. The existing BHEECB branch office is located at Clives Building, Nandhi koil street, Trichy-2. Now this office is proposed to be shifted to the new place located at M/s Tiruchirappalli District Amaravathi Consumers Cooperative Wholesale stores Ltd, No.1, Good shed road, Trichy-2.
 - ii. The work involves Civil, electrical as well as removing and replacing the furniture items and MS Grill from old office to the new office, as specified in the Bill of quantities, in three parts.
- 02. The tender value <u>includes</u> cost of all materials, labour, taxes involved in Civil, Electrical, Miscellaneous works etc. The vendor should furnish the materials and execute the work, confirming to relevant latest IS specifications as per instructions of Engineer in charge.
- 03. Time is the essence of the contract. Being a time bound project, the contractor should make all efforts to complete the work in time. Even though the overall completion period is indicated as **2 (Two) months**, the works shall be completed progressively and handed over as per mutually agreed schedule.
- 04. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (twenty percentage).
- 05. The contractor has to execute any item of work irrespective of the quantity available in the tender without any reservation till the contract value does not vary more than 20%.
- 06. Quoted rate shall be firm throughout the contract period of 02 (Two) months or till completion of work and no cost escalation is allowed on any account.
- 07. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The Percentage rates quoted shall be deemed to be inclusive of all such contingencies.

08.

1) Taxes & Duties :

The percentage rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, establishment, services, revenue expenses, overheads, profits & all other incidentals etc., complete. Rate quoted shall include all royalties, terminal taxes, Octroi duties, and any other taxes leviable under the State or Central Government rules. Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect.

The percentage rate quoted shall not include applicable GST.

- a. Response to Tenders will be entertained only if the contractor has a valid GST registration number which should be clearly mentioned in the offer.
- b. The Contractor shall mention their GST registration number in all their invoices and invoices shall be in the format as specified / prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice No., commercial invoice No. etc., then the Invoice No. which is linked / uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN / SAC Code, etc.
- c. All invoices shall bear the SAC code (Services Accounting Code) & HSN Code (if applicable) for each item separately (Harmonized System of Nomenclature).

- d. Payment shall be effected only after submission of declaration to the effect that all invoice particulars are / were uploaded in the GSTN network / portal & All tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If it is not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL.
- e. All documents like Work completion certificate and any other document mentioned in PO, shall be submitted.

For all works executed within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle (if Input Tax Credit is applicable). In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the works executed, in such case availing of tax credit will be deferred to next month or so.

- f. In case of discrepancy in the data uploaded by contractor in the GSTN portal or in case of any shortages or rejection in the works executed, then BHEL will not be able to avail the tax credit (if Input Tax Credit is applicable) and will notify the Contractor of the same. The Contractor has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections, within the calendar month notified by BHEL.
- g. For any such delay in availing of tax credit for reasons attributable to the Contractor (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills.

All taxes and duty other than GST & GST Cess

The contract price shall be inclusive of all (save the specific exclusions as enumerated in this contract) taxes, fees, license charges, deposits, duties, tools, royalty, Octroi, commissions or other charges which may be levied on the input goods consumed and output goods delivered in the course of Works Contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from the contractors bills or otherwise as deemed fit.

Goods and service Tax (GST) & Cess

The contractor shall submit the proof of GST registration to BHEL at the offer stage. Contractor's price/rates shall be exclusive of GST & GST Cess (if applicable) herein after termed as GST. Contractor shall submit to BHEL the GST compliant tax invoice/debit note / revised tax invoice on the basis of which BHEL will claim the input tax credit in its return (if Input Tax Credit is applicable). GST charged in the tax invoice / debit note/revised tax invoice by the contractor shall be released separately to the contractor only after contractor files the outward supply details in GSTR-1 on GSTN portal and input tax credit of such invoice is matched with corresponding details of outward supply of the supply and has paid the GST at the time of filing the monthly return.

In case of deduction / excess in completion certificate/measurements credit note / debit note shall be issued within the time limit prescribed in GST law and accordingly contractor shall adjust his tax liability.

If GST will be payable on reverse charge, then the same shall be payable directly to Govt. by BHEL under reverse charge.

In case BHEL has to incur any liability (like interest, penalty etc.) due to denial or reversal of input tax credit for the reasons attributable to the contractor or any such delay in availing of tax credit for reasons attributable to the Contractor, the same shall be recovered from the contractor.

In case BHEL is deprived off the Input tax credit due to any reason attributable to contractor, the same shall not be paid to the contractor or will be recovered from the contractor.

TDS under GST (as & when applicable) shall be deducted at prevailing rates on applicable value from the running bills.

New Taxes / Levies - In case the Government imposes any new levy / tax on the output service / goods / after price bid opening, the same shall be reimbursed by BHEL at actual.

In case any new tax / levy / duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary

- evidence in support of the same before opening of Price Bid. Claim for any such impact after opening the Price Bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.
- 09. The tenderers are advised to visit the sites and get themselves acquainted with the site conditions before submitting the offer.
- 10. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of BHEL. In such case, it is to be carried out in the presence of BHEL officials or their authorized persons.
- The work shall be carried out as per Department Work & Safety procedure, AWS / BIS specifications, standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities provided in the Price Bid. Tenderer has to quote Common single Percentage Rate (Below (100-X)% / At Par(100)% / Above(100+X) %) to be Quoted with respect to the rates provided in the Bill of Quantities provided in the Price Bid. Individual item rates shall be derived based on the quoted common single percentage shall be deemed to be the contracted rates for various BOQ items for all purposes.
- 12. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract in force.
- 13. After award of work the contractor has to furnish the security deposit, as per clause 13 of Tender Notice, attached in the Tender Document. Also it is to be noted that after award of work the contractor has to furnish 50% of security deposit before the commencement of work.
- For any clarification on the tender document, the bidder may seek the same in writing or through email, as 14. per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- The contractor should bring the construction earth moving machineries like Poclain, Paver, road Roller, JCB 15. etc., as and when required for the work without any delay if necessary. Also required number of the following tools & plants / instruments shall be made available at site for the works as and when required
 - a) Precise Levelling instruments and theodolite.
 - b) Full load mixture machine / mini batching.
 - c) Petrol / Kerosene driven vibrator / mechanical vibrator
 - d) Cube moulds
 - e) Inter carting vehicle (tractor, hand trolley etc.)
 - f) Hydra cranes
 - g) Power operated winches
 - h) Mobile / Hydraulic crane
 - Welding machine etc.
- 16. The contractor has to arrange sufficient number of lorries to collect & transport the surplus earth construction debris generated etc. at site. Otherwise would clear the debris at the contractor's risk and cost.
- 17. In the event of any conflict between requirement of any clause of this specification / documents / drawings/ data sheets etc. of requirements of different codes / standards specified the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error / missing pages / other clerical errors in the tender documents, noticed must be pointed out before submission of offer, else BHEL's interpretation shall prevail.

Order of Precedence 18.

In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below.

- a. Amendments / Clarifications / corrigenda / errata etc. issued in respect of the tender documents by BHEL.
- b. Notice Inviting Tender (NIT)
- c. Price Bidd. Qualification Bid
- e. General Conditions of Contract.

- 19. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
- 20. The following eligibility criteria shall be complied to fulfill the Qualification Bid:
 - i) The tenderer should have EPF, ESI, PAN & GSTIN No., proof of having submitted IT returns acknowledged by IT office, Profit & Loss account and balance sheets certified by the auditor for the last 3 (three) financial years (2013-14, 2014-15, 2015-16).
 - ii) Average annual turnover for the last 3 (three) financial years (2014–15, 2015-16, 2016-17) ending 31st March, shall be at least 30% of the estimated cost.
 - iii) Experience of having successfully completed Civil works during last 7 (Seven) years ending (i.e.) from 01st August 2010 to 31st July 2017 should have successfully completed works either
 - a) Three Similar completed works costing not less than the amount equal to 40% of the estimated cost.
 - (or)
 b) Two Similar completed works costing not less the amount equal to 50% of the estimated cost. (or)
 - c) One Similar completed work costing not less than the amount equal to 80% of the estimated cost.
 - iv) Experience of having successfully completed Electrical works during last 7 (Seven) years ending (i.e.) from 01st August 2010 to 31st July 2017 should have successfully completed works either
 - a) One similar completed work costing not less than the amount equal to 30% of the estimated cost.
 - v) Latest Solvency Certificate (obtained before 6 months from the date of tender opening) from Nationalized / Scheduled Bank shall be at least for a value of 40% of the estimated cost.
- 21. Documentary evidences (Xerox copies Gazetted officer attested & self-attested) for turnover, works experience, EPF, ESI, Service tax and Balance sheet ,Profit & Loss account & IT returns for the last three years etc., all as required & indicated in the tender document should be furnished, without which it will not be taken into account. The tenderers shall produce original document for verification if so decided by BHEL.
- 22. The norms for qualification is attached in the Qualification Bid Document. Evaluation will be done accordingly.
- 23. The contractor may be required to undertake works at remote places and in such cases the contractor should make own arrangement for safety of BHEL materials, water required for the work and power etc. without extra claim from BHEL.
- 24. The contractor has to carry out all the works on all days except Sundays and BHEL holidays under normal circumstances. However sweeping of all shop floors has to be done in Sundays and BHEL holidays, if required.
- 25. The works executed in the own name of the tenderer only will be considered for eligibility criteria. The nominated committee may also visit the works executed by the contractor / tenderer to ascertain the nature of work relating to similar works before qualifying.
- 26. The contractor shall strictly adhere to various labour laws in force.
- 27. The tenderer has to ensure payment of Minimum Wages as per Tamil Nadu State Minimum Wages as applicable under law from time to time.

The labourers engaged in this contract shall be paid additional payment as mentioned below in addition to the payment of Minimum wages as stated above.

a) Unskilled Worker Rs. 3200 per month b) Semi-skilled Worker Rs. 3700 per month c) Skilled Worker / Supervisor Rs. 4100 per month Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

At present the Tamil Nadu State Government Minimum wages declared is enclosed for your reference (Page No. 11). Normally the revision will be with effect from 1st April of every year. Tenderers are requested to quote their offer after taking into account of the above factor also.

The contractor has to disburse the salary / wages for their workmen preferably through Bank. If wages are paid through Banking channel, the relevant Bank statement / proof for Bank payment should also be produced along with PF and ESI challans to Welfare Section every month."

- 28. The contractor shall ensure compliance of EPF & MP Act 1952, by the subcontractors, if any engaged by the contractor.
- 29. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex including biometric system.
- 30. The offers of the tenderer / bidders who are on the banned list and also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site (www.bhel.com → Tender Notification → List of Banned Firms).
- 31. 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. The contract should arrange for surveying construction site at his own cost.
- 32. BHEL reserves its right to reject the offer on account of unsatisfactory past performance by the present tenderer / his group / group of companies / any member in the consortium in case of consortium in another project / sister unit awarded under different enquiry. The tenderer has to declare the facts of performance with his customers and their contact details with phone & e-mail ids in his letter head. BHEL reserves its right to cancel the tender without assigning any reason.
- 33. Tenderers are requested to furnish the duly filled in E format (attached as separate in the Qualification Bid) sheet along with a cancelled cheque leaf to accept Electronic Fund Transfer / RTGS transfer for any payment from BHEL, Trichy.
- 34. The contractor has to submit the organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.
- 35. The contractor should submit the programme for the completion of work and the list of machineries and site personnel to be deployed for the work along with tender.
- 36. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor in the last week of every month or as required by the department for processing bill.
- 37. The contractor should establish his own site office, labour colony, fabrication yard, handling facility, storage facility etc., for which vacant land will be allotted on specific request for which the rent will not be cancelled.
- 38. The contractor is required to carry out construction activities as directed by the department officials. It is required to engage certain minimum strength of staff for effective supervision of works as indicated below.

Min. of Supervisor - 1 No. Min. of Graduate Engineer - 1 No.

In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.

- 39. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site.
- 40. The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled Mason, Carpenter, Plumber, Welder, fitter, Mistry, Electrician, Technically Experienced, etc. so as to execute the works simultaneously in all areas of work. The Technical persons with experience shall have to produce valid certificate for verification.
- 41. Expertise labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, watersupply, railway track laying and aligning works, sewerage system work etc.
- 42. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
- 43. All the works shall be executed as per the standard specifications as provided in TNBP / BIS.
- 44. All the materials to be used in the work and the nature of work shall confirm to the respective TNBP & BIS and National Building Organization, Standard Specifications forming part of "ALL INDIA STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
- 45. With regard to specifications not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or Electrical specifications approved by Bharat Heavy Electricals Limited, shall apply.
- 46. The contractor should use only the materials of brand and quality as approved by BHEL.
- 47. All materials and consumables brought by the contractor should have manufacturer's certificate.
- 48. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
- 49. The contractor should maintain proper accounts for cement, reinforcements, Structural steel and other materials if any and these should be available at the site of work for verification and check by the Officials of this Organization at any time.
- 50. All tools and plants including jack hammer with silencer & bits, rock drilling machine, etc., required for all the works covered under this contract will have to be brought by the contractor.
- 51. To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
- 52. All safety measures are to be followed during execution of work. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure like railway lines if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department.
- 53. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
- 54. The contractor should extend fullest co-operation with the third party agencies engaged, if any by BHEL, to adhere the Quality Control Procedures ensuring quality.
- 55. The contractor should extend full 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.
- 56. The Contractor has to make his own arrangements for water, electrical energy and Compressed Air etc., to the work.
- 57. Bank Guarantee format can be obtained after award of work by the successful tenderer.

- 58. Bank guarantee format and the list of consortium banks are enclosed for BG submission against Security Deposit.
- 59. No advance / No mobilization advance will be given and the part-payment or advance for raw materials brought by the successful tenderer will not be paid. The payment for the finished items of works only will be paid after incorporating the required raw materials into the work, if any.
- 60. No over Run charges shall be applicable under any circumstances.
- 61. LD / Penalty clause is applicable as per General Conditions of Contract in force.
- 62. BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
- 63. In all matters of dispute, the decision of General Manager BHEL, Tiruchirappalli 620 014 is final and binding on the successful tenderer.
- 64. Any claim or dispute arising from the tender stage, till / after completion of the work under the terms and conditions stipulated in the tender document / contract agreement shall only be enforced or settled in the courts at Tiruchirappalli, TamilNadu only.
- 65. **Force Majeure clause**: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non-performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by BHEL subject to prompt notification by the tenderer to BHEL of the particulars of the events and supply to the BHEL if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.
- 66. The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.
- 67. Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.
- 68. In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be binding on both the parties to the business.
- 69. Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalization of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.
- 70. If, in case of opening of price bids, when there is a Tie in the percentage rates quoted by the tenderers, the ranking will be decided based on Lot System, in the presence of the bidders who witness the price bid opening.

