

TENDER DOCUMENT NO: PSER:SCT:BDG: C 719:07

**TECHNICAL SPECIFICATION
AND
SPECIAL CONDITION OF CONTRACT**

VOLUME – II

FOR

Renovation of Chumery building, construction of soakpits, under ground masonry / concrete works, tiling, sanitary works and other miscellaneous civil & electrical works etc.

AT

**1 X 250 MW Budge-Budge Generating station extension Unit-3 of
CESC**

PO – PUJALI

DIST – 24 Parganas (S)

WEST BENGAL

**BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. Of India Undertaking)
POWER SECTOR – EASTERN REGION
DJ-9/1, SALT LAKE CITY, SECTOR-II,
KOLKATA – 700 091**

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TECHNICAL SPECIFICATION AND SPECIAL CONDITION OF CONTRACT

These Special conditions shall be construed as part of tender document and shall be read along-with General Conditions of Contract. In case of any conflict or inconsistency between the general and these special conditions, the same shall be brought out by the bidder in writing to BHEL for clarification during pre-bid discussions; failing which most stringent interpretation / clause in favour of BHEL shall be adopted and the same shall be binding to the contractor.

1. PROJECT SYNOPSIS AND GENERAL INFORMATION

The present proposal is to install additional two nos. UNIT of 250 MW Capacity each UNIT-7 & 8 as extension of the existing Budge-budge Thermal Power Stations. The site of work is situated at Budge-budge under P.S. Budge-budge in the district of Bokaro, Jharkhand. Nearest railway station: - Budge-budge Jn (3 Km), Dhanbad (40 Km) and Bokaro City (35 Km). Nearest Airport: Ranchi.

2. SITE VISIT

Contractor should visit 2 x 250 MW CESC Budge-budge Project site and acquire full knowledge and information about site conditions. The bidder must visit site, to acquaint himself with the conditions prevailing at site and in and around the plant premises at Budge-budge, together with all the statutory, obligatory, mandatory requirements of various authorities before submission of the bid.

3. SCOPE OF WORK

- 3.1. Renovation of Chumery building, construction of soakpits, under ground masonry / concrete works, tiling, sanitary works and other miscellaneous civil works.
- 3.2. All the quality standards, tolerances, welding standards and other technical requirements shall be strictly adhered to. The Bidder shall fully apprise himself of the prevailing conditions at the proposed site, climatic conditions including monsoon pattern, soil conditions, local conditions and site specific parameters and shall include for all such conditions and contingent measures in the bid, including those which may not have been specifically brought out in the specifications.

4. DEVIATIONS

- 4.1. The bidder is required to submit with his offer in the relevant schedule / format without any ambiguity. Any assumptions, presumptions, deviations etc. indicated or implied anywhere by the bidder except those indicated in the deviation schedule / format will not be recognized and will not form a part of consideration / offer. In the absence of such filled-up schedule / format it will be understood and agreed that the bidder's offer is based on strict conformance to the specification and no negotiation would be allowed in this regard. BHEL reserve the right not to recognize any / all deviations submitted after opening of the bid.

5. DEWATERING

- 5.1. Contractor shall ensure at all times that his work area & approach / access roads are free from accumulation of water, so that the materials are safe and the erection/progress schedule are not affected. No separate claim in this regard shall be admitted by BHEL. No separate payments for dewatering of subsoil, surface water or catchments water, if required, at any time during execution of the work including monsoon period shall be considered by BHEL.

6. LAND

- 6.1. No land will be provided for Labour Colony inside the project premises to the contractor to construct labour colony/hutment. The contractor will have to make temporary arrangement (at his own cost) outside the project premises the same in consultation with CESC/BHEL.
- 6.2. The contractor will be responsible for handing back all premises, as handed over to him.

7. WATER

- 7.1. The bidder has to arrange for water required for his scope of work.

8. ELECTRICITY

- 8.1. BHEL will provide construction power points on free of charge basis at LT voltage level (3-Ph., 415-V) at two different points. Further distribution (including laying of cables/ installation DBs and maintenance of the same) beyond this point to be arranged by the contractor at his own cost. The bidder shall have to provide earth leakage circuit breaker at each point wherever human operated electrical drives / T&Ps are deployed.
- 8.2. The power supply will be from the available grid. BHEL shall not be responsible for any inconvenience or delay caused due to any interruption of power supply / variation in voltage level and no compensation for delay in work can be claimed by the contractor due to such non-supply on the grounds of idle labour, machinery or any other grounds.
- 8.3. The contractor shall have to make arrangement at their own cost for illumination that will be required in the working area for execution of the work & safety of workmen.

9. CONSUMABLE

- 9.1. All consumables, like gas, electrodes, chemicals, lubricants etc. required for the job, shall be arranged by the contractor at his cost unless otherwise specifically mentioned in the contract.
- 9.2. All consumables to be used for the job shall have to be approved by CESC/BHEL prior to use.
- 9.3. In the event of failure of contractor to bring necessary and sufficient consumables, BHEL may arrange for the same at the risk and cost of the contractor. The entire cost towards this along-with overhead shall be paid by the contractor or deducted from the contractor's bills.

10. TEST CERTIFICATES

- 10.1. Necessary test certificates of all the materials supplied by contractor are to be produced to BHEL prior to use of those materials.

11. DELETED

12. DELETED

13. DELETED

14. GENERAL REQUIREMENTS

- 14.1.1. The Budge-Budge generating station is located in such a place that there is no suitable trauma center or adequate medical facility available in the immediate vicinity, in case of emergency. The nearest ESI hospital is about 9.00 km away, where some medical treatment is available. Hence it is imperative that a workman whose monthly remuneration is less than Rs 10,000.00 needs to be covered under ESI scheme. The bidders are to consider this during quoting.
- 14.1.2. Bidders to note that stipulations as per Govt. of WB minimum wages Act including House Rent Act & Height allowance Act are applicable for this project. Any agency found to be violating these acts is liable for legal proceedings & compensation as per law and recovery from the RA bill as per actual cost + 30% will affected. Bidders to note that provisions & rules as construction workers welfare act is also implemented and the same is applicable for this project.
- 14.1.3. Since this is an extension unit, the project area cordoned off by providing a temporary fencing arrangement. Bidders to take special care that none of his workmen ventured into the running plant area during any time of the day, except for interface area working, for which separate procedure will be issued at the time of execution.

- 14.1.4. Before starting the work at site the bidder to apply for gate pass for his workmen. The application for GATE PASS shall be addressed to "The Dy. Chief Security Officer, CESC, Budge-Budge Generating Station". The application for gate pass should be first routed through authorized representative of BHEL and then by Project Department, CESC, before proceeding to the IR section of CESC. The application must accompany the relevant & applicable documents like Proof of residence, ESI No. etc.
- 14.1.5. All workmen should be provided with a color band (on right hand), which should be worn by all workmen while working inside the project premises as an additional identity to distinguish them as workmen for extension unit-3 job.
- 14.1.6. Labour Requirements
- 14.1.7. The Contractor shall prepare and make available to the CESC from time to time details of the numbers and trades of workmen whom the Contractor proposes to employ (whether directly or through Sub-Contractors) on the Site throughout the periods shown in the Project Schedule. Such details shall be in the form of a periodic histogram, accumulative "S" curve and summary line item tabulation or such other form as the CESC may reasonably request and the Contractor normally utilises.
- 14.1.8. As far as practicable, the Contractor shall give preference in the employment of unskilled labourers at the Site to persons living locally in consultation with CESC's IR Department.

QUALITY ASSURANCE

- 14.1.9. All the purchase specifications for the major bought out items list of which shall be drawn up by the contractor and finalized with BHEL/CESC shall be furnished to BHEL for comments and approval before placement of orders.
- 14.1.10. BHEL reserves the right to carry out quality audit and quality surveillance of the systems and procedures of contractor's quality management. Contractor shall provide all necessary assistance to enable BHEL to carry out such audit.
- 14.1.11. Quality audit/approval of the results of test and inspection will not prejudice the right of BHEL /CESC to reject an equipment service not giving the desired performance and shall not in no way limit the liabilities and responsibilities of the contractor in earning satisfactory performances of equipment/service as per specification.
- 14.1.12. Repair/rectification procedure to be adopted to make any job acceptable shall be subject to the approval of BHEL.

15. PROJECT MANAGEMENT / CONSTRUCTION MANAGEMENT

To meet the need of construction management at site, Contractor shall provide the following services within quoted/accepted rates:

15.1. DELETED

15.2. SITE ORGANIZATION

- 15.2.1. The contractor shall maintain a site organization of adequate strength in respect of manpower, construction machinery and other implements at all time for smooth execution of the contract headed by a competent construction manager for site operations with sufficient level of authority to take site decisions. The vendor will submit organization chart (showing the name of SITE-IN-CHARGE) with individual bio-data indicating various levels of experts to be posted for supervision in the fields of supervision and execution, quality, material management, planning, safety, etc. The organization shall be reinforced from time to time, as required to make up slippage (if any) from the schedule without any commercial implication to BHEL. The organization chart is to be submitted within 10 days from the date of LOI.

15.2.2. BHEL reserves the right to reject or approve the list of personnel proposed by the contractor. The persons whose bio-data have been approved by BHEL will have to be posted at site and deviation in this regard will not be permitted unless specific & reasonable justification is made.

15.2.3. The contractor should also submit to BHEL for approval a list of T&Ps along with their fitness certificates. The tools & tackles shall not be removed from site without written permission of BHEL.

15.3. CONSTRUCTION MANAGEMENT

15.3.1. Based on the approved program the contractor shall submit a program of construction / erection / commissioning for the implementation. The program would be jointly finalized by the site in-charge of the contractor with BHEL project coordinator as well as the site-planning representative.

15.3.2. The contractor is liable to furnish all documentary evidences towards payment of Works Contract Tax as when required by BHEL.

15.4. WORK & SAFETY REGULATIONS

15.4.1. The contractor shall ensure the safety of all workmen, materials and equipment either belonging to him or to others working at site. He shall observe safety rules and codes applied by the BHEL at site without exception.

15.4.2. Safety nets with hand railings must be provided on all both inside & outside hanging platform of slip-form equipment & hanging platform from brickwork.

15.4.3. Emergency vehicle must be provided & kept separately as stand-by.

15.4.4. Non-conformity of safety rules and safety appliances will be viewed seriously and BHEL has right to impose fines on the contractor on each incident/each non-conformity as per details given below:

SL.	Safety measure	Fine (Rs)
1	Not wearing safety helmet.	15/workmen
2	Not wearing safety belt for workmen working at heights	10/workmen
3	Electrical plugs not used for hand machines.	100/case
4	Welding cables, electrical wires not insulated with proper/standard.	50/joint
5	Not removing scrap from platform.	Actual cost for removal plus 30 %
6	Gas cutting without taking proper precaution/not using sheet below per incidence.	100/case
7	Electrical winches having no guards earthed properly etc.	500/case
8	Improper earthing of electrical T&P.	200/ equipment
9	Not protecting/locating the gas cylinder to avoid catching of fire.	100/cylinder
10	Not providing earth leakage circuit breaker as per direction of BHEL.	1000/point

15.4.5. Any other nonconformity noticed not listed above will also be fined. The decision of BHEL engineer is final on the above. The amount will be deducted from running bills of the contractor. The amount collected on the above will be utilised for giving award to the employee who could avoid accidents by following safety rules. Also, the amount will be spent for improving the safety at site.

15.4.6. The contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislation and BHEL, as he may deem necessary.

15.4.7. The contractor will notify well in advance to BHEL of his intention to bring to the site any container filled with liquid or gaseous fuel or explosive or petroleum substance or such chemicals, which may involve hazards. BHEL shall have the right to prescribe the conditions, under which such container is to be stored, handled and used during the performance of the works and the contractor shall strictly

adhere to and comply with such instructions. BHEL shall have the right at his sole discretion to inspect any such container or such construction plant/equipment for which material in the container is required to be used and if in his opinion, its use is not safe, he may forbid its use. BHEL/CESC shall entertain no claim due to such prohibition and BHEL shall not entertain any claim of the contractor towards additional safety provisions/conditions to be provided for/constructed as per the BHEL/CESC's instructions.

- 15.4.8. Further, any such decision of the BHEL shall not, in any way, absolve the contractor of his responsibilities and in case, use of such a container or entry thereof into the Site area is forbidden by the BHEL, the contractor shall use alternative methods with the approval of the BHEL without any cost implication to BHEL or extension of work schedule.
- 15.4.9. Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the Contractor shall be responsible for carrying-out such provision and/or storage in accordance with the rules and regulations laid down in Petroleum Act 1934, Explosives Act, 1948, and Petroleum and Carbide of Calcium Manual published by the Chief Inspector of Explosives of India. All such storage shall have prior approval of the BHEL. In case, any approvals are necessary from the Chief Inspector (Explosives) or any statutory authorities, the Contractor shall be responsible for obtaining the same.
- 15.4.10. All equipment used in construction and erection by Contractor shall meet Indian/ International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipments shall be strictly operated and maintained by the Contractor in accordance with manufacturer's operation Manual and safety instructions and as per Guidelines/Rules of CESC in this regard.
- 15.4.11. The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need, as may be directed by BHEL/CESC who will also have right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability.
- 15.4.12. The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and supervision of an experienced and competent person. For erection, the Contractor only shall use good and standard quality of material.
- 15.4.13. The Contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the BHEL/CESC or other Contractors under any circumstances, whatsoever, unless expressly permitted in writing by CESC to handle such fuses, wiring or electrical equipment.
- 15.4.14. Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contactor or BHEL/CESC, he shall:
- a) Satisfy the BHEL/CESC that the appliance is in good working condition:
 - b) Inform the BHEL/CESC of the maximum current rating, voltage and phases of the appliances;
 - c) Obtain permission of the BHEL/CESC detailing the sockets to which the appliances may be connected.
- The BHEL/CESC will not grant permission to connect until he is satisfied that:
- a) The appliance is in good condition and is fitted with suitable plug;
 - b) The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
- 15.4.15. No electric cable in use by the contractor/BHEL/CESC will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.
- 15.4.16. No repair work shall be carried out on any live equipment. BHEL/CESC must declare the equipment safe and a permit to work shall be issued by the BHEL/CESC before the Contractor carries

out any repair work. While working on electric lines/equipments whether live or dead, suitable type and sufficient quantity of tools will have to be provided by Contractor to electricians/workmen/officers.

- 15.4.17. The Contractors shall employ necessary number of qualified, full time Electricians/ Electrical Supervisors to maintain his temporary electrical installations.
- 15.4.18. The Contractor shall employ trained Safety Officer to supervise day to day safety aspects of the equipments and workmen, who will co- ordinate with the BHEL/CESC Safety Officer. In case of work being carried out through sub-Contractors, the Sub- Contractor's workmen/employees will also be considered as the Contractor's employees/workmen for the above purpose.
- 15.4.19. The name and address of such Safety Officer of Contractor will be promptly informed in writing to BHEL/CESC with a copy to Safety Officer-In charge before he starts work or immediately after any change of the incumbent is made during currency of the Contract.
- 15.4.20. In case any accident occurs during the construction/ erection or other associated activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor to promptly inform the same to the BHEL/CESC in prescribed form and also to all the authorities envisaged under the applicable laws.
- 15.4.21. The BHEL/CESC shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipments. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly.
- 15.4.22. The Contractor shall not be entitled for any damages/ compensation for stoppage of work due to safety reasons above and the period of such stoppage of work will not be taken as an extension of time for completion of the facilities and will not be the ground for waiver of levy of penalty.
- 15.4.23. The Contractor shall follow and comply with all Safety Rules of the BHEL/CESC, relevant provisions of applicable laws pertaining to the safety of workmen, employees plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservation. In case of any inconformity between statutory requirement and CESC's Safety Rules of the BHEL/CESC referred above, the later shall be binding on the Contractor unless the statutory provisions are more stringent.
- 15.4.24. In case the BHEL/CESC is made to pay such Compensation then the Contractor is liable to reimburse the BHEL/CESC such amount in addition to the compensation indicated above.
- 15.4.25. These insurance covers have to be taken prior to start of his work at the subject project and he shall make available the Policy to BHEL Site in-charge for necessary verification before commencement of work. However, irrespective of such verification/acceptance, the sole responsibility to maintain adequate insurance cover for his workmen, T&P, assets etc. at all times during the period of contract shall lie with the contractor. Regarding the aforesaid insurance cover, the contractor shall directly deal with the Insurance Company for all matters regarding the insurance in his scope.

16. HEALTH SAFETY & ENVIRONMENT

GENERAL

- 16.1.1. It is imperative on the part of the contractor to join and effectively contribute in joint measures such as tree plantation, environment protection, contributing towards social up-liftment, conversion of packing woods to school furniture, keeping good relation with local populace etc.
- 16.1.2. No staff quarter shall be provided by BHEL.
- 16.1.3. No borrow area for earth shall be arranged / provided by BHEL.

16.1.4. The contractor shall solely be responsible for the safety, quality, & quantity of material after it is handed over and issued to contractor by the BHEL.

17. TEST CERTIFICATE FOR T&P

17.1.1. All T&P, lifting tackles and pulling devices to be deployed by the contractor must bear valid / latest test certificates for their suitability, and the documents shall be preserved at site.

18. ISSUE OF T&P

18.1.1. No T&P is envisaged to be issued by BHEL in this contract. However, in the event of BHEL issued T&P, measuring instruments etc. the contractor and BHEL shall maintain joint protocol about the condition of all T&P, instruments etc. taken from BHEL's custody and return to BHEL after use. The contractor shall not use this equipment for purposes other than the scope of work given in this tender document. It is the responsibility of contractor to keep these equipments always in working condition and ensure their safe return in working condition to BHEL's store subject to normal wear & tear.

18.1.2. After use of T&P items issued by BHEL the same shall be returned to BHEL in good working condition subject to normal wear & tear failing which recoveries at the book value of the item or the market rate prevailing at the time of returning the items, whichever is higher shall be made from the payments due to the contractor from BHEL from this contract or from any other contract.

19. INSURANCE

19.1.1. The contractor shall be responsible for timely submission of loss/damage/theft to the underwriter, assistance in lodging & settlement of claim for losses/damages/theft/lodging of FIR with Police.

19.1.2. It is the entire responsibility of the contractor to insure his workmen against accident and injury while at work as required by the relevant rules and to pay compensation, if any, to their workmen as per workmen's compensation act. The contractor has also to insure his staff against accident/injury. The contractor has to take insurance cover for his tools and plants, assets etc.

19.1.3. These insurance covers have to be taken prior to start of his work at the subject project and he shall make available the Policy to BHEL Site in-charge for necessary verification before commencement of work. However, irrespective of such verification/acceptance, the sole responsibility to maintain adequate insurance cover for his workmen, T&P, assets etc. at all times during the period of contract shall lie with the contractor. Regarding the aforesaid insurance cover, the contractor shall directly deal with the Insurance Company for all matters regarding the insurance in his scope.

20. MATERIAL HANDLING (BHEL ISSUED MATERIAL) – DELETED

21. ISSUE OF MATERIALS – DELETED

21.1. ISSUE OF CEMENT - DELETED

21.2. ISSUE OF STEEL – DELETED

22. RETURN OF MATERIALS – DELETED

23. CEMENT AND STEEL CONSUMPTION AND WASTAGE – DELETED

24. RECONCILIATION OF BHEL ISSUED MATERIALS - DELETED

25. RECOVERY OF MATERIAL – DELETED

26. CONSTRUCTION OF TEMPORARY OFFICE, STORES ETC.

The contractor shall arrange at his own cost cleaning and grading of area allotted, construction of his temporary office, stores, cement godown, fabrication yards, labour colony etc. and also the watch and ward of all the above. Materials required for the same shall be provided by contractor at his own cost.

Contractor shall construct Cement store (capacity min. 500 MT) with CGI/asbestos roofing (slope) with brick masonry wall, PCC flooring. Materials required for the same shall be provided by contractor at his own cost. Cement has to be kept over wooden raised platform. Stacking of cement is to be done as per IS codes with proper illumination and locking arrangements.

27. TOOLS & PLANTS (TO BE PROVIDED BY CONTRACTOR)

The contractor is required to provide all necessary T&P (other than those specified to be provided by BHEL) measuring (calibrated) instruments and handing equipments for timely completion of the total works as per contract. In case of project requirement, some activities may have to pre-pone. In such cases the contractor may have to deploy additional T&P. The quoted rate shall be inclusive of such requirements. However, the contractor shall submit deployment plan of all T&P along with tender bid.

In the event of any failure of the part of the contractor, BHEL may at his discretion also terminate the contract on this ground and take out any or whole amount of the contract from the scope of the contractor. In the event of failure of contractor to deploy necessary and sufficient T&P/ IMTEs. BHEL will be at liberty to arrange the same at the risk and cost of contractor including transportation cost of same from any of BHEL site/other agency and charges as applicable shall be deducted from contractor's R/A bill. Decision of BHEL in this regard will be final and binding on the contractor.

All T&P and all IMTEs, which are required for successful and timely execution of the work covered within the scope of this tender, shall be arranged and provided by the contractor at his own cost in working condition.

28. CIVIL LABORATORY - DELETED**29. CONSTRUCTION SCHEDULE**

The contractor shall furnish the construction schedule indicating all milestones on the basis of **major activities** indicated below within 10 days from the date of LOI:

SL. No	WORKS TO BE COMPLETED	Completion period from the date of LOI
1	Completion of major renovation work	4 months
2	Completion of entire work under the scope	6 months

Contractor shall submit daily work program based on above construction schedule.

30. MOBILISATION & COMPLETION PERIOD.

The contractor shall mobilize with T&P required to start the actual work within 10 days from the date of placement of LOI.

The completion period of major activities as mentioned in the construction schedule have to be followed. The entire work shall be successfully completed in all respect within 6 months from the date of issue of LOI. The entire work shall be carried out in accordance with the construction schedule.

31. CERTIFICATE TOWARDS COMPLETION

The work under the scope of the contractor shall be deemed to have been completed in all respects only when so certified by BHEL/CESC. The decision of BHEL in this regard shall be final and binding on the contractor.

32. COMPENSATION FOR DELAY

Entire work have to be completed within 6 months from the date of LOI, failing which BHEL shall levy Compensation for delay @ 0.07% of the awarded Price for delay of every one (1) day if the reasons for delay is attributable to contractor, subject to a maximum of 7.5% of contract price.

33. GUARANTEE

Even though the work will be carried out under supervision of BHEL, the contractor will be responsible for the quality of workmanship, quality of materials / items and design for which the contractor is responsible.

