

TENDER SPECIFICATION

No. BHE / PW / PUR / AMRT- MMS / 717

FOR

RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF COMPONENTS OF BOILER & AUXILIARIES; STEAM TURBINE & AUXILIARIES; ESP; GENERATOR & AUXILIARIES; ELECTRICALS, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES; HP PIPING, LP PIPING, TG PIPING; REFRACTORY & INSULATION; BHEL'S T&P; COMPONENTS & EQUIPMENTS OF VARIOUS OTHER SYSTEMS; AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR 5x270 MW AMARAVATI THERMAL POWER PROJECT UNIT No 1 to 5.

AT

NANDGAONPETH,
ADDITIONAL AMRAVATI INDUSTRIAL AREA,
INDIABULLS POWER LTD
DIST- AMRAVATI
MAHARASHTRA

PART- I

TECHNICAL BID SPECIFICATION (REV – 01 Dated 31/03/2010)

(TECHNICAL BID SPECIFICATION, NOTICE INVITING TENDER & GCC)



Bharat Heavy Electricals Limited

(A Government of India Undertaking)

Power Sector - Western Region

345-Kingsway, Nagpur-440 001

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§: Attached at the end of hard copy of Tender Specifications Part-I. Hosted in BHEL web page (www.bhel.com) as file titled "**NIT+GCC-717**".

@: Issued as separate hard copy booklet 'Tender Specifications Part-II (Price Bid-717)'. Hosted in BHEL web page (www.bhel.com) as file titled "**PRICE BID-717**".

Note:

Rest of the tender documents are included in Tender Specifications Part-I. Hosted in BHEL web page (www.bhel.com) as file titled "**TECH BID-717**"

NOTICE INVITING TENDER

Sealed tenders are invited in two bid system (viz. Part-I: Technical cum Commercial Bid and Part-II : Price Bid) from bidders meeting Qualifying Requirements (QR) as specified later in this NIT. Brief details of job and Tender Specification (T.S.) No. are as under.

T. S. No. – BHE/PW/PUR/AMRT-MMS/717

RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF COMPONENTS OF BOILER & AUXILIARIES; STEAM TURBINE & AUXILIARIES; ESP; GENERATOR & AUXILIARIES; ELECTRICALS, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES; HP PIPING, LP PIPING, TG PIPING; REFRACTORY & INSULATION; BHEL'S T&P; COMPONENTS & EQUIPMENTS OF VARIOUS OTHER SYSTEMS; AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR 5x270 MW AMARAVATI THERMAL POWER PROJECT UNIT No 1 to 5 AT NANDGAONPETH, ADDITIONAL AMRAVATI INDUSTRIAL AREA, INDIABULLS POWER LTD DIST- AMRAVATI MAHARASHTRA

- **Issue /Salesof T. S. Documents:** from 11/03/2010 to 31/03/2010**
- **Last Date for Tender Submission:** 01/04/2010 15.00 HRS**(Rescheduled to 09/04/2010 at 16.00Hrs)
- **Date of Opening Technical Bid:** 01/04/2010 16.00 HRS**(Rescheduled to 09/04/2010 at 16.00Hrs)
-

Earnest Money Deposit (EMD): Rs 2.00 Lakhs

* : Prospective bidders to obtain latest update of these dates from our web page www.bhel.com → Tender Notifications → View Corrigendum

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- Tender Specification documents with complete details are hosted in web page (www.bhel.com). Bidders can directly download the same and use for submission of offer. Tender Document charges shall be paid to BHEL along with or before submission of Offer.
 - Interested bidders may alternately collect hard copy of T.S. documents from this office on all working days within the sale period on payment of Tender Document charges.
 - Tender Specification Document Charges: Rs. 2,000/- by DD (in favour of BHEL payable at Nagpur) or cash. Courier charges will be Rs. 500/- extra if T.S. documents are requested through courier.
 - BHEL takes no responsibility for any delay/loss of documents or correspondences sent by courier/post.
 - Bidders who have deposited One Time EMD of Rs. 2.00 Lakhs with BHEL:PSWR:Nagpur will be exempted from submission of EMD with these tenders.
 - BHEL reserves the right to accept or reject any or all tenders without assigning any reasons whatsoever.
 - BHEL will operate Purchase Preference Policy of the Government of India as applicable.
 - Dates of Price Bid opening will be intimated to bidders later.
 - All corrigenda, addenda, amendments and clarifications to Tender Specifications will be hosted in this web page (www.bhel.com → Tender Notifications → View Corrigendum) and not in the newspaper. Bidders shall keep themselves updated with all such amendments.
 - BHEL reserves the right to reject any tender on the basis of unsatisfactory performance of the bidder in any ongoing job or any similar job in the last seven years or for furnishing false information/declaration in the offer

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Part I: Technical Specifications

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Qualifying Requirements (QR)

Bidder must fulfill the Qualifying Requirements as under in order to be considered as qualified for this Tendering process

a) Bidder must have, achieved any one of the following:

a.1) Bidder must have, in last seven years as on 28/02/2010, executed any one of the following listed works:

a.1.1) Material Handling Package of 2 units of 190 MW or higher Boiler-TG-Piping-Electrical-CI Package in a single Work.

OR

a.1.2) Material Handling Package of 1 unit of 490 MW or higher Boiler-TG-Piping-Electrical-CI Package in a single Work Order.

OR

a.1.3) Erection, Testing and Commissioning of Boiler (upto Boiler Light up or beyond) of one unit of 190 MW or higher.

OR

a.1.4) Erection, Testing and Commissioning of Steam Turbine Generator sets (upto Synchronization or beyond) of one unit of 190 MW or higher.

a.1.5) One job of material handling of 88,000 MT in a single Work Order in any industry **OR One job of material handling of Value of Rs. 288.00 Lakhs in a single Work Order in any Industry**

AND

Handling/unloading/stacking of atleast one ODC of 100 MT in the same or different Work Order.

OR

a.1.6) 2 jobs of material handling each of 55,000 MT or higher in any industry **OR 2 jobs of material handling of Value Rs. of 180.00 Lakhs each in any Industry**

AND

Handling/unloading/stacking of atleast one ODC of 100 MT or higher in the same or different Work Order.

OR

a.1.7) 3 jobs of material handling each of 44,000 MT or higher in any industry **OR 3 jobs of material handling Value Rs. of 144.00Lakhs each in any Industry**

AND

Handling/unloading/stacking of atleast one ODC of 100 MT or higher in the same or different Work Order.

a.2) Bidder should have been Techno Commercially Qualified for Material Handling Package of 1,10,000 MT or higher in One Tender by any Power Sector Region of BHEL, in the last 3(Three) years as on 28/02/2010.

b) Bidder must have achieved average financial turnover (Audited) of Rs 108 Lakhs per year over last three financial years i.e. 2006-07, 2007-08, 2008-09.

AND

c) Net worth of bidder based on Audited Accounts of 2008-09 should be higher than 50% of paid up capital in case of companies.

AND

d) Bidder must have earned cash profit in any one of the three Financial Years as applicable in case of 'b' above based on latest Audited Accounts.

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Explanatory Notes for QR 'a'

1. The word 'executed' means the bidder should have achieved the criteria specified in the QR even if the total contract has not been completed or closed
2. For the purpose of evaluation of QR, one MW shall be considered equivalent to 3.5 TPH wherever rating of HRSG/Boiler is referred/mentioned in MW
3. For a.1.1 & a.1.2, the word 'Executed' means the bidder should have handled at-least 80% of the incoming material in the scope of work.

GENERAL

1) **Timing of sale of Documents:** Tender Specification documents will be issued from BHEL PSWR Nagpur office from 10:00 AM to 4:00 PM on all working days within the period specified in the NIT.

2) **Holidays:**

Sale of Tender Documents shall not take place on National Holidays, holidays declared by the Central or State Governments, Sundays, second and last Saturdays and holidays of BHEL PSWR Nagpur HQ.

3) **Seeking Clarifications on Tender Specification:**

Clarifications on the Tender Specifications, if any, may be sought by the bidders so as to reach this office at least **seven days before the Due Date** for submission.

4) **Fulfillment of Qualifying Requirements:**

A bidder must satisfy **all the Qualifying Requirements** stipulated under 'a', 'b' etc of this tender concurrently in order to get qualified.

5) **Customer Approval:** In case customer approval is required for this package, bidder's offer will be accepted subject to approval of bidder by customer.

6) **Supporting Documents:**

Bidders shall submit documents in support of possessing "Qualifying Requirements" as under duly self-certified and stamped by the authorized signatory.

- List of jobs done with Name of the Project, Owner of Project, Name of Customer, Work Order Ref. No. & Date, Brief Details of Job, Executed Value, Date of Start, Date of Completion.
- Photocopies of Work Orders issued by the Customer containing details of Bill of Quantities/Schedule of Rates.
- Photocopies of Completion Certificate issued by Customer or Owner of Project.
- Photocopies of audited Profit and Loss accounts accompanied by relevant schedules for turnover figures.

7) **Earnest Money Deposit (EMD):** Refundable, Non-interest bearing EMD for each tender is indicated against each job earlier here. Bidders may also opt to deposit "One Time EMD" of Rs. 2.0 lacs and thus be exempted henceforth from payment of EMD

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with each Erection and Commissioning tender of BHEL-PSWR Nagpur. EMD shall be paid ONLY by **Account Payee Demand Draft** in favour of "Bharat Heavy Electricals Limited" payable at Nagpur.

Those bidders who have already deposited 'One Time EMD' earlier need not submit EMD with the present tenders. Please indicate the payment details of the 'One Time EMD' in each tender.

8) Tender Document Cost and Courier Charges:

Tender document charges @ Rs 2000/- per set and courier charges @ Rs 500/- per set shall be made by Account Payee Demand draft in favour of "Bharat Heavy Electricals limited" payable at Nagpur or in cash payable at cash counter of this Office. Courier charges shall be paid in case bidders requests for dispatch of Tender specifications by courier. In case bidder downloads the Tender specifications etc from web page, they shall remit the Tender document charges (Rs 2000/-) positively along with or before submission of offer.

9) Liquidated Damages/Penalty: BHEL will impose Liquidated Damages and Penalty as per suitable clauses in the respective Tender Specifications on account of delay, violation of contract conditions and non-performance attributable to the contractor.

10) LATE TENDER : Tender received after the specified time of submission shall not be considered in any circumstances.

Sr Dy. General Manager (Purchase)
BHEL:PSWR:Nagpur

BHARAT HEAVY ELECTRICALS LIMITED

(A GOVERNMENT OF INDIA UNDERTAKING)
POWER SECTOR - WESTERN REGION
SHREEMOHINI COMPLEX
345-KINGSWAY, NAGPUR 440 001

TENDER SPECIFICATION DOCUMENT ISSUE DETAILS

TENDER SPECIFICATION No. BHE / PW / PUR / AMRT-MMS/717

NAME OF THE WORK: RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF COMPONENTS OF BOILER & AUXILIARIES; ESP, STEAM TURBINE & AUXILIARIES; GENERATOR & AUXILIARIES; ELECTRICALS, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES; HP PIPING, LP PIPING, TG PIPING; REFRACTORY & INSULATION; BHEL'S T&P; COMPONENTS & EQUIPMENTS OF VARIOUS OTHER SYSTEMS; AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR 5x270 MW AMARAVATI THERMAL POWER PROJECT UNIT No 1 to 5 AT NANDGAONPETH, ADDITIONAL AMRAVATI INDUSTRIAL AREA, INDIABULLS POWER LTD DIST- AMRAVATI MAHARASHTRA

EARNEST MONEY DEPOSIT: Please see Special Conditions of Contract.

LAST DATE FOR TENDER SUBMISSION: Please obtain updated information from web page "<http://www.bhel.com>" → Tender Notifications → View Corrigendum.

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING **PART-I** AND **PART- II** ARE ISSUED

TO:

M / s.

.....

PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

Sr DGM (Purchase)
Place: Nagpur
Date:

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
POWER SECTOR - WESTERN REGION
345, KINGS WAY - NAGPUR 440 001

PROCEDURE FOR SUBMISSION OF SEALED TENDERS

The tenderer must submit their tenders as required in two parts in separate sealed covers prominently superscribed as Part-I Technical Bid and Part-II Price Bid and also indicating on each of the covers the tender specification number and due date and time as mentioned in the tender notice.

PART-I (TECHNICAL BID) COVER-I

Excepting rate schedule, all other schedules, data sheets and details called for in the specification shall be enclosed in Part-I "Technical Bid" only.

PART-II (PRICE BID) COVER-II

All indications of price shall be given in this Part-II "Price Bid". **EMD shall not be included in this cover.**

These two separate covers-I and II (Part-I and Part-II) shall together be enclosed in a third envelope (cover-III) alongwith requisite EMD as indicated earlier and this sealed cover shall be superscribed and submitted to Sr DGM (Purchase) at the above mentioned address on or before the due date as indicated.

The qualified tenderer will be intimated separately about the status of their offer.

Tenderer are requested to make specific note of the following conditions:

- Contractor should have adequate resources including major T&Ps at his disposal for this job.
- Contractor should have sound financial stability.
- Tenderer should meet quality requirement regarding workmanship, deployment of personnel, erection tools and necessary inspection, measurement & testing instruments.
- All information as called for in various appendices and clauses of tender specification should be furnished in completeness. Please refer the checklist.
- Clarification on tender if any, shall be obtained by the tenderer before submitting their offer.
- Offers must be submitted without any deviation.
- Offers received with any deviation or without relevant information as described above are liable to be rejected. Price bids received in the form other than specified in Part-II (Price Bid) are liable to be rejected.

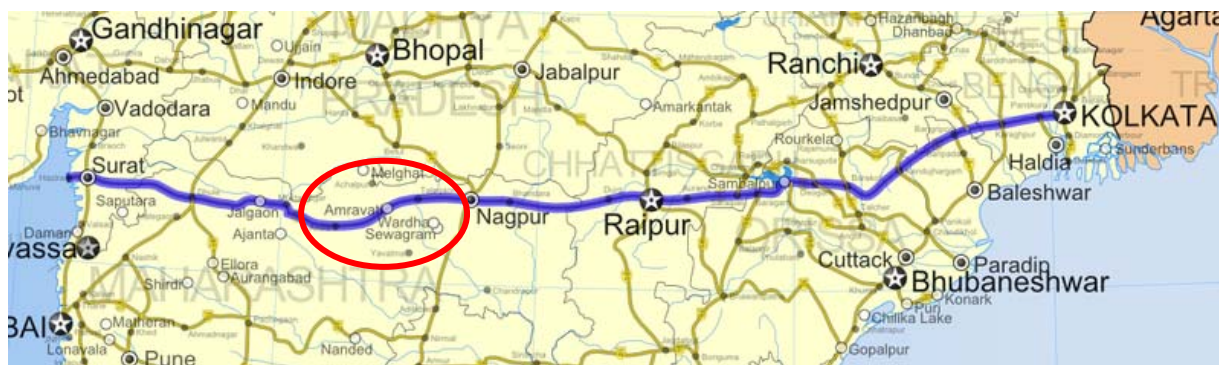
PROJECT INFORMATION

BACKGROUND

INDIABULLS POWER LTD. is setting up a coal based 5x270 MW Thermal Power Project at Nandgaonpeth, Additional Amravati Industrial Area, Dist: Amravati, Maharashtra. Project Site is located at a distance of 22 KM from Amravati District on NH-6 near Nandgaonpeth.

Nearest Railway Station : Badnera about 20 KM from project site.
Badnera is located at a distance of 175 KM from Nagpur on Howrah - Mumbai main line of Central Railways passing through Sevagram, Wardha, Pulgaon, Dhamangaon, Badnera.

Nearest Highway : National Highway No NH-6 (Surat to Kolkata). Highway passes through Jagaon, Amravati, Nagpur, Raipur



Nearest Airport : Nagpur 150 KM (By road)

CLIMATE

Amravati is located between 20°56'N 77°45'E to 20.93°N 77.75°E. It has an average elevation of 343 metres. Amravati has a tropical wet and dry climate with hot, dry summers from March to June, the monsoon season from July to October and warm winters from November to March. As far as the climate of the city is concerned, one can notice extreme variations in the temperatures. The summers in Amravati are very hot. The maximum as well as continuous rainfall is received, from the South Westerly monsoons, in the months of July and August.

Max Temp	:	44.5 Deg. C.
Min Temp	:	12.4 Deg. C
Rainfall	:	841.80 mm (Average)
Seismic Zone	:	Zone III as per IS : 1893

CHECK LIST

(VIDE PARA 1.3 OF SECTION-I OF GENERAL CONDITIONS OF CONTRACT)

1	NAME OF THE TENDERER WITH ADDRESS		
2	NATURE OF THE FIRM	LIMITED / PARTNERSHIP / PROPRIETARY	
3	EMD DETAILS (Rs. 2.0 LACS BY DD ONLY OR ONE TIME EMD)		
4	VALIDITY OF OFFER (REQUIRED 6 MONTHS FROM DUE DATE)		
5	MOBILIZATION TIME (As Per Tender Conditions)		
6	WHETHER NO DEVIATION CERTIFICATE FURNISHED	YES	NO
7	TENDERER HAS VISITED THE PROJECT SITE AND ACQUAINTED WITH THE SITE CONDITIONS	YES	NO
8	DETAILS OF CONCURRENT JOBS ARE FURNISHED (AS PER RELEVANT APPENDIX)	YES	NO
9	HEAD QUARTER'S ORGANISATION IS FURNISHED	YES	NO
10	PROPOSED SITE ORGANISATION IS FURNISHED	YES	NO
11	FINANCIAL STATUS OF THE COMPANY (RELEVANT ANNEXURE OF GCC) IS FURNISHED	YES	NO
12	PROFIT & LOSS ACCOUNT FOR PRECEDING THREE YEARS IS FURNISHED	YES	NO
13	LATEST SOLVENCY CERTIFICATE FROM THE BANKER IS FURNISHED	YES	NO
14	LATEST INCOME TAX CLEARANCE CERTIFICATE OR COPY OF PAN CARD ACCOMPANIED BY 'IT RETURN' COPY IS FURNISHED	YES	NO
15	MANPOWER DEPLOYMENT PLAN (AS PER RELEVANT APPENDIX) IS FURNISHED	YES	NO
16	MONTHWISE DEPLOYMENT PLAN FOR MAJOR T&P (AS PER RELEVANT APPENDIX) IS FURNISHED	YES	NO
17	ANALYSIS OF UNIT RATES QUOTED (AS PER RELEVANT APPENDIX) IS FURNISHED	YES	NO
18	POWER OF ATTORNEY ENCLOSED IN FAVOUR OF PERSON MAKING OFFER.	YES	NO
19	DETAILS OF SIMILAR WORK DONE IN LAST SEVEN YEARS (AS PER RELEVANT APPENDIX) AND SUPPORTING DOUCMENTS FURNISHED.	YES	NO

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20	PROGRAMME FOR THE SUBJECT WORK FURNISHED	YES	NO
21	BIDDER HAS FAMILIARIZED HIMSELF WITH ALL RELEVANT LOCAL LAWS & CONDITIONS.	YES	NO
22	WHETHER ALL THE PAGES OF THE TENDER DOCUMENTS ARE READ, UNDERSTOOD AND SIGNED	YES	NO
23	<p>WHETHER THE FOLLOWING DETAILS PERTAINING TO YOUR BANK ACCOUNT DULY ENDORSED BY THE BANK HAVE BEEN FURNISHED {TO ENABLE BHEL RELEASE PAYMENTS THROUGH ELECTRONIC FUND TRANSFER (EFT / RTGS) AS SPECIFIED IN SECTION 12 }</p> <ol style="list-style-type: none"> 1. Name of the Company 2. Name of Bank 3. Name of Bank Branch 4. City / Place 5. Account Number 6. Account type 7. IFSC code of the Bank Branch 8. MICR Code of the Bank Branch 	YES	NO

NOTE: STRIKE OFF YES OR NO, AS APPLICABLE

DATE:

SIGNATURE OF TENDERER

DECLARATION BY BIDDER'S AUTHORIZED SIGNATORY

REFERENCE: TENDER SPECIFICATION No. BHE / PW / PUR / AMRT-MMS/717

I, _____ HEREBY CERTIFY THAT ALL THE INFORMATION AND DATA FURNISHED BY ME WITH REGARD TO THIS TENDER SPECIFICATION ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I HAVE GONE THROUGH THE SPECIFICATIONS, CONDITIONS AND STIPULATIONS IN DETAIL AND AGREE TO COMPLY WITH THE REQUIREMENTS AND INTENT OF THE SPECIFICATION. I FURTHER CERTIFY **THAT I AM DULY AUTHORISED REPRESENTATIVE OF THE UNDERMENTIONED BIDDER AND A VALID POWER OF ATTORNEY TO THIS EFFECT IS ALSO ENCLOSED.**

DATE:

SIGNATURE OF AUTHORIZED SIGNATORY WITH SEAL

CERTIFICATE OF NO-DEVIATION

REFERENCE: TENDER SPECIFICATION No. BHE / PW / PUR / AMRT-MMS/717

I / WE, M / s
.....

HEREBY CERTIFY THAT NOTWITHSTANDING ANY CONTRARY INDICATIONS / CONDITIONS ELSEWHERE IN OUR OFFER DOCUMENTS, I / WE HAVE NEITHER SET ANY TERMS AND CONDITIONS NOR THERE IS ANY DEVIATION TAKEN FROM THE CONDITIONS OF BHEL'S TENDER SPECIFICATIONS, EITHER TECHNICAL OR COMMERCIAL, AND I / WE AGREE TO ALL THE TERMS AND CONDITIONS MENTIONED IN BHEL'S TENDER SPECIFICATION WITH ASSOCIATED AMENDMENTS AND CLARIFICATIONS.

Signature of the Bidder
Date:

**CERTIFICATE CONFIRMING
KNOWLEDGE ABOUT SITE CONDITIONS**

REFERENCE: TENDER SPECIFICATION No. BHE / PW / PUR / AMRT-MMS/717

We, M / s

Hereby declare and confirm that we have visited the project site as referred in BHEL's Tender Specification under reference above and acquired full knowledge and information about the site conditions. We further confirm that the above information is true and correct and we shall not be eligible for any additional payment of any nature due to lack of knowledge or non-familiarization of site conditions.

BIDDER'S NAME AND ADDRESS:

SIGNATURE & OFFICIAL SEAL OF BIDDER'S
AUTHORISED SIGNATORY

PLACE:

DATE:

SECTION-3

OFFER OF THE BIDDER

To,

The Add. General Manager (Purchase)
Bharat Heavy Electricals Limited
Power Sector - Western Region
Shreemohini Complex
345, Kingsway
Nagpur 440 001

Dear Sir,

I / we hereby offer to carry out the work detailed in tender specification no **BHE / PW / PUR / AMRT-MMS/717** issued by Bharat Heavy Electricals Limited, Power Sector-Western Region, Nagpur, in accordance with the terms and conditions thereof.

I / we have carefully perused the following listed documents connected with the above work and agree to abide by the same.

1. Instructions to bidders
2. General conditions of contract
3. Special conditions of contract
4. Other sections, appendices, schedules and drawings.

I / we have deposited / forwarded herewith the earnest money deposit (EMD) as per requirement specified in the Tender Specification, details of EMD payment are furnished in the Check-List.

EMD shall be refunded should our offer not be accepted / EMD need not be refunded and the amount may be treated as "one time EMD" for erection and commissioning tenders of BHEL-PSWR, Nagpur. Should our offer be accepted, I / we further agree to deposit security deposit for the work as provided for in the tender specification within the stipulated time as may be indicated by BHEL, Power Sector-Western Region, Nagpur.

I / we further agree to execute all the works referred to in the said documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

Place:
Date:

Signature of bidder:
Address:

Witnesses with their address

Signature	Name	Address
1.		
2.		

SECTION-4
SPECIAL CONDITIONS OF CONTRACT
SCOPE OF WORK

4.1 BROAD SCOPE OF WORK

The scope of work of this tender specification of material handling and materials management services for 5x270 MW Unit 1 to 5 at Nandgaonpeth, Additional Amravati Industrial Area, Indiabulls Power Ltd Dist- Amravati Maharashtra shall broadly be as under:

- Receipt and Unloading of various components of the power plant (as detailed later in this tender specification) **including heavy and over-dimensional consignments** (e.g. boiler drum, ceiling girders etc) directly from trailers / wagon by suitable crane or by jack and sleeper method including levelling of the unloading area and attendant work.
- BHEL will despatch the plant materials both by **road transport** on door delivery basis upto the project site and by **rail transport** upto the nearest railway siding. Contractor shall receive all such consignments at the respective location, unload, and carry out local transportation upto the stacking yard / storage sheds inside the project premises.
- Collection of materials (dispatched by road transport on go-down delivery basis) from transporters' go-downs at Amravati, loading at transporters go-down, local transport up to BHEL stores / storage yard at project premises and unloading thereof.
- **Preliminary verification** of all materials at the time of unloading from transport vehicle or while receiving consignments from transporters' go-down - as the case may be, reporting immediately the discrepancies like damages and shortages noticed.
- **Detailed verification** of materials with reference to packing list and loading advice slip after unpacking of boxes & crates; repacking, where called for, after detailed verification; preparation of receipt inspection reports.
- **Stacking and storing** at BHEL open storage yard / covered stores / closed & semi-closed sheds in project premises, submission of stacking / storing records.
- **Preservation** of the materials in accordance with BHEL's preservation manual or BHEL vendors' manual as applicable else as per BHEL's instructions.
- **General cleaning, grass cutting and upkeep of storage yard, covered and semi-closed stores sheds** within the quoted rates for unloading, verification and stacking.
- **Providing Materials Management Services** (refer clause no. 4.12).
- **Re-handling and restacking** of materials as and when called for by BHEL. This also includes excess / redundant / scrap materials returned to stores by BHEL's erection contractors.
- **Handling and loading of outgoing materials** those are to be sent to other destinations.

4.2 SYSTEMS & PACKAGES IN SCOPE OF WORK

4.2.1 Components of the following major systems are to be handled under this contract:

1. Steam Generator & associated equipment
2. Dust Precipitation & collection system
3. Steam Turbine & Turbo Generators (**excluding Generator Stator**), along with associate equipment
4. Control & instrumentation equipment - TG / SG integral & station C& I along with cable & cable trays
5. Condensate system comprising of Surface condenser, Gland steam Condenser, Vaccum Pumps.
6. Regenerative cycle auxiliaries comprising CEP, LP Heaters, Deareator, MDBFP, HP Heater along with associated piping.
7. Power cycle piping & valves
8. HP / LP chemical Dosing system
9. Boiler Fill Pump and associated piping & valves.
10. Hot well make up Pump and associated piping & control valves
11. Closed circuit DMCW system
12. Central Lube oil storage & transfer system
13. Thermal insulation refractory & cladding of piping equipment
14. Condensate Storage Tank
15. ACW system for BTG package
16. CW piping up to A - row along with associate BFV's, RE joints and debris filter
17. Condenser On Load Tube cleaning System
19. DM make up water system
20. Wet steam washing system.
21. C& I lab instrument.
22. Empty H2 & CO2 cylinder
23. Generator relay panels
24. Cable & cable trays for power cables
25. SWAS & flue gas analyser
26. Generator Hydrogen gas purity analyser

27. UPS system for BTG
28. Silencer for SH RH & low set for drum
29. Coal sampling system
30. Electrical control Panel
31. DDCIMS for Electrical Control System
32. BHEL Own T & Ps

The packages indicated above are only the tentative indication and should in no way become a basis for any claim on account of any variation in package.

4.2.2 SOME MAJOR HEAVY SINGLE CONSIGNMENTS :

SN	Description	Approx Wt
01	Boiler Drum	134 MT
02	Ceiling Girder – Heaviest Piece	40 MT
03	Water wall Inlet Header	30 MT
04	Generator Rotor	48 MT
05	LP Rotor	56 MT
06	IP Turbine	58 MT
07	HP Turbine	56 MT
08	HP Heaters	40 MT
09	Cabins / Crawlers of 75 / 100 / 150 MT & Heavy Lift capacity Cranes of BHEL	Up to 60 MT

Approx quantum of material will be around 110000 MT for the entire scope of work.

The weights indicated above are only the tentative indication and should in no way become a basis for any claim on account of any variation in actual weight.

Bidder may please note that Generator Stator is excluded from the scope of the work under this contract.

4.3

The intent of specification is to provide material handling and materials management services according to the most modern and proven techniques and codes. The omission of specific reference to any method, equipment or materials necessary for proper and efficient unloading, transportation, verification, stacking & preservation etc shall not relieve the contractor of the responsibility of providing such facilities to complete the work without any extra compensation.

4.4

The work shall be executed under usual conditions affecting major thermal power projects in an existing power plant and in conjunction with numerous other operations at site. The contractor and his personnel shall cooperate with personnel of customer's contractors, coordinating his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.

4.5

All the work shall be carried out as per the instructions of BHEL engineer. BHEL engineer's decision regarding correctness of the work and method of working shall be final and binding on the contractor.

4.6

The contractor shall perform all required services which may not be specified herein but nevertheless required for the completion of work within quoted rates.

4.7

All necessary certificates and licenses required to carry out this work are to be arranged by the contractor expeditiously.

4.8

All cranes, transport equipments, handling equipment, tools, tackles, fixtures, equipment, manpower, supervisors / engineers, consumables (excluding those indicated as BHEL scope), etc required for this scope of work shall be provided by the contractor.

4.9

All expenditure including taxes and incidentals in this connection will have to be borne by the contractor unless otherwise specified in the relevant clauses elsewhere here. The contractor's quoted rates shall include of all such contingencies. In this connection refer relevant clause of general conditions of contract.

4.10 RESPONSIBILITIES OF CONTRACTOR AND SCOPE OF WORK RECEIPT, UNLOADING, VERIFICATION AND STACKING ETC

4.10.1

It will be responsibility of the contractor to keep in touch with officials of BHEL regarding advance information about arrival of consignments. The contractor shall collect lorry way bills, railway receipts or other such dispatch documents.

4.10.2

The contractor shall remain in regular contact with the concerned transporters or railways based on the dispatch details obtained as stated above and make all necessary arrangements for collection / receipt of the consignment as applicable. Contractor shall take advance action to deploy all necessary resources for local transportation, handling and unloading of the anticipated consignments so as to ensure no loss of time upon arrival of the consignments.

4.10.3

Payment of demurrage / wharfage etc., which result due to contractor's fault, shall be the responsibility of contractor and to his account. If BHEL has to make payment of such demurrage / wharfage together with freight (payment of freight alone is in BHEL's scope), the amounts so paid as demurrage / wharfage for the reasons stated above shall be paid to BHEL by the contractor forthwith or shall be recovered from the bill payments due to the contractor.

4.10.4

It would be responsibility of the contractor to examine the packages, consignments etc. Immediately on arrival and bring to the notice of BHEL authorities regarding loss / damage /

shortage / discrepancy, if any, observed in the consignments before taking delivery of the same.

4.10.5 INCOMING AND OUTGOING SMALLS

Contractor shall arrange collection, from transporters' godowns, of materials (smalls) dispatched by road transport on Godown delivery basis, loading at transporters Godown, local transport up to BHEL / client's stores / site and unloading. Payment for loading at the transporter's Godown, unloading at stores / storage yard / site, verification and stacking will be made as per unit rate vide item Sl.No. A.1 of rate schedule and terms of payment as per section-12. However, for transport of smalls from godown to site, pro-rata payment @ Rs. 10 /- (Ten only) per km for total to and fro distance, as certified by BHEL engineer, shall be made. No other payment such as minimum charges for carrier etc will be made. All arrangements including transport, labour and other T&P etc is in contractor's scope. Prior approval of BHEL engineer should be obtained for such trips to transporters' godown(s). These godowns are expected to be located within a radius of **35 km approx from the project site**.

Similarly, for any smalls to be sent to different locations / sites from site and which needs to be brought to transporter's / railway godown for booking same arrangement as above shall be adopted.

In case of consignments in smalls, the weight of package shall be checked with the invoiced weight of the packages and any discrepancies shall be reported immediately to BHEL / transporter.

4.10.6

For all such consignments, observations regarding loss / damage / shortage / discrepancy is to be recorded in appropriate document and informed to BHEL. In case it becomes necessary to take '**open delivery**' from the authorities, contractor shall make all arrangements for taking open deliveries. All expenses connected therewith shall be to the account of contractor. Any loss that accrues to BHEL on account of such failures shall be debited to the contractor and recovery effected from his running bills.

4.10.7

Any discrepancy / shortage / damage found in the consignment after taking clean delivery from the carriers shall be the responsibility of contractor and the resultant loss to BHEL on such account shall be recoverable from the contractor.

4.10.8

Consignments are expected to arrive during any time of the day, and count down for demurrage / wharfage will start immediately, unloading of such consignments may be necessitated even in the night or round the clock. Contractor shall arrange to deploy his resources immediately and continue round the clock on such occasions without any additional cost to BHEL. Contractor shall arrange necessary spot lighting for working at night. The contractor shall similarly unload consignments arriving on weekly off days and holidays.

4.10.9

Unloading at storage area / work site, stacking and restacking if necessity arises, of heavy / sophisticated equipments like tubed wall panels of boiler, heavy motors, coal mill components, heavy bearing pedestals, fan impeller and servomotors, electrical panels and TG equipment like heavy turbine components, pumps, panels, etc. shall be done as per storage and preservation manual of BHEL and / or as per directions of BHEL engineer.

4.10.10

The contractor shall verify the consignments in detail within the time frame prescribed by BHEL. Contractor shall arrange all facilities to open packages - where required in the presence

of BHEL engineer, verify the contents, repack wherever and whenever called for and properly stack them as per storage manual or / and as may be directed by BHEL.

4.10.11

The material shall be so stacked that it should facilitate easy identification, retrieval and handling for issue as and when need arises.

4.10.12

Pre-defined identification system of the locations of open storage yard, semi-closed shed, covered stores as well as storage racks has to be designed by the contractor with the approval of BHEL. Contractor shall put up prominent identification boards of segmental locations (for open and semi-closed stores) or inscription (on the storage racks) with clear visibility from a distance. Contractor shall also arrange to display plot plan at regular intervals in the covered / semi-closed / open storage. The contractor shall arrange proper displays / signs for various requirements as per instructions of BHEL.

4.10.13

The contractor shall execute the work in a professional manner. The stores shall be handled with due care and diligence. The contractor at his risk and cost shall make good any loss to BHEL due to contractor's lapse.

4.10.14

Loading on to the transporter's trailer / truck for onward transmittal to other destinations is also scope of work of contractor. Payment for these shall be made as per relevant items of rate schedule.

4.10.15 HANDLING OF MATERIALS ARRIVING ON RAILS

Presently there is no railway siding inside the project premises. In due course of project execution the railway siding may be made available by M / s India Bulls.

Normally the materials shall be dispatched through road. However, supply of materials from manufacturing units / vendor works through Rail may take place. Taking delivery of materials from Railway siding at Amravati, loading, transportation to storage area / work site, stacking and restacking, if necessity arises, will be in the scope of work of the Contractor.

4.10.15.1

Contractor shall have liaison with railways at all concerned locations to obtain prior intimation of arrival of consignments, and line up resources accordingly and make other arrangements as may be necessary.

4.10.15.2

Contractor shall keep his resources ready at unloading bay / location before bringing the rake inside plant so as not to lose any time and return the empty rake at the earliest. Any demurrage levied shall be to the contractor's account.

4.10.15.3

Contractor shall deploy his crane, trailers / trucks and all other T&P including additional T&P and manpower etc for handling of materials at such unloading bay / location and transport to stores / storage yard.

4.10.15.4

Contractor shall provide area lighting at railway siding for handling of materials during evening / night and any other situation necessitating the same.

4.10.15.5

In addition to above, all the responsibilities specified in the contractor's scope for the materials received by road shall also be applicable mutatis-mutandis for all the consignments received by rail.

4.10.15.6

For the consignments received by rail the payment will be made on pro-rata basis at the rate of 1.25 (one point two five) times the accepted rate applicable for unloading of consignments received by road.

Contractor shall complete the work satisfactorily in respect of consignments received by rail as specified above. The payment will be released as per terms of payment specified in section-12 special conditions of contract.

4.10.16 HEAVIER CONSIGNMENTS

4.10.16.1 BOILER DRUM

Boiler drum will be arriving in its Special Rail wagon / Special Tractor inside the project premises. Contractor shall unload the boiler drum using jack & sleeper / suitable crane (to be arranged by the contractor) from the special wagon / Tractor. Contractor shall also carry out the necessary leveling & consolidation of the unloading area and attendant work.

4.10.17 SHIFTING / RE-STACKING / RE-ARRANGING

Over a period of time, restacking / rearranging of the materials stacked earlier may arise due to various reasons. The handling of such items will also be in the scope of this contract. The restacking / re-handling may be necessitated for any equipment / materials covered within this work specification. Contractor shall deploy necessary resources like manpower, T&P, equipments etc to carry out this exercise including proper inscription of identification marks if needed, preparation and submission of list of items restacked, updating stock records about change in location etc.

Restacking and rearranging shall be applicable for materials returned by BHEL's erection contractors also.

Separate item rate shall be quoted for restacking / re-arranging / shifting of staked materials as asked under item no. A.2 of the rate schedule.

4.11 OTHER POINTS

4.11.1

This is an green field project and there is likely to be usual constraints on basic infrastructure facilities. Contractor, therefore, before submission of tender, shall visit the site and assess the local conditions and availability of infrastructures, entry and traffic restrictions and get acquainted with general procedures by customer related to BHEL / its agencies' and interface activities. Claims for not having proper knowledge on site condition shall not be entertained.

4.11.2

The distances indicated in these specifications if any are only approximate. However, the bidders should assess the various distances and site conditions by visiting site before submitting their offer. No additional / extra claims for any variation in this regard will be entertained.

4.11.3

Contractor shall arrange for cutting and removal of vegetation growth / grass etc in the storage yard as and when called for by BHEL as incidental to work. BHEL will take appropriate action at the risk & cost of the contractor in case of failure in this regard.

4.11.4

If the contractor or his workmen or employees break, deface, injure or destroy any part of a building, road, kerbs, fence, enclosures, water pipes, cables, drains, electric or telephone posts or wires, trees or any other property or to any part of erected equipments, stored components etc. Within the project premises or outside the contractor shall make the same good at his own expenses.

4.11.5 Exclusion from Scope:

Following activities are excluded from the scope of work under the present tender specification:

- 1) Shifting / Dragging of Boiler Drum from Unloading Area
- 2) Unloading and Shifting of Generator Stator

4.12 SCOPE OF WORK FOR PROVIDING MATERIALS MANAGEMENT SERVICES

According to the contract between BHEL and India Bulls the schedule of important milestones for Unit 1 is as follows:

- | | |
|-------------------------------|--------------------------|
| a) Start of Material Receipt: | May 2010 (For all Units) |
| b) Boiler Drum Lifting: | Nov 2011 |
| c) Synchronization: | Mar 2012 |
| d) Trial Operation: | May 2012 |

For Balance Units There will be a gap of 2 months from previous Unit.

However due to unforeseen circumstances, the aforesaid schedule may get altered during execution of work at project. Contractor shall provide the Materials Management Services as per actual progress of the project.

4.12.1

As is normal to any project execution, the flow of material may not follow linear pattern. Thus the requirement of MM services will vary from month to month. Similarly issue of materials to erection agencies may vary from month to month depending upon the stage of completion. After major receipts and issues, the thrust will shift towards final reconciliation with erection agencies. From time to time, the contractor shall modulate his resource deployment in consultation with BHEL for effective & satisfactory delivery of required MM services in all respect.

4.12.2 SCOPE OF MATERIALS MANAGEMENT SERVICES

The contractor under this contract shall provide following four categories of services towards proper materials management at the project site.

(a) SUPERVISION SERVICES (Maximum two service points simultaneously)

- (1) Scope includes supervision of various activities as follows.

- (i) Receipt, unloading, carrying out receipt inspection, detailed verification, stacking and regular stock verification of project materials at site.
- (ii) Preparing various reports at appropriate stages and reporting damage / loss during receipt as well as storage and any other associated responsibility as assigned by BHEL from time to time. Responsibility shall include the following activities:
 - A. Examination of incoming consignments to detect any loss or shortage or outward damage and recording it on the LR / LWB before making acknowledgement of it's receipt from the transporter and simultaneously obtaining endorsement of the vehicle driver on the same.
 - B. Reporting such discrepancy to BHEL immediately on receipt of consignment.
 - C. Assisting BHEL in lodging insurance claims in respect of loss / damage as stated above.
- (iii) Issue of materials to BHEL's erection contractors, preservation of stacked materials, re-stacking / re-handling as necessary, progressive and final reconciliation with BHEL's erection agencies and preparation of necessary document / record in respect of these activities.
- (iv) Return of excess / defective materials by various erection contractors of BHEL.
- (v) Loading and dispatch of outgoing materials.

(2) Expected minimum quality of service

Contractor shall render the supervisory services by ensuring deployment of requisite personnel with adequate educational qualification of engineering / technical background, having thorough experience in related field to enable understanding the intricacies of and special requirements involved in handling of project materials, inconsistencies and uncertainties associated with in / out flow of materials, project activities at odd hours & holidays and irregular working hours. Contractor shall ensure prompt and timely availability of such services as and when required by BHEL.

(b) PRESERVATION OF COMPONENTS (Maximum two service points simultaneously)

Contractor shall arrange for preservation of components as per BHEL's storage and preservation manual and / or as per instructions of BHEL engineers.

One or more of following methods shall be adopted for preservation.

- 1) Coating with preservative paints / lubricant / inhibitors
- 2) Capping / wrapping / covering
- 3) Filling / immersion in oil / chemicals etc
- 4) Energising

For preservation of HT motors, space heaters have to be kept energized to avoid ingress of moisture. Insulation resistance has to be measured and

recorded at specified intervals till these are issued for erection. BHEL will provide necessary cables, switches etc. For this, however contractor shall install, operate and maintain the same.

BHEL will provide free of cost all preservatives like preservative oil, lubricants, chemicals, inhibitors, caps etc except primers & paints. Contractor shall provide red oxide zinc chromate (ROZC) primer conforming to IS:2074 of reputed manufactures (e.g. Asian paints, Berger, Shalimar, Kansai Nerolac Paints or any other BHEL-approved manufacturer) required for preservation shall be provided by the contractor and used for this purpose.

In the process the identification marks, component / material codes, match marks may have to be repainted. This work after preservation components are to be stacked properly, periodical reports on the preservation carried out should be submitted to BHEL in the prescribed formats.

(c) RECORD KEEPING (Maximum two service points simultaneously)

Contractor shall prepare, maintain and update various MM records, associated with materials management operation of BHEL at project site. Two systems of record keeping / capturing information & data at various stages are in vogue viz.

- i. Manual ledgers & records.
- ii. Computerized database application: BHEL has developed a software application named Site Operations Management System (SOMS) / Material Management package that captures all the data in the entire chain of transactions starting with master list of project materials, records of dispatch, receipt, inspection, issue, return, consumption etc.

Some of these records are master shipping / packing list, LR / RR register, daybook register, stock register, MDR, Excess receipt, shortage receipt, records of issues to & return of materials in respect of various erection subcontractors, insurance claim records, BHEL T&P, periodical status reports in various formats covering desired aspects and output information as per BHEL / client's requirement.

BHEL will provide necessary hardware, software & stationary etc for the above. Contractor shall take utmost care to ensure that these properties and records are protected from any damage or loss. BHEL will recover the cost of such property / expenses of restoration from the contractor with 30% overhead charges in case of any loss / damage attributable to negligence / failure on contractor's part.

D. SECRETARIAL & OTHER MISC. SERVICES (Maximum four service points simultaneously)

These services shall include secretarial services at BHEL office and stores, services of office boy, messenger / peon, carpenter, Electrician's services.

A suggestive deployment of crew members is given at **Appendix-VI**. Contractor may use it as a reference and sign the Appendix as accepted.

4.12.3 PARAMETERS AND QUANTIFICATION OF MM SERVICES, PERIODIC MONITORING

For the purpose of delivery of the aforesaid MM Services and progressive monthly billing by the contractor and release of payment thereof by BHEL, there shall be an action plan jointly agreed by BHEL and contractor. This action plan shall be drawn at the beginning of each quarter / each month / any convenient number of months as per actual project need. The plan shall detail the following aspects.

- Plan period (number of months planned).
- List of activities / targets to be carried out / achieved by the contractor under the scope of these MM services in the defined plan period.
- Identification of necessary resources to be deployed by the contractor for delivery of the planned activities / targets in the defined plan period.
- Deciding on the break up of the assigned amount towards MM services in the plan period towards each of its four components (supervision, preservation, record keeping and secretarial services) for the purpose of monthly billing by contractor.

4.12.4 PRICE AND STAGE PAYMENT

Contractor shall include the price for rendering complete materials management services (generally described as in the preceding clauses, including providing all necessary resources excepting those indicated specifically as BHEL scope) in the various item rates of material handling activities as appearing in the rate schedule of price bid. **Contractor shall not quote any separate item rate / price for MM Services in the rate schedule.**

For further details of progressive payment and final payable amounts, please refer Section-12 (SCC).

4.12.5 DEFICIENT / UNSATISFACTORY MM SERVICES & NOT RENDERING MM SERVICES

4.12.5.1

Contractor shall render the MM services as per the jointly agreed plan and parameters thereof as described in “parameters and quantification of MM services”. In case the contractor fails in delivering / rendering these services partly or totally, either qualitatively or quantitatively in the concerned plan period, BHEL will take the following recourse.

- Deficient / unsatisfactory services:

In case the level / quality of MM services is found not in compliance with the plan (either in terms of deficiency in quality or quantity or both, with regard to the mutually agreed / identified resources), BHEL will communicate the same to the contractor on record. Contractor shall immediately take corrective action to eradicate the complaint. BHEL will not make any payments for such period / number of days when services are found deficient / unsatisfactory. Payment will be made for the period / number of days of satisfactory services on pro-rata basis as per the following formula.

$$P = P_a \times D_s / D_m, \text{ where}$$

P = amount payable for rendering a particular service satisfactorily in a billing month.

P_a = amount **assigned** towards the particular service for the concerned month as per agreed plan.

D_s = number of equivalent days including Sundays and BHEL holidays of **satisfactory** services in the particular billing month.

D_m = total number of days including Sundays and BHEL holidays in the particular **billing month**.

In addition to 'no payment' for the unsatisfactory / deficient services period, a penalty @ 5% applied on the pro-rata amount of the deficient period i.e. 5% of ($P_a - P$) will be levied on the contractor. This penalty will be recovered from the running account bill of the same month.

4.12.5.2 NOT RENDERING THE SERVICES AT ALL

In the event, the contractor fails to render a particular service during the month (either part of the month or full) BHEL will not make any payment towards that service for such period. Additionally, a penalty @ 15% will be levied as under.

For no services in the entire month: 15% of the total monthly assigned amount.

For no services during part of the month: 15% of the pro-rata amount for the defaulting period as per formula given earlier here.

4.12.5.3 IRREVOCABLE PENALTY AND DISALLOWED AMOUNT

It shall be specifically noted that the payment disallowed for deficient or nil service in a particular month and / or penalties levied on similar ground, shall not be considered for release in any subsequent month even if the contractor takes corrective action in the later stage.

4.13 EXPLANATION ABOUT THE SCOPE OF MM SERVICES

1. General

The resources deployed for MM services by the contractor shall be at the exclusive disposal of BHEL on a full time basis. These shall not be used for any activities associated with the regular material handling activities (like receipt, unloading, verification, stacking and regular stock verification of project materials).

2. Supervision services

Working level supervision of each work spot shall be in the scope of contractor under regular material handling work. On the other hand, supervisory services under mm services shall be at one level higher than working level supervision being done as contractor's responsibility towards material handling work. BHEL requires that these services shall be to oversee and monitor the various operations / activities of material handling process. MM supervisory services shall ensure setting broad guidelines to the working level supervisors, monitoring progress of overall plan vis-à-vis implementation, proper and prompt traceability of stock in the stores, identification of corrective & preventive actions in material handling & storage work and implementation of a systematic process to finally ensure achievement of the project schedule.

3. **Preservation of components**

Contractor's scope under this MM services work includes handling of the materials that requires preservation, as well as handling of other materials around the former in order to make proper access / approach for work. Contractor shall deploy necessary supervisors, labourers and T&P for all such activities.

4. **Record keeping**

Creation and maintenance of proper records of dispatch, receipt, stock, issue, return, damage, insurance claims, preservation, restacking, receipt inspection, stock verification etc. Of project materials are vital in nature. Contractor shall ensure that all such records are created and updated promptly to facilitate latest possible information to BHEL and concerned erection agencies of BHEL. Records shall be created and maintained in BHEL's computerized data base programme (named 'SOMS') as well as in hard copy (registers, file, folder etc.) as a back-up. The contractor shall deploy adequate number of personnel with proficiency in computerized data base operations for operating SOMS. Contractor shall also deploy adequate personnel for creation & maintenance of manual records with experience in materials management work.

5. **Secretarial & other miscellaneous services**

These shall include services of personal assistance in the official work of BHEL's construction manager, clerical services for correspondences and record keeping to various departments of BHEL site (erection, commissioning, finance & accounts, stores / material management etc).

Scope shall also include services of office boy at BHEL office and stores, messenger / peon for receipt and local distribution of correspondences (dak), collection / delivery of correspondences from / to post office or courier office and similar nature of services.

Services of Carpenter with helper shall be exclusively used for unpacking and packing the boxes after verification of materials wherever directed by BHEL Engineer. Similarly the services of Electrician with helper shall be used for maintenance of the Electrification work in stores, storage yard, office building etc.

SECTION-5

SPECIAL CONDITIONS OF CONTRACT

5.0 OBLIGATIONS OF THE CONTRACTOR (TOOLS AND TACKLES, CONSUMABLES, INFRASTRUCTURES ETC.)

5.1 TOOLS AND PLANTS

5.1.1

Contractor shall provide all the Tools & Plants that are required for carrying out the work covered under this tender specification over and above the ones being provided by BHEL free of charges as stated elsewhere in this tender specification. Contractor shall submit proposed T&P deployment plan along with his tender.

5.1.2

The contractor shall provide necessary wooden / concrete sleepers for unloading & storage of materials including for the needs at unloading bay / location.

5.1.3

In case the contractor does not deploy or delays deployment of major T&P with reference to the jointly agreed deployment plan, BHEL will recover non-refundable penalty per day of delay in the following manner:

- | | |
|--|-----------------|
| 1. In respect of 40 MT mobile crane: | @ Rs. 5,000 / - |
| 2. In respect of 18 MT mobile crane: | @ Rs. 2,000 / - |
| 3. In respect of 8 Ton pick & carry crane: | @ Rs. 500 / - |
| 4. In respect of fork lifter: | @ Rs 300 / - |

5.1.4

Further, in the event of contractor failing to arrange the required Tools & Plants and other resources envisaged as his scope as also the non-availability of the T&P owing to breakdown, or otherwise, BHEL will take appropriate action at contractor's risk and cost.

5.1.5

The T&P arranged by the contractor shall be in proper working condition, and shall not lead to unsafe conditions.

5.2 CONSUMABLES

5.2.1

The contractor shall provide all consumables required for carrying out the work covered under this scope of work excepting those specifically included in the scope of BHEL.

5.2.2

If at any time during the execution of work, it is noticed that the work is suffering on account of non-availability of consumables from the contractor's side BHEL will take appropriate action at his cost and risk.

5.3 FIELD OFFICE AND STORES, LOCALIZED LIGHTING, LABOUR COLONY ETC.

5.3.1

The contractor shall make his own arrangements for field office cum stores. Open land for the same will be provided by customer / BHEL free of charges in the project area as available.

After the completion of work, contractor shall dismantle his constructions and hand over the vacant land to BHEL / customer as the case may be.

5.3.2

The contractor at his cost shall arrange for temporary localized lighting for unloading, verification and stacking activities. All temporary wiring must comply with regulations and will be subjected to engineer's inspection before connecting to supply point.

5.3.3

Construction power will normally be made available at one point in the project site or at the discretion of BHEL, at more points free of charge. The contractor shall arrange at his own cost drawl and distribution of power from this point onwards. Contractor shall be responsible for fulfillment of all requirements including statutory requirements in this regard. Duty and taxes for Electricity, if levied by the government / concerned authorities, shall be payable by the contractor at actual.

5.3.4 LABOUR COLONY

5.3.4.1 Space & Construction

Customer / BHEL will provide free of charges sufficient levelled and adequate area as required for construction of labour colony, the location of which will be finalized after joint survey with owner. Contractor shall construct labour colony including lighting, internal, roads, water distribution ensuring proper hygiene and provide facilities for proper sanitation and drainage. Contractor shall comply with the stipulations of Maharashtra Pollution Control Board while constructing the labour colony.

5.3.4.2 Electricity

Customer / BHEL will provide electricity on chargeable basis at one point at 415 / 440V. Electricity charges shall be as per the tariff plan applicable in the site. Contractor shall make further necessary arrangements like distribution network with necessary poles, conductors, cables, Energy Meter, protection devices, distribution board etc. at his own cost and services as per the requirement and instruction from Customer / BHEL .

5.3.4.3 POTABLE & DRINKING WATER

Contractor shall arrange for potable water and drinking water at his own cost and services for labour colony..

5.3.5 CONSTRUCTION WATER

Construction water shall be made available at site at one point free of cost. Contractor shall arrange for further distribution at his own cost. Contractor shall be responsible for fulfillment of all requirements including statutory & safety requirements in this regard as per the instructions from Customer / BHEL.

5.3.6 SITE CLEARANCE AND REMOVAL OF CONTRACTOR'S ESTABLISHMENT

On completion of work, contractor shall remove all his establishments and T&P and all temporary installations brought by him for this work, level the ground and return to BHEL / client. BHEL shall take necessary action in this regard at contractor's risk and cost including imposing non-refundable penalty in the event contractor fails to clear site within specified period by BHEL / client.

5.4.0 TAXES, DUTIES, LEVIES

5.4.1

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

However, provisions regarding Service Tax and Value Added Tax (VAT) on output services and goods shall be as per following clauses.

5.4.2 Service Tax & Cess on Service Tax

Service Tax and Cess on Service Tax as applicable on output Services are excluded from contractor's scope; therefore contractor's price/rates shall be **exclusive** of Service Tax and Cess on Output Services. In case, it becomes mandatory for the contractor under provisions of relevant act/law to collect the Service Tax & Cess from BHEL and deposit the same with the concerned tax authorities, such applicable amount will be paid by BHEL.

Contractor shall submit to BHEL documentary evidence of Service Tax registration certificate specifying name of services covered under this contract. Contractor shall submit serially numbered Service Tax and Cess Invoice, signed by him or a person authorized by him in respect of taxable service provided, and shall contain the following, namely,

- I. **The name, address and the registration number of the contractor,**
- II. **The name and address of the party receiving taxable service,**
- III. **Description, classification and value of taxable service provided and,**
- IV. **The service tax payable thereon.**

All the four conditions shall be fulfilled in the invoice before release of service tax payment.

Contractor shall obtain prior written consent from BHEL before billing the amount towards such taxes.

With introduction of Cenvat Credit Rules 2004, which came into force w.e.f. 10.09.2004, Excise Duty paid on Input Goods including Capital Goods and Service Tax paid on Input Services that are used for providing the output services can be taken credit of against the Service Tax payable on output services. However BHEL may opt for availing the abatement provision in which case cenvat credit may not be available on input duty.

5.4.3 VAT (Sales Tax /WCT)

As regards Value Added Tax (VAT) on transfer of property in goods involved in Works Contract (previously known as Works Contract Tax) applicable as per local laws, the price quoted by the contractor shall be **exclusive** of the same. Where such taxes are required to be paid by the contractor, this will be reimbursed on production of proof of payment made to the authorities by the Contractor. In any case the Contractor shall register himself with the respective Sales Tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. The contractor has to take all necessary steps to **minimize tax on input goods** by purchasing the materials from any registered dealer of the concerned state only. In case contractor opts for composition, it will be with the prior express consent of BHEL. Deduction of tax at source shall be made as per the provisions of law unless otherwise found exempted.

In case tax is deducted at source as per the provisions of law, this is to be construed as an advance tax paid by the contractor and no reimbursement thereof will be made unless specifically agreed to.

5.4.4 Modalities of Tax Incidence on BHEL

Wherever the relevant tax laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL will have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.

5.4.5 New Taxes/Levies

In case the Government imposes any new levy/tax on the output service/ goods/work after award of the contract, the same shall be reimbursed by BHEL at actual.

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

No reimbursement/recovery on account of increase/reduction in the rate of taxes, levies, duties etc. on input goods/services/work shall be made. Such impact shall be taken care of by the Price Variation/Adjustment Clause (PVC) if any. In case PVC is not applicable for the contract, Bidder has to make his own assessment of the impact of future variation if any, in rates of taxes/duties/ levies etc. in his price bid.

5.5 SUBMISSION OF PERIODICAL REPORTS

Contractor shall submit periodical reports in respect of following aspects of operation:

- Availability and utilization of BHEL's cranes
- Contractor's daily manpower reports
- Progress reports - periodically
- Test reports for Lifting Equipments and Tackles
- Safety reports as specified in Section-9 of SCC

Contractor shall finalize the formats for these reports in consultation with BHEL site.

5.6

It is the responsibility of the contractor to arrange gate pass for all his employees, T&P etc. Necessary coordination with customer officials is the responsibility of the contractor. Contractor to follow all the procedures as laid down by the customer for issue of gate passes. Where permitted, by customer / BHEL, to work beyond normal working hours, the contractor shall arrange necessary work permit for working beyond normal working hours.

SECTION-6
SPECIAL CONDITIONS OF CONTRACT

6.0 CONTRACTOR'S OBLIGATION IN REGARD TO EMPLOYMENT OF SUPERVISORY STAFF AND WORKMEN

6.1 SUPERVISORS AND LABOURER

Contractor shall deploy in adequate strength labour, technicians and engineers / supervisors for this work.

6.2

It is the responsibility of the contractor to engage his workmen in shifts and or on overtime basis for achieving the target set by BHEL. This target may be set to suit BHEL's commitments to its customer or to advance date of completion of events or due to other reasons. The decision of BHEL in regard to setting the target will be final and binding on the contractor.

6.3

Contractor shall employ only qualified engineers / supervisors for this job. They shall have professional approach in executing the work having adequate knowledge / experience in the fields of material handling and materials management, quality assurance procedures, planning, safety etc that are required to be undertaken for the type of work as per these specifications.

6.4

Contractor shall obtain necessary Gate passes and work permits whenever necessary from BHEL / customer prior to take up any work. He shall arrange for display of due and necessary caution notices / boards etc.

6.5

The contractor shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instructions that may endanger safety of men, equipment, material and environment in his scope of work or another contractors or agencies. Cost of damage, if any, to life and property arising out of such violation of statutory regulations shall be borne by the contractor..

6.6 WATCH AND WARD

CUSTOMER / BHEL shall make general security arrangements by way of boundary wall, fencing and deployment of security guards in the project site. In addition, contractor shall arrange and provide watch and ward round the clock for the materials / equipments issued to him and also his own assets.

6.7

Contractor shall implement local labour laws; maintain necessary records and co-ordinate with the local labour authorities on all matters of labour and industrial relations.

6.8

The contractor shall comply with the applicable law, rules and regulation etc; with regard to employment of labour. He shall obtain labour license under the provisions of applicable law / statute.

The scope includes getting the licenses and approvals from the statutory authorities, arranging for inspection of electrical inspector periodically as per BHEL engineer's instructions, submitting documents etc. and following up the matter with them as and when necessary for the work involved in this scope. All expenses, fees, levies etc have to be borne by the contractor.

6.9 COMPLIANCE WITH LABOUR LAWS

6.9.1.1

The contractor may employ his regular skilled employee with experience for specific and appropriate requirements of work. No female labourer shall be employed after darkness. No person below the age 18 yrs shall be employed.

6.9.1.2

Contractor's employees shall wear identification badges while on work at site.

6.9.1.3

It is to be specifically noted that BHEL and client place special emphasis on compliance with labour laws. Accordingly contractor shall be required to promptly and regularly pay all dues as per central, state and local government laws, acts, regulation etc as may be applicable from time to time in this regard. In case of his non-compliance with any provision contractor shall indemnify BHEL and INDIA BULLS from and against all liabilities, damages, penalties, demands etc.

It will be essential to provide all requisite documents as evidence of compliance for a particular month along with monthly running bill of immediate subsequent month. Failing which contractor's bill shall not be released for payment, and all consequences thereof shall be contractor's responsibility.

BHEL engineer, however, in consideration of certain exceptional situations may grant relaxation at his discretion with regard to time frame of submission of these documents.

6.9.1.4

As far as possible, unskilled labourer shall be engaged from the local area of the site

6.9.1.5

The contractor shall at all times have due regard to the local religious festivals and customs.

6.9.1.5

The contractor in the event of his engaging twenty or more workmen at site shall obtain independent license under Contract Labour (Regulation & Abolition) Act from the concerned state labour authorities. On completion of contract, the contractor shall return the labour license to the Labour Commissioner and submit a proof of having cancelled the labour license to BHEL / INDIA BULLS.

SECTION-7
SPECIAL CONDITIONS OF CONTRACT

7.0 OBLIGATIONS OF BHEL

7.1 FACILITIES PROVIDED BY BHEL

7.1.1 CONSTRUCTION POWER

Refer section-5.3.3

BHEL is not responsible for any loss or damage to the contractor's equipment as a result of variations in voltage or frequency or interruptions in power supply.

7.1.2 CONSTRUCTION WATER

Refer Section-5.3.5

7.1.3 TOOLS & PLANTS

BHEL will make available T&P listed in Appedix-1 free of charge.

7.2 FREE OF CHARGE SERVICES / FACILITIES:

BHEL shall provide following facilities / services to the contractor free of charges except where stated otherwise.

7.2.1 Preservatives:

BHEL will provide free of cost preservatives like preservative oil, lubricants, chemicals, inhibitors, caps etc except primers & paints. Contractor shall provide red oxide zinc chromate (ROZC) primer conforming to IS: 2074 of reputed manufactures (e.g. Asian paints, Berger, Shalimar Paints, Kansai Nerolac or any other BHEL-approved manufacturer) required for preservation shall be provided by the contractor and used for this purpose

7.3 OTHER ISSUES

7.3.1

The Tools and plants supplied against DU / DESS numbers by manufacturing units / Vendors of BHEL as part of supply for handling of materials will be provided free of charge to the contractor on returnable basis.

7.2.2

BHEL will provide tarpaulins and / or such other covering material for covering the materials at BHEL storage yard. Contractor shall do necessary work for covering the materials with the covering material provided by BHEL.

SECTION-8 (Rev 01, 24/01/2009)

SPECIAL CONDITIONS OF CONTRACT

8.0 Inspection/Quality Assurance/Quality Control/ Statutory Inspection

8.1 Various inspection/quality control/quality assurance procedures/methods at various stages of erection and commissioning will be as per BHEL/customer quality control procedure/codes and other statutory provisions and as per BHEL engineer's instructions.

8.2 Preparation of quality assurance log sheets and protocols with customer/ consultants/statutory authority, welding logs, NDE records, testing & calibration records and other quality control and quality assurance documentation as per BHEL engineer's instructions, is within the scope of work/specification. These records shall be submitted to BHEL/customer for approval from time to time.

The protocols between contractor and customer/ BHEL shall be made prior to installation for correctness of foundations, materials, procedures, at each stage of installation, generally as per the requirement of customer/ BHEL. This is necessary to ensure elimination of errors or keeping them within tolerable limits and to avoid accumulation and multiplication of errors.

8.3 A daily log book should be maintained by every supervisor/engineer of contractor on the job in duplicate (one for BHEL and one for contractor) for detailing and incorporating alignment/clearance / centering / leveling readings and inspection details of various equipments etc.

High pressure welding details like serial number of weld joints, welders name, date of welding, details of repair, heat treatment etc. will be documented in welding log as per BHEL Engineer's instructions.

Record of radiography containing details like serial number of weld joints, date of radiography, repairs, if any, re-shots etc shall also be maintained as per BHEL Engineer's instructions.

Record of heat treatments performed shall be maintained as prescribed by BHEL.

8.4 The performance of welders will be reviewed from time to time as per the BHEL standards. Welders' performance record shall be furnished periodically furnished for scrutiny of BHEL's Engineer. Corrective action as informed by BHEL shall be taken in respect of those welders not conforming to these standards. This may include removal/ discontinuance of concerned welder(s). Contractor shall arrange for the alternate welders immediately.

8.5 All the welders shall carry identity cards as per the proforma prescribed by BHEL/Customer/Consultant. Only welders duly authorized by BHEL/customer/consultant shall be engaged on the work.

8.6 Contractor shall provide all the measuring monitoring devices (MMDs) required for completion of the work satisfactorily. These MMDs shall be of brand, quality and accuracy specified by BHEL Engineer and should have necessary calibration and other certificates as per the requirement of BHEL Engineer. Decision of BHEL Engineer regarding acceptance or otherwise of the measuring instruments/gauges/tools for the work under this specification, is final and binding on the contractor. The indicative list of MMDs required for this work and to be made available by the contractor is given in relevant appendix. The list will be reviewed by BHEL and the contractor shall meet any augmentation needed wherever required.

8.7 It is the responsibility of the contractor to prove the accuracy of the testing/measuring/calibrating equipments brought by him based on the periodicity of calibration as called for in the BHEL's quality assurance standards/BHEL Engineer's instructions.

8.8

Any re-laying or re-termination of cables/re-erection of instruments/ recalibration of instruments etc. required due to contractor's mistake or design requirement and found at any stage inspection, shall be carried out by the contractor at no extra cost.

- 8.9 BHEL, Power Sector – Western Region (PSWR) has already been accredited with ISO 9002 certification and as such this work is subject to various audits to meet ISO 9002 requirements. One particular aspect which needs special mention is about arrangement of calibration of instruments by the contractor. Contractor shall ensure deployment of reliable and calibrated MMDs (Instrument Measuring and Test Equipment). The MMDs shall have test / calibration certificates from authorised / Government approved / Accredited agencies traceable to National / International Standards. Re-testing / re-calibration shall also be arranged at regular intervals during the period of use as advised by BHEL Engineer within the contract price. The contractor will also have alternate arrangements for such MMDs so that work does not suffer when the particular equipment / instrument is sent for calibration. Also if any MMDs not found fit for use, BHEL shall have the right to stop the use of such item and instruct the contractor to deploy proper item and recall ie repeat the readings taken by that instrument, failing which BHEL may deploy MMD and retake the readings at Contractor's cost.
- 8.10 Re-work necessitated on account of use of invalid MMDs shall be entirely to the contractor's account. He shall be responsible to take all corrective actions, including resource augmentation if any, as specified by BHEL to make-up for the loss of time.
- 8.11 In the courses of erection, it may become necessary to carry repeated checks of the work with instruments recently calibrated, re-calibrated. BHEL may counter/ finally check the measurements with their own MMDs. Contractor shall render all assistance in conduct of such counter/final measurements.
- 8.12 Vibration indicators / vibration recorders / vibration analysers will be provided by BHEL for checking and analysing vibration levels of rotating equipments with necessary operators. Contractor shall provide necessary labour for carrying out such tests.
- 8.13 Total Quality is the watchword of the work and Contractor shall strive to achieve the Quality Standards, procedures laid down by BHEL. He shall follow all the instructions as per BHEL drawings and Quality Standards. Contractor shall provide the services of Quality Assurance Engineer.

8.14 Stage Inspection By FES/QA Engineers

Apart from day-to-day inspection by BHEL Engineers stationed at Site and Customer's Engineers, stage inspection of equipments under erection and commissioning at various stages shall also be conducted by teams of Engineers from Field Engineering Services of BHEL's Manufacturing Units, Quality Assurance teams from field Quality Assurance, Unit/Factory Quality Assurance and Commissioning Engineers from Technical Services etc. Contractor shall arrange all labour, tools and tackles etc for such stage inspections free of cost.

- 8.15 Any modifications suggested by BHEL FES and QA Engineers' team shall be carried out. Claims of contractor, if any, shall be dealt as per Section 13, and provided such modifications have not arisen for reasons attributable to the contractor.

Statutory Inspection of Work

- 8.16 The work to be executed under these specifications has to be offered for inspection, at appropriate stages of work completion, to various statutory authorities for compliance with applicable regulations.

The work related statutory inspections, though not limited to, are as under:

- 1) Inspectorate of steam boilers and smoke nuisance
- 2) Factory Inspector, Labour Commissioner, Electrical Inspector PF Commissioner and other authority connected to this project work

The scope includes getting the approvals from the statutory authorities, which includes arranging for inspection visits of statutory authority periodically as per BHEL Engineer's instructions, arranging materials for ground inspection, taking rub outs for the pressure parts to

be offered for inspection, submitting co-related inspection reports, documents, radiographs etc and following up the matter with them. Contractor shall also make all arrangements for offering the Products / Systems for inspection at location, as applicable, to the concerned authority.

- 8.17 Contractor should be qualified to execute pressure parts & piping work coming under the purview of IBR, for which he should register himself with CIB of state concerned. contractor also should be aware of the latest IBR regulations and Electricity Act, including the amendments thereof.
- 8.18 All fees connected with the contractors for testing his welders / men / workers and testing, inspection, calibrating of his instruments and equipments, shall be paid by the contractor. It shall be contractor's responsibility to obtain approval of Statutory Authorities, wherever applicable, for the conducting of any work which comes under the purview of these authorities.
- 8.19 Other fees like fees for periodic visits, hydraulic test fees, light up inspection fees etc. shall be borne by the contractor.
- 8.20 Payment of Registration fees for Boiler is excluded from the scope.
- 8.21 BHEL shall pay the ground inspection fees of Boiler Inspectorate. All other arrangements for site visits periodically by Boiler Inspector to site, for obtaining Inspection certificate etc, will have to be made by contractor.
- 8.22 The quality management system of BHEL, Power Sector – Western Region (PSWR) has already been certified and accredited under ISO 9002 standards in this regard. The basic philosophy of the quality management system is to define the organizational responsibility, work as per documented procedures, verify the output with respect to acceptance norms, identify the non-conforming product/ procedure and take corrective action for removal of non-conformance specifying the steps for avoiding recurrence of such non-conformities, & maintain the relevant quality records. The non-conformities are to be identified through the conduct of periodical audit of implementation of quality systems at various locations/stages of work. Suppliers/vendors of various products/services contributing in the work are also considered as part of the quality management system. as such the contractor is expected not only to conform to the quality management system of BHEL but also it is desirable that they themselves are accredited under any quality management system standard.

Field Quality Assurance

- 8.23 Contractor shall carry out all activities conforming to the approved Field Quality Plan (FQP) as revised from time to time. Total quality shall be the watchword of the work and contractor shall strive to achieve the quality standards, procedures laid down by BHEL. He shall follow all the instructions as per BHEL drawings and quality standards. Contractor shall provide the services of quality assurance engineer as per the relevant clauses.

SECTION-9
SPECIAL CONDITIONS OF CONTRACT

Safety, Occupational Health and Environmental Management

BHEL PSWR has been certified for Environmental Management under ISO 14001:1996 standard and Occupational Health & Safety under OHSAS 18001 by DNV. In order to comply with the above standards, it shall be the endeavour of BHEL and all its subcontractors to meet and implement the requirements by following the guidelines issued under Environmental, Occupational Health and Safety Management (EHS) manual a copy of which will be available with the BHEL Site-in-charge.

Contractor shall also enter into a "Memorandum of Understanding" as given in clause 9.9 in case of award of contract.

9.0 Responsibility of the Contractor in Respect of Safety of Men, Equipment, Material and Environment.

9.1 The Contractor shall:

9.1.1

Abide by the Safety Regulations applicable for the Site/Project and in particular as mentioned in the booklet "Safe Work Practices" issued by BHEL. Contractors are also to ensure that their employees and workmen use safety equipments as stipulated in the Factories Act (Latest Revision) during the execution of the work. Failure to use safety equipment as required by BHEL Engineer will be a sufficient reason for issuance of memo, which shall become part of Safety evaluation of the contractor at the end of the Project. Also all site work may be suspended if it is found that the workmen are employing unsafe working practice and all the costs/losses incurred due to suspension of work shall be borne by contractor. A comprehensive list of National Standards from which the contractor can draw references for complying with various requirements under this section is given under 9.10

9.1.2

Hold BHEL harmless and indemnified from and against all claims, cost and charges under Workmen's Compensation Act 1923 and 1933 and any amendment thereof and the contractor shall be solely responsible for the same.

9.1.3

Abide by the Procedure governing entry/exit of the contractor's personnel within the Customer/Client premises. All the contractors employees shall be permitted to enter only on displaying of authorized Photo passes or any other documents as authorized by the Customer/Client.

9.1.4

Be fully responsible for the identity, conduct and integrity of the personnel/workers engaged by them for carrying out the contract work and ensure that none of them are ever engaged in any anti national activity

9.1.5

Prepare a signboard giving the following information and display it near work site:

- i) Name of Contractor
- ii) Name of Contractor Site-in-charge & Telephone number
- iii) Job Description in short
- iv) Date of start of job
- v) Date of expected completion
- vi) Name of BHEL Site-in-charge.

9.1.6

Abide by the rules and regulations existing during the contract period as applicable for the contractors at the Project premises.

9.1.7

Observe the timings of work as advised by BHEL Engineer-in-charge for carrying out the contract work.

9.2 **SPECIAL CONDITIONS**

9.2.1 **Safety**

9.2.1.1 **Safety Plan**

Before commencing the work, contractor shall submit a "safety plan" to the authorized BHEL official. The safety plan shall indicate in detail the measures that would be taken by the contractor to ensure safety to men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified hereunder.

The contractor shall submit "safety plan" before start of work. During negotiations, before placing of work order and during execution of the contract, BHEL shall have right to review and suggest modifications in the safety plan. Contractor shall abide by BHEL's decision in this respect.

9.2.1.2

The contractor shall take all necessary safety precautions and arrange for appropriate appliances and/or as per direction of BHEL or its authorized person to prevent loss of human lives, injuries to men engaged and damage to property and environment.

9.2.1.3

The contractor shall provide to his work force and also ensure the use of Personnel Protection Equipment (PPE) as found necessary and/or as directed and advised by BHEL officials without which permission is liable to be denied.

- Safety helmets conforming to IS 2925/1984 (1990)
- Safety belts conforming to IS 3521/1989
- Safety shoes conforming to IS 1989 part-II /1986(1992)
- Eye and face protection devices conforming to IS 2573/1986(1991), IS 6994 (1973), part-I (1991), IS 8807/1978 (1991), IS 8519/1977(1991).
- Other job specific PPEs of standard ISI make as may be prescribed

9.2.1.4

All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, cages, safety nets, ladders, equipment, etc used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item found to be unsafe.

9.2.1.5

All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirements of Indian Electricity Act and Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works. All electrical appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

9.2.1.6

The contractor shall not use any hand lamp energized by electric power with supply voltage of more than 24 volts. For work in confined spaces, lighting shall be arranged with power source of not more than 24 volts.

9.2.1.7

The contractor shall adopt all fire safety measures as per relevant Indian Standards

9.2.1.8

Where it becomes necessary to provide and/or store petroleum products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down by the relevant government acts, such as petroleum act, explosives act, petroleum and carbides of calcium manual of the chief controller of explosives, Government of India etc. The contractor in all such matters shall also take prior approval of the authorized BHEL official at the site.

9.2.1.9

Proper means of access must be used e.g. ladders, scaffolds, platforms etc. No makeshift access such as oil drums or pallets shall be used. Design of these will be in accordance with relevant standards and certified by competent persons before use.

9.2.1.10

Temporary arrangements made at Site for lifting , platforms, approach access etc should be properly designed and approved before being put to use.

9.2.1.11

All excavations and openings must be securely and adequately fenced/barricaded and warning signs erected when considered necessary as per relevant code of practice.

9.2.1.12

No persons shall remove guardrails, covers or protective devices unless authorized by a responsible supervisor and alternative precautions have been taken

9.2.1.13

Access ways, means of escape and fire exits shall be clearly marked, kept clear and unobstructed at all times

9.2.1.14

Only authorized persons holding relevant license will drive and operate site plant and equipments e.g. cranes, dumpers, excavators, transport vehicles etc

9.2.1.15

Only authorized personnel are allowed to repair, commission electrical equipments.

9.2.1.16

Gas Cylinders shall be handled and stored as per Gas Cylinders Rules and relevant safe working practices

9.2.1.17

All wastes generated at Site shall be segregated and collected in a designated place so as to prevent spillage/contamination/scattering at Site, until the waste is lifted for disposal to designated disposal area as advised by BHEL official.

9.2.1.18

The contractor shall arrange at his cost (wherever not specified) appropriate illumination at all work spots for safe working when natural day light is not adequate for clear visibility.

9.2.1.19

The contractor shall train adequate number of workers/supervisors for administering "FIRST AID". List of competent first aid administers should be prominently displayed.

9.2.1.20

The contractor shall display at strategic places and in adequate numbers the following in fluorescent markings

- Emergency telephone numbers
- Exit, Walkways
- Safe working load charts for wire ropes, slings, D shackles etc
- Warning signs

9.2.1.21

The contractor shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instructions that may endanger safety of men, equipment, material and environment in his scope of work or other contractors or agencies. Cost of damage, if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.

9.2.1.22

In case of a fatal or disabling injury/accident to any person at construction sites due to lapses by the contractor, the victim and/or his/her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

9.2.1.23

In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.

9.2.1.24

In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have the right to recover cost of such delay from payments due to the contractor after notifying the contractor suitably and giving him opportunity to present his case.

9.2.1.25

If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so, and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.

9.2.1.26 **Emergency Response**

BHEL will have an Emergency Response Plan for each Project Site in consultation with the Owner as the case may be, detailing the procedure for mobilization of personnel and

equipment, and defining the responsibilities of the personnel indicated, in order to prepare for any emergency that may arise in order to ensure the priorities of

- Safeguard of life
- Protect assets under construction or neighbouring
- Protect environment
- Resumption of normal operations as soon as the emergency condition is called off

All Contractors shall also be part of the Emergency response Plan and the personnel so nominated shall be aware of their duties and responsibilities in an emergency response situation.

9.2.1.27

At least 5% Contractors supervisors and workmen shall undergo training in administering 'First Aid'. The trained persons should represent for all categories of work and for all areas of work. Adequate number of trained persons should be available for each shift. These first aides shall be included in the emergency response team. Contractor employees and workmen are encouraged to participate in first aid training programmes whenever organized by BHEL.

9.2.2 OCCUPATIONAL HEALTH

9.2.2.1

Specific occupational health hazards will be identified through the hazard evaluation processes in consultation with BHEL engineers and the necessary prevention/reduction/elimination methods implemented.

9.2.2.2

All personnel working in an activity with a potential risk to health shall be made aware of all those risks and the actions they must take to reduce/control/eliminate the risk

9.2.2.3

Safety coordinator shall conduct periodic checks to ensure that every group of workers engaged in similar activities are aware of potential risks to health and the actions required to be taken to mitigate the risk

9.2.2.4

In order to protect personnel from associated health hazards, the following main areas will be focused

- Issue of approved Personnel Protective Equipment
- Verification that the PPE are adequate/maintained and worn by all staff involved in operations that are potentially hazardous to their health
- Ensure that the personnel deployed are physically fit for the operation/work concerned
- Provide hygienic and sanitary working conditions

9.2.2.5

Contractor workers employees engaged in noise risk areas shall be issued with hearing protection aids and the use of the same will be enforced. Further, these workers will be educated on the hazards of noise

9.2.2.6

Contractor workers engaged in dust environment shall be issued with necessary dust protection aids and the use of the same shall be enforced

9.2.2.7

Workers engaged in exposure to bright light/rays as in welding or radiation shall be issued with eye protection devices and the use of the same shall be enforced

9.2.2.8

Adequate arrangements shall be made to provide safe drinking water

9.2.2.9

Health monitoring records on at least sample basis for contractor employees & workmen shall be maintained for persons engaged in specified categories of work. These shall include

- Noise induced hearing loss
- Lung Function test
- Ergonomic Test
- Eye Test for Welders, Grinders, Drivers etc

9.2.3.0 HYGIENE and HOUSEKEEPING

9.2.3.1

Good house keeping and proper hygiene is one of the key requirements of Occupational Health Safety and Environment management. Towards this the contractor shall encourage his workers and supervisors to maintain cleanliness in their area of work.

9.2.3.2

The Contractor shall arrange to place waste bins/chutes at convenient locations for the collection of scrap and other wastes. The bins shall be clearly marked and segregated for metal, non-metal, hazardous and non hazardous wastes.

9.2.3.3

BHEL may take up appropriate remedial measures at the cost of the contractors if the contractors fail in good house keeping and if there is an imminent risk of pollution

9.2.4 ENVIRONMENT MANAGEMENT

9.2.4.1

BHEL has a sound environmental management system, which is to be maintained and implemented by all the contractors. The system allows for project specific objectives to be set and developed sensitive to client requirements, applicable environmental legislation and BHEL's own objectives and policy. BHEL engineers will assess and monitor the environmental impact of their work and lay out objectives for their minimization. The contractors shall implement the objectives for continual improvement of environmental performance. BHEL shall regularly audit environmental impacts and their improvements.

9.2.4.2 WASTE MANAGEMENT

9.2.4.3.1

The objective of waste management is to ensure the safe and responsible disposal of waste, ensuring that it is correctly disposed of and being able to audit the process to ensure compliance.

9.2.4.3.2

Chemical wastes if any shall be collected separately and disposed of to BHEL designated refuse yard as per BHEL advice.

9.2.4.3.3

No dangerous chemicals, noxious waste products or materials will be disposed off on or off site without approval obtained through BHEL.

9.2.4.3.4

All disposal of wastes generated during construction shall be in accordance with all relevant legislation.

9.2.4.3.5

Acid and alkali cleaning wastes shall be neutralized to acceptable norms before disposal to the designated area.

9.2.4.3.6

All necessary measures shall be taken to ensure safe collection and disposal of waste oils. In particular to ensure the prevention of their discharge into surface waters, ground waters, coastal waters or drainages

9.3 SUPERVISION

9.3.1

Contractor must provide at least one full time on site safety coordinator when the manpower engaged is in excess of 50 for the contract activities in the premises. If the manpower is less than 50, the on site safety coordination responsibilities shall be assumed by any one of the contractor's other supervisory staff; however in both the cases, the contractor must specify in writing the name of such persons to the BHEL Engineer in Charge.

9.3.2

Contractor's safety coordinator or his supervisor responsible for safety as the case may be shall conduct at his work site, and document formal safety inspection and audits at least once in a week. Such documents are to be submitted to BHEL Engineer in Charge for his review and record.

Contractor, supervisor must attend all schedule safety meetings as would be intimated to him by the BHEL Engineer in Charge.

9.3.3

Before starting work under any contract, the contractor must ensure that a job specific safety procedures/field practices as required over and above the safety permit conditions are prepared and followed .He should also ensure that all supervisors and workers involved understand and follow this procedures /field practices.

9.3.4

Contractor must ensure that in his work site appropriate display boards are put displaying signs for site safety, potential hazards and precautions required.

9.4.0 TRAINING & AWARENESS

9.4.1

Contractor shall deploy experienced supervisors and other manpower who are well conversant with the safety and environment regulations of the Project. The electricians to be deployed on the job should have wireman license.

9.4.2

All Supervisors & Workmen of the Contractor shall undergo Fire safety training/ demonstration whenever arranged by BHEL with the help of either Customer's Fire and Safety department or outside faculty so as to acquire knowledge of fire prevention and also to be able to make use of appropriate fire extinguishers.

9.4.3

Contractor must familiarize himself from BHEL Engineer in Charge about all known potential fire, explosion or toxic release hazards related to the contract. He in turn will ensure that same information has been passed to the supervisors and workmen

9.4.4

Contractor must ensure that all his supervisors are properly trained and each employee has received and understood from his supervisor necessary training and briefing about the safety requirement. Necessary document as a means to verify that employees have understood the training is to be maintained.

9.4.5

The contractor supervisors shall also give a small safety briefing to all the workmen under his charge before undertaking any new work and specially understand the safety requirements that are mandatory

9.5.0 **REPORTING**

9.5.1

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrences to the authorized BHEL official immediately after such occurrence but in any case not later than twelve hours of the occurrence. Such report shall be furnished in the manner prescribed by BHEL and also to meet statutory requirement.

9.5.2

Any injury sustained by any of the contractor's employees within the Project premises must be reported to BHEL supervisor and FIRST AID should be immediately administered. The Contractor shall be responsible for keeping and maintaining proper records of Accidents to his personnel.

9.5.3

Contractor must arrange to immediately investigate, properly document and report any injury, accident or near miss involving any of his employees and take appropriate follow up action. He must furnish within 12 hours of the incident a written report to BHEL Engineer in charge and the Safety Section.

9.5.4

According to the Factory Act and the Employees state Insurance Act & regulation, any person sustaining any injury within the project premises and absenting himself from work for more than 46 hours, his accident report has to be sent to the respective Government Authorities. Therefore contractor shall inform the owner's representative such matter immediately for their needful action.

9.5.5

In addition, contractor shall submit periodic reports on safety to the authorised BHEL official from time to time as prescribed.

9.5.6

Before commencing the work, the contractor shall appoint/nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

9.6 **AUDIT REVIEW AND INSPECTION**

9.6.1

BHEL shall conduct audit on the contractor performance and compliance with the project specific requirements of the Environment and Occupational Health & Safety Management systems. The programme of audit shall cover all activities under the contract but will focus particularly on high-risk activities. The Construction Manager shall decide the schedule of audit. The audit findings shall be communicated to the contractors and necessary remedial action as advised by BHEL Engineers shall be under taken within the stipulated time.

9.6.2

Inspections shall be carried out regularly by the contractors and by BHEL Engineers on activities, facilities, equipment, documentation, to cover the following aspects.

- Compliance with procedures and systems
- Availability, condition and use of PPE
- Condition of maintenance tools, equipments, facilities
- Availability of fire fighting equipments and its condition
- Use of fire fighting equipments and first aid kit
- Awareness of occupational health hazard
- Awareness of safe working practices
- Presence of quality supervision
- Housekeeping

The Safety coordinator shall visit and inspect work sites daily. All unsafe acts, unsafe conditions that have imminent potential for causing harm/injury/damage will be immediately corrected. He shall maintain a daily logbook giving details of unsafe acts or conditions observed and the corrective action taken and recommendations for preventing recurrence. Adequacy of corrective actions will be verified

The contractor shall take remedial measures as per the findings of each inspection Besides the above, the contractor shall be required to carry out the following inspections

SI no	Equipment	Scope of inspection	Inspection by	Schedule
1	Hand tools	To identify unsafe/defective tool	User	Daily
2	Power tools	To identify unsafe/defective tool	User	Daily
3	Fire Extinguishers	To check pressure and any defect	User / Safety Coordinator	Daily Every month
4	Lifting equipment/tackles	To check for defects and efficacy of brakes	User Third party	Daily Every Year
5	PPE	To check for defects	User	Daily

9.7 **NON COMPLIANCE:-**

9.7.1

NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND THE BHEL HAS RIGHT TO IMPOSE FINES ON THE CONTRACTOR AS UNDER **for every instance of violation noticed:**

Sl. No	Instance of Violation	Fine (in Rs)
01	Not Wearing Safety Helmet	50/-
02.	Not wearing Safety Belt	100/-
03.	Grinding Without Goggles	50/-
04.	Not using 24 V Supply For Internal Work	500/-
05.	Electrical Plugs Not used for hand Machine	100/-
06.	Not Slings property	200/-
07.	Using Damaged Sling	200/-

Sl. No	Instance of Violation	Fine (in Rs)
08.	Lifting Cylinders Without Cage	500/-
09.	Not Using Proper Welding Cable With Lot of Joints And Not Insulated Property.	200/-
10.	Not Removing Small Scrap From Platforms	200/-
11.	Gas Cutting Without Taking Proper Precaution or Not Using Sheet Below Gas Cutting	200/-
12.	Not Maintaining Electric Winches Which are Operated Dangerously	500/-
13.	Improper Earthing Of Electrical T&P	500/-
	Major Accident or Accidents causing partial loss of earning to the victim	50,000/- per victim
14	Fatal Accident or Accidents causing permanent loss of earning to the victim	1,00,000/- per victim

Any other non-conformity noticed not listed above will also be fined as deemed fit by BHEL. The decision of BHEL engineer is final on the above. The amount will be deducted from running bills of the contractor. The amount collected above will be utilised for giving award to the employees who could avoid accident by following safety rules. Also the amount will be spent for purchasing the safety appliances and supporting the safety activity at site.

9.8

CITATION:-If safety record of the contractor in execution of the awarded job is to the satisfaction of safety department of BHEL, issue of an appropriate certificate to recognize the safety performance of the contractor may be considered by BHEL after completion of the job

9.9 Memorandum of Understanding

After Award Of Work, Contractors Are Required To Enter Into A Memorandum Of Understanding As Given Below:

4 Memorandum of Understanding

BHEL, PSWR is committed to Health, Safety and Environment Policy (EHS Policy) as given in the booklet titled " Safe Working Practices" issued to all contractors.

M/s _____ do hereby also commit to the same EHS Policy while executing the Contract Number _____

M/s _____ shall ensure that safe work practices not limited to the above booklet are followed by all construction workers and supervisors. Spirit and content therein shall be reached to all workers and supervisors for compliance.

BHEL will be carrying out EHS audits twice a year and M/s _____ shall ensure to close any non-conformity observed/reported within fifteen days.

Signed by authorized representative of M/s-----

Name :

Place & Date:

9.10

Comprehensive list of National Standards for reference and use wherever applicable in the execution of Civil, Erection and Commissioning Contracts.

IS No	YEAR	Amd upto	DESCRