



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 02

Ref: PSER:SCT:KLN-M1845:TCN-02

Date: 05-08-2017

Sub	Tender Change Notice (TCN) - 02.	
Job	Material Management work, consisting of receipt, unloading, handling, verification, storage, issue, record maintenance, etc of materials of boiler & auxiliaries, TG & auxiliaries, electrical system, control & instrumentation system, non-BHEL system, steel, cement, construction equipments, miscellaneous items etc. for 2x660 MW Maitree Thermal Power Project, Khulna, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-M1845:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-M1845:5819, Dated 24-07-2017.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:KLN-M1845:TCN-01, Dated 03-08-2017.
	4.0	Other References, if any.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting the offer.

1. Bidders' Clarification is attached vide **Annexure-A** to TCN-02.
2. Revised Volume-IF-TCC-CML-Rev-01 is attached herewith, superseding earlier version issued along with NIT. (Revision in cl. no. 13.3.4)
3. In case of **HARD** bid submission, bidders are requested to note the following:
 - I. Two additional copies of Techno-commercial bid, along with original shall be submitted.
 - II. Price Bid shall be submitted in a separate sealed envelope super-scribed with "PRICE BID" along with tender number & job description.

All the sealed envelope shall be enclosed in a main outer cover & this cover shall be super-scribed with (i) Details of cover inside this cover and (ii) Name of the job, tender no & due date of submission.

4. Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
5. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Sr. Engineer (SCT)

Encl: As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : (033) 23398000

ANNEXURE-A TO TCN-02

Job: Material Management work, consisting of receipt, unloading, handling, verification, storage, issue, record maintenance, etc of materials of boiler & auxiliaries, TG & auxiliaries, electrical system, control & instrumentation system, non-BHEL system, steel, cement, construction equipments, miscellaneous items etc. for 2x660 MW Maitree Thermal Power Project, Khulna, Bangladesh.

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CLARIFICATION OF BIDDERS' QUERY

SL NO	REFERENCE CLAUSE OF TENDER DOCUMENT	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION	
1.0	Clause no. 4.12 of Volume-IF-TCC-CML	All materials/ equipment All tarpaulins required for stacking until completion of work.	Not mentioned Qty, quality and sizes. Qty and size to be specified.	Shall be as per tender provision.	
2.0	Clause no. 4.23.3 of Volume-IF-TCC-CML	Wherever end caps to be done. End caps for pipes shall be provided by contractor free of additional charge.	No limitation of, size, quantity & quality Procurement from local market will be difficult. Please provide quality of end caps and quantity to be specified. Please advise supplier to provide spare end caps.		
3.0	Clause no. 4.23.6 of Volume-IF-TCC-CML	Parts conserved by grease shall be additionally protected by wrapping with two layers of paraffin paper wherever advised. Contractor will provide paraffin papers free of additional charge.	Providing of two layers of paraffin papers for wrapping of materials to be provided by contractors. Qty to be specified.		
4.0	Clause no. 4.23.12 of Volume-IF-TCC-CML	Deployment of crane	Crane can be mobilized within 45 days due to congestion at Pitropole border and delay in Bangladesh customs clearance. Please clarify.		
5.0	Clause no. 6.0 of Volume-IF-TCC-CML	DEWATERING	Dewatering from yard and approach is of contractors scope (it is unlimited) area to be specified.		
6.0	Clause no. 13.6 of Volume-IF-TCC-CML	WEATHERPROOF COVERINGS	Please refer our comments at sl.no.1 above.		
7.0	Clause no. 14.0 of Volume-IF-TCC-CML	LIQUIDATED DAMAGE	Before imposing any LD / penalty it is to be discussed with contractor and clarified wheter it is attributable to contractor.		
8.0	Clause no. 17.5 of Volume-IF-TCC-CML	Any discrepancy/ shortage/ damage the contractor.	After taking delivery of materials and giving clear receipt, the responsibility will be of contractor till issue the materials to erection contractors. Material is stored in BHEL yard and watch & ward is of BHEL, MM contractor will not be custodian. Daily responsibility of contractor is to be discussed and clarified.		
9.0	Clause no. 18.6 of Volume-IF-TCC-CML	The preservation painting shall be done	Including paint and equipment at contractors scope. Please mention quantity of supply.		
10.0	Clause no. 18.12 of Volume-IF-TCC-CML	Preservatives and consumables shall be provided by contractor at his own cost.	All the preservation materials / consumables at contractors scope including silica-gel. Our supply will be limited to thiner, grease and emery paper.		
11.0	Clause no. 39.3.1 of Volume-IF-TCC-CML	Billing	Not mentioned the percentage wise payment for individaul activities. Please clarify.		
12.0	Clause no. 39.6 of Volume-IF-TCC-CML	The Currency of Payment	To be cleared at the time of meeting. Also mode of payment to be clarified.		
13.0	Page no. 41 of 44, Sl. no. 1.0 under Annexure-IV of Volume-IF-TCC-CML	Mobilization of Crane	Please refer our comments at sl. no. 4 above.		
14.0	Clause No.13.3.4 (c), (d) of Volume-IF-TCC-CML		As per TCC Clause No.13.3.4 (c),(d) figure and wordings of manpower requirement do not match each other.		Clause no. 13.3.4 (c),(d) has been revsied. Please refer TCC-CML-Rev-01 attached with this TCN.
15.0	Sl.no. 9.0 of Preamble, Volume-III-Price Schedule	Cleaning of site.	Dressing, clearing of old structure and levelling including fixing of grid pillars, benchmark etc. Cleared area is to be provided by BHEL.		Shall be as per tender provision.
16.0	General	-	Kindly clarify whether the following items to be unloaded in yard or respective turbine floor. IP Turbine HP Turbine Generator Rotor LP Rotor-1 LP Rotor-2 Heat Exchangers		The unloading point for such consignment shall be decided after material shall reach site.

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These special conditions shall be construed as part of tender document and shall be read along with general conditions of contract (GCC) and other volumes of tender. In case of any conflict or inconsistency between GCC, other volumes and these Technical conditions contract (TCC), the same shall be brought out by the bidder in writing to BHEL for clarification with stipulated date & before due date of submission of offer, failing which most stringent interpretation/ clause in favour of BHEL shall be adopted and the same shall be binding to the bidder.

CLAUSE NO	DESCRIPTION
1.0	PROJECT INFORMATION
1.1	<p>INTRODUCTION</p> <p>The 2x660 MW MAITREE SUPER THERMAL POWER PROJECT is located in Moithara Village, Rampal Upazila, Bagerhat District, Bangladesh.</p> <p>The Bidder shall acquaint himself by a visit to the site, if felt necessary, with the conditions prevailing at site before submission of the bid. The information given here in under is for general guidance and shall not be contractually binding on the Owner. All relevant site data/information as may be necessary shall have to be obtained / collected by the Bidder.</p>
1.2	<p>APPROACH TO SITE</p> <p>The nearest town Khulna is at a distance of 23 km from project site. The site is Connected by road from Mangla- Khulna Highway.</p> <p>Nearest Domestic airport is Jessor, Bangladesh at a distance of about 107 KM and international airport is Dhaka at a distance of 263 KM, Bangladesh</p>
1.3	Owner: BIFPCL (BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED)
2.0	SITE VISIT
	The bidder should visit project site and acquire full knowledge & information about the conditions prevailing at site and in & around the plant premises, together with all statutory, obligatory, mandatory requirements of various authorities before submission of offer.
3.0	NAME OF WORK
	Providing required manpower including supervision, tools & plants, consumables etc. for doing the material management work including Receipt, unloading, handling, verification, storage, issue, record maintenance, etc. of materials of Boiler & Auxiliaries, TG & Auxiliaries, Power House Structures, CHP & AHP Structures, Electrical system, Control & Instrumentation System, Non-BHEL system, Steel, Cement, Construction Equipment, Miscellaneous items etc.in line with drawings/ documents/ test procedures approved by BHEL/ customer, including mobilisation of cranes on hiring basis, for the total scope defined in the technical specification and terms & conditions of tender.
4.0	SCOPE OF WORK
4.1	Receipt, unloading, handling, verification, storage, issue, record maintenance, etc. of materials of Boiler & Auxiliaries, TG & Auxiliaries, Power House Structures, CHP & AHP Structures, Electrical system, Control & Instrumentation System, Non-BHEL system, Steel, Cement, Construction Equipment, Miscellaneous items etc.
4.2	Unloading of material from nearby Jetty/Railway Station/any other place, Reloading the materials/ equipment received, wherever required, to trucks/ trailers etc. and transportation to stores/ storage yard/ work site at subject project, unloading and stacking at site stores/storage yard/ work site in line with BHEL storage manual and as per the instruction of BHEL engineer.
4.3	For storage of these materials, open store yard, covered and semi-covered store shed will be provided by BHEL.
4.4	The contractor shall maintain computerised records for receipt of materials, issued to BHEL's vendors and return by BHEL's vendors in BHEL standard format/BHEL computerised system like (ISCMS/E-store etc). Monthly report shall be produced by

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	contractor and Suitable soft & hard copy be maintained as a back up.
4.5	The contractor shall raise MDR & monthly MIR pertaining to material management in consultation with BHEL engineers.
4.6	The contractor shall raise insurance claim in case of damage, short supply, theft or any other cause in consultation with BHEL engineers and assist during survey work by the surveyor of insurance company.
4.7	The contractor shall stack the materials as per grid plan of BHEL, maintain proper 'house keeping', maintain and upkeep entire storage area and passage for smooth material handling as per BHEL instructions.
4.8	The contractor shall strictly abide by the state and central laws, statutory rules, regulations etc. In addition, the contractor shall have to comply with the PF or equivalent/similar regulations (if applicable) etc. for all his employees/workmen as per the local authorities/Governing bodies instructions. Compliance with statutory obligations as well as any other requirements/provisions with respect to contractor's manpower, equipment including insurance, medical facilities, minimum wages, safety requirements, accommodations etc., are the responsibility of the contractor.
4.9	Verification of components, including opening of cases if required, re-packing and stacking them after verification as per instruction of BHEL Engineers at site & submission of detailed report. The scope of all handling during above activities and re-handling (re-stacking/ re-shifting) is also applicable for the verification activity.
4.10	In case, the storage yard/ store is not ready, the materials/ equipment shall be unloaded and stacked in transit storage as advised by BHEL, and later it will be transported, unloaded and stacked in the store yard/ store by the contractor under scope of re-handling (re-shifting/ re-stacking).
4.11	Under the scope of this contract, it shall be the responsibility of the contractor to provide facilities to open the package in the presence of BHEL Engineer, verifying the same, re-packing wherever and whenever required, properly stacking them as may be directed by BHEL, so as to facilitate proper handling, receipt position, stock taking etc. The rate quoted by the bidder shall be deemed to have included such provisions.
4.12	All materials/ equipment shall be stacked and stored above ground level by the use of concrete or wooden sleepers as per instruction of BHEL Engineer. No materials shall remain on ground at any time. Materials shall not be stacked in low lying areas where it is likely to get flooded during rain. All tarpaulins required for stacking the materials shall be provided by contractor within the quoted price at his cost, however BHEL will provide concrete sleeper free of cost during execution based on the availability & requirement of the vendor. However, contractor shall make all efforts to keep these sleepers in good condition until completion of work.
4.13	Stacking of the material shall be done as per the instructions and to the satisfaction of BHEL/ customer engineers. The material shall be so stacked that it should facilitate easy handling during the erection. Any negligence or improper stacking may force BHEL to get the job done by other agencies at the risk and cost of the contractor.
4.14	Normally all the materials which are to be kept in covered/ semi-covered stores, should be shifted to their respective places immediately after unloading as per advice of BHEL engineer at site.
4.15	All the necessary lifting tackles, tools and plants including Cranes (other than those to be provided by BHEL as mentioned elsewhere in this tender document) tractors, trailers, lorries, trucks, pulley blocks, jacks, winches, wire rope etc of suitable capacities etc. and other equipment incidental to carry out this work shall have to be arranged by the contractor himself at his cost.
4.16	BHEL engineer reserves the right to inspect lifting tackles and equipment before allowing their use. Such approval however, shall not relieve the contractor of his responsibility to ensure safe handling of equipment taking due precautions to avoid any accident and damage to other equipment and personnel.
4.17	All hardware such as rails, maxpuller etc, required for dragging or for any other connected works shall be arranged by the contractor at his own cost.

4.18	The contractor shall help the erection agency of BHEL to identify the location of the material within 48 hrs from requisition. He will also issue the material to the erection agency of BHEL, and record the issue in register as per BHEL format. Collection of the issued material is excluded from the scope.
4.19	The contractor shall execute the work in the most substantial and workman like manner. The store shall be, handled with care and diligence. Any loss to BHEL due to contractor's lapses shall have to be made good by the contractor. All surplus, damaged, unused materials, package materials/ containers, gunny bags etc. shall be returned to BHEL.
4.20	If the contractor or his workmen break, deface, injures or destroy any part of building, road, kerbs, fence enclosures, water pipes, drains, electric/ telephone poles or wires, trees or any other property or damage any part of erected stores, stored components etc. the contractor shall make the same good at his own expenses (of which BHEL site engineer's decision shall be final) failing which the site engineer shall get the same rectified by other agencies at the risk and cost of the contractor and the same shall be deducted from the sums that may be due then or at any time thereafter become due to the contractor or even from his security deposit.
4.21	All the riggers, sarangs, etc engaged for the work should have adequate experience, which should be supported by documentary evidence, if called for.
4.22	The weights of components, to be handled, as indicated in Annexure-I are tentative and are subject to variations to any extent.
4.23	Upkeepment, maintenance and conservation of material (to be executed on man hour rate basis under preservation) during storage period and till issue to erection contractor shall be included in the contractor's scope as broadly explained below.
4.23.1	Removal of stored material from boxes/crates, identification, cleaning/ conservation and replacing Boxes/crates and stacking on floors/racks as required under the BHEL store requirement as per the preservation manual/ site engineer's instruction.
4.23.2	Cleaning of corroded surfaces by rubbing with recommended grades of emery papers, removing the conservative greases, damaged coatings of paints or varnish, cleaning/ washing of surfaces as required and re-application of anti corrosive paints, protective grease etc as prescribed by BHEL.
4.23.3	Wherever end caps are found missing, these pipes/ tubes are to be cleaned with compressed air and replacement of protective pellets and end caps to be done. End caps and protective pallets required for pipes shall be provided by contractor free of additional charge.
4.23.4	All electrical/ C&I panels, motor bearings, slip rings, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and inspected periodically. Heavy rotating parts in assembled conditions shall be periodically rotated after ensuring proper lubrication to prevent corrosion due to prolonged storage.
4.23.5	The preservation painting shall be done as per the advice of BHEL engineer and shall normally consist of three operations, e.g. priming, putting and final painting. Coating of paints or varnish shall be done either by spray gun or by brush or by dipping as the case may be.
4.23.6	Parts conserved by grease shall be additionally protected by wrapping with two layers of paraffin paper wherever advised. Contractor will provide paraffin papers free of additional charge.
4.23.7	While applying the anticorrosive layer, by any of the above methods, care shall be taken that the coating is uniform and without overflow and gaps.
4.23.8	The process of preservation painting and re-conservation of surfaces shall be done by experienced workers and supervisors.
4.23.9	Total scope of work for preservation/ conservation of materials, as per BHEL instruction/procedure is included in the scope of work, payment will be made as per applicable rate schedule. Monthly programme of the materials to be conserved will be given by BHEL in the beginning of every month. Contractor can not claim any compensation for any increase/ decrease in the scope of work under such monthly programme. The contractor shall inspect all consignments once in every four months

	or the period advised by BHEL site engineer to ensure that they are in proper order. After inspection, parts and sub assemblies shall again be re-conserved and packed as before, if required. However, service of only inspection of the consignment shall be deemed to have been included in the rate quoted by the bidder.		
4.23.10	Preservatives and consumables like paints, greases, varnish, thinners for paints, silica-gel, white spirit, paraffin paper and all other preservatives and consumables, required for upkeepment, maintenance and preservation/ conservation work shall be provided by contractor at his own cost. A tentative list of such preservatives and consumables is given in relevant annexure of the tender.		
4.23.11	All the necessary tools & plants and equipment (except those mentioned to be given by BHEL free of cost as per relevant annexure of the tender), including operator, fuel, consumables etc. for running the same, required for the above job of upkeepment, maintenance and preservation/ conservation work shall be arranged by the contractor at his own cost.		
4.23.12	Deployment of crane		
	DESCRIPTION	QUANTITY	TENATIVE DEPLOYMENT SCHEDULE
	40 MT Tyre mounted mobile crane with telescopic boom (of min length 30m).	01 no.	48 Months
	40 MT Tyre mounted mobile crane with telescopic boom (of min length 30m).	01 no.	24 Months
	75/80 MT Hydraulic Crawler Crane.	01 no.	36 Months
4.23.13	The cranes indicated above shall be deployed by the contractor after getting written intimation from BHEL and monthly payment shall be made as per Rate schedule, Vol-III after adjusting downtime / Break down period (if any) on pro-rata basis. Depending on work requirement, BHEL may release the crane before deployment period is completely exhausted by giving one month advance notice.		
4.23.14	The age of the crane to be deployed should not be more than 12 years.		
4.23.15	BHEL may utilise the above cranes for any other purpose apart from material handling. However, under such case, fuel shall be provided by BHEL free of cost.		
4.23.16	For other T&P as per Annexure-IV and any other item required for carrying out the job, no separate payment shall be made and deployment of the same will be within quoted rate.		
4.24	The tentative break up of tonnage, in terms of scope of work shall be as per relevant annexures.		
5.0	DEVIATIONS/CLARIFICATIONS		
	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.		

6.0	DEWATERING 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.
7.0	QUALITY CONTROL & QUALITY ASSURANCE Contractor's engineers & supervisors shall be adequately qualified and also inclined to do a quality job. The quality assurance engineer shall co-ordinate all aspects of quality control, inspection, implementation of quality assurance procedures laid down in Quality Plan and technical specification by BHEL. He shall fill up quality assurance log sheets/ formats and submit to BHEL for joint inspection & acceptance. The contractor shall fill up, maintain & preserve the quality records in computerized media. BHEL's/ customer's authorized representative shall be given free access at all time to such quality related records etc for inspection, review etc.
8.0	QUALITY ASSURANCE PROGRAMME
8.1	The contractor shall arrange for suitable quality assurance programme to control all activities pertaining to the scope of work, as necessary. Such programs shall be outlined by the contractor and shall be finally accepted by BHEL. A quality assurance programme of the contractor shall generally cover the following.
8.1.1	Organization structure and qualification data for key personnel of the contractor for the management and implementation of the proposed quality assurance programme.
8.1.2	The procedure for source inspection, incoming raw material inspection, verification of material purchased etc.
8.1.3	System for maintenance of records.
8.2	General requirements – quality assurance All materials, components and equipments covered under the specification shall be procured, manufactured, erected, commissioned and tested, as applicable, at all stages as per comprehensive quality assurance programme.
8.3	Field quality plan will detail out the quality practices and procedures etc to be followed by the contractor's site quality control organization, during various stages of site activities from receipt of material/ equipment at site.
8.4	BHEL/ customer reserve 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/ customer to carry out such audit.
8.5	Quality audit/approval of the results of test and inspection will not prejudice the right of BHEL/ customer to reject an equipment service not giving desired performance and shall not in no way limit the liabilities & responsibilities of contractor in earning satisfactory performances of equipment/service as per specification.
8.6	Repair/ rectification procedure to be adopted to make any job acceptable shall be subject to the approval of BHEL/ customer.
9.0	LABOUR AND SUPERVISORY STAFF
9.1	The contractor shall engage especially skilled labour eg sarangs, riggers, etc and khalasis for works under this contract.
9.2	The contractor shall provide adequate number of supervisory staff for carrying out job under this contract. The supervisory staff employed by the contractor should be familiar with BHEL material identification pattern. The contractor shall ensure proper out turn of work and discipline on the part of labour put on the job by the contractor. They will also in general see that the works are carried out in a safe and proper manner and in co-ordination with labour and staff employed directly by BHEL or other contractor of BHEL or customer.
9.3	It will be the responsibility of the contractor to ensure safe lifting of the equipment/material taking due precautions to avoid any accident and damage to other equipment and personnel. He shall be liable for all accidents, damages, etc to personnel and equipment etc. during the execution of the work by the contractor.
10.0	RESPONSIBILITIES OF THE CONTRACTOR UNDER THE SCOPE OF WORK

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10.1	It would be the responsibility of the contractor to keep in touch with BHEL authorities at site to find out the arrival of the consignments. The railway/ transport receipts for the consignments shall be handed over to the contractor immediately on receipt.
10.2	The contractor is required to find out from railway/ transport authorities, regarding consignment arriving prior to receipt of railway/ transport receipts, if any and take delivery of the same on 'Indemnity Bond', which should be got signed by BHEL/ purchaser as required.
10.3	It would be the responsibility of contractor, to examine the packages, consignments etc on arrival and bring to the notice of railway/ transport authorities and BHEL authorities the loss/ damages, if any, observed in the consignments. Before taking delivery, particularly of consignments in "smalls", the weight of the same will be checked with the invoiced weight & any discrepancies shall be reported immediately to BHEL/ transport authority/ railway. It would be the responsibility of the contractor to sign on the delivery book/ acknowledgement slip of railway/ Transport authority after taking delivery of the consignment.
10.4	Any discrepancy/ shortage/ damage found in the consignment after taking delivery and giving clear receipt to the carriers, would be the responsibility of the contractor and the amount liable to be lost by BHEL on such accounts is recoverable from the contractor, as per the calculation of amount of such loss made by BHEL.
10.5	In case of apparent damages/ shortages to/ in consignment packing or any transshipment noticed by the contractor, such cases shall be brought to the notice of BHEL and cleared only with their knowledge/ approval.
10.6	Wagon/ truck/ trailer/barge/ship coming on Sunday and holidays, are also required to be handled by the contractor. Since the offices and go-downs will probably remain closed on these days, it will be the responsibility of the contractor to contact the site engineer or the authorised representative of BHEL at their residence and obtain instructions.
10.7	Only non-ODC consignment (as per Indian railway's definition) is envisaged to be despatched through wagon.
10.8	BHEL reserves the right to recover from the contractor any loss, which arises out of undue delay/discrepancy/ shortage/ damage/ theft/ pilferage or any other causes during transit between the Railway siding/ transporter's go-down/ material receiving point and BHEL stores/ storage yard/ work site or during verification, stacking or at any time in the custody of the contractor.
10.9	Unloading from wagons/trucks/trailers, re-loading, transportation, unloading at storage yard/ store/ work site of heavy/ sophisticated equipment shall be done as per the directions of BHEL's engineer and in his presence, if required.
10.10	Any demurrage payable to railways, shipping agency, and/or transporters for any delay in clearing the goods due to any fault on contractor's part shall be borne by the contractor. The decision of BHEL engineer in this regard will be final and binding on the contractor. However, the contractor has to clear all such charges, if any, in this regard and complete the job without waiting for BHEL's decision.
10.11	Complete list of T&P/ equipment which shall be provided by contractor, is to be furnished in detail with the tender (in line with relevant annexure of GCC).
11.0	GENERAL
11.1	The contractor will make his own arrangement for his communication needs at his site office or residential area/labour colony.
11.2	It may be required to keep separate cranes at various receipt points for loading/ unloading of materials specially for materials received by rail. All T&Ps, 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. The contractor shall ensure deployment of reliable and calibrated instrument, measuring and test equipments (IMTE). The IMTE, as required for the job, shall have valid test/ calibration certificate from authorised/ Govt approved agencies. The contractor shall also keep provision of alternate arrangement for such IMTE so that the work does not suffer when a particular IMTE is sent for calibration. Re-testing/ re-calibration shall also to be arranged by the contractor at their own cost at regular interval during

	the period of use as advised by BHEL.
11.3	The contractor shall submit a list of various tools, plants, material handling equipment etc being provided by them, to the Construction Manager, BHEL site before taking up the work in hand. The above items shall be deployed by the contractor after taking prior approval of the Construction Manager with respect to their suitability and quality. These equipments shall not be removed from site without the written permission of the Construction Manager, BHEL site.
11.4	In event of any failure on the part of the contractor in providing necessary T&P etc, BHEL may at its discretion also terminate the contract on this ground and take out any or whole amount of the contract from the scope of the contractor. Decision of BHEL in this regard will be final and binding on the contractor.
11.5	All consumables required for the work shall be provided by the contractor at his own cost. However, the tentative list of consumables to be provided by the contractor is given in relevant annexure of the tender. The consumables supplied by the contractor shall be subject to prior approval of BHEL.
11.6	The contractor shall provide necessary first aid facilities for all his employees, representatives, and workmen working at site.
11.7	During the period of contract the contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish debris etc to entire satisfaction of BHEL. The contractor shall provide proper sanitary arrangement in the work area & office.
11.8	Work procedures that are to be used during the work shall be such, as to minimise fire hazards to the extent practicable. Combustible materials, waste and rubbish shall be collected and removed from the site, at least once in every week.
11.9	All contractor's supervisory personnel and sufficient number of workers shall be trained for fire-fighting and shall be assigned specific fire protection duties.
11.10	Contractor shall provide & maintain enough of fire protecting equipment of the types and number for their office & work premises and BHEL office & stores. Access to such fire protection equipment is to be given at all times. Compliance of the above requirement under fire protection shall in no way relieve the contractor of any of his responsibility and liabilities to fire accident occurring either to his materials, man and equipment or to those of other's working in the area.
11.11	The contractor shall have total responsibility for all materials in his custody, and shall ensure protection of all materials from theft, fire, pilferage and any other damage and loss. The contractor shall make suitable and adequate arrangement to ensure the above, by deploying security personnel.
11.12	In case of theft of material from store/ storage yard under his custody, contractor shall lodge complaint/FIR with the local Police Station (PS) so that Insurance Company does not turns down the claim. In the event of non-admittance of the claim by Insurance Company due to non-availability of FIR, BHEL reserves the right to recover the Loss suffered from contractor's bills based on the merit of the case.
11.13	The contractor shall be responsible to ensure that none of the personnel move beyond the areas marked out for his operation. In case of a need for the contractor's personnel to move beyond the area marked for him, the same shall be done with a written permission of the construction manager.
11.14	Contractor shall be responsible for examining all the shipment and notify the BHEL engineer immediately of any damage, shortage, discrepancies etc for the purpose of engineer's information only. The contractor shall submit to the engineer a report detailing all the receipts after actual receipts of consignments. However, the contractor shall be solely responsible for any shortage or damage after giving a clear receipt to railway/ transport companies, and for shortages/ damages during transit from material receipt/ unloading point to stores/ storage yard/ work site.
11.15	The contractor shall maintain an accurate and exhaustive record detailing out the list of all materials/ equipment received by him and keep such records both in hard copies and also in soft copies in BHEL Computerised system (ISCMS/E store as applicable) ready for the inspection of the engineer at any time.
11.16	The materials/ equipment which are stored in the open or dusty location and

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	required to be covered must be covered with suitable weatherproof and flameproof covering materials wherever applicable at any number of times at no additional cost. Such weatherproof/ flameproof covering which gets worn out from uses should be replaced periodically as per instruction of BHEL engineer at no additional cost. In no occasion, this work can be linked with preservation. All materials/ equipment shall be handled very carefully to prevent any damage/ loss. No bare wire ropes/ slings etc shall be used without the specific approval of BHEL.
11.17	If the materials/equipments belonging to the contractor are stored in areas other than those earmarked for him, the engineer will have the right to get it shifted to the area earmarked for the contractor at the contractor's cost.
11.18	For completion of work, the contractor may have to work in one or more shifts. He will not be eligible for any extra charges on account of this.
11.19	All the contractor's employees shall carry identification cards/gate passes while working at site.
11.20	The contractor, during execution of the work under scope, shall take utmost care in preserving the identification marks/tags as available on the materials.
11.21	Although all tools and plants of suitable capacities required for timely and safe completion of work under the specification shall be provided by the contractor at his own cost, based on contractor's demand (depending upon load to be lifted or approach availability at site), BHEL will provide free of cost as per relevant annexure of the tender including operator as available, fuel and consumables, suitable crane on shared basis for material handling. However, such requirement shall be intimated in writing by vendor suitably to the construction manager. Daily routine maintenance, monthly servicing of crane etc. of BHEL, will be under the scope of BHEL. Provision of T&Ps by BHEL shall be subject to following.
11.21.1	Actual use of T&P including marching as per entry in log-book duly certified by BHEL engineer shall be considered for calculation of overtime charges.
11.21.2	The contractor shall be responsible for the safe and proper use of T&P issued to him. Any loss/ damage to any part of the above T&P, for reason attributable to the contractor shall be to his account. In case contractor fails to make good the loss, and expenditures on these account will be recovered from contractor's bills. BHEL's decision in this regard shall be final and binding on the contractor.
11.21.3	The contractor shall have to return the above T&Ps at the earliest in good working condition, subject to normal wear & tear.
11.21.4	T&P issued shall be used only for the designated scope of work under specification.
11.21.5	If at any time, it is noticed that contractor is not using any of the T&Ps properly according to the instruction of BHEL, BHEL will have the right to withdraw any and all such T&P and any cost due to this shall be to contractor's account.
12.0	AREA REQUIREMENT
	BHEL shall provide the land, as per availability, considered necessary, depending upon the area availability for construction of bidder's office. Contractor shall also have to arrange the watch and ward of its office within the quoted price.
13.0	PROJECT MANAGEMENT/ CONSTRUCTION MANAGEMENT
	To meet the need of construction management at site, contractor shall provide the following services within quoted/ accepted rates.
13.1	PLANNING & MONITORING AND COMPUTERISED MATERIAL MANAGEMENT
13.1.1	The bidder shall prepare detail program (L-2) as per completion dates given in this document. This schedule must include the tentative dispatch schedule from all manufacturing units shall be made available to the bidder as & when available). This program must conform to the overall project schedule. The bidder should also ensure monitoring of these activities at least weekly basis to start with and on daily basis whenever required by BHEL.
13.1.2	The bidder will have to provide following for exclusive BHEL usage: 1) Install 3 nos PCs (multimedia PC work station Pentium i3/i5, with a processor of 1 GHz or above, Min 160 GB HDD, 3 GB RAM, 100/1000 MBPS LAN card) of CL/HP/DELL or equivalent make with Window 7 O/S and required software like MS Office 2010 Professional, AutoCAD 2010 or higher, PageMaker (7.0) etc,

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	<p>Adobe Pdf Creator</p> <p>2) One no. laserjet printer (HP or equivalent) compatible for A3 size printing and scanning (ink/ cartridge for which to be supplied as and when required),</p> <p>3) One no laserjet printer (HP or equivalent) compatible for A4 size printing (ink/ cartridge for which to be supplied as and when required) with power backup at places, as per instruction of BHEL for exclusive use of BHEL.</p> <p>These computers/ printers shall remain contractor's property and they will be allowed to take out the same after completion of the site works (including extended period, if any). The contractor shall provide data / information etc in prescribed formats for periodical updating of the progress reports, material management reports, updating of network pertaining to the contractor's scope of work etc.</p> <p>The contractor shall also provide following persons, beyond their own staff, for exclusive BHEL works:-</p> <ul style="list-style-type: none"> • Two nos. computer operators and • Three numbers service staff <p>Above is required for miscellaneous service for BHEL's use at site/ Kolkata /etc. for reconciliation, progress review & day-to-day planning purpose, documentation etc. These facilities are to be provided within 15 days from the start of work till completion of site works or as decided by BHEL. If contractor fails to provide computer/ printer or personnel as per requirement, for a continuous period of fifteen days or more, BHEL shall have the right to deduct the amount as per following rates on prorated basis, from contractor's RA bill or any other dues.</p>
13.1.2.1	@ USD 230/- (Two Thirty)/ month for each computer operator or at actual (rate +5%) if BHEL arranges this facility, whichever is lower.
13.1.2.2	@ USD 180/- (One Eighty) / month for each service staff or at actual (rate +5%) if BHEL arranges this facility, whichever is lower.
13.1.2.3	@ USD 100/- (Hundred) / month for each (computer + printer) or at actual (rate +5%) if BHEL arranges this facility, whichever is lower.
13.1.3	In the event of the contract period getting extended beyond the stipulated contract period for reasons not attributable to the bidder, the bidder will be reimbursed at the above mentioned rate or (actual+5%), whichever is lower, if the services of operator/service staff are being used by BHEL.
13.1.4	The contractor's site office must have facilities of communications like Fax, E-mail, and telephone with STD facility within a month from start of work.
13.2	PROGRESS REPORTING
13.2.1	The bidder shall submit daily, weekly and monthly progress reports for work force, materials reports, consumables (gases/ electrodes) report and other reports as per pro-forma considered necessary by the BHEL. In case of any failure on contractor's part to comply with this, BHEL may at its discretion, consider to withhold part payment against their RA bills.
13.2.2	<p>The progress report shall indicate the details of material received at site and issued to various contractors at site as per BHEL agreed format.</p> <p>The contractor should also inform the progress achieved against requirement with reasons indicating delays in unloading/stacking/issue of material, if any, and shall give the remedial actions which the contractor intends to take to avoid such delay in future.</p>
13.2.3	Contractor shall also provide a report on daily basis on trailers/trucks arrival on daily basis. The report will show the list of all the trailers pending unloading with the date of reporting at site. A consolidated report on trailers shall be submitted on monthly basis having date wise details of unloaded & reported trailers. Such report format shall be finalised in consultation with BHEL site engineer.
13.2.4	Contractor shall also provide a report on daily/weekly basis on MDR. The report will show the detail of issue against each MDR case. Reconciliation of all MDR report shall be done on weekly/ monthly basis, as directed by site engineer, and such

	report shall be submitted at site.
13.2.5	The daily work force reports shall clearly indicate the work force deployed, category-wise specifying also the activities in which they are engaged.
13.2.6	Weekly progress review meetings will be held at site during which actual progress during the week vis-à-vis scheduled program shall be discussed or actions to be taken for achieving targets. For discussions, the contractor shall present program of subsequent week. The contractor shall constantly update/revise his work program to meet the overall requirement.
13.2.7	Periodic progress reviews on the entire activities of execution in respect of supply and works in scope of bidder will be held once in a month at Kolkata/site. These meetings will be attended by reasonably higher officials of the contractor and will be used as a forum for discussing all areas where progress needs to be speeded up. The contractor shall be further responsible for ensuring that suitable steps are taken to meet various targets decided upon such meetings.
13.2.8	Successful bidder has to provide for electronic/ computerized storing and reproduction/ printing/ plotting of various data, log sheets, protocols, measurements etc. These may be stored in CD (as per requirement) and handed over to BHEL as per requirement.
13.3	SITE ORGANISATION
13.3.1	The contractor shall maintain a site organisation of adequate strength in respect of manpower, T&P and other implements at all times for smooth execution of the contract. This organisation shall be reinforced from time to time, as required, to make up for slippage from the schedule without any commercial implication to BHEL. The site organisation shall be headed by a competent manager having sufficient authority to take decisions at site.
13.3.2	On award of contract, the contractor shall submit to BHEL a site organisation chart indicating the various levels of personnel to be deployed on the job. 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 deviations in this regard will not generally be permitted.
13.3.3	The site-in charge once approved and posted at site, should not be changed through-out the contract period as far as practicable.
13.3.4	Following (minimum) manpower is to be deployed at site by the successful vendor for their day to day supervision etc. This is over & above one experienced site-in-charge to be posted at site as per following requirement:
	<ul style="list-style-type: none"> a. 1 (one) no. manager with material management experience within 15 days from the date of start of work (SOW). b. 1 (one) supervisor with insurance claim lodging & settlement experience within 60 days from the date of SOW. c. 2 (two) supervisors with experience in material handling/stacking/verification etc. within 30 days from the date of SOW. d. 1 (one) supervisor with experience in computerized material management system and record keeping, updation and reporting within 30 days from the date of SOW.
13.3.5	<p>The above supervisory staff requirement is minimum.</p> <p>Supporting working level dealing staff staff for various area wise functioning like (boiler & aux, TG & aux, BOP, electrical & C&I, cement, steel etc) are to be exclusively deployed additionally for smooth execution of the job along with supporting staff for bidder's own store & purchase, material management of bidder's own material, planning, finance, administration etc.</p> <p>MM supporting staff will have to deal with transport agency, railway authorities, liason with customer regarding gate pass etc., identify and issue of materials, other day to day co-ordination required to be carried out as per the instruction of BHEL Engineer (MM).</p>
13.3.6	In the event of non deputation of manger and supervisors (as per clasue no. 13.3.4) by the bidder, BHEL shall reserve the right to deduct USD 770 & USD 460 per man-month respectively from the date of deputation as indicated above from RA bills.

	Further induction of manpower regarding site supervisor & working staff will be decided at site as per requirement.
13.3.7	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.
13.3.8	In addition to above, a well experienced qualified engineer to be designated, as 'Project Co-coordinator', shall be deployed by the contractor. Such engineer shall have adequate exposure on the job and shall remain fully involved in all planning activities, guidance etc to contractor's own team during the complete execution period of contract.
13.3.9	The contractor shall also submit to BHEL for approval a list of T&P, tackle etc., prior to commencement of site activities. These tools & tackles shall not be removed from site without written permission of BHEL.
13.4	CUSTOMS CLEARANCE <p>The Contractor shall be responsible for Bangladesh customs clearance of all materials, supplies, equipment, tools and other articles shipped into Bangladesh by him for the implementation of his works, including the food and the personal effects of the Contractor's personnel.</p> <p>All payment for clearance charge, storage charge, etc. which are imposed by the relevant agencies of the Government of Bangladesh, relating to the clearance of equipment, materials and Plant that will be incorporated in the Permanent Works or relating to the Temporary Works shall be borne by the Contractor. Further, if the Contractor is delayed in submitting necessary shipping documents to the Employer, the demurrage charges by the Port Authority will be borne by the Contractor.</p> <p>Tools and equipment and other equipment of the Contractor for use during construction but which are to remain the property of the Contractor and which are to be exported by the Contractor from Bangladesh at the completion of the Work shall be carefully documented and specially listed to facilitate both import and export. The Contractor shall determine prior to shipment the customs regulations applicable to this special case as well as normal import rules and regulations applicable. The Contractor shall also be responsible for inland transport by barge/ truck/train to the Site.</p>
13.5	RECEIVING, TRANSPORTING, HANDLING AND STORAGE <p>The Contractor shall receive, transport, handle, store and install all materials and equipment furnished under these specifications, or otherwise involved in the implementation of this Contract. It shall be the responsibility of the Contractor to determine the availability and capacity of transportation and unloading facilities (including for the transportation, delivery and receipt of all equipment, materials, Plant to the Site) and to make the required arrangements to secure the necessary facilities for the same.</p> <p>The Contractor shall be responsible for the prompt unloading of all equipment or materials. The Contractor shall pay any demurrage incurred due to delay in unloading and for any other reasons.</p> <p>The Contractor shall handle materials and equipment carefully to prevent damage or loss. The use of bare rope slings for handling will not be permitted unless specifically approved by the Engineer. Special handling devices shall be used when necessary to avoid damage.</p> <p>In addition the Contractor shall also comply with the requirements of Technical Specification with respect to the receipt, transportation, handling and storage.</p>
13.6	WEATHERPROOF COVERINGS <p>Weatherproof and flame resistant sheeting of sufficient size for outdoor storage, as</p>

	required, shall be provided by the Contractor. The sheeting shall be carefully placed and tied down to prevent moisture and wind from entering underneath the sheeting and to otherwise protect the equipment, materials and other Plant.
13.7	<p>IDENTIFICATION OF CONTRACTOR'S EMPLOYEES, VEHICLES & BUILDINGS</p> <p>The Contractor shall provide each of his employees and his Subcontractor's employees with a name tag bearing the picture, the name or initials of the employee, a serial number and the name of the Contractor. Each employee shall wear his badge visibly to the security personnel at any time.</p> <p>Subcontractor's employees with a name tag bearing the picture, the name or initials of the employee, a serial number and the name of the Contractor. Each employee shall wear his badge visibly to the security personnel at any time.</p> <p>All vehicles and large equipment furnished and used by the Contractor or his Subcontractors on the Work shall be clearly marked with the Contractor's or Subcontractor's business name. The Contractor's offices, stores, depots and other facilities shall also be clearly identified. The detailed requirements are defined in the Health, Safety and Environment (HSE) Plan of BHEL.</p>
13.8	<p>EXPATRIATE PERSONNEL</p> <p>The Contractor shall submit to Employer data of all personnel he intends to bring into Bangladesh for the performance of the Work. This data shall include the name and present address of each person, his intended assignment and responsibility in connection with the Work and a concise resume of his experience in the type of work to which he will be assigned. This data shall be submitted to the Employer at least thirty (30) days prior to their expected arrival in Bangladesh.</p> <p>Any expense associated with illness of the Contractor's personnel, including replacement thereof, shall be to the Contractor's account.</p> <p>Costs of passports, visas, travel documents, inoculations and other incidental expenses incurred by the Contractor's non-Bangladesh employees and their dependents occasioned by travel to and from Bangladesh shall be borne by the Contractor.</p> <p>All accommodations and amenities for the Contractor's personnel and families (including all staff and labour) must be provided by the Contractor, and the Employer shall not have any liability for the same.</p>
13.9	<p>CONTRACT PLANNING AND CONTROL</p> <p>Before starting the Work at the Site, the Contractor shall submit the detail site management organization for approval by the Employer. Such proposals shall show clearly the Contractor's key personnel, classification and qualification with the detailed information and curriculum vitae for above key personnel.</p> <p>The Contractor's Representative, site manager and senior key personnel who will be responsible for working closely with the Employers staff to achieve efficient execution of the Contract shall be competent to conduct meetings and communications in the English language.</p> <p>The management organization shall include a planning and programming tools covering the Work, and shall apply the latest techniques in communication and analysis. The Contractor shall nominate a planning engineer to co-ordinate all planning activities.</p>
13.10	<p>HOUSING & TRANSPORT</p> <p>The Contractor shall arrange for suitable housing units together with furnishing and utilities in the close proximity of the construction Site for accommodation of all his expatriate personnel. If the services of any expatriate personnel of the Contractor or its Subcontractors.</p> <p>If the Contractor decides in consultation with the Employer that the health or safety</p>

	<p>of any of his personnel is or might be jeopardized by political or health hazards in Bangladesh, the Contractor may, after forty eight (48) hours' notice, order its employees and the employees of its Subcontractors and suppliers to return to their headquarters or other safe location, in which case the Work will be deemed to be suspended for the duration.</p> <p>The Contractor shall provide to the extent agreed transport vehicles for use during construction period by the expatriate as well as local personnel.</p>
13.11	<p>PROPRIETARY NAMES</p> <p>Whenever a material or article is specified or described on the plants by using the name of a proprietary product or by using the name of a particular manufacturer or vendor, the specific item mentioned shall be understood as establishing the type, function and quantity desired. Unless otherwise specified, other manufacturers' products which in the opinion of the Employer are equivalent of those specified will be accepted. Such items shall be submitted for approval prior to their incorporation in the Works.</p>
13.12	<p>PERFORMANCE OF THE WORK</p> <p>The Contractor shall conduct all Works in such a manner as to cause the least possible disturbance or damage to the environment. In cases where some temporary disturbance or damage is unavoidably caused due to the nature of the work, the Contractor shall, as soon as possible, remove the cause of such temporary disturbance, repair the damage and, in general, restore the affected areas to their original condition to the extent possible, and in a manner satisfactory to the Employer, the landowner and any authorities.</p> <p>Prior to commencement of the Work, the Contractor shall provide details of its EMP specifically addressing the following: Environmental management system and manual – policies, standards and procedures, and programs; organization / responsibilities;</p> <p>Training Incident and accident investigation; Management support; Environmental protection, mitigation and restoration; Emergency preparedness and response;</p> <ul style="list-style-type: none"> • Socio-economic plans, including historical and cultural resources; • audit, monitoring and corrective action; • information and records management; and, • Integration of safety & health requirements with the EMP. <p>All aspects of the EMP and the environment work requirements are the Contractor's accountability and the Contractor, its management and its Site supervisory staff will be held responsible for its implementation.</p> <p>All relevant Health, Safety and Environment (HSE) issues, results of audit and monitoring plans and programs, and HSE performance indicators will be communicated to the Contractor's management and the Employer through daily inspection meetings and reports, weekly construction meetings, monthly meetings, and in terms of the monthly project report.</p>

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	<p>The Contractor shall ensure that he has complete knowledge of all the laws, statutes, statutory instruments, regulations, rules, treaties and conventions (by whatever name or title), environmental protection regimes and other Applicable Laws, in each of the jurisdictions where he shall perform the Work. The Contractor shall also take all necessary measures to protect the atmosphere, ocean, rivers, groundwater, seaports and land from pollution. In any event the Contractor shall promptly use its best efforts to eliminate and clean up any pollution caused, directly or indirectly, by the Contractor or which occurs at the Site, or other sites associated with this Work.</p> <p>The Contractor shall cooperate in all respects with any participant environmental representatives and with governmental persons, and allow them to inspect any and all equipment or operations that they wish to observe. The Contractor shall, at all times, be ready to discuss the implementation of the Contractor's safety, health and environmental protection program.</p>
13.13	<p>SITE REGULATION MANUAL</p> <p>The Contractor shall thirty (30) days prior starting any Work at the Site furnish a detailed and comprehensive site regulation manual for its proposed operation and works on the Site, which shall be based on the site related regulations and requirements in the Contract and which shall be subject to Employer's approval. All work on the Site, shall be carried out in compliance with the so approved site regulation manual.</p>
13.14	<p>WORKING HOURS/ LEAVES</p> <p>For payment of manpower deputed by the contractor for work as above, the months shall be computed as comprising of number of days worked at site, which at present are 6 days a week and 8 hours per day. However, in special cases work may continue round the clock, or may continue on Fridays/holidays for which availability of above manpower should be ensured if required by BHEL. However, no extra payment will be made for working beyond normal hours in such special cases and contractor has to quote accordingly.</p>
13.15	<p>Contractor shall provide blank format books of RIV, SRV, gate pass, MDR, tag and other stores related formats as per requirement. If contractor fails to provide as above for a continuous period of 15 days or more, BHEL shall arrange the same and the cost with over head as per GCC will be deducted from contractor's R.A. bill or any other dues.</p>
13.16	<p>The contractor shall provide tarpaulin, plastic, weatherproof & fireproof covering materials for stacking & storing of materials as required. If contractor fails to provide as above for a continuous period of 15 days or more, BHEL shall arrange the same and the cost with over head as per GCC will be deducted from contractor's R.A. bill or any other dues.</p>
13.17	<p>The contractor shall provide wooden/RCC sleepers as per BOQ for stacking & storing of materials as per instruction from BHEL site engineer. If contractor fails to provide as above for a continuous period of 15 days or more, BHEL shall arrange the same and the cost with over head as per GCC will be deducted from contractor's RA bill or any other dues.</p>
14.0	<p>LIQUIDATED DAMAGE</p>
14.1	<p>Since the bidder is dependent on the arrival of materials at site, the liquidated damage will be charged if the consignment is not unloaded in time and BHEL had to pay any detention/demurrage. The amount of LD will be limited to the amount of such charges + 5% in each case. The total ceiling for such liquidated damages shall be limited to 10 % of the executed contract value.</p>
14.2	<p>The above LIQUIDATED DAMAGE clause shall not be applicable for items at sl. no. 4.1 and 4.2 of the Rate Schedule, Vol-III for Cranes. However, for delayed</p>

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	deployment of crane, if BHEL has to arrange & deploy crane from any other source, the cost incurred for the same shall be recovered from the vendor with overhead as per GCC.
15.0	WORK & SAFETY REGULATIONS
15.1	In addition to the BHEL safety manual, below mentioned shall have to be complied by the successful bidder.
15.2	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/ customer at site without exception.
15.3	Emergency vehicle must be provided & kept separately as stand-by.
15.4	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 recognized 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.
15.5	The contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislation and BHEL/ customer, as he may deem necessary.
15.6	The contractor will notify well in advance to BHEL/ customer 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/ customer 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/ customer 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/ customer shall entertain no claim due to such prohibition and BHEL/ customer shall not entertain any claim of the contractor towards additional safety provisions/ conditions to be provided for/ constructed as per the BHEL/ customer instructions.
15.7	Further, any such decision of the BHEL/ customer 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/ customer, the contractor shall use alternative methods with the approval of the BHEL/ customer without any cost implication to customer or extension of work schedule.
15.8	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/ customer. In case, any approvals are necessary from the Chief Inspector (Explosives) or any statutory authorities, the contractor shall be responsible for obtaining the same.
15.9	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 customer in this regard.
15.10	Periodical examinations and all tests for all lifting/ hoisting equipment & tackles shall be carried-out in accordance with relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated laws/ rules in force from time to time. A register of such examinations & tests shall be properly maintained by contractor and will be promptly produced as & when desired by BHEL/ customer or by authorized person.
15.11	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/ customer who will also have right to examine these safety equipments to determine their suitability, reliability, acceptability and adaptability.

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15.12	Where explosives are to be used, the same shall be used under the direct control and supervision of an expert, experienced, qualified and competent person strictly in accordance with the Code of Practices/ Rules framed under Indian Explosives Act pertaining to handling, storage and use of explosives.
15.13	The contractor shall provide safe working conditions to all workmen and employees at 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.
15.14	The contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to BHEL/ customer or other contractors under any circumstances, whatsoever, unless expressly permitted in writing by customer to handle such fuses, wiring or electrical equipment.
15.15	Before the contractor connects any electrical appliances to any plug or socket belonging to the other contractor or BHEL/ customer, he shall fulfill following.
15.15.1	Satisfy BHEL/ customer that the appliance is in good working condition.
15.15.2	Inform BHEL/ customer of the maximum current rating, voltage and phases of the appliances.
15.15.3	Obtain permission of BHEL/ customer detailing the sockets to which the appliances may be connected.
15.16	BHEL/ customer will not grant permission to connect until following are complied.
15.16.1	The appliance is in good condition and is fitted with suitable plug.
15.16.2	The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
15.17	No electric cable in use by contractor/ BHEL/ customer 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.
15.18	No repair work shall be carried out on any live equipment. BHEL/ customer must declare the equipment safe and a permit to work shall be issued by BHEL/ customer 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.
15.19	The contractors shall employ necessary number of qualified, full time electricians/ electrical supervisors to maintain his temporary electrical installations.
15.20	The contractor shall employ trained safety officer to supervise day to day safety aspects of the equipments and workmen, who will co-ordinate with BHEL/ customer safety officer. In case of work being carried out through sub-contractors, sub-contractor's workmen/ employees will also be considered as the contractor's employees/ workmen for the above purpose.
15.21	The name and address of such safety officer of contractor will be promptly informed in writing to BHEL/ customer 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 contract.
15.22	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 BHEL/ customer in prescribed form and also to all the authorities envisaged under the applicable laws.
15.23	BHEL/ customer 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.
15.24	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.

15.25	The contractor shall follow and comply with all safety rules of BHEL/ customer, 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 Safety Rules of BHEL/ customer referred above, the later shall be binding on contractor unless the statutory provisions are more stringent.
15.26	In case BHEL/ customer is made to pay such compensation then the contractor is liable to reimburse BHEL/ customer such amount in addition to compensation indicated above.
15.27	These insurance covers have to be taken prior to start of work at the project and shall make available the Policy to BHEL site-in-charge for necessary verification before start 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.
16.0	HEALTH SAFETY & ENVIRONMENT
16.1	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.
16.2	Round the clock experienced paramedical personnel with first aid facility & one ambulance including driver, fuel etc., and shall be available at site, being provided by other agency. The above facilities will be shared by various contractors working at site on chargeable basis to the providing agency (actual cost distributed among the various BHEL vendors present at site availing the facility on a prorata basis). The subject facility will be strengthened as per the requirement during peak work progress at site, by other vendor. Individual vendor may co-ordinate with the providing agency in this regard. No medical facility within / near the site shall be provided by BHEL.
16.3	No staff quarter shall be provided by BHEL.
16.4	No borrow area for earth shall be arranged/ provided by BHEL.
16.5	All individual site erection, temporary approaches required for movement of cranes, trailers, trucks, transit mixers, dumpers, etc shall be arranged by the contractor at his own cost.
16.6	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.
16.7	The Contractor shall comply with all ordinances and regulations including, but not limited to, National, State, Municipal laws and Department of Labour, Transmigration and Co-operation Regulations, and other Applicable Laws that are in force in the locality of the Works and shall comply with any instructions that may be from time to time issued by Employer. The safety rules and regulations laid down in the Health, Safety and Environment (HSE) Plan are to be strictly adhered to.
16.8	SAFETY AND ACCIDENT PREVENTION It shall be the Contractor's responsibility to maintain throughout the construction period, a safety and accident prevention program satisfactory to the Employer which meets the requirements of Applicable Laws and of all other Governmental Authorities having jurisdiction over the Works. The rules and regulations laid down in the Health, Safety and Environment (HSE) Plan must be adhered to at all times.
16.9	SECURITY BHEL shall provide security in the store yards, however, contractor shall be solely responsible for the security of all equipment and materials incorporated or to be incorporated in the Work by him and all equipment, materials, tools, supplies, structures, facilities and others properly used in the execution of the Work while in

	<p>his care and custody.</p> <p>The Contractor shall conform also to any specific security requirements of Employer but such compliance shall not relieve the Contractor from the total responsibility for security.</p>
16.10	INSTRUCTION TO WORKERS (ORIENTATION / INDUCTION)
	<p>The Contractor shall ensure that all employees, subcontractors, servants and agents (and employees, servants and agents of all Subcontractors) participating in the Work, are advised about the strategy and plan for managing the environmental-social issues related to the work, and on their role and responsibility; instructed on the requirements of environmental laws, rules, regulations and specific permit conditions applicable to the area and the Work; instructed on the application and use of the required personal protective equipment (PPE) for their job duties and functions; and, have received the appropriate training in the use, application and maintenance of PPE.</p>
16.11	RISK MANAGEMENT
	<p>The Contractor shall clearly state the management methods and techniques to be used to identify potential hazards and risks at any stage prior to the execution of a particular activity. If required, specific procedures shall be developed by the Contractor to eliminate or mitigate the hazard to a safe level prior to the work being authorized. All requirements of the project’s environmental impact assessments (“EIA”) and other relevant assessments and conditions of approvals accorded by the relevant Governmental Authorities must be considered by the Contractor in the development of the Contractor’s Health, Safety and Environment (HSE) Plan, EMP and other related/relevant plans. The Contractor is required to implement a system whereby all risks associated with hazardous substances, whether chemicals, by-products, effluents or waste materials, are minimized and/or eliminated. In conjunction with its emergency plans and procedures, the Contractor shall develop and submit to the Employer’s Representative a “Safety Philosophy Document” that details the strategy to be adopted for control and shutdown systems, including alarms and programmable electronic control systems.</p>
16.12	EMERGENCY PREPAREDNESS, RESPONSE & CONTINGENCY PLAN
	<p>The Contractor shall prepare an Emergency Preparedness, Response and Contingency Plan (a detailed program of action to minimize the effects of an abnormal event requiring prompt actions beyond normal procedures to protect human life, minimize injury and safeguard the environment) for environmental and personal safety emergencies or incidents. This plan shall be found within the Contractor’s Safety & Health and/or Environmental Programs. The purpose of the plan shall be to limit insurance and damage to people, property and the environment respectively. The plans, procedures, and trained personnel shall be in place for the duration of the Contract to manage and control emergency situations and incidents in a proper and expeditious manner.</p>
16.13	SERVICING AND FUELLING
	<p>To ensure adequate response capability in the event of a fuel, ground spill or other spill, all fuel transport vehicles and the Contractor’s foreman vehicles shall carry a suitable amount of commercial absorbent material. In addition, floating absorbent pads and booms for spill clean- up on open water shall be kept accessible on the construction Site.</p> <p>All service vehicles and/or equipment utilized for re-fuelling must be equipped with automatic shut-off valves. All equipment or servicing activities with the potential for accidental spills (e.g., oil changes, hydraulic repair, coolants) will require</p>

	appropriate containment methods to be in place (i.e., storage containers, impervious liners, absorbent materials, etc.) prior to the start of the activity.
16.14	<p>SOIL AND GROUNDWATER PROTECTION</p> <p>The Contractor shall develop and implement soil and groundwater protection measures. Protection measures shall include building and impervious floors, where appropriate. The Contractor shall make an assessment of groundwater quality prior to the start of construction and prior to commissioning to demonstrate to Employer’s Representative that construction activities have not adversely affected the environment. Groundwater quality shall be monitored throughout the construction phase.</p>
16.15	<p>HEALTH HAZARDS</p> <p>Worker and public health is a critical part of any HSE management program. The Contractor shall control substances and materials that may be a hazard to worker’s health. These controls shall be a combination of hazard communication, safe work systems and the controlled handling and disposal of hazardous materials The Contractor’s controls shall commence at contract preparations and procurement stages, where all vendors and subcontractors shall be required to submit Material Safety Data Sheets (“MSDS”) for all hazardous materials that will be supplied, provided or brought onto the Site. These MSDSs shall be forwarded to Contractor’s HSE Manager for review and records management.</p> <p>In the event hazardous materials are to be used, the Contractor shall carry out assessments according to recognized international standards, to determine if there are any more suitable or less hazardous materials that could be substituted for the original materials. Only when the Project Manager, Employer and his Engineer and the Contractor are satisfied that assessments have been completed, and control measures are adequate to protect worker health, the materials shall be allowed on the project worksite. The Contractor’s control measures shall include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Material transport, storage, labelling, packaging, and disposal, <input type="checkbox"/> Personnel protective equipment (PPE), <input type="checkbox"/> Health surveillance and monitoring, and <input type="checkbox"/> Emergency procedures and training. <p>All explosive materials to be used for blasting during Site preparation shall only be handled by approved and qualified personnel. All explosive materials shall be stored in a secure, limited access sites, protected from workers and the public, and removed from the site every day and immediately after use.</p> <p>All radioactive equipment and materials shall only be used by qualified, approved and permitted personnel. Radioactive materials must be stored in approved and protected containers. Radioactive materials and waste products shall not be disposed of on-site but removed in protective containers and disposed at government approved storage and disposal sites</p>
16.16	<p>WASTE MATERIAL MANAGEMENT</p> <p>The Contractor shall ensure that waste management identification, handling, transport and disposal are addressed in the development of their HSE management plans.</p> <p>The Contractor’s employees responsible for handling hazardous materials</p>

(including wastes) shall receive training and certification in the handling, transport, storage and disposal of chemicals and regulated or hazardous materials. Where applicable, Workplace Hazardous Materials Information System (“WHMIS”) certification and training, or its equivalent, shall be made available to employees. Regular written updates shall be included for continued employee awareness.

The Contractor shall ensure proper segregation and isolation for wastes that could react together in the event of a leak or other incident. These facilities shall include lockable, fire proof cabinets or storage in shelving units separated by fireproof barriers or walls.

The Contractor shall dedicate a space for waste and drum storage. The storage area must be easily accessible for spill containment and emergency response and not be susceptible to flooding.

For any waste storage area which could accumulate hazardous gases, vapors, or dust due to the nature of the wastes stored, the Contractor must supply suitable ventilation or other controls to ensure exposure by employees is kept below required minimum standards. Storage areas for hazardous wastes shall be designated as restricted areas and shall be suitably equipped to control an incident involving a leak or spill.

The Contractor shall make available suitable fire extinguishing equipment and proper electrical bonding equipment in all areas involving the handling and storage of flammable and reactive wastes.

Disposal of wastes by burning will not be allowed on the construction site.

Sumps and waste pits shall not be used for waste storage at the work site. Sumps should only be used for temporary control and containment of spills, equipment leaks, etc. If the Contractor encounters former sump sites or waste pits during ground surveys, the Contractor shall be identify and investigate the same. If any contamination is suspected, the Contractor shall excavate, remove and where required replace with an approved sump container system.

The Contractor shall develop and implement a waste disposal control system. This system shall control every load of waste leaving the worksite, detailing the type of waste disposal, waste origin and destination, approximate weight, date and transport details on a waste manifest/document. These documents shall be audited.

16.17 SPILL RESPONSE AND CONTROL

All spills shall be stopped and cleaned up immediately to avoid potential impact to water and soil quality. All spills shall be reported using the Incident Management Process. Under no circumstance contaminated material may be “stored” on the work site.

All spills shall be rapidly stopped and appropriately eliminated as defined in the Contractor’s Emergency Preparedness, Response and Contingency Plan. Spills shall be contained in a way that will prevent their redistribution. All ground spills shall be contained as quickly as possible through diking, suction methods, excavation and the use of absorbents or other appropriate recovery techniques.

A list including the type, quantity and location of the storage of retaining and clean up equipment to be used during construction shall be prepared. The list shall

	<p>include the procedures and mitigation measures to be used in case of a spill. A written inventory will also be prepared, before starting construction works, including lubricants, fuels, solvents, chemicals and other materials that might be accidentally discharged during construction.</p> <p>All on-site fuel storage tanks shall be located in an impermeable secondary containment area with a holding capacity equal to 110% of the largest tank within the berm. For above ground tanks, the tanks shall be surrounded by a berm, the entire area covered with a suitable commercial absorbent material and with a sealed plastic liner to form an area that can be pumped out in the event of a leak in the tank. A waste handling plan shall be made with the purpose of identifying the procedures necessary for cleaning and disposing of residues from a major spill. In the event of a spill, the Contractor shall make all resources available to contain and clean up the spill. Traffic shall be minimized in and around the spill site.</p>
16.18	<p>NOISE CONTROL</p> <p>Noise level specifications to be followed by the Contractor in design, assessment and monitoring activities are based upon the maximum (acceptable) levels which plant personnel may be exposed during their normal working duties. The Contractor shall be familiar with and comply with the environmental guidelines as issued by the relevant Governmental Authorities in Bangladesh, including the Department of Environment, Government of Bangladesh and other relevant Applicable Laws.</p> <p>All internal combustion motors of vehicles, machinery and equipment used during the construction phase, shall have adequate noise silencers, and shall be kept in good operating conditions, during the entire construction period. Where temporary noise pollution of greater than 85 dBA will occur, temporary silencers shall be used. Equipment noise should not exceed the specified limits at accessible locations.</p>
16.19	<p>CONSTRUCTION TRAFFIC PLANNING</p> <p>The Contractor shall ensure that the construction Site is organized in such a way that pedestrians can move safely and without risk. The Contractor shall firstly select the lowest period of traffic flow for equipment crossings; and secondly, ensure that traffic patterns and entrances to private and public roads for access are not obstructed during construction activities. All site entry will be controlled by vehicular passes. Road closures, on-site and off-site, shall be with the approval of the Contractor's site manager and/or road closure permit. Site traffic shall be minimized and speed limits posted and enforced.</p>
16.20	<p>HOUSEKEEPING</p> <p>All construction debris and other garbage shall be continuously collected and disposed at an approved facility. At the end of each day, all waste material shall be removed from the construction Site and deposited at the approved allocated area. The approved procedures to manage waste shall be specified in the Contractor's waste management plan. All empty hazardous material containers shall be removed from the work area as soon as is practicable. All empty gas containers and bottles shall be returned to their storage area and secured properly.</p> <p>The Contractor's shall prepare a pest and vector control program to address specific site conditions, including a mosquito control program.</p>
16.21	<p>CONSTRUCTION CAMPS</p> <p>The location of work places, camps, areas of storage and installation of works, compression, regulation and communication stations shall be located on levelled land, avoiding areas with non-cohesive soils to avoid erosive processes.</p> <p>Health conditions in the camp shall be controlled in order to prevent contamination</p>

	<p>of adjacent groundwater or surface water resources. Domestic sewage generated at the construction sites shall be eliminated by two systems of septic/absorption tanks or chemical toilets located on the sites.</p> <p>Solid combustible garbage shall be collected and secured daily, until disposal, to prevent the attraction of livestock, vermins and wild animals. Residue shall be disposed of, along with non-combustible garbage, in a disposal location approved by the Authorities.</p> <p>Upon abandonment, the camp site area shall be cleared of all trailers, piping, cable, insulation, lumber, blockage, metal wastes, etc., and re-graded according to the landscaping concept. These guidelines and procedures for the management of domestic and other waste shall be specified in a plan.</p>
17.0	SPECIAL CONDITIONS FOR UNLOADING AND TRANSPORTATION /STORAGE WORKS
17.1	It would be the responsibility of the contractor to keep in constant contact with the BHEL authorities at site to find out the arrival of the consignments. The lorry waybill/ truck waybill for consignments would be handed over to the contractor immediately on receipt.
17.2	The contractor is also required to find out from concerned authorities, regarding arrival of consignment prior to the receipt of consignment note, if any, and take delivery of the same on 'Indemnity Bond'. Indemnity Bonds would be executed by BHEL, when intimation regarding arrival of consignments is furnished by contractor.
17.3	Payment of all demurrages/ wharfages that result due to contractor's fault/ delay would be the responsibility of the contractor and to their account. If BHEL have to make payment of demurrage/ wharfages together with the freight the amounts so paid as demurrages/ wharfages for the reasons stated above shall be recovered from the bills of the contractor.
17.4	It would be the responsibility of contractor to examine the packages, consignments etc., on arrival and bring to the notice of transport authorities and BHEL authorities regarding loss/ damages, if any observed in the consignments proposed to be taken delivery of, before taking delivery, particularly of consignment in 'smalls' the weight of the packages and any discrepancies shall be reported immediately to BHEL/ transport authorities. In case, it becomes necessary to take open delivery from the authorities contractor should make all arrangements from taking open deliveries. All expenses connected there with shall be to the account of the contractor. Any loss that occurs to BHEL on account of this and recovery affected from his RA bills.
17.5	Any discrepancy/ shortage/ damage found in the consignment after taking delivery from the carriers after giving clear receipt would be the responsibility of the contractor and the amount liable to be lost by BHEL on such accounts is recoverable from the contractor.
17.6	In case of apparent damages/ shortage to consignment/ packing noticed by the contractor such cases shall be brought to the notice of BHEL and cleared only with their knowledge/ approval.
17.7	Consignments coming on Sundays and holidays are also required to be handled by the contractor. Since the offices and go-downs will probably remain closed on these days, it will be the responsibility of the contractor to contact the site engineer/ his authorized representative at BHEL at their residence and obtain instructions.
17.8	BHEL reserves the right to recover from the contractor any loss which arises out of undue delay/ discrepancy shortage / damage or any other causes during transit or during unloading or during stacking, or any time in the custody of the contractor.
17.9	Unloading from transport equipments, transportation, unloading at storage area/ work site of heavy sophisticated equipment like heavy motors, mills, drums, heavy bearings, fans, transformers, electrical panels, turbine, generator etc shall be done in the presence of and as per the direction of BHEL representative including stacking and restacking if necessary arises.
17.10	Since the consignment are expected to arrive during any time of the day or night, contractor shall have his workmen round-the-clock at site as well as other places as

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	required to unload the materials. Contractor's quoted rate shall include all such contingencies.
17.11	Unloading of material/ components at storage yard, using contractor's own cranes, lorries, trailers and other equipments with valid road permits for their operation, unloading and stacking at storage yard for verification shall be the responsibility of the contractor under this contract.
17.12	All the materials shall be stored 6" (six inches) above the ground level by the use of wooden/ concrete sleepers or wooden logs. No material shall be allowed to remain on ground at any time. Materials shall never be stacked in low-lying areas. Where it is likely to get flooded during rain.
17.13	Stacking of the materials shall be done as per the instructions and to the satisfaction of BHEL engineers. The materials shall be stacked that it should facilitate easy handling during erection. In case any negligence or improper stacking is noticed, it shall be the responsibility of the contractor to re-stack at his cost. Failure to do so may force BHEL to get the job done through other agencies and recover the same from the contractor.
17.14	Under the scope of this contract, it shall be the responsibility of the contractor to provide facilities to open the package in the presence of BHEL Engineers verifying the same, repacking wherever and whenever necessary properly stacking them as may be directed by BHEL so as to facilitate proper handling and verification.
17.15	The necessary lifting tackles, tools, wire rope slings of suitable capacities and other equipment incidental to carry out this work shall have to be arranged by the contractor himself. All such lifting tackles and equipments shall be approved by BHEL before they are actually used for works.
17.16	The contractor shall execute the work in the most substantial and workmen like manner. The stores shall be handled with care and diligence. Any loss to BHEL due to contractor's lapse shall have to be made by the contractor.
17.17	If the contractor or his workmen or employees shall break, deface, injure or destroy any part of a building, road, kerfs, enclosures, water pipes, fence, cables, drains, electric or telephone posts or wires, trees or any other property for to any part of erected boilers, TG sets components etc, contractor shall make good the same at his own expense or in default, the site engineer may cause the same to be made good by other workmen or by other means and deduct the expenses (of which site engineer's decision is final) from any sums that may be then or at any time there after becomes due to contractor or from his security deposit or any other money due.
17.18	When the consignments are received from road transport agencies, it is the responsibility of the contractor to collect the road permit for the said consignment and deposit the same to the concerned BHEL authority. The contractor has to keep a log for accounting of the road permits.
17.19	The contractor in coordination with BHEL staff shall prepare grid plans for storage of various types of material in open storage yard/ covered stores. Grid plan shall be product group (PG) wise for boiler and aux system, product wise for TG & aux, unitwise/ section wise cable storage system, equipment/ supplier wise bought out package system etc and should be stacked & stored in such a way so that they are approachable & easily sequentially retrievable to facilitate issue to erection agencies.
17.20	The contractor shall unload and store at the designated location as advised by BHEL/ customer site authorities. The contractor must keep computerised storage record along with its coordinate/ location of storage in the overall grid plan and shall update regularly in accordance with unloading/stacking of fresh material and issue of material to erection agencies.
17.21	Locating and facilitating Issue of material to various erection agencies is in the scope of contractor. The contractor shall have prior approval of BHEL before issue of materials to any erection agency and shall maintain proper computerised record of issue of material.
17.22	The contractor shall render necessary assistance to BHEL in lodging insurance claims.

18.0	UPKEEPMENT, MAINTENANCE AND CONSERVATION OF MATERIAL
18.1	Upkeepment, maintenance and conservation of material (to be executed on man hour rate basis under preservation) during storage period and till issue to erection contractor shall be included in the contractor's scope as broadly explained below.
18.2	Removal of stored material from boxes/ crates, identification, cleaning/ conservation and replacing boxes/ crates and stacking on floors/ racks as required under the BHEL store requirement as per the preservation manual/ site engineer's instruction.
18.3	Cleaning of corroded surfaces by rubbing with recommended grades of emery papers, removing the conservative greases, damaged coatings of paints or varnish, cleaning/washing of surfaces as required and re-application of anti corrosive paints, protective grease etc as prescribed by BHEL.
18.4	Wherever end caps are found missing, these pipes/ tubes are to be cleaned with compressed air and replacement of protective pellets and end caps to be done. End caps and protective pallets required for pipes shall be provided by contractor.
18.5	All electrical/ C&I panels, motor bearings, slip rings, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and inspected periodically. Heavy rotating parts in assembled conditions shall be periodically rotated after ensuring proper lubrication to prevent corrosion due to prolonged storage.
18.6	The preservation painting shall be done as per advice of BHEL engineer and shall normally consist of three operations, eg priming, putting and final painting. Coating of paints or varnish shall be done either by spray gun or by brush or by dipping as the case may be.
18.7	The preservation painting shall be done as per the advice of BHEL engineer and shall normally consist of three operations, eg priming, putting and final painting. Coating of paints or varnish shall be done either by spray gun or by brush or by dipping as the case may be.
18.8	Parts conserved by grease shall be additionally protected by wrapping with two layers of paraffin paper wherever advised. Contractor will provide paraffin papers.
18.9	While applying the anticorrosive layer, by any of the above methods, care shall be taken that the coating is uniform and without overflow and gaps.
18.10	The process of preservation painting and re-conservation of surfaces shall be done by experienced workers and supervisors.
18.11	Total scope of work for preservation/ conservation shall be as per price schedule. Monthly programme of materials to be conserved will be given by BHEL in the beginning of every month. Contractor can not claim any compensation for any increase/ decrease in the scope of work under such monthly programme. The contractor shall inspect all consignments once in every four months or the period advised by BHEL site engineer to ensure that they are in proper order. After inspection, parts and sub assemblies shall again be re-conserved and packed as before, if required. However, service of only inspection of the consignment shall be deemed to have been included in the rate quoted by the bidder.
18.12	Preservatives and consumables like paints, greases, varnish, thinners for paints, silica-gel, white spirit, paraffin paper and all other preservatives and consumables, required for upkeepment, maintenance and preservation/ conservation work shall be provided by contractor at his own cost.
18.13	All the necessary tools & plants and equipment, except those mentioned to be given by BHEL free of cost, including operator, fuel, consumables etc. for running the same, required for the above job of upkeepment, maintenance and preservation/ conservation work shall be arranged by the contractor at his own cost.
18.14	It is clarified that special preservatives as received from BHEL manufacturing units for specific products/ equipment will be provided free of cost. All other preservatives and consumables as indicated above has to be arranged by contractor at his cost.
19.0	PROCEDURE TO BE ADOPTED BY THE CONTRACTOR IN CASE OF SHORT/ DAMAGED NON-DELIVERED CONSIGNMENTS FOR DESPATCHED BY ROAD
19.1	NON- DELIVERED CONSIGNMENTS PROCEDURE
19.1.1	Apply for and obtain a certificate of non-delivery from the road carriers.

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19.1.2	File a notice of claim on the carriers sending the same to their registered office by Registered Post AD and forwarding a copy to their delivery office, immediately or within 1 months from the date receipt of material at site.
19.1.3	Following documents should be obtained and submitted to BHEL in charge at site.
19.1.3.1	Original Non-delivery certificates.
19.1.3.2	Copy of claim notice filed on the carriers.
19.1.3.3	Postal acknowledgement card or reply received for the claim notice.
19.1.3.4	If the package originally non-delivered is traced and offered for delivery at a later date apply for obtaining open delivery in respect of the same before clearance.
19.2	SHORT DELIVERY (NON-DELIVERY OF A FEW PACKAGES IN CONSIGNMENT)
19.2.1	PROCEDURE
19.2.1.1	Obtain a certificate of short delivery from the road carriers.
19.2.1.2	File a notice of claim on the carriers sending the same to their registered office by Registered Post with AD and forwarding a copy to their delivery office immediately or within 1 months from the date of receipt of material at site.
19.2.2	Documents to be submitted to BHEL site engineer.
19.2.2.1	Original short delivery certificate.
19.2.2.2	Copy of claim notice filed on the carriers.
19.2.2.3	Postal acknowledgement or reply received, for the claim notice.
19.2.2.4	If the package originally short delivered is traced out and offered for delivery at a later date, apply for & obtain open delivery in respect of the same before clearance.
19.3	SHORT/ DAMAGE IN PACKAGES DELIVERED FROM THE ROAD CARRIERS
19.3.1	Apply for and obtain open delivery from the road carriers.
19.3.2	If open delivery is refused.
19.3.2.1	Arrange for survey at the carrier's godown by a licensed insurance surveyor after giving notice in writing.
19.3.2.2	Take delivery under protest in writing against acknowledgement or by Registered Post with AD.
19.3.2.3	Make necessary endorsement regarding the loss/ damage on the reverse of the consignee copy of the lorry way bill before surrendering it to the carriers.
19.3.3	File a notice of claim on the carriers sending the same to their registered office by Registered Post with AD and forwarding a copy to the delivery office immediately or within 1 months from the date of receipt of material at site.
19.3.4	Documents to be submitted to BHEL site incharge
19.3.4.1	Claim form.
19.3.4.2	Insurance policy/ certificate in Original (If specific document is issued).
19.3.4.3	Original open delivery certificate and report of Insurance survey if any conducted to the final destination.
19.3.4.4	Following additional documents required in the event of refusal of open delivery by carriers. <ul style="list-style-type: none"> • Copy of notice given to the carriers advising about the survey at their godown before clearance. • Survey report of the licensed insurance surveyor with the bill / receipt for payment of survey fee and expenses. • Copy of letter of protest extended to the carriers with the postal acknowledgement received thereto. • Photocopy of the lorry waybill with the endorsement of the discrepancies made thereon.
20.0	RECONCILIATION OF MATERIALS
20.1	The contractor shall submit a reconciliation statement of items received by them and issued to various erection agency (through computerized system of BHEL namely SOMS) with each RA bill.
20.2	At the time of submission of bills, the contractor shall properly account for the material issued to him as specified herein to the satisfaction of BHEL certifying that the balance material are available with contractor's custody at site.
21.0	PROGRESS OF WORK

21.1	During the course of work if the progress is found unsatisfactory, or if the target dates fixed from time to time for every milestone are to be advanced or in the opinion of BHEL, if it is found that the workmen employed are not sufficient, BHEL will induct required additional workmen, to improve the progress and recover them from bidder's bills, all charges incurred on this account including all expenses together with BHEL overheads.
21.2	The contractor shall submit monthly progress reports as per the Format given in relevant annexure of the tender, together with requisite nos of photograph, as detailed elsewhere, showing material receipt position and location, to the Construction Manager with a copy to Project Manager at BHEL/ PSER/ HQ. Manpower reports, material reports, consumables reports, and other reports considered necessary by the Engineer will also have to be submitted with a copy to Project Manager at BHEL/ PSER/ HQ.
21.3	The manpower reports shall clearly indicate the manpower deployed category wise daily specifying also the activities in which they are engaged. The periodicity of the reports will be decided by BHEL engineer at site.
21.4	Bidder shall arrange for weekly progress review meetings with the engineer at site during which actual progress during the week vis-à-vis scheduled programme shall be discussed for action to be taken for achieving targets. The programme for subsequent week shall also be presented by bidder for discussions. Bidder shall constantly update / revise his works programme too meet the overall requirement and suit the material availability.
21.5	Bidder shall submit a detailed monthly plan after discussion with BHEL engineer and the same has to be forwarded by the first week of the month (Working month or calendar month).
22.0	SPECIFIC REQUIREMENTS FOR ISO 9002
22.1	Bidders shall ensure that all their staff/ employees are exposed to periodical training programmes conducted by qualified agencies/ personnel on ISO-9002 Standards.
22.2	Bidder shall ensure that the quality is maintained in all the works connected with this contract at all stages of the requirement of BHEL.
22.3	Bidder shall ensure that all Inspection, measuring and testing equipment that are used, whether owned by bidders or used on loan, are calibrated by the authorized agencies and valid calibration certificate will be available with them for verification by BHEL. A list of such instruments possessed by bidder at site with its calibration status is to be submitted to BHEL engineer for control.
22.4	Bidder shall ensure that fitness certificate of the tools & plants, that are in use, whether owned by bidder or issued on loan, are tested by authorised agency & valid fitness certificate are available for verification by BHEL.
22.5	Bidders shall arrange for the inspection of the works at various stages as required by BHEL. Bidders shall take immediate corrective action for the non-conformances if any, observed and pointed out by BHEL.
23.0	LAND
23.1	Availability of land within plant boundary is very limited and the contractor has to plan & use the existing land considering the use of land by other contractors and the storage of plant machineries and materials. The existing land shall be shared by all erections agencies. The same will be reviewed by BHEL and allotted to the extent available/ considered necessary free of cost. Contractor shall develop these areas for their site office, their own stores etc. Bidder must visit site to assess site condition, prior to quoting.
23.2	Levelled area for storage area for BHEL's material shall be provided as per availability free of cost.
23.3	No land will be provided for labour colony. The contractor to construct labour colony/ hutment as per their requirement after obtaining approval of formalities from statutory body of their own.
23.4	The contractor will be responsible for handing back all lands, as handed over to him by BHEL/ customer.

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24.0	WATER
24.1	Till such time, Construction water system is not ready, the contractor has to make his own arrangement for construction/drinking water. On readiness of construction water system, BHEL will provide single point supply for construction & drinking water inside the project premises for office free of cost.
24.2	Further necessary network for construction & drinking water system shall be done by the bidder at his own cost.
24.3	Contractor should arrange for water for labour colony of their own.
24.4	BHEL shall not be responsible for any inconvenience or delay caused due to any interruption of water supply and the contractor shall claim no compensation for delay in work for such interruption. Contractor may make standby arrangement for water at their own cost.
24.5	Contractor will have to arrange for storage of water to meet the day-to-day requirement.
24.6	The availability of water (construction as well as drinking) may be limited. Contractor shall ensure that no water is wasted. In this regard the contractor shall take all necessary measure towards preservation of water.
25.0	ELECTRICITY
25.1	Till such time the construction power is not ready (Approx for 8 months)., successful bidder has to make its own arrangement for power as required for their site office or any other work to carry out under the scope within the accepted rate.
25.2	Contractor shall provide 3 nos. Mobile Lighting Tower (combined package of light, tower, DG and accessories) having 4x400W halide lamps in each Tower, height up to 9m from the Ground level with required DG backup without any extra cost to BHEL. These set up shall be used until commissioning of BHEL High light mast (Approx for 8 months), in the open yard storage.
25.3	BHEL shall provide construction power on free of cost basis at 415V level at one point. Contractor has to make their own distribution arrangement to draw electricity. Overall area illumination will be provided by BHEL. However, for night working contractor should arrange illumination as and when required by them.
25.4	The bidder shall have to provide earth leakage circuit breaker at each point wherever human operated electrical drives/ T&Ps are deployed.
25.5	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.
25.6	Bidder will have to arrange sufficient illumination at their own work areas.
25.7	The contractor should ensure that the work in critical areas is not held up in the event of power breakdown. In the event of breakdown in the electric supply, if the progress of work is hampered, it will be the responsibility of the contractor to step up the progress of work after restoration of electric supply so that overall progress of work is not affected.
25.8	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.
25.9	Contractor shall make arrangement of electricity of their own for labour colony.
26.0	CONSTRUCTION OF TEMPORARY OFFICE, BIDDER'S OWN STORES ETC
	The contractor shall arrange at their own cost cleaning of area allotted, construction of his temporary office, his own stores, etc and also the watch & ward of all the above. Materials required for the same shall be provided by contractor at their own cost.
27.0	CONSUMABLE
27.1	All consumables, like gas, electrodes, chemicals, lubricants etc required for the scope of work, shall be arranged by the contractor at his cost unless otherwise specifically mentioned in the contract.
27.2	All consumables to be used for the job shall have to be approved by BHEL/

	customer prior to use.
27.3	In the event of failure of contractor to bring necessary and sufficient consumables, BHEL may arrange for the same at the risk & 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.
28.0	TEST CERTIFICATE FOR T&P
	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.
29.0	MMD
	The contractor shall ensure deployment of reliable & calibrated instrument, measuring and test equipment (MMD). The MMD shall have test calibration certificate from authorized/ Govt approved agencies. The contractor shall also keep provision of alternate engagement for such MMD so that the work does not suffer when a particular MMD is sent for calibration. Re-testing/ re-calibration shall also be arranged by the contractor at their own cost at regular interval during the period of use as advised by BHEL.
30.0	TOOLS & PLANTS (TO BE PROVIDED BY BHEL)
	Not applicable.
31.0	TOOLS & PLANTS (TO BE PROVIDED BY CONTRACTOR)
31.1	Tentative list of tools & plants to be deployed by bidder is furnished in the tender. It may be noted that the list is not exhaustive and is only for general guidance. The contractor is required to provide all necessary T&P (other than those specified to be provided by BHEL) measuring (calibrated) instruments & handing equipments for timely completion of total work 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. Quoted rate shall be inclusive of such requirements.
31.2	CUSTOMS CLEARANCE
	The Contractor shall be responsible for Bangladesh customs clearance of their own materials, supplies, equipment, tools and other articles shipped into Bangladesh by him for the implementation of his works, including the food and the personal effects of the Contractor's personnel.
	All payment for clearance charge, storage charge, etc. which are imposed by the relevant agencies of the Government of Bangladesh, relating to the clearance of equipment, materials and Plant that will be incorporated in the Permanent Works or relating to the Temporary Works shall be borne by the Contractor. Further, if the Contractor is delayed in submitting necessary shipping documents to the Employer, the demurrage charges by the Port Authority will be borne by the Contractor.
	Tools and equipment and other equipment of the Contractor for use during construction but which are to remain the property of the Contractor and which are to be exported by the Contractor from Bangladesh at the completion of the Work shall be carefully documented and specially listed to facilitate both import and export. The Contractor shall determine prior to shipment the customs regulations applicable to this special case as well as normal import rules and regulations applicable. The Contractor shall also be responsible for inland transport by barge/ truck/train to the Site.
31.3	In the event of any failure of the part of 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 contractor. In the event of failure of contractor to deploy necessary and sufficient T&P/ MMDs, BHEL will be at liberty to arrange the same at the risk & cost of contractor including transportation cost of same from any of BHEL site/ other agency & charges as applicable shall be deducted from contractor's RA bill. Decision of BHEL in this regard will be final & binding on contractor.
31.4	T&P shown in the list of tender are minimum requirement. Further requirement will be reviewed time to time at site and vendors will provide additional T&P/ equipments