71. Deviations

The contractor shall not make any alteration in addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer-in-charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the contract.

The Accepting Officer may deviate either by way of addition or deduction, from the work so described, provided that the contract sum be not thereby varied on the whole by more than the percentage set out in the tender documents. The value of all addition and deductions will be added to, or deducted from the contract sum. Whenever the Accepting Officer intends to exercise such a right, his intention shall specify the deviations which are to be made, the lumpsum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the entire contract.

Any objection by the Contractor to any matter concerning the order shall be notified by him in writing to the Engineer-in-charge within **Seven days** from the date of such order, but under no circumstances shall the work be stopped (unless so ordered by the Engineer-in-charge) owing to differences or controversy that may arise from such an objection. In the absence of such a notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein. In the event of the contractor failing to agree with the Engineer-in charge regarding the terms of the proposed deviation, the objection shall be referred to the Project Manager whose decision shall be final conclusive and binding on the Contractor.

72. Arbitration:

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Executive Director / General Manager of BHEL and if ED is unable or unwilling to act, to the sole arbitration of some other person appointed by the ED / General Manager, willing to act as such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Manager / Senior Engineer / Engineer-in-charge is expressed in the contract to be final and conclusive.

There will be no objection if the arbitrator so appointed is an employee of B.H.E.L and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such Executive Director / General Manager as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

Subject as aforesaid the provision of the Arbitration & Reconciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

The arbitrator(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

The work under the Contract shall, if reasonably possible, continue, during the arbitration proceedings and no payment due or payable, to the Contractor shall be withheld on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of first hearings.

The arbitrator shall give a separate award in respect of each dispute or difference referred to him.

The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply the provisions of BPE office memorandum No. BPE/CL 001/76MAN / 2 (1.10) 75-BPE (GM-1) dated 1st January 1976 or its amendments for arbitration shall be applicable.

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or in relation to interpretation of any provision of the contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Executed Director, BHEL, Trichy.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be *Tiruchirappalli*, *TamilNadu*.

Subject to the arbitration in terms of Clause, the Courts at *Tiruchirappalli, TamilNadu* shall have exclusive jurisdiction over any matter arising out of or in connection with this contract.

Notwithstanding the existence or any dispute or differences and / or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in the terms of this Contract.

In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator."

73. MSE vendors can avail EMD / Tender Document cost waiver benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format shown below). Tenders without EMD / Tender Document cost / MSME proof will be summarily rejected.



Ref.

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI = 14 HUMAN RESOURCE MANAGEMENT

CIRCULAR

No.BHEL: HR: WEL: MW

Date: 31.03.2017

ALL CONTRACT EXECUTING/AWARDING OFFICIALS

Sub. : Minimum Wages Act 1948 - Fixation of Minimum rates of wages

for the employment in "General Engg, and Fabrication Industry"

Revision of DA Reg.

Notification No. Z3/5309/2017 dated 27.03.2017 from the Commissioner

of Labour, Chennai.600 006

Consequent upon the increase in Dearness Allowance payable under the Minimum Wages Act from Rs. 5196,00 to Rs.5417.00 per month to those employed in "General Engineering and Fabrication Industry", the Minimum Wages payable by the Contractors to their workmen engaged in the following categories would be as follows with effect from 01/04/2017:

SI. No.	Category	Minimum Basic Wages per day	Minimum DA per day	Total Minimum Wages per day	Minimum Basic Wages per month	Minimum DA per month	Total Minimum Wages per month
1	Unskilled Worker	Rs.123.00	Rs.209.00	Rs.332.00	Rs.3690.00	Rs.5417.00	Rs.9107.00
2	Semi-Skilled Worker	Rs.133,00	Rs.209.00	Rs.342.00	Rs.3990.00	Rs.5417.00	Rs.9407.00
3	Skilled Worker	Rs.139.00	Rs.209.00	Rs.348.00	Rs.4170.00	Rs.5417.00	Rs.9587.00
4	Supervisor	 -		: -	Rs.3956.00	Rs.5417,00	Rs.9373.00

Contract Awarding / Executives are requested to ensure that the contractors make payment to their workers not less than Minimum Wages as stated above.

truta 1- 30/3/17

SDGM (HR-Welfare and Recruitment)

Ce:

All HR Executives DGM/HR/PPPU/Thirumayam. DGM/HR/PC/Chennai AGM/Finance GM/Finance AGM/HR GM/HR

SCHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK: Improvement & Modification works for the proposed BHE-ECB Branch at No.1 Good Shed Road, Trichy – 2.

I / We ______ have read the condition of tender attached hereto and agree to abide by such conditions. I / We offer to execute the works in T.S No. CT: TS: 011/17 - 18 for a period of 02 (Two) months at the percentage below / at par / above the rates contained in Bill of Quantities appended below from Page 13 to 24.

I / We further agree to sign an Agreement Bond to abide by the General Conditions of Contract and to carry out all works according to the specifications for materials and works of Bharat Heavy Electricals Limited, Tiruchirapalli - 620 014. In case of acceptance of the tender by the BHEL, I / We bind myself / ourselves to execute the contract documents within 7 days after notice that my/our tender has been accepted and this contract has been awarded to menus and thus failing which I / We shall have no objection to the forfeiture of the Earnest Money amount to Rs. 17,800/- lodged with Bharat Heavy Electricals Limited, Tiruchirapalli - 620 014.

I / We further agree to include all tools & plants and consumables required for the work in my / our scope but required power and water will be provided at one point by BHEL at free of cost and based on this, we have quoted our percentage.

Note: Details & Quantities of each item of work shown in the BILL OF QUANTITIES are only approximate and the same is appended below. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the overall percentage quoted by the contractor **Below (100 - X %) / At par (100 %) / Above (100 + X %)** of the rates provided in Bill of Quantities **appended below from Page 13 to 24**.

SI. No.	Approx. Value of work	Common single Percentage Par(100)% / Above(100+X) %) the rates provided in the Bil enclosed in the Price Bid of Page No. 13 to 24.	ll of Quantities (all items as
		In Figures	In Words
1.	Rs. 8,88,986.83 - 100%		

Note: BHEL estimate rates are given below. Contractor has to quote the overall percentage only {Below (100-X %) / At par (100%) / Above (100+X %) } at page No. 12 both in figures and in words

BHEL / TRICHY – 620 014 CIVIL ENGINEERING DEPARTMENT - TOWNSHIP BILL OF QUANTITIES PART - A (CIVIL)

Name of work: Improvement & Modification works for the proposed BHE ECB City Branch at No. 1 Good Shed Road, Trichy - 2.