The contractor shall guarantee the work executed under the scope of the contract for a period of 12 (twelve) months from the date of start of guarantee period as certified by the Engineer (i.e. on completion of total work under scope and / or taking over by BHEL/CESC) and shall rectify free of cost all defects due to faulty supply or work done. In case the contractor fails to repair / replace the defective works within the time specified by the Engineer, BHEL may proceed to undertake the repairs / replace such defective works at contractor's risk and cost without prejudice to any other rights and recover the same from security deposit / other dues.

34. MOBILIZATION ADVANCE

No mobilization advance shall be given.

35. SECURED ADVANCE

No Secured advance is envisaged in this contract.

36. OVER RUN CHARGES

No over run charges shall be paid to the contractor in the event the completion period is extended for any reason whatsoever.

37. REVISION ON ACCEPTED CONTRACT RATE

No revision of rates shall be applicable in the event the completion period is extended for any reason whatsoever.

38. ESCALATION

No escalation is envisaged in this contract.

39. SECURITY DEPOSIT & PERFORMANCE BOND

Upon acceptance of the tender, the successful bidder within the time specified in the letter of intent, must deposit the required Security Deposit, except as directed by BHEL. The terms and conditions of the Security Deposit to be deposited shall be as per the stipulations laid in the General Conditions of the Contract. Performance Bond is not applicable for this contract.

40. CONTRACT PRICE

The bidder shall quote their rates strictly in accordance with prescribed rate schedule of Volume-III.

The quantities of the various items mentioned in the BOQ cum rate schedules of items of Volume-III are approximate, based on very preliminary information and may vary to any extent or to be deleted altogether. The quoted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of the work executed under any part of the this

contract including extra items, if any, but excluding any price variation, remains within +/- 30 % (plus/minus thirty percent) of the awarded price as per LOI / WO.

41. TAXES AND DUTIES

- 41.1. All taxes (except Service tax including educational cess), Works contract tax under VAT act, charges, royalties, duties, octroi etc and other taxes for materials obtained for the work and for the execution of the contract shall be borne by the contractor and shall not be payable extra. Any increase of the same at any stage during execution of the contract shall have to be borne by the contractor. Quoted price of the bidder shall be inclusive of all such requirements. The contractor is liable to furnish all documentary evidences towards payment of Works Contract Tax as and when required by BHEL.
- 41.2. Service, tax and Educational Cess on service tax (as applicable), shall be paid extra on submission of documentary evidences to the satisfaction of BHEL. Contractor shall avail abatement available (wherever applicable) as per prevailing service tax rules. BHEL will reimburse service tax after availing abatement, wherever applicable. As such, bidder's quoted rate shall be exclusive of service tax. Any changes in service tax rules (by Government) shall be complied with.
- For reimbursement of service tax following documents are to be submitted :
1. Original invoice indicating service tax separately.
 2. Copy of service tax paid challan duly certified by bidders authorised signatory stating that the amount paid in the said challan includes above service tax of BHEL.
- 41.3. Any new tax & duties, if imposed subsequently by statutory authority during contract period (after latest date of offer submission), shall be reimbursed by BHEL (if applicable) on production of relevant supporting document to the satisfaction of BHEL. No reimbursement shall be made on account of increase in rates of existing taxes, duties etc (as on date of offer submission).

42. INTERIM PAYMENTS

- 42.1.1. For all items of work as per BOQ cum rate schedule Volume-III, the monthly interim payment shall be limited to 90 % of the gross value of interim bill on accepted item rate basis. All admissible recoveries/ adjustments etc shall be made from the interim payable amount. The balance 10 % shall be payable as follows.
- 42.1.2. **5 %** of gross bill amount shall be retained from each bill which shall be released along with final bill on completion of total work as certified by BHEL Engineer.
- 42.1.3. **5 %** of gross bill amount shall be retained from each bill which shall be released completion of guarantee period as certified by BHEL Engineer.
- 42.1.4. All admissible recovered/ adjustments etc shall be made from the interim payable amount.
- 42.1.5. If the Contractor's RA BILL, certified by BHEL engineer, can't be paid immediately (within 30 days of receipt of complete bill) due to reasons not attributable to the contractor, the same is to be paid in the following manner:-
- 42.1.6. 60% (Sixty Percent) of payable amount of RA bill shall be made within 15-Days and balance 40 % (Forty Percent) of Payment within 30-days.

43. METHOD OF MEASUREMENT

Mode of measurement shall be as per relevant clauses of technical specification of this tender. In case the same is not available the relevant IS 1200 in conjunction of IS code 3385 shall be adopted. In case the same is also not available, the standard procedure adopted in CPWD shall be adopted. In case the same is also not available in CPWD, the measurement of the work done will be based on the mutual agreement between BHEL and contractor. In all the above cases, the interpretation of BHEL will be final and binding to the contractor.

44. EXTRA / ADDITIONAL ITEMS OF WORK

If any extra or additional items, which are not incorporated in the BOQ schedule/CPWD DSR 2002, have to be executed by the contractor, the rate of such extra or additional work shall be as per the following:

First, the rate of such items shall be derived by a duly constituted committee, if possible, from the available rates, agreed upon in the rate schedule of this contract. The rates have to be mutually agreed upon on the basis of prevailing market rates for which all documentary evidences, as required by BHEL shall have to be produced by the contractor. Decision of BHEL in such cases shall be final and binding on the contractor.

45. DESIGN OFFICE - DELETED

46. OTHER TERMS

Statutory Requirements

46.1.1. Compliance with Laws and Directives

The Contractor shall in its performance of the Contract and the carrying out of the Works ascertain and comply with all relevant Indian laws and Directives including but not limited to Contract Labour (Regulation & Abolition) Act, 1970, ESI & Provident Fund Act etc. Ignorance on the part of the Contractor in this matter cannot be pleaded as reason for non-compliance.

The Contractor shall indemnify the CESC, the Owner's Affiliates and their respective directors, officers, employees and agents against losses, claims and liabilities, including any penalties and sanctions payable to a Competent Authority, together with all legal expenses incurred in connection therewith, to the extent arising out of any failure of the Contractor, any Sub-Contractor or their respective agents or employees to comply with the performance of the Works prior to Taking Over with any Indian law or Directive applicable to the construction, start-up and operational activities conducted at Site.

46.1.2. Divergences from Statutory Requirements

If the Contractor finds any divergence between any Indian law or Directive and the Technical Specifications it shall immediately give to the other written notice specifying the divergence. The Contractor shall promptly upon becoming aware of the same, inform the BHEL in writing of its proposed amendment for removing the divergence, and with the CESC's consent, which shall not be unreasonably delayed or withheld, the Contractor shall entirely at its own cost and expense complete the Works in accordance with the amendment.

46.1.3. Labour Welfare

46.1.4. Housing for Labour

The Contractor shall provide and maintain such temporary accommodation and amenities as may be reasonably necessary for all its and its Sub-Contractors' staff and labour employed at the Site, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, fire prevention and fire-fighting equipment and other agreed requirements in connection with such accommodation or amenities.

46.1.5. Festivals and Religious Customs

The Contractor shall in all dealings with its and its Sub-Contractors' staff and labour have due regard to all recognised festivals, days of rest and religious or other customs.

All other term & conditions of this specification, not mentioned above shall be governed by the pertinent provisions of GCC, Volume-IB.

VOLUME – III
TENDER DOCUMENT NO: PSER: SCT: BDG:C 719:07
PREAMBLE

01. This preamble forms part of tender document (vol-III) and BOQ/ schedule of items. The tenderer should read this preamble carefully before filling in rates for various items in BOQ cum rate/price schedule. Clauses under this preamble shall be read in conjunction with Volume-IB and Volume – II, TCN, MOM etc. as applicable and shall have precedence over any contrary statement mentioned anywhere in this document.