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	to ensure completion of entire work within schedule time without any financial implication to BHEL. Contractor will give advance intimation & certification regarding capacity etc prior to dispatch of heavy equipment.
31.5	For deployment of 40 T Crane, separate rate is to be quoted as per Sl. No. 4.0 of the Price Schedule, Vol-III. This crane shall be used for material handling; however, BHEL can deploy the same for other works also. BHEL shall have the control over use of the crane. Operation of the crane shall be 12 hrs/day with one hr. recess.
31.6	For balance T&P as per above list and any other Item required for carrying out the job, no separate payment shall be made and deployment of same will be within quoted rate.
31.7	In case of non-deployment within the period indicated, BHEL reserves the right to arrange the same at the vendors risk & cost or suitable recoveries will be made from RA bills at site.
31.8	All T&P and all MMDs, 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.
31.9	In the event of non mobilisation of any T&P by the successful bidder and as a result progress of work is suffered, BHEL reserve the right to deduct suitable amount from the dues of contractor. BHEL's decision in this regard shall be final & binding on contractor.
32.0	INSURANCE
32.1	BHEL shall arrange comprehensive MCE (marine cum erection) Insurance Policy for total project supply & services including balance of plant package covering transit risks & loss, destruction or damage during handling at site, storage, civil works, erection, testing and commissioning up to trial operation completion of each unit including theft, sabotage, fire, lightning and other natural calamities.
32.2	The contractor shall report to BHEL in writing any damages to equipments/ components on receipt, storing, and during withdrawal of the materials from stores. The above report shall be as prescribed by BHEL site management. Any consequential loss arising out of non-compliance of this stipulation will be borne by bidder.
32.3	The contractor will take necessary precautions/ due care to protect the material at Project site, while in his custody from any damage/ loss till the same is handed over to BHEL/ BHEL Erection agency/customer as applicable, at Project site. For lodging/ processing of insurance claim the bidder will submit necessary documents. BHEL will reserve the right to recover the loss from the bidder as detailed below in case the damage/loss is due to negligence/ carelessness on the part of the bidder. In case of theft of material under bidder's custody, the same shall be reported to police by the bidder immediately and copy of FIR and subsequently police investigation report shall be submitted to BHEL /customer for taking up with insurance. However this will not relieve the bidder of his contractual obligation for the materials in his custody.
32.4	In case the damage/loss/theft of materials are attributable to negligence/failure in discharging the duties and obligations of the bidder, the expenses incurred for repair/replacement of such components in excess of the amount realized from the underwriters, limited to Normal Excess (Deductible Franchise) shall be recovered from the bidder.
32.5	In case the claim is summarily rejected by the underwriters due to WILFUL NEGLIGENCE of the bidder, the entire cost of repair/ replacement will be recovered from the bidder.
32.6	Other conditions of Insurance shall be as per relevant clause of GCC.
33.0	EMD, SECURITY DEPOSIT & PERFORMANCE BOND
33.1	EARNEST MONEY DEPOSIT (EMD)
33.1.1	EMD is to be paid by tenderers for securing fulfilment of any obligations in terms of the NIT. In case of EMD submitted in USD by the successful tenderer, the same shall be

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	<p>converted and adjusted towards the required amount of Security Deposit of 50%. In case of EMD in INR, whole EMD shall be converted into USD as per stipulated selling conversion rate of INR to USD as per State Bank of India (SBI) publication on tender floating date. In case of EMD in BDT, whole EMD shall be converted into USD as per stipulated selling conversion rate of BDT to USD as per Bangladesh Bank publication on tender floating date.</p> <p>Tender cost & EMD can be submitted in INR/ USD/ BDT for this tender.</p> <p>Exchange Rate of currency as available in the web site of Bangladesh Bank on the tender floating/publishing date. If the date happens to be a holiday / or rate is not published, then the exchange rate of next day / next published day will be considered.</p> <p>Irrespective of submission in any of the aforesaid modes, amount of refund of EMD shall be net of submitted EMD less applicable Bank charges.</p>
33.1.2	<p>EMD & Tender cost amount can also be submitted directly by Foreign Bidders (other than Indian bidders) to the followings Bharat Heavy Electricals Limited bank account in Bangladesh-</p> <ol style="list-style-type: none"> 1. SBI (Branch Address:-24-25, DILKUSHA C/A,DHAKA-1000,Branch Code 4984),A/C No. 05160293520001,BDT Account. 2. SBI (Branch Address:-24-25,DILKUSHA C/A,DHAKA-1000,Branch Code 4984),A/C No. 05160293510001,USD Account
33.1.3	<p>EMD & Tender cost amount can also be submitted directly by Indian Bidders to the followings Bharat Heavy Electricals Limited bank account in India-</p> <ol style="list-style-type: none"> 1. SBI (Branch Address:-Commercial Branch, Saltlake, Sector V, Kolkata, Branch Code SBIN0004289),A/C No. 11107800029,INR Account.
33.1.4	Amount of EMD exceeding INR 20 Lakh may be submitted in the form of Bank Guarantee (INR or eqv. USD).
33.1.5	All other terms & conditions shall be as per GCC.
33.2	SECURITY DEPOSIT(SD)
33.2.1	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.
33.2.2	<p>At least 50% of the required Security Deposit, including the EMD, shall be collected in before start of the work. Balance of the Security Deposit shall be collected by deducting 10% of the gross amount in USD progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.</p> <p>If the value of work done at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or recovered from payment/s due to the Contractor.</p> <p>The recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, with the approval of the authority competent to award the work.</p>
33.2.3	All other terms & conditions shall be as per GCC.
33.3	Performance bond is not applicable for this tender.
34.0	TIME SCHEDULE
34.1	The materials/ equipments/ components are likely to be received in stages for a

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	period of 48 (Forty Eight) months from the date of start of work, as certified by Construction Manager/Site Engineer, BHEL.
34.2	Bidder has to mobilize and commence the work within 15 (fifteen) days, from the date of intimation by BHEL. The exact date of start of work shall be reckoned based on certificate of Construction Manager, BHEL.
34.3	During the entire period of contract, bidder shall maintain proper progress, adequate manpower, requisite handling and transportation equipments, tools & tackles and other consumables etc to meet the schedule programme as per the priority given by BHEL engineer.
34.4	The scope of work under this contract is deemed to be completed only when so certified by the site engineer of BHEL. The decision of BHEL in this regard shall be final and binding on bidder.
35.0	MOBILIZATION ADVANCE
	Not applicable for this tender.
36.0	OVER RUN CHARGES
	Applicable as per GCC (Volume-IB) subject to minimum amount of USD 1550 per month. (USD – INR conversion factor is 64.581)
37.0	PRICE VARIATION COMPENSATION (PVC)/ ESCALATION
	Not applicable for this tender.
38.0	TAXES, DUTIES ETC.
38.1	<p><u>For Imports</u> Bidder may please note that import for the project shall be in the name of our Employer / Owner of the Plant / Project and such import other than Office and Household Equipment shall be exempted from payment of Customs Duty, VAT & AIT. Hence successful Bidder is requested to furnish EXHAUSTIVE ITEM –WISE LIST OF IMPORTED MATERIALS for the instant jobs/ works to facilitate us to arrange the requisite papers for exemption purposes. Any documentation needed for availing of Duty Free Imports will be submitted by the bidder in reasonable time having regard to the time for delivery of the work and the time for completion.</p> <p>Temporarily imported erection materials, machineries and spare parts during construction period of Project are exempted from payment of Customs Duty and VAT. Such items shall be exported within six months from the commercial operation date. Documentation for the same to be submitted / maintained by the bidder.</p> <p>Bidder shall quote their rates/ price inclusive of all taxes, duties in line with provisions as mentioned above etc. together with variation thereto during contract period including extension, if any. BHEL shall not release any additional payment in this regard.</p> <p><u>For domestically sourced / Execution</u> BHEL will not deduct any VAT from Bidder's Gross Bill and such bidder need not to load any Output VAT in Bidder's quoted price. A.I.T unless Exemption Certificate from the appropriate authority/ authorities is/ are furnished under Income Tax Act of Bangladesh , shall be deducted at prevailing rates on Gross Invoice Value from the bills</p> <p><u>For Both Imports & domestically sourced/ Execution</u> Except otherwise mentioned above all taxes, Charges, Royalties, Cess any State or Central Levy and other Taxes in or outside Bangladesh for materials supplied for the work and for the execution of the contract shall be borne by contractor and shall not be payable extra by BHEL</p> <p>Bidder should have valid 12 digit TIN number in Bangladesh prior to start of work.</p> <p>The bidder is responsible for compliance of all relevant Tax Laws of Bangladesh and all other related places outside Bangladesh in connection with this contract and</p>

	BHEL will not bear any such liability.		
38.2	<p>New tax & duties, if imposed subsequent to latest due date of offer submission, as per NIT & TCN, as applicable, by statutory authority after due date of submission of latest price offer and within the contract period including extension, if any (provided reason for extension is not attributable to vendor), shall be reimbursed by BHEL at actual on production of relevant supporting document to the satisfaction of BHEL. However, the vendor shall obtain prior approval from BHEL before depositing new taxes & duties.</p> <p>Benefits and/or abolition of all existing taxes must be passed on to BHEL against new Taxes, if any, proposed to be introduced at a later date.</p>		
39.0	TERMS OF PAYMENTS		
39.1	<p>Contractor should submit his monthly RA bill with all the details required by BHEL at the end of every month covering progress of work in all respects. The contractor shall submit his bills along with the following information:</p> <ul style="list-style-type: none"> i) Work order no and date. ii) Challan no and date. iii) Work completion report wrt challan. iv) Monthly work progress report / Day Book Register (DBR) v) Amount claimed. xi) Recoveries such as hire charges, demurrage, fine/ penalty etc, if any. xii) Certified man-hour regarding upkeepment, maintenance and preservation etc. 		
39.2	<p>The RA bill, complete in all respects accompanied by BHEL engineer's certificate/ jointly signed measurement sheet will be paid, as indicated elsewhere, subject to its completeness & correctness in all respects. The measurement will be taken by BHEL engineer as per relevant clause of GCC and certify regarding the actual work executed in the measurement book and bills for work. All admissible recoveries/ adjustments etc shall be made from the interim payable amount of each RA bill on completion of item of work. Contractor shall make his own arrangement for making payment of impending labour wages and other dues in the meanwhile.</p>		
39.3	<p>For all items of work as per Price Schedule, interim payment shall be made as per following break up. The following break up is only for the purpose of progressive payment and should not be construed as total scope of work. The total scope of work is as detailed in this tender document and shall be completed by the contractor without making any reference to the following break-up.</p>		
	Sl. No. of rate schedule	Description of activity	% of payment
39.3.1	1.1,	Unloading, re-loading, transporting, un-loading to covered store/ semi-covered store/ open storage yard/ place or place of erection, as required, as per direction of BHEL.	40%
	1.2,		
	1.3,		
	1.4,		
2.1 (a,b,c); & 3.1	2.1 (a,b,c);	Updation of store documents (both hard & soft) of above.	10%
	&	Proper stacking as per direction of BHEL.	20%
	3.1	Verification, as required, as per direction of BHEL.	20%
		Updation of store documents (both hard & soft) after stacking & verification.	10%
39.3.3	1.6, 1.7,	Material re-shifting/ re-stacking.	90%
	2.3 (a,b,c), 2.4 (a,b,c), 3.3, & 3.4	Updation of store documents (both hard & soft) of above.	10%
39.3.4	1.5, 2.2 (a,b,c), & 3.2	Issue of material to erection agency after identification of location	60%
		Updation of store documents (both hard & soft) of above.	40%
39.3.5	6.0	Providing manpower for preservation/ conservation/ maintenance.	90%
		Updation of store documents (both hard & soft) of above.	10%

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39.3.6	4.1a & 4.2 a	On mobilization of crane.	50%
		On de-mobilisation of crane.	50%
39.3.7	4.1b & 4.2b	Monthly hire charge.	100%
39.3.8	5.0 & 7.0	On execution of items.	100%
39.4	Out of above break up for payment, 5% will be retained from each bill which will be released on completion of guarantee period. However, this 5% payment can be released against submission of bank guarantee valid for the guarantee period as stated above in prescribed proforma subject to receipt of certificate that all works are completed in all respects. The submission of bank guarantee towards above is separate and the bank guarantee towards security deposit cannot be utilized for this purpose. The security deposit / Retention amount will be refunded as per GCC.		
39.5	1.5 % of gross bill amount shall be paid in the following manner on certification by BHEL engineer after compliance of each of following activity in each month. In case of non-fulfilment of respective activity by vendor in each month, no payment shall be made by BHEL against corresponding activity and no claim of bidder at a later date, whatsoever, in this regard shall be entertained by BHEL.		
39.5.1	0.7 % shall be paid on compliance of house keeping of vendor's working area and store/ office areas.		
39.5.2	0.3 % shall be paid on compliance of general illumination of vendor's working area and stores, office area.		
39.5.3	0.2 % shall be paid on compliance of applicable OHSAS requirement as per guideline of BHEL/ PSER and as specified in the tender.		
39.5.4	0.3 % shall be paid on compliance of applicable Safety requirement as per guidelines of BHEL/ PSER and as specified in the tender.		
39.6	The currency of payment shall be USD (\$). However for reasons, solely at the discretion of BHEL, if USD amount is not possible to be paid then BDT equivalent of USD will be paid at the Buying Exchange Rate of USD (of our banker) as on the date of payment. The quoted / accepted price shall remain Firm throughout the contract period including extension period, if any, without any escalation till handing over.		
39.7	Contractor's RA bill, complete & correct in all respects, certified by BHEL engineer, shall be paid within 30 days of date receipt of bill subject to its completeness & correctness.		
39.8	BHEL at its discretion may further split up the above percentages and effect payment to suit the site condition, cash flow requirement and according to the progress of work.		
40.0	CONTRACT PRICE		
40.1	The bidder shall quote their rates in compliance with specification and terms & conditions of tender and strictly in accordance with prescribed Price Schedule, Volume-III.		
40.2	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 +/- 15 % (plus/minus fifteen percent) of the awarded price as per LOI / WO.		
40.3	The work executed will be priced at the unit rate quoted by the contractor and accepted by BHEL. For the purpose of payment, the gross weight indicated in RR/ LWB / PWB will be taken into account for calculating the tonnage handled.		
41.0	GUARANTEE		
41.1	Even though the work will be carried under supervision of BHEL engineers, bidder will be responsible to ensure proper handling, storage/ upkeepment, preservation of materials/ equipment, timely lodging of FIR/ MDRs for lodging claims with the		