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
1	Brick work with F.P.S bricks (second class ground moulded chamber bricks) of class designation 50/75 in foundation and plinth in: Cement mortar 1:5 (rate includes cost of cement)	36	CUM	4,190.25	1,50,848.90
2	Extra for Brick work in superstructure above plinth upto floor three level in all shapes and sizes.	35	CUM	274.45	9,605.78
3	Extra charges for providing half brick masonry, brick on edge walls, fins, balustrade etc. over and above the brick work.	1	CUM	301.11	301.11
4	Plastering with cement mortar as per standard specifications. In Cement mortar 1:5, 12mm thick (rate includes cost of cement)	210	SQM	118.58	24,901.13
5	Ceiling plastering with cement mortar 1:3, 6mm thick as per standard specifications. (rate includes cost of cement)	21	SQM	103.25	2,168.33
6	White washing on surfaces using best shell lime to give an even shade including cleaning, brushing of walls and preparing surfaces in accordance with standard specifications. Rate includes cost of all materials, labour etc., complete. Two coats	150	SQM	6.02	903.03
7	Distempering using oil bound washable distemper of approved brand and shade on surfaces including cleaning, brushing, preparing the surfaces even and sand papered smooth in accordance with standard specifications. Two coats	350	SQM	40.67	14,236.03
8	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works. Rate includes MS/CTD bars, cover blocks, cost of binding wire, conveyance of MS/ CTD bars from BHEL stores to site of work, labour etc. complete.	0.35	MT	47,417.18	16,596.01
9	Centring and shuttering including strutting, propping, assembling etc. and removal of form work. Upto a maximum height of 4.50 metre of each floor and also upto floor five level. Suspended floors, roofs, landings, balconies, access platform and sunshades.	12	SQM	327.47	3,929.63

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
10	Centring and shuttering including strutting, propping, assembling etc. and removal of form work. Upto a maximum height of 4.50 metre of each floor and also upto floor five level. Lintels, beams, plinth beams, girders, bressumers and cantilevers.	15	SQM	256.49	3,847.37
11	Providing false ceiling at all height with 12.5 mm thick tapered edge gypsum board conforming to IS: 2095 including providing and fixing of frame work made of special sections of power pressed from M.S sheet and galvanised in accordance of zinc coating of grade 350 as per IS:277 and consisting of angle cleats of size 25 wide & 1.6 mm thick with flanges of 22 mm and 37 mm at 1200 mm c/c one flange fixed to the ceiling with dash fastener 12.5 mm dia. 40 mm long with 6 mm dia. bolts to the angle hangers of 25 x 25 x 0.55 mm of required length and other end of angle hanger being fixed with nut and bolts to G.I channels 45 x 15 x 0.9 mm running at the rate of 1200 mm c/c to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having clips of 10.5 mm at 450 mm c/c shall be fixed in a direction perpendicular to G.I channel with connecting clips made of 2.64 mm dia. 230 mm long G.I wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall / partition with the help of rawl plugs at 450 mm c/c with 25 mm long drive all screws @ 230 mm interval including joining and fixing to a flush finish of tapered and square edges of gypsum board with recommended filler, paper tapes, finisher and two coats of primer suitable for gypsum board as per manufacturers' specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing, specification and direction of Engineer-in-charge, but excluding the cost of painting.	80	SQM	749.39	59,951.17
12	Manufacturing, supplying and fixing in position of partitions for an approximate height of 3.20 m as detailed below: The bottom, middle and top of the partition (full portion) shall be of wooden, using 9 mm thick interior grade ISI marked (IS: 12823) three layered melamine faced prelaminated (both side) particle board of approved shade with Powder coated aluminium frame work. FRAME WORK: The frame work shall be with Powder coated aluminium sections with suitable aluminium beadings and rubber gaskets. The bottom member shall be of size 3 ¾" x 1 ¾" and 1.70 mm thick (weight 1.312 kg/m). The middle, top and vertical members shall be of size 2 ½" x 1 ½" and 1.28 mm thick (weight 0.754 kg/m). The verticals shall be generally spaced at 0.90 m centers and can be suitably varied at corners, wall junctions etc, without affecting the general elevation. Generally all the vertical sections shall be taken up to ceiling height and fixing the same with RC beams/slabs for better rigidity. Rate includes cost of all materials, labour and other incidentals etc., complete.	8	SQM	2,413.14	19,305.14

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
13	Manufacturing, supplying and fixing in position of Powder coated aluminium single leaved/double leaved panelled door of overall size 0.75m x 2.10m or thereabouts with suitable frame work as per the following specification and instructions of Engineer- in- charge. The alround vertical and horizontal outer frame shall be with 4" x 1¾" x 1.60 mm (unit wt. 1.312 kg/m) sections and for door shutter the bottom member shall be with 3 ¾" x 1 ¾" x 1.70 mm thick (unit wt. 1.312 kg/m) shutter top and verticals shall be of size 1 ¾" x 1 ¾" x 1.52 mm thick (unit wt. 0.885 kg/m) and shutter divider shall be 2 nos. of 1 ¾" x 1 ¾" x 1.70 mm thick (unit wt. 0.885 kg/m) with necessary beadings and rubber gaskets as per standard specifications. The entire panel 210 cm height shall be with 9 mm thick interior grade ISI marked (IS:12823) three layered melamine faced prelaminated (both side) particle board. Door shall be provided with 2 Nos. of 300 mm long anodized aluminium handle, One No. of ISI marked heavy duty door closer of approved brand, One No. 200 mm long anodized aluminium tower bolt, suitable lock (4 lever), required top and bottom pivots, all as per specification of Engineer in charge. Rate includes cost of all materials, labour and other incidentals etc., complete.	2	SQM	3,035.40	6,070.80
14	Manufacturing, supplying and fixing in position of Powder coated aluminium single leaved/double leaved glazed door of overall size 1.00 x 2.10m with suitable frame work as per the following specification and instructions of Engineer- in- charge. The alround vertical and horizontal outer frame shall be with 4" x 1¾" x 1.60 mm (unit wt. 1.312 kg/m) sections and for door shutter the bottom member shall be with 3¾" x 1¾" x 1.70 mm thick (unit wt. 1.312 kg/m) shutter top and verticals shall be of size 1¾" x 1¾" x 1.52 mm thick (unit wt. 0.885 kg/m) and shutter divider shall be 2 nos. of 1¾" x 1¾" x 1.70 mm thick (unit wt. 0.885 kg/m) with necessary beadings and rubber gaskets as per standard specifications. The upper panel of 120 cm shall be with 5 mm thick plain glass and lower panel of 90cm shall be with 9 mm thick interior grade ISI marked (IS:12823) three layered melamine faced prelaminated (both side) particle board. Door shall be provided with 2 Nos. of 300 mm long anodized aluminium handle, One No. of ISI marked heavy duty door closer of approved brand, One No. 200 mm long anodized aluminium tower bolt, suitable lock (4 lever), required top and bottom pivots, all as per specification of Engineer in charge. Rate includes cost of all materials, labour and other incidentals etc., complete.	2.5	SQM	3,549.14	8,872.85
15	Dismantling from existing branch, carefully transporting the same to the new branch and fixing in position of Glazed aluminium single leaved/double leaved glazed door of overall size 1.40 x 2.40m (approx.) with suitable frame work and to make it fully functional, as per the following specification and instructions of Engineer- in- charge. Rate includes cost of necessary accessories like screws etc.	7	SQM	708.26	4,957.82