02. The work shall be carried out as per specifications, description of the items in this schedule and / or engineer's instructions.

03. Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.

04. Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc. equipment etc required for carrying out different activities & tests, material, levies, taxes (except service tax) , transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the tender document and this schedule.

Service tax (as applicable) shall be reimbursed extra against submission of documentary evidence to the satisfaction of BHEL. As such , the bidder's quoted rate shall not be inclusive of the service tax.

05. The quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or be deleted altogether. The quoted rate for each item shall remain firm and valid as long as variation in total value of work executed under this contract including extra items, if any, but excluding any price escalation, remains within +/- 30% (thirty percent) of the total awarded price.

06. The rates quoted shall be inclusive of cleaning the site of any vegetation, dressing and leveling, if any, etc., required for commencement of site activities. No separate payment will be made towards the same.

07. The rate shall also be inclusive of carrying out topography survey of site to establish levels and coordinates at suitable intervals, from existing grid levels and coordinates furnished by the owner, establish bench marks, setting out the locations and levels of the proposed structures, constructions and making references, pillars and other identification marks etc. No separate payment will be made towards the same.

08. Rates shall be quoted both in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English language. The rates quoted are inclusive of all taxes(except service tax) and duties viz Sales Tax, excise, octroi etc.
09. All works item wise shall be measured upon completion and paid for at the rates quoted and accepted.
10. The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
11. BHEL does not contemplate to split up the job and award the job to different bidders.
12. Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections / volumes of the contract.
13. For evaluation purpose (deciding L1), Grand total price quoted by bidders for part-A (civil portion) and Part-B (electrical portion) in enclosed BOQ cum rate schedule shall only be considered.

VOL;-III - BOQ CUM SCHEDULE OF RATES - SUMMARY (Rev. 00)

Renovation of Chumery building, construction of soak pits, under ground masonry /concrete works, tiling, sanitary works and other miscellaneous civil & electrical works etc. for 1x250 MW unit # 3 at CESC-Budge Budge Project, West Bengal.

TENDER DOCUMENT NO - PSER:SCT: BDG-C719:07

SL NO	DESCRIPTION OF ITEM	AMOUNT (Rs)	
		In figure	In words
01	TOTAL PRICE OF PART A - CIVIL		
02	TOTAL PRICE OF PART B - ELECTRICAL		
GRAND TOTAL (PART A AND PART B)			

SIGNATURE / DATE / COMPANY SEAL

VOLUME-III (BOQ CUM RATE/PRICE SCHEDULE), PART-A (CIVIL)

Renovation of Chumery building, construction of soak pits, under ground masonry /concrete works, tiling, sanitary works and other miscellaneous civil & electrical works etc. for 1x250 MW unit # 3 at CESC-Budge Budge Project, West Bengal.

(TENDER DOCUMENT NO:PSER:SCT: BDG-C719:07)

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
1	Applying one coat of cement primer of Seacem or equivalent on old or new plastered or concrete surface (old or new) to receive water proofing cement based paint including scraping, cleaning and preparing the surface thoroughly complete as per direction of the Eng-in-charge. After completion of painting rooms / areas are to be handed over with neat and clean condition.					
a)	From ground floor to roof outside building	SQM	1600.00			
b)	Inside room	SQM	500.00			
2	Applying two coats of water proofing cement paint of Seacem or equivalent on old or new surfaces of walls including rain water / sewer pipes (pipes to be measured on outer surface area basis) including preparation, scraping of su, curing with all materials , labour, scaffolding etc complete.After completion of painting rooms / areas are to be handed over with neat and clean condition.					
a)	From ground floor to roof outside building	SQM	1800.00			
b)	Inside room	SQM	500.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
3	Providing two coat of Colour distempering with pigments of any shade on walls,false ceilings etc.including cleaning, scraping and smoothing of old surface throughly, including all materials, labour, scaffolding etc complete, After completion of painting rooms / areas are to be handed over with neat and clean condition.	SQM	2000.00			
4	Providing Two coats of Colour washing with pigments of any shade on walls,false ceilings etc including cleaning, scraping and smoothing of old surface throughly (5 parts of stone lime and 1 part of shell lime should be used) , covering materials with plastic sheet properly, removing, repositioning the materials before & after completion of work in good condition including all materials, labour, scaffolding etc complete, After completion of painting rooms / areas are to be handed over with neat and clean condition.	SQM	600.00			
5	Providing One coat Primer of Berger Jadu or equivalent on old or new wood / steel / plastered / concrete surface with including smoothing surfaces by sand papering, cleaning of surfaces, with all materials, labour, scaffolding etc complete,etc.	SQM	525.00			
6A	Providing One coat synthetic enamel paint of Berger Jadu or equivalent on old or new plastered / concrete / wooden / steel surfaces of any structures / doors / windows / cupboard, gratings,chqd. plates, platforms etc. including scraping, cleaning, smoothing/preparation of surface etc with all labour, materials complete.	SQM	200.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
6B	Providing two coat synthetic enamel paint of Berger Jadu or equivalent on old or new plastered surface / concrete / wooden / steel surfaces of any structures / doors / windows / cupboard, gratings, chqd. plates, platforms, false ceilings, rolled steel sections like angle 65x65x6mm or higher, ISMB and channels of 90 mm or higher, pipe 65 mm dia or higher etc. including scraping, cleaning, smoothing/preparation of surface etc with all labour, materials complete.	SQM	800.00			
6C	Providing one coat primer paint of Berger or equivalent on mild steel hand railing, lighter section of rolled steel sections like angle 50x50x6mm or below, ISMB and channels of 75mm or below, pipe 50 mm dia or below including scraping, removing rust / old paints, cleaning etc complete with all labour, materials etc.	RM	300.00			
6D	Providing Two coats synthetic enamel paint of Berger Jadu or equivalent on mild steel hand railing, lighter section of rolled steel sections like angle 50x50x6mm or below, ISMB and channels of 75mm or below, pipe 50 mm dia or below including scraping, removing rust / old paints, cleaning etc complete with all labour, materials etc.	RM	600.00			
7A	Brick on edge floor or pavement with bricks class designation 75 in cement sand mortar (1:6) and laid with a cushion of sand below with all labour and materials complete.	SQM	50.00			
7B	Flat brick soling for floors, foundation, RCC raft with bricks class designation 75 and laid after compaction, with all labour and materials complete.	SQM	100.00			
8A	providing and laying Cement concrete (1 cement :4 sand :8 stone chips graded 20mm down) excluding shuttering and reinforcement, with cost of cement and all materials, labour etc complete.	CUM	5.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
8B	providing and laying Cement concrete (1 cement :3 sand :6 stone chips graded 20mm down) excluding shuttering and reinforcement for toilet flooring, sanitary pan fixing, with cost of cement and all materials, labour etc complete .	CUM	4.50			
8C	providing and laying Cement concrete (1 cement :2 sand :4 stone chips graded 20mm down) excluding shuttering and reinforcement, with cost of cement and all materials, labour etc complete.	CUM	15.00			
9	Supplying (matching with adjacent fitted glass) best Indian sheet glass panes set in putty and fitted and fixed (Replace the damaged/ broken one, if required) with nails and putty complete. 3mm thick	SQM	20.00			
10A	Cement Plaster (! cement : 6 sand) to the existing masonry/concrete wall, floor, ceiling etc. after chipprd off damaged plaster & Removal, including rounding off or chamfering corners with all labour, scaffolding, materials complete as directed by Eng-in-charge. 12mm thick for inside or outside at all elevation.	SQM	125.00			
10B	Cement Plaster (! cement : 6 sand) to the existing masonry/concrete wall, floor, ceiling etc. after chipprd off damaged plaster & Removal, including rounding off or chamfering corners with all labour, scaffolding, materials complete as directed by Eng-in-charge. 15mm thick for inside or outside at all elevation.	SQM	125.00			
10C	15 mm thick Cement Plaster (1 cement : 6 sand) with neat cement punning for septic tank inside wall & floors with all labour, cement, materials complete as directed by Eng-in-charge.	SQM	93.00			
11	Dismantling all types masonry excepting cement concrete plain or reinforced , removing rubbish as directed within a lead of 200 M etc complete.	CUM	2.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
12	Dismantling all types of plain or reinforced cement concrete works and removing rubbish as directed within a lead of 200 M. etc complete.	CUM	2.00			
13	Providing 250 mm thick Brick masonry work with Class designation 75 in cement sand mortar (1:6) in foundation, drains, trenches, walls and above ground work upto a height of 2.5 M with cost of cement and all materials, labour complete.	CUM	55.00			
14	Providing 125 mm thick Brick masonry work with Class designation 75 in cement sand mortar (1:6) in foundation, drains, trenches, walls at all height with cost of cement and all materials, labour complete.	SQM	125.00			
15	Providing 75 mm thick Brick masonry work with Class designation 75 in cement sand mortar (1:4) for walls at all height with cost of cement and all materials, labour complete.	SQM	69.75			
16	Repairing cracks in brick wall , concrete kerb, floors etc. by cement sand mortar (1:4) includingwidening the crack on the surface(intoV-section) cleaning and packing the same and finishing with colour neat cement (if required) to match with adjacent surface.	Metre	100.00			
17	Supplying fitting & fixing PVC Pipes of locally best quality with all necessary accessories,specials viz. GI Socket, GI bend, GI Tee, union cross, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, etc. complete in all respects including removal of old and damaged pipes(if required), cost of all necessary fittings as required, jointing materials, in any position.(Payment will be made on the centre line measurements of the total pipe line including all specials . No seperate payment will be made for accessories, specials)					