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	underwriter (by BHEL) during the entire contract period and shall guarantee the work done for a period of 12 months from the date of start of guarantee period, as certified by the engineer for good workmanship and shall rectify free of cost all defects due to faulty material management. In case bidder fail to make good the defective works within the time specified by the engineer, BHEL may proceed to undertake the remedial actions for such defective works at bidder's risk & cost without prejudices to any other rights and recover the same from SD/ other dues.
41.2	The guarantee period shall start from the date of completion of the scope of work under this contract which is to be certified by the BHEL engineer.
41.3	This supercedes relevant clause (Guarantee/ warranty) of the GCC.
42.0	SPECIFIC TERMS FOR CRANE DEPLOYMENT
42.1	The crane shall be provided with operator, helper, service & maintenance staff, fuel & all other consumables. The crane should be in good working condition.
42.2	DEPLOYMENT SCHEDULE- As per Annexure IV or relevant clause of the tender.
42.3	Payment beyond the period indicated in the Rate Schedule shall not be made unless extension of the deployment period is confirmed by Construction/ Project Manager, BHEL in writing.
42.4	The monthly rate quoted in the prescribed rate schedule shall remain firm throughout this period including extended period (if any).
42.5	Bidder shall submit separate rates for (i) Monthly rental of the crane inclusive of all lubricants, grease, spare parts, filters, consumables, operator, helper, maintenance staff etc. based on the working hours as above (ii) Mobilization and de-mobilization charges together for the crane to & from site are to be quoted separately in the enclosed price schedule format as per Volume-III (latest revision) of this tender.
42.6	For recording the hours of operation with engine on condition, vendor is required to maintain a separate register at site, which shall be certified by site engineer before release of payment for monthly fuel charges. The quoted rates shall remain firm throughout the entire contract tenure including extension if any.
42.7	The crane operation shall be executed under the usual conditions prevailing in major power plant construction and in conjunction with numerous other operations at site. The contractor and his personnel shall co-operate with all BHEL personnel, BHEL's customer, customer's consultants and all other contractors, coordinating the crane movements with others and work in a manner that shall not delay or hinder the progress of work of the project.
42.8	The contractor shall execute the work in most substantial and workman like manner. The materials and equipment of BHEL by the crane shall be handled with care and diligence, while same are handled by the crane.
42.9	Mobilization charges for crane shall be paid only after satisfactory commissioning and load test of the crane at site, and certification from BHEL site to this effect.
42.10	Demobilization charges shall be paid only on receipt of written confirmation from BHEL site that the crane has been dismantled and transferred from site by the vendor.
42.11	Towards fulfillment of the relevant safety norms, the contractor is required to submit valid test certificate for the crane to be deployed at site. On deployment, load test is to be conducted at site for which necessary load materials will be provided by BHEL free of cost. Local transportation of load materials shall be in the BHEL's erection subcontractor's scope.
42.12	Operation, maintenance, fuel (engine on condition) and all consumables required for regular daily running of the crane as per the working hours mentioned are to be provided by the contractor. The agency should provide adequate no operators, helpers and maintenance personnel to ensure trouble-free uninterrupted operation, services and maintenance of the crane at site. In case the contractor fails to provide the required fuels, consumable etc in time, BHEL reserves the right to supply the same and deduct the cost from contractor's bill with overhead, as required.
42.13	Normally the maintenance/ greasing activities in the crane shall be done by the contractor during recess period so that no working day is lost for outage of the crane. However, any breakdown/ repair of the crane shall be immediately attended

	by contractor at his own cost & risk. The contractor is to maintain stock of adequate spares & consumables with the required tools & tackles at site for this purpose.
42.14	A log book giving full operation/ maintenance/ downtime if any details shall be maintained by the contractor at site and regularly endorsed by BHEL site engineer through his signature on daily basis or as per the site procedure.
42.15	In case of operator's absence the contractor shall arrange alternative immediately for continuation of site work so as not to hamper the time scheduled erection program.
42.16	In case there is a total failure of the crane, the contractor should replace the same and bring substitute crane within a deadline of 20 days from outage, which shall be treated as idle period and no hire charges payment shall be made for this period. In the case of contractor's failure to do so, BHEL shall make alternative arrangements at the risk & cost of the contractor.
42.17	Necessary insurance coverage for the crane including Third Party liability and for the workmen (covering Workmen's Compensation Act) engaged by the contractor are to be taken at his cost and copy of the same should be submitted to BHEL at site before work commencement. If any accident/ injury occurs to any other persons/ public due to proven negligence/ non-adherence to relevant safety and other precautions on the part of contractor/ its employees, the contractor shall remain liable to pay necessary compensation and other expense, as decided by appropriate authorities.
42.18	The contractor shall follow & comply with all Safety Rules of BHEL and their customer, relevant provisions of applicable laws pertaining to 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 conflict between statutory requirement and Safety Rules of the client referred above, the later shall be binding on the contractor unless the statutory provisions are more stringent.
42.19	Any loss or damage to BHEL or customer's property due to negligence of the crew employed by the contractor is attributable to the contractor. BHEL shall not be responsible for any accident/ injury to the contractor's crew/ staff during operation or otherwise. Contractor has to assume full responsibility of the safety of their crew/ staff and to comply with the security/ safety regulations of BHEL and others at site.
42.20	BHEL shall provide space free of cost to the contractor at site, where they are to maintain a shed/ container for working facility of their personnel and keeping/ storing of their required hand tools, spares, slings, consumables etc. as necessary. General watch & ward/ security services may be provided by BHEL.
42.21	Contractor shall have to arrange entry gate passes for their crew/ staff at the construction plant site. Necessary support in regard to forwarding of documents shall be given by BHEL.
42.22	Electrical power/ illumination for your crane operation/ maintenance works at site shall be provided by BHEL at free of cost basis. However, the crane should have it's own lights for movement/ working in the working area at site.
42.23	The contractor shall comply with the plant security regulations in force at site in entry, exit, movement & working inside the plant premises. The contractor shall also ensure that all persons engaged by him for the work behave properly with BHEL and their client. In case of any reported misbehavior, contractor shall immediately withdraw such employee/ person from work.
42.24	Utilisation of cranes shall be certified by BHEL/engineer as per log book entry every month. Separate record to be maintained by the contractor duly certified by BHEL/engineer every month alongwith report of break down details of crane.
42.25	The period of breakdown shall be deducted from each month's bill in regard to crane deployment.
42.26	Use of cranes provided by the vendor beyond scheduled utilised period, as per Price schedule, if required, shall be intimated by BHEL/Site Incharge in writing prior to giving extension in writing.

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43.0	OTHER TERMS
	All other term & conditions of this specification, not mentioned above shall be governed by the pertinent provisions of GCC, Volume-IB.
44.0	RELEASE OF INFORMATION
	The Contractor shall not communicate or use in advertising, publicity, or sales release, photographs or other reproductions of the Work under this Contract, or descriptions of the size, dimensions, quantity, quality, or other information concerning the Work unless prior written permission has been obtained from the Employer.

ANNEXURE-I
APPROXIMATE WEIGHT SCHEDULE TO BE HANDLED

SL NO	MANUFACTURING UNIT/SOURCE	DESCRIPTION OF MAJOR SUPPLIES	APPRX WEIGHT (IN MT)
01	TIRUCHIRAPALLI, RANIPET, PIPING CENTRE, HYDERABAD, HARDWAR, BHOPAL, PEM (-NON-BHEL PKG), EDN,JHANSI, RUDRAPUR,EPD, IS, AND ASSOCIATED VENDORS	BOILER, FANS, APH, ,ESP,PIPING, SG/TG PIPING & CW/LP PIPING, MILLS, PUMPS, AND OTHER EQUIPMENTS ETC, STEAM TURBINE & AUXILIARIES, GENERATOR & AUXILIARIES, HEAT EXCHANGER, C&I ITEMS, TRANSFORMERS, BUS DUCTS, BATTERY ETC, ELECTRICAL AND CONTROL PANELS, CABLES, HT MOTORS, DG SET, ETC.	2,11,000 MT
02	PSER	REINFORCEMENT/STRUCTURAL STEEL	7,000 MT
		CEMENT	500 MT
		LUBRICANTS, CHEMICAL, FURNITURE, OFFICE ITEM, T & P ITEMS AND OTHER MISCELLANEOUS ITEMS	500 MT

Note: These are approximate quantities. Actual quantity may vary as per requirement.

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ANNEXURE-II

FOLLOWING IS EXCLUDED FROM THE SCOPE OF THIS CONTRACT -

1.0 BOILER CONSIGNMENT

- CEILING GIRDERS

2.0 OTHER CONSIGNMENTS

- GENERATOR STATOR
- GENERATOR TRANSFORMER
- STATION TRANSFORMER

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ANNEXURE-III

**TENTATIVE LIST OF T&P TO BE PROVIDED BY BHEL FREE OF COST
INSIDE PLANT BOUNDARY (ON SHARING BASIS)**

- BHEL shall not provide any T&P, free of cost for the scope of work under this contract.

ANNEXURE-IV
TENTATIVE LIST OF T&P/ MATL HANDLING EQUIPMENT TO BE PROVIDED
BY THE CONTRACTOR AT HIS COST

1.0 TOOLS & PLANTS

Sl no	Description	Qty	Tenative Deployment schedule from the date of start of work
1.0	Crawler crane of capacity 75 T or more having lattice boom of length min 40 mtr. (As per Price Schedule)	01	Within 30 days from the date of written notice from construction manager, BHEL for respective cranes.
2.0	Tyre mounted mobile crane with telescopic boom (of min length 30m) of capacity 40 T or more (As per Price Schedule).	02	Within 21 days from the date of written notice from construction manager, BHEL for respective cranes.
3.0	Crawler crane of capacity 25 T or more having lattice boom of length min 25 mtr.	02	1 st - Within 30 days from the date of written notice from construction manager, BHEL 2 nd – Within 2 months of SOW.
4.0	10/12/14/18 MT pick & carry type tyre mounted mobile crane.	04	1 st – Within 7 days of start of work (SOW). 2 nd , 3 rd & 4 th – Within 21 days from the date of written notice from construction manager, BHEL.
5.0	Mobile 9 mtr light mast having 4x400W halide lamps with DG set facility.	03	1 st - Within 14 days of start of work (SOW). 2 nd & 3 rd within 14 days from from the date of written notice from construction manager, BHEL.
6.0	40 T trailor	02 (minimum)	As per requirement
7.0	20 T trailor	02 (minimum)	As per requirement
8.0	Trucks.	As per requirement	As per requirement
9.0	Winches.	As per requirement	As per requirement
10.0	D-shackles.	-do-	-do-
11.0	Slings.	-do-	-do-
12.0	Max puller.	-do-	-do-
13.0	Pulley blocks.	-do-	-do-
14.0	Jacks.	-do-	-do-

2.0 MEASURING AND MONITORING DEVICES (MMD)

As per requirement, to be finalized at site.

NOTE

- | |
|---|
| 1. Cranes at Sl. No. 1 & 2 above shall be used for material handling. However, BHEL can deploy the same for other works also. BHEL shall have the control over use of this crane. |
|---|

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Operation of these cranes shall be 12 hrs/day with one hr. recess.
2. For balance T&P as per above list and any other Item required for carrying out the job, no separate payment shall be made and deployment of same will be within quoted rate.
3. In addition to the above necessary lifting tackles like slings, D-shackles, chain pulley blocks, tripods etc. are to be arranged by bidder. T&P shown in the above mentioned list are minimum requirement. Further requirement will be reviewed time to time at site and vendors will provide additional T&P/ equipments to ensure completion of entire work within schedule time without any financial implication to BHEL. Vendor will give advance intimation & certification regarding capacity etc prior to dispatch of heavy equipment.
4. The capacity of the cranes indicated are as per load chart and the same duty are to be performed during use.

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ANNEXURE-V
**TENTATIVE LIST OF CONSUMABLES /PROTECTIVE MATERIAL AS REQUIRED TO BE
PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST**

SL NO	DESCRIPTION
1.0	PVC
2.0	Kerosene
3.0	Jute
4.0	Tape
5.0	Brush
6.0	Emery paper
7.0	White finishing enamel
8.0	Wire brush
9.0	Weatherproof and fireproof covering material
10.0	Grease
11.0	Varnish
12.0	Silica gel
13.0	White spirit
14.0	Tarpauline
15.0	Zinc primer Red oxide Paints
16.0	Thinners For Paints
17.0	Parafin paper
18.0	End caps

NOTE

The above list is not exhaustive and all required the consumables required to complete the work shall have to be arranged by the successful contractor at his cost.

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Material Management work, consisting of receipt, unloading, handling, verification, storage, issue, record maintenance, etc of materials of boiler & auxiliaries, TG & auxiliaries, electrical system, control & instrumentation system, non-BHEL system, steel, cement, construction equipments, miscellaneous items etc. for 2x660 MW Maitree Thermal Power Project, Khulna, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-M1845:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-M1845:5819, Dated 24-07-2017.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:KLN-M1845:TCN-01, Dated 03-08-2017.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:KLN-M1845:TCN-02, Dated 05-08-2017.
	5.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION DJ-9/1, SECTOR-II, SALTLAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : (033) 23398000