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
16	Providing and fixing to existing door frames, 24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanized /plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic / galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multichambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanized M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bath-room door shutter).	1.8	SQM	2,530.11	4,554.19
17	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer in- charge. Extruded section profile size 42x50 mm.	3	RM	179.19	537.57
18	Providing and fixing in position of pedestal type water closet (European type W.C pan) 400 mm high of approved brand with seat and lid, C.P brass hinges and rubber buffers, 10 litre PVC low level flushing cistern with fittings and painted C.I / M.S brackets with 15 mm PVC connection, 32/40 mm PVC flush bend with fittings and clamps, over flow arrangement with specials and mosquito proof coupling including painting of fittings & brackets, cutting and making good the walls and floors wherever required etc. complete. White glazed (white seat and lid)	1	EACH	4,583.50	4,583.50
19	Providing and fixing in position of white glazed earthenware wash basin of size 550 x 400 x 225 mm of approved brand with M.S or C.I brackets painted with two coats of synthetic enamel paint, single 15 mm C.P brass pillar tap and C.P brass chain with rubber plug, 32 mm C.P brass waste coupling of standard pattern, 32 mm dia. PVC flexible waste pipe etc. complete, including cutting and making good the walls wherever required.	1	EACH	1,624.75	1,624.75
20	Providing and fixing 600 x 450 x 5 mm bevelled edge mirror of superior glass (approved brand) mounted on 5/6 mm thick hard board / ply wood / plastic folder sheet, fixed to wooden cleats with C.P brass screws and washers, etc. complete. 600 x 450 x 5 mm bevelled edge mirror	1	EACH	378.41	378.41

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
21	Providing and fixing G.I pipes and specials (B - Class) of approved brand with G.I fittings and clamps on walls & floors, including cutting and making good the walls & floors etc. complete. (Internal work - exposed on walls) 15 mm dia. nominal bore .	3	RM	148.84	446.51
22	Providing and fixing G.I pipes and specials (B - Class) of approved brand with G.I fittings and clamps on walls & floors, including cutting and making good the walls & floors etc. complete. (Internal work - exposed on walls) 20 mm dia. nominal bore .	2	RM	182.12	364.25
23	Providing and fixing G.I pipes and specials (B - Class) of approved brand with G.I fittings and clamps on walls & floors, including cutting and making good the walls & floors etc. complete. (Internal work - exposed on walls) 25 mm dia. nominal bore .	2	RM	242.48	484.96
24	Providing and fixing G.I pipes and specials (B - Class) of approved brand with G.I fittings and clamps on walls & floors, including cutting and making good the walls & floors etc. complete. (Internal work - exposed on walls) 32 mm dia. nominal bore .	1	RM	293.52	293.52
25	Providing and fixing PVC water pipes and specials conforming to ISS on walls and floors with clamps at one metre spacings, joining with proper adhesive as suggested by manufacturers, cutting and making good the wall etc. complete. PVC Pipe 18/20 mm OD (10 kg/Sq.cm) (internal work - exposed on walls)	2	RM	63.64	127.28
26	Providing and fixing PVC water pipes and specials conforming to ISS on walls and floors with clamps at one metre spacings, joining with proper adhesive as suggested by manufacturers, cutting and making good the wall etc. complete. PVC Pipe 25 mm OD (10 kg/Sq.cm) (internal work - exposed on walls)	2	RM	80.99	161.99
27	Providing and fixing PVC pipes of 4 K.G / Sq.cm conforming to ISS including joining with proper adhesive as suggested by manufacturers and suitable clamps for rain water pipes, drainage etc. Rate excludes all specials like shoe, bend, tee, tee with door etc. PVC Pipe 75 mm OD	5	RM	129.56	647.80
28	Providing and fixing PVC pipes of 4 K.G / Sq.cm conforming to ISS including joining with proper adhesive as suggested by manufacturers and suitable clamps for rain water pipes, drainage etc. Rate excludes all specials like shoe, bend, tee, tee with door etc. PVC Pipe 110 mm OD	10	RM	228.16	2,281.61
29	Providing and fixing PVC moulded fittings / accessories on walls for rain water pipes conforming to IS 13592 Type A including joining with seal rings conforming to IS 5382 and proper adhesive as suggested by manufacturers etc. complete. 75 mm bend	1	EACH	82.87	82.87
30	Providing and fixing PVC moulded fittings / accessories on walls for rain water pipes conforming to IS 13592 Type A including joining with seal rings conforming to IS 5382 and proper adhesive as suggested by manufacturers etc. complete. 110 mm bend	2	EACH	152.02	304.05

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
31	Providing and fixing in position of brass wheel valve / gate valve (G.M) of approved brand with C.I wheel etc. complete. (ISI marked) 15 to 25 mm dia. nominal bore	2	EACH	426.68	853.35
32	Providing and fixing in position C.P brass bib cock / stop cock (Medium Duty) of approved brand (ISI marked) 15mm dia. nominal bore	2	EACH	210.00	420.00
33	Providing and fixing in position C.P brass bib cock / stop cock (Medium Duty) of approved brand (ISI marked) 20mm dia. nominal bore	1	EACH	268.38	268.38
34	Providing and fixing in position of 100 x 75 mm Nahani trap with PVC grating, all as per standard specifications.	1	EACH	184.86	184.86
35	Supply and fixing M.S grills for windows, ventilators and also wherever necessary including a priming coat. All according to our design and specification.	65	KG	13.36	868.12
36	Providing and laying in position specified grade of reinforced cement concrete including vibration charges, curing etc. complete but excluding cost of centring, shuttering, finishing and reinforcement. 1:2:4 with graded stone aggregate 20 mm nominal size - 1:2:4 with graded stone aggregate 20 mm nominal size - Above plinth to floor five level. Rate includes cost of cement	5	CUM	4,639.79	23,198.93
37	Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc. complete, all as per standard specifications. All works upto plinth level. Rate excludes cost of centring and shuttering. 1:4:8 with graded stone aggregate 20 mm nominal size	2	CUM	3,077.28	6,154.57
38	Finishing the top of all floors with 20 mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to 10 mm gauge hard broken granite stone chips and finishing the top surface smooth, rounding of corners, curing etc., complete, all as per standard specifications. (Ellis pattern I sort)(rate includes cost of cement)	130	SQM	257.30	33,449.03
39	Drilling holes for the following diameter in Industrial Reinforced cement concrete floor or in machine foundation using power drilling machine in proper manner to a maximum depth of 200 mm as per standard specification and fixing the anchor bolts through the holes provided in the machine with the drilled holes in the shop floor as per the instructions of Engineer in charge. The power and compressed air required for drilling holes will be supplied by BHEL at free of cost. The quoted rate shall include all labour charges for drilling holes only and also include hire and running charges for machineries, tools and plants, loading, leading, conveyance and cleaning the debris etc. complete. 19 – 23 mm diameter	45	EACH	89.75	4,038.60
40	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Doors / Windows / Ventilators (steel or wood) including frame and shutters, holdfasts, hinges, fastenings etc. of area 3 sq. m & below.	12	EACH	111.45	1,337.40