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
a)	15mm dia Medium quality	Metre	40.00			
b)	20mm dia Medium quality	Metre	20.00			
c)	25mm dia Medium quality	Metre	30.00			
d)	40mm dia Medium quality					
18	Refixing G.I. Pipe with fittings after cleaning where necessary					
a)	15mm	Metre	10.00			
b)	20mm	Metre	10.00			
c)	25mm	Metre	5.00			
d)	32mm.	Metre	5.00			
e)	40mm	Metre	15.00			
f)	50mm	Metre	5.00			
19	Supplying fitting and fixing Gun-Metal Full way valve of local best quality (for water lines).					

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
a)	15mm	Each	2.00			
b)	20mm	Each	2.00			
c)	25mm	Each	2.00			
d)	32mm	Each	2.00			
e)	40mm	Each	2.00			
e)	50mm	Each	2.00			
20A	Supplying, fitting & fixing C.P.brass Stop Cock of locally best quality, 15 mm NB	NO	10.00			
20B	Supplying, fitting & fixing brass Bib Cock of locally best quality, 15 mm NB	NO	10.00			
20C	Supplying, fitting & fixing PVC Bib Cock of locally best quality, 15 mm NB	NO	10.00			
21	Providing and fixing PVC pipes (medium quality) for rain water or soil pipe of locally best quality on walls or laying below ground (excluding cost of excavation, filling) including making hole in the wall, floor etc.at all levels and mending good damages with necessary jointing materials, labour etc all complete.					
a)	75 mm dia.	Metre	30.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
b)	100 mm dia.	Metre	30.00			
22	Providing and fixing PVC Bend / Tee after removal of existing damaged fittings as per direction of BHEL etc.complete .					
a)	75 mm dia	NO	6.00			
b)	100mm dia	NO	6.00			
23	Supplying, fitting, fixing PVC "P" OR "S " trap (100 MM) after removal of existing damaged fittings as per direction of BHEL.	NO	6.00			
24	Earth work in excavation of foundation trenches, drains, pipes etc in all sorts of soil including removing, spreading or stacking the spoils within a lead of 200 M as directed . The item includes necessary trimming the sides of trenches , levelling, dressing and ramming the bottom, bailing out water etc. as required complete. Depth of excavation upto 2.5 M from GL.	CUM	100.00			
25	Earth work in filling in foundation trenches or plinth with good earth, in layers not exceeding 250mm including watering and ramming etc. layer by layer complete.	CUM	70.00			
26	Hire and labour charges for shuttering with centring and necessary pops for foundation, trenches, drains, column, plinth beams , slab of septic tank etc with hard wood planks of 25 mm thickness including fitting, fixing and striking out after completion of work below plinth level with all labour,materials etc..	SQM	150.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
27	Hire and labour charges for shuttering with centreing and necessary staging and thick hard wood planks of 25 mm thickness with required bracing for concrete slabs, beams columns, chajjas, lintels curved or straight including fitting, fixing and striking out after completion of work at all elevation above plinth level with all labour, materials etc..	SQM	150.00			
28	Providing Reinforcement for reinforced concrete work in all sorts of structures including distribution bars , stirrups, binders etc including supply of rods, straightening, cutting to requisite length, hooking and bending to correct shape , placing in proper position and binding with 16 gauge black annealed wire at every intersection for foundation, trenches, drain, column, beams, slabs, chajjas etc at all elevation, complete as per drawing and direction.	M T	6.00			
29	Renewing throating, nosing or drip course moulding with 15 mm thick cement plaster (1 cement : 6 sand) complete.	Metre	25.00			
30	Supplying, fitting & fixing in position locally best quality P.V.C. door frame with shutter minimum 25 mm thick made from extruded P.V.C. sections, the frame will then be fixed in the opening with the help of P.V.C. expandable fastner and steel screws including cost of all materials and labour, higher charges of tools and appliances , carriage of all materials taxes and all other incidental charges complete .	SQM	6.50			
31	Levelling (+/- 100mm excavation or filling) & Cleaning of outside area after removal of waste material, debris, cutting jungle & trees and removal, disposal of same at a distance of 300 M including all labour, tools & tackles etc.	SQM	640.00			
32	Providing and fixing white vitreous European water closet of Hindustan make or equivalent with low level PVC cistern 10 ltr, PVC seat black colour, PVC flush pipe etc complete with all labour and material,	NO	8.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
33	Dismantling & removal of existing damaged Indian pan or EWC	NO	2.00			
34	Replacing European Water Closet seat (black colour) of approved make with lid with rubber buffer, screws etc. fitting and fixing after removal of damaged seat and extensive cleaning of EWC with cleaning agent etc complete.	NO	6.00			
35	Replacing damaged pipe with new one, 32mm. Dia polythene flush pipe of locally best quality with necessary fixing materials and clamps complete.	NO	2.00			
36	Supplying fitting & fixing locally best quality mirror 5.5 mm thick, size 450mmx 300 mm	NO	4.00			
37	Supplying fitting & fixing glass shelf with alluminium guard rails.	NO	4.00			
38	Supplying fitting & fixing C P brass soap tray	NO	8.00			
39	Supplying fitting & fixing Aluminium grating / jali net type for fixing over P or S trap, 100mm/150mm dia.	NO	6.00			
40	Supplying fitting & fixing CP brass shower rose of locally best quality including removal of damaged shower.	NO	6.00			
41	Supplying fitting & fixing 10 litres P.V.C. low down cistern locally best quality as per I.S.standard with all inside fittings complete.	NO	2.00			
42	Providing white vitreous Wash basin of Hindustan or equivalent and size 450mm x300mm, with all fittings, PVC deain pipe, brass union, CI brackets, CP brass pillar cock, brass stop cock, etc complete.	NO	6.00			
43	Labour for taking out wooden door shutter for repair or replacement with new partly and refixing the same including mending good all damages complete	SQM	18.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
44	Supplying,fitting& fixing Aluminium handle 100 mm size for door inside and out side.	NO	40.00			
45	Supplying, fitting & fixing steel peg stay 300mm long	NO	7.00			
46	Supplying ' Godrej' mortice lock with latch and keys 6 levers, including fitting & fixing complete.	NO	20.00			
47	Supplying annodised alluminium sliding door bolt , fitted and fixed with brass screw.: 300mm long x16mm dia. Bolt	NO	30.00			
48	Supply annodised aluminium tower bolt 100 mm long, fitted and fixed complete.	NO	40.00			
49	Supply annodised aluminium tower bolt 150 mm long, fitted and fixed complete.	NO	5.00			
50	M.S. gate of jail type as per approved design made of strong M.S.angle 50x50x6mm frame work , intermediate stiffeners & round/ square bars or angles, 10x5mm flats ,MS sheets 14 gauge, cleats etc. including necessary bolting, welding, locking and hanging arrangements, fitted and fixed complete with one coat of primer paint as per direction of the Engineer-in-charge. in ground floor.	Kg	100.00			
51	Labour for taking out steel door and windows frame for repairs and refixing the same (or replaced by new one) including mending good damages and applying a protective coat of paint.	No.	3.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
52A	Providing Wooden (karpur, sal or equivalent) frame work for partition wall of room or toilet, ceiling etc , with 40x25mm / 50x40mm / 50x25mm, fixed with existing floor or wall by screw etc complete and finished with one coat primer and two coat synthetic enamel paint, with all labour and materials complete.	CUM	0.75			