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
41	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engi-neer-in-charge. Steel partitions including bolts, nuts, cutting rivets, welding etc. and dismembering	35	SQM	68.80	2,408.08
42	Fabrication of steel work including all materials going into the process of fabrication and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes cost of structural steel, delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office despatch list for BHEL's approval, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works.	0.25	МТ	54,917.74	13,729.43
43	Carrying from stacks at erection site to erection positions and erection of fabricated steel work including all handling, conveying, assembling, hoisting, erecting in position and site welding and or bolting, alignment of structures, all as per drawings and standard specifications. Rate includes bolts & nuts, hire for welding tools and plants, labour etc., but excluding cost of fabricated components. Weight of fasteners will not be accounted for payment.	0.25	МТ	6,746.58	1,686.65
44	Painting with synthetic enamel paint of approved brand and shade on surfaces to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matters, sand papering and stopping, all as per standard specifications. Two coats	25	SQM	68.35	1,708.68
45	Providing and fixing powder coated aluminium two track sliding windows of approved colours aluminium sections of size 60 x 28 x1.20 mm (wt 0.656 kg / m) for outer frame , 38 x 17 x 1.20 mm (0.41 kg / m) for shutter box and 38 x 17 x 1.20 mm (0.44 kg/m) for inter lock 4 mm thick plain glass for panes, PVC wheels, U rubber, screws, locking arrangements etc. complete, all as per instructions of Engineer-in-charge.	3	SQM	3,003.63	9,010.89
46	Dismantling the collpasible steel shutters from exisiting branch, transporting the same and fixing in position at new branch - with vertical channels 20 x 10 x 2 mm and braced with flat iron diagonals 20 x 5 mm size with top and bottom rail of T-iron 40 x 40 x 6 mm with 40 mm dia. (size approx) steel pulleys complete with bolts, nuts, locking arrangements, stoppers, handles, including applying a priming coat of approved steel primer.	5	SQM	303.54	1,517.70
47	Labour charges for fixing doors, windows and ventilators including frames and shutters in position etc. complete.(wood or steel)	5	SQM	120.30	601.52
48	Providing and fixing 100 mm brass lock (mortise latch & lock with six levers) for aluminium doors including necessary cutting and making good etc. complete.	1	EACH	375.78	375.78

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
49	Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge. Hydraulic door closer - universal type (Medium duty)	1	EACH	1,442.27	1,442.27
50	Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge. Brass Mortice lock 100 mm, 6 levers and a pair of brass lever handles	1	EACH	498.21	498.21
51	Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge. D type Anodised Aluminium handle - 100 mm	6	EACH	32.28	193.66
52	Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge. 75 x 11/12 mm Anodized Aluminium tower bolt	10	EACH	38.95	389.54
53	Supply & fixing the following furniture fittings of approved brand & quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc. with appropriate screws, nails etc., all as per standard specifications & instructions of Engineer in charge. 75 x 11/12 mm Anodized Oxidised iron butt hinges 125mm	10	EACH	22.82	228.16
54	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Brick work in cement mortar	1	CUM	536.51	536.51
55	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Stone rubble masonry in cement mortar	2	CUM	640.17	1,280.33
56	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Old plastering / skirting raking out joints / chipping the concrete and roughening the surface	140	SQM	14.32	2,004.38

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
57	Dismantling / removing / demolishing as the case may be of the following by manually / mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same and disposal of unserviceable materials by transporting and dumping in the nearby low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Plain Cement Concrete.	2	CUM	391.72	783.44
			To	otal for Part – A	4,52,536.83

PART - B (MISCELLANEOUS)

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
1	'Removing MS safety grill from existing branch, average grid size (25 cm x 9 cm) transporting and fixing the same at new branch as follows - CHEST ROOM IRON GRILL - 3.65m x 2.50m x 2.80 m height approx.	1	Lumpsum	51,750.00	51,750.00
2	'Removing the furniture from existing branch and fixing in new branch as follows - CASH COUNTER WITH MODULAR TABLE and ALUMINIUM GRILL - 2 NOS size - 1.80m x 1.25m x 2.20m, COUNTER MODULAR TABLES - 5 NOS - 1.30m x 0.65m x 1.20 m height approx.	1	Lumpsum	30,000.00	30,000.00
3	Fixing of Safe vault door of size 4' x 7' height by properly anchoring to the existing wall using MS rods, Flats and packing with concrete all as per directions of Engineer in charge. Door will be supplied and kept ready for anchoring by supplier of BHE ECB.	1	Lumpsum	15,000.00	15,000.00
			Т	otal for Part – B	96,750.00

PART - C (ELECTRICALS)

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)
New lig	htning, fan, A/c, RJ-11, RJ-45, Plug points		l l	<u>'</u>	
1	Supply and wiring with 3 runs of 1.5sqmm PVC insulated copper wire in 18-20mm dia, 1.8-2mm thickness of PVC conduit pipe including 5A switch with modular suitable size M.S box with necessary accessories for light and fan points, 5A plug points etc.	50	Point	1,085.00	54,250.00
2	Supply and wiring with 2 runs of 2.5sqmm and one run of 1.5sqmm PVC insulated copper wire with 18-20mm dia. 1.8-2mm thickness of PVC conduit pipe with necessary accessories.	300	Mtr	130.00	39,000.00
3	Supply and wiring with 2 runs of 4 sq.mm and one run of 2.5sqmm PVC insulated copper wire with 18-20mm dia. 1.8-2mm thickness of PVC conduit pipe with necessary accessories.	100	Mtr	167.00	16,700.00
4	Supply and wiring of 1.5 sqmm multistrand wire in the existing pipe for UPS supply to lighting 6 lights (1 in each room and 2 in hall).	80	Mtr	18.00	1,440.00
5	Supply and wiring with CAT-6 cable and suitable size PVC conduit casing caping pipe with accessories.	150	Mtr	66.00	9,900.00
6	Supply and wiring with telephone cable and suitable size PVC conduit casing caping pipe with accessories.	80	Mtr	27.00	2,160.00
7	Supply and fixing of computer RJ-45 jack with suitable modular box.	12	Nos.	735.00	8,820.00
8	Supply and fixing of telephone RJ-11 jack with suitable modular box.	4	Nos.	784.00	3,136.00
9	Supply and fixing of 1No 5A switch and 1No 5A 2in1 socket modular in the existing switch board with interconnections.	6	Nos.	490.00	2,940.00
10	Supply and fixing of 1No. 5A switch with 1No. 5A 3pin socket with suitable size modular box.	10	Nos.	686.00	6,860.00
11	Supply and fixing of 2Nos 5A switch and 2Nos 5A 2in1 socket with suitable size modular box for UPS supply.	12	Nos.	882.00	10,584.00
12	Supply and fixing of 1No 15A switch with 1No 15A 3pin socket with suitable size modular box	2	Nos.	784.00	1,568.00
13	Supply and fixing of 1No 15A switch with 1No 15A 3pin socket with suitable size modular box with UPS supply for ATM.	2	Nos.	784.00	1,568.00
14	Supply and fixing of 20A metal clad plug and socket with 1No 20A SP MCB in M.S enclosure.	7	Nos.	1,274.00	8,918.00
15	Supply and fixing of 1No 20A DP MCB in suitable M.S enclosure for UPS input supply for 3kVA UPS.	2	Nos.	882.00	1,764.00

SI. No	Description	Qty.	Unit	Rate (Rs. P)	Amount (Rs. P)	
16	Supply and fixing of 8way compartmental TPN MCB DB with M.S enclosure including 1No 63A 4pole MCB, 24Nos 20/16/10/6A SP MCB with interconnections.	1	Nos.	12,740.00	12,740.00	
17	Supply and fixing of 12way SP MCB DB with M.S enclosure including 1Nos 40A DP MCB and 10Nos 10/6A SP MCB with interconnections for UPS line.	2	Nos.	3,430.00	6,860.00	
18	Supply and fixing of 1X18W box type fitting with 18W LED tube light with accessories.	10	Nos.	764.00	7,640.00	
19	Supply and fixing of 2'X2' square type false ceiling 48watts LED fitting with accessories.	9	Nos.	7,724.00	69,516.00	
20	Supply and fixing of round type false ceiling 18watts LED fitting with accessories.	4	Nos.	1,935.00	7,740.00	
21	Supply and laying of No.8 SWG copper wire for earthing.	50	Mtr	73.00	3,650.00	
22	Supply and fixing of 1200mm sweep ceiling fan with down rod and accessories with electronic regulator.	3	Nos.	1,689.00	5,067.00	
23	Supply and fixing of 19mm dia. 2.5 to 3 mtr length fan down rod.	3	Nos.	245.00	735.00	
EB serv	vice connection					
24	Supply and fixing of 125A change over switch with M.S enclosure and suitable size adaptor box.	1	Nos.	4,410.00	4,410.00	
25	Supply and laying of 3.5 core 50 sqmm LT UG Al. Ar. Cable in wall/ Overhead with 12SWG GI wire for EB incoming.	55	Mtr	276.00	15,180.00	
26	Supply and making end termination 3.5C 50sqmm LT UG Al. Ar cable.	6	Nos	392.00	2,352.00	
27	Supply and erection of 2.5mtr length 50mm dia. GI earth electrode with alternate layer of salt and charcoal including excavation of earth and refilling with same soil.	2	Nos	3,920.00	7,840.00	
28	Supply and fixing of TANGEDCO 3phase meter board with suitable angle iron frame including provision for fixing 3phase energy meter, 3Nos 200A fuse carrier 1No 125A TPN switch with HRC fuses and internal control wiring with accessories.	1	Set	16,660.00	16,660.00	
29	Supply and fixing of 200A patty type fuse unit-3No with suitable MS roofing plate with clamps etc.	1	Set	6,370.00	6,370.00	
30	Supply and fixing of 300 mm (12") size, heavy duty exhaust fan (230V, 50Hz,1400 RPM, Single phase) complete with all required and electrical connection Brand: CROMPTON GREAVES	1	Nos.	3,332.00	3,332.00	
				Γotal for Part C	3,39,700.00 4,52,536.83	
	Total of Part A (Civil)					
				Miscellaneous)	96,750.00	
				rt C (Electrical) art B + Part C)	3,39,700.00 8,88,986.83	

SCHEDULE 'B'

1. The following materials will be issued FREE of cost to contractor at BHEL Stores / Stock yard.

SI. N	lo. DESCRIPTION	PLACE OF ISSUE
	NIL	
2.	It will be the responsibility of the Contractor to subneween days in advance of the actual requirement.	nit his demands for the above stores in writing at
3	Issue of Stores is subject to the availability at the p by BHEL which are not available at the time of inde	
1.	may be supplied by BHEL after necessary procure of compensation for delay in the supply of stores by	
5.	The materials will be issued only during the workin 4.30 p.m.). Contractor shall have to transport them at his own cost.	
3.	The steel materials if issued will be in random leng all cutting, conversion, substitution and fabrication Contractor.	
7.	The contractor shall from time to time render prope fails to do so, no further issue of materials will be delay in the execution of the work which may occur	made to him and he will be held responsible for
8.	Where A.C. Sheets and accessories, Doors, Wind are issued free of cost to the contractor, the contract or damage to any part or whole of the items issued as fixed by BHEL will be charged for at the prescent or at punitive rates which will be 100% high	actor will have to make good at his own cost—any to him as above. All wastage within the premises l cribed issued rates of BHEL. Excess wastage wi
9.	All surplus materials in good condition which are remarkerials consumed in excess of the max. Permi punitive rates.	
	The decision of the Senior Engineer / Dy. Manage been rendered surplus or consumed in excess of and binding on the contractor.	

SCHEDULE 'C' ISSUE OF TOOLS AND PLANTS TO CONTRACTORS

SI. No. Qty. Particulars		Details of BHEL Crew Supplied	Hire Charges Per unit Per Day	Place of Issue	Remarks	
			Nil			

- a. Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.
- b. All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the contractor at his own expense.

SCHEDULE 'D'

NOTE: All Drawings are to be signed by the Contractor as well as the officer entering into contract.

SL. No.	DRAWING NUMBER	DESCRIPTION
01	2 – TP – CEG – 01973 (R0)	PROPOSED LAYOUT OF ECB AT AMARAVATHY BUILDING
02	3 – TP – CEG – 02047 (R0)	PROPOSED ELECTRICAL LAYOUT OF ECB AT AMARAVATHY BUILDING

SCHEDULE 'E'

LEAD STATEMENT

SI. No.	Name of Material	Name of Source	Lead Particulars both for Factory and Township	
1		NIL		

C.A							
AUTHORITY TO TENDER							
Tender Notice No. CT: TN: 011 / 17 - 18	Office of the Sr. Mgr. / Civil / Plng. D & QC, 53 Building, BHARAT HEAVY ELECTRICALS LIMITED TIRUCHY – 14.						
Tender Schedule No. CT: TS: 011 / 17 - 18							
Item percentage rate tender for work required in Improproposed BHE-ECB Branch at No.1 Good Shed Road, Tr							
Messrs / Mr.							
are / is hereby authorized to tender for the above Office of the Sr. Mgr. / Civil / Plng. D & QC, Bldg. No. 53 Ground							
hrs. on 21 08 2017 addressed to the Sr. Mgr. / Civil / Plng. D & Q0 - 620 014 superscripting the name of works as mentioned above.	C, Bldg. No. 53, Ground Floor, BHEL, Trichy						
Any correspondence concerning this tender should be addressed a Schedule No. and other relevant particulars.	as indicated above quoting the Tender Notice,						
BHARAT HEAVY ELECTRICALS LIMITED DO NOT BIND THEMS TENDER.	SELVES TO ACCEPT THE LOWEST OR ANY						

Issuing Officer with Designation

Contract Agreement No					
TENDER					
То					
Sr. Mgr. / Civil / Plng., D & QC Bharat Heavy Electricals Limited Unit: Tiruverumbur TIRUCHIRAPPALLI – 620 014.					
I / We hereby offer to carry out the work of "Improvement & Modification works for the proposed BHE ECB City Branch at No.1 Good Shed Road, Trichy – 2."					
I / We hereby carefully perused the following documents connected with the above noted work and agree to obide by the same.					
 Specifications (General & Particular) Drawings attached separately (Civil- dwg. Ref. No. 2 TP CEG 01973 Rev 00; + Electrical – dwg. Ref. No. 3 TP CEG 02047 Rev 00) Schedule 'A', 'B', 'C', 'D' & 'E' & BOQ attached hereto. Schedule of Rates 					
5. BHE Ltd., General & Special Conditions of Contract, Tender Notice and Instructions to Tenders attached hereto.					
I / We forward herewith the sum of Rs					
I / We further agree to execute all the work referred to in the said documents upon the terms & conditions contained or referred therein and as detailed in Schedule 'A' and Bill of Quantities annexure thereto and to carry out such deviations as may be ordered, vide conditions 6 of the BHEL Ltd., General Conditions of Contract up to a maximum of 20% of the tendered amount of Rs.					
I / We further agree to refer all disputes, as required by condition 62 of the General conditions of Contract to the sole arbitration of an Officer, to be appointed by the General Manager, B.H.E Ltd., in his sole discretion whose decision shall be final and binding.					
WITNESS Signature of the Contractor					
Date:					