52B	Fixing of 4 mm commercial ply on existing wooden frame work for partition wall fixing with screw or nailing, with all labour and materials and one coat of primer paint, complete.	SQM	30.00			
52C	Fixing of 6 mm thick plain asbestos sheet for toilet wall partition on wooden frame work fixing with screw or nailing, with all labour and materials, complete.	SQM	35.00			
53A	Repairing of existing false ceiling wooden frame work with new Wooden batten (Karpur, Sal or equivalent) size 40x25mm / 50x40mm / 50x25mm, fixed with existing frame work or wall by screw or nailing etc complete with one coat of bitumenous paint with all labour and materials complete.	CUM	0.15			
53C	Renewing of existing false ceiling random perforated particle board 600x600x12mm with new one of locally best quality, fixing and finishing with exiting false ceiling and matching, etc complete with all labour and materials.	SQM	50.00			
54	Closing of air condition opening by wooden (sal or equivalent) 15mm thick planks with smooth finish , fixed with m s screw, size 750x500(approx) complte with all labour and materials.	NO	20.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
55	Supplying solid flush type doors of commercial quality , the timber frame consisting of top & bottom rails and side stiles of well seasoned timber place both ways in order to make the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position complete. (In all floors). 25mm thick thick shutters (Single leaf)	SQM	6.00			
56	Artificial stone in floor , dado, staircase , roof etc with cement concrete (4:2:1) with stone chips, laid in panels as directed with topping made with ordinary/white cement (as necessary) and marble dust in proportion (2:1) including smooth finishing and rounding off corners and including application of cement slurry before flooring works, using cement @ 1.75 Kg /Sq. m all complete including all materials and labour.(In all floors)	SQM	40			
57	Neat cement punning average 1.5 mm thick in wall, dado, window sills , floor drain etc.	SQM	5.00			
58A	Repairing of damaged CGI sheet with new sheet and fixing the same with all materials, labours, etc. complete. New CGI sheet/cut pieces of new CGI sheet 0.5 mm thick of locally best quality to be provided for damaged portion only.(Payments will be made for new sheet only).	SQM	20.00			
58B	Roof treatment over existing old CGI roof : Cleaning of old/existing roof sheet, preparation and applying one coat of bitumen primer, providing and laying one layer of self adhesive tarfelt and spreadiding of sand on top for waterproofing treatment, with all materials , labours ,etc. complete.	SQM	1350.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
59	Rendering the surface of walls and ceiling including repairing of cracks with plaster of paris (thickness not less than 1.5 mm) including scraping, removing of loose scales, blisters, old paints etc. and thoroughly smoothening the surface. Work to be carried out carefully to avoid any damage to the existing wall. All waste materials/ rubbish to be disposed of (in a paper disposal bags) 500 m away from the Bhel office. Before starting of work joint inspection to be done and decision for repairing area will be finalised by BHEL Engineer.	SQM	120.00			
60	Z- Batten wooden shutter of door having tongued and groove-half lap jointed as per direction of Engineer including fitting, fixing, cost of three nos Ms hinge 75x40mm, for each shutter (of size approx 700mmx1900mm), one aluminium tower bolt 75mm long x 10mm dia, two nos MS handle 75mm grip x 10mm dia rod, one MS sliding door bolt 250mm long x 16mm dia. Shutter of sal wood or equivalent with 25mm thick planks, 19 mm thick x 75 mm wide battens finished smooth and painted with synthetic enamel. Painting will be measured and paid as per relevant item.	SQM	32.00			
61	Providing and fixing White glazed ceramic wall tiles of locally best quality of size 150x150mm, 5.5mm thick in dado, The mix for underbed plaster shall consist of 1 part cement and 3 parts coarse sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry, including pigments, curing etc all complete.	SQM	143.70			
62	Providing and laying white colour Ceramic floor Tiles of locally best quality (Matt Finish) of 6.5 to 7mm thick, with under layer of 20mm thick cement sand mortar (1:4) to match with floor finish level as per drawing / hand sketches, including all material, labour, etc all complete.	SQM	75.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
63	Providing and laying white colour Ceramic floor Tiles (Matt Finish) of 7mm thick of locally best quality , with adhesive of reputed manufacturer, over existing existing floor after cleaning of floor with oxalic acid/ caustic soda etc.to achieve the bond with existing surface and adhesive as per recommendation of manufacturer or as per instruction of Bhel Engineer including all materials, labour, tools and plants, sealing the joints with white cement etc. all complete as direction of engineer.	SQM	14.40			
64	Providing and fixing wooden door frame of sal or equivalent quality for toilet partition wall with wooden battens (75mmx50mm) with groove and ms clamp 6nos 30mmx3mm thick x 125 mm long jamming with concrete1:2:4 on masonry wall, etc complete.	CUM	0.32			
65	Providing and fixing Orissa pattern white glazed vitreous china squatting pan with internal foot rests fixing on cement sand mortar (1:4) and all complete and as directed by Engineer.	NO	6.00			
66	Supply and fixing white vitreous china Wash Basin size 550x400 mm of hindustan make or equivalent, with C.I. brackets painted, 15mm brass tap & brassb stop cock with 32mm brass waste, brass trap unions, PVC waste pipe, cutting and making good the walls where required etc complete.	NO	4.00			
67	Providing and fixing white glazed vitreous orissa pan size 530 mm of Hindustan or equivalent with foot rests, 15 mm brass stop cock, PVC connector, high level 10 lit capacity PVC cistern with all fittings and fixing etc, all complete and as directed by Engineer.	NO	6.00			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
68A	Providing and manufacturing conference table U- shape, each longer side length shall be 7.5 M and width shall be 600mm (total centre line length of table shall be 19.0 M approximate) made of 19 mm to 20 mm thick wooden block board table top, side and intermediate support @ 1.5 M C/C. Table top shall be 1 mm thick lamination, longer side of vertical face shall be 150mm above ground floor, all vertical supports (long as well as shorter side) visible side shall be 0.8 mm thick lamination, long side of vertical face(inner portion) which is not visible shall be smooth finish with putty, two coat of primer and two coat of synthetic enamel paint matt finish, 19mmx9mm half round moulded beading of 1st class teak wood for both ends of all vertical supports, fixed by screw, nail, metal angle, adhesive, etc. complete including cost of first class/furniture carpenter, all labours, materials, complete.	lumsu m	1.00			
68B	Providing and fixing 1st class teak wood moulded beading of size 40x25mm for conference table on table top edge as per direction of Engineer.	RM	38.00			
	TOTAL OF ABOVE (PART A -CIVIL WORKS)					
	MISC. Items.					
69	For items not covered under items above , quote above, below or at per on the PWD Schedule of rate (Presidency Circle) for 1999-2000 Govt. W.B.					
69A	Rate for complete item	%				
69B	Rate for supply of material	%				
69C	Rate for supply of labour	%				

NOTE:

1. ALL MATERIALS INCLUDING CEMENT, STEEL, REINFORCEMENTS & PAINTS ETC ARE IN THE SCOPE OF THE BIDDER.

VOLUME-III (BOQ CUM RATE/PRICE SCHEDULE), PART-B (ELECTRICAL)

Renovation of Chumery building, construction of soak pits, under ground masonry /concrete works, tiling, sanitary works and other miscellaneous civil & electrical works etc. for 1x250 MW unit # 3 at CESC-Budge Budge Project, West Bengal.

(TENDER DOCUMENT NO:PSER:SCT: BDG-C719:07)

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
1	Supply & fixing composite flush type 250V, 6 pin 15 A plug-socket-integral fuse unit with 15A piano key type swich on sheet metal box with bakelite cover and earthing attachment including S & F of matching PVC box. MAKE: - ANCHOR/NORTH-EAST	No.	30			
2	Supply & fixing composite flush type 250V, 5 pin 5 A plug socket-integral fuse with 5A piano key type swich on sheet metal box with bakelite cover and earthing attachment including S & F of matching PVC box. MAKE: - ANCHOR/NORTH-EAST	No.	60			
3	Supply of 48" sweep ceiling fan complete with 100W electronic regulator.	No	30			
4	Fixing from roof ceiling providing plate with fasteners (4 nos.) and S hook duly fixed, commissioning of 48" sweep ceiling fan alongwith mounting rod and 100W electronic regulator.	No	30			
5	Fixing from roof truss with suitable clamp arrangement, commissioning of 48" sweep ceiling fan alongwith mounting rod and 100W electronic regulator.	No	30			
6	Tubular Down rod of suitable size, fabrication & supply of hardwares for above ceiling fans including painting etc.	RM	100			
7	Supply of 230 V, 12" exhaust fan alongwith external louvre.	No	5			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
8	Fixing,Wall cutting, finishing, making good of the same, commissioning of 12" exhaust fan alongwith louvre.	No	5			
9	Supply and fixing of PVC 150x100mm Switch board with matching color cover with switch cut out and interconnection.	No	15			
10	Supply and fixing of PVC 300x200mm switch board with colour cover and switch cutout and interconnection.	No	5			
11	Supply and fixing 5A piano type switch. ANCHOR/NORTH-EAST	No	100			
12	Supply and fixing of 240V, 5A, 5 pin socket. ANCHOR/NORTH-EAST	No	50			
13	Supply, drawing through surface conduit/ wooden baton, termination, testing & commissioning of 1 core 6 sqmm PVC insulated, stranded Copper wire of 1.1 KV grade as control wiring and lighting & power.	RM	100			
14	Supply, drawing through surface conduit / wooden baton, termination, testing & commissioning of 1 core 4 sqmm PVC insulated, stranded Copper wire of 1.1 KV grade as control wiring and lighting & power.	RM	100			
15	Supply, drawing through surface conduit / wooden baton, termination, testing & commissioning of 1 core 2.5 sqmm PVC insulated, stranded Copper wire of 1.1 KV grade as control wiring and lighting & power.	RM	100			
16	Supplying,drawing through PVC conduit/surface wooden baton, termination, testing & commissioning of 1 core 1 sqmm PVC, stranded Copper wire of 1.1KV grade as point wiring.	RM	200			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
17	Supply and drawing through PVC conduit/surface wooden baton, termination of 1x1.5 sqmm 1.1 KV PVC insulated copper conductor single core stranded wire.	RM	200			
18	Supply & fixing of Ceiling Rose.	No	200			
19	Supply of mounting rail type fixture made of painted MS Sheet Steel suitable for 2x40/36 W wall/ceiling mounted fluorescent lamp with reflector, complete with starter, power factor improvement (HPF), RF capacitor, Copper wound ballast and lamps.Including all fixing/supporting accessories complete.Model CROMPTON IGP-1324 or equivalent from BAJAJ/PHILIPS	No	50			
20	Fixing from roof truss with suitable clamp arrangement, down rod, ball & socket suspension,& commissioning of mounting rail type fixture made of painted MS Sheet Steel suitable for 2x40/36 W wall/ceiling mounted fluorescent lamp with reflector, complete with starter, power factor improvement (HPF), RF capacitor, Copper wound ballast and lamps.Including all fixing/supporting accessories complete.	No	50			
21	Fixing from roof with down rod, ball & socket suspension,& commissioning of mounting rail type fixture made of painted MS Sheet Steel suitable for 2x40/36 W wall/ceiling mounted fluorescent lamp with reflector, complete with starter, power factor improvement (HPF), RF capacitor, Copper wound ballast and lamps.Including all fixing/supporting accessories complete.	No	50			

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
22	Replacement of existing choke with electronic ballast	No.	50			
23	Replacement of existing flurocent lamp	No	50			
24	Replacement of starter for flurocent lamp	No	100			
25	Removal of existing light Fixture, painting, repair if any and putting back the same	No	50			
26	Removal of existing storage gysers venus make, repair of element (1500W), painting & putting back the same	No	10			
27	Drawing, laying of earth wire (16 SWG GI wire) and termination	RM	500			
28	Supply & Fixing of MCCB Single pole 15 A	No	10			
29	Supply & Fixing of MCCB Single pole 6 A	No	10			
30	Supply & Fixing of MCCB Double pole 15 A	No	5			
31	Making of provision for hanging of projector from ceiling with all necessary supply of materials, fitting, fixing all complete	No	1			
	TOTAL OF ABOVE (PART B -ELECTRICAL WORKS)					

Item No.	Description of items	Unit	Quantity	RATE IN RUPEES		AMOUNT IN RUPEES
				In figures	In words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4) X (5)
	<p>NOTE: LIST OF APPROVED MAKES OTHER THAN THOSE SPECIFICALLY MENTIONED ABOVE</p> <p>1. SINGLE CORE STRANDED Cu WIRE PVC INSULATED - FINOLEX/EVERSHINE KDK/ANCHOR/Rajdhani 2. MCCB/MCCB WITH BOX - SIEMENS/STANDARD/MDS/HAVEL/GE 3. RIGID PVC CONDUIT - PLAZA/PLICA/PIONEER MARKED AS PER IS-9537 4. FLEXIBLE PVC CONDUIT - PLAZA/PLICA/PIONEER 5. IRON CLAD TPN/DP MAIN SWITCH - SURYA/FLORA/STANDARD/L&T 6. DISTRIBUTION FUSE BOARD - STANDARD/HAVEL/ASIATIC ELECTRIC 7. ELECTRONIC REGULATOR - RIDER/ANCHOR OR ISI APPROVED 8. POWER CABLE- NICCO/INCAB/GLOSTER/CRYSTAL/FINOLEX. 9. LUGS -DOWEL/UML 10. GLAND - COMMET/SUNIL&CO. 11. CEILING FAN - best available in the market with min 2 years warranty</p>					