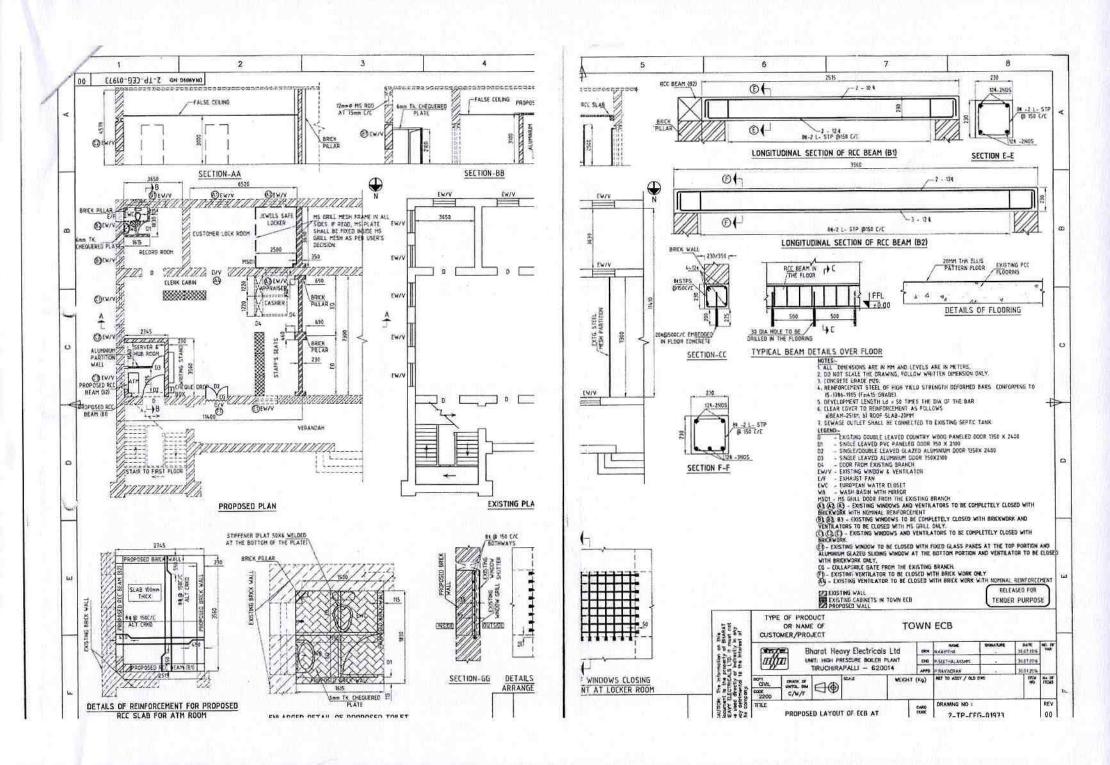
1.

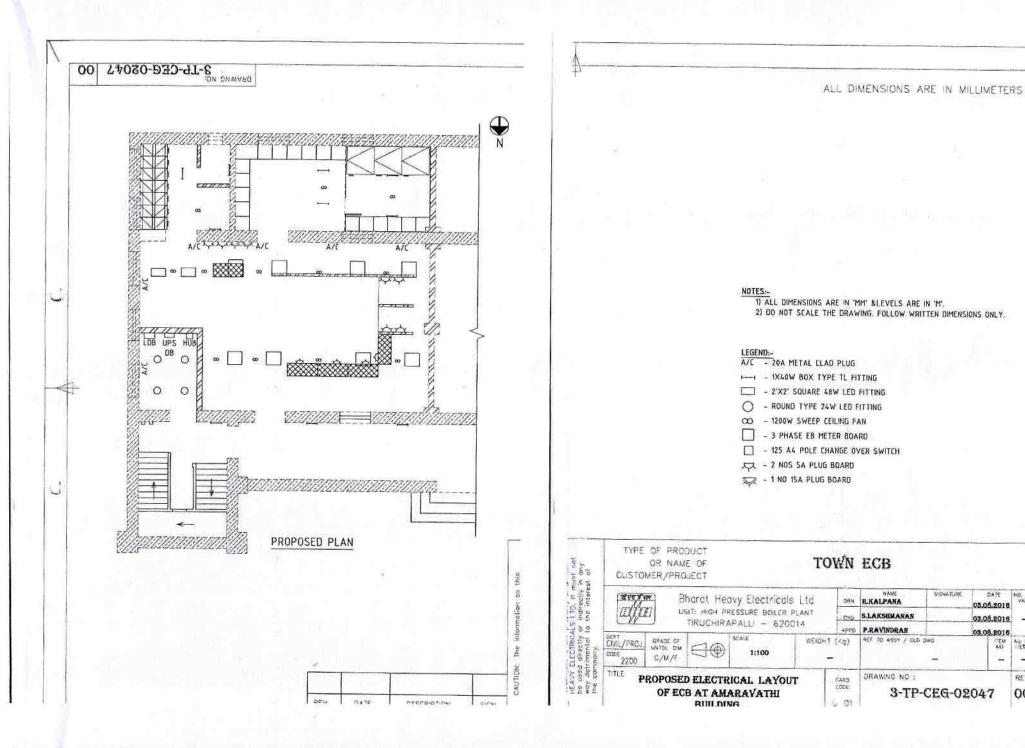
2.

GENERAL SUMMARY

1.	(a) Net Cost of works or building etc., from Schedule 'A'				Rs.					
2.	Provisional sum					Rs.				
			Tota	I		Rs.				
Rupee	es									
							has	been du	uly authorize	ed by
me	/ us	to	sign	the	tender	for	and	on	behalf	of
		(In	block lette	ers)						
Date:					SIG	NATURE	OF CON	TRACTO	PR	
Witnes	SS:					Postal Ad	ddress:			
1						Telephon	e No.			
	Address									
2										
	Address									

					alterations have be the execution of o		
have	been	initialed	by	the	Contractor	and	the
			•				
		the said of	ficer is hereby	authorized to	sign and initial on r	ny behalf the do	cuments
forming par	t of this contra	act (Number of al	ternation in fiç	gures and wor	ds to be given here	∍).	
The above	tender is acc	cepted by me on	behalf of the	Bharat Heav	yy Electricals Limit	ed, Unit: Thriuv	erumbur,
Tiruchirappa	alli –	620 014.	for	a sum	of Rs		
					• • • • • • • • • • • • • • • • • • • •		
			at the	e percentage	rates as indicated	in Schedule 'A'	
Signature			Date				
Oignature			Date				
Designation	۱						





DATE NO OF

03.08.2016

03.08.2016

03.06.2016

NO No of

REV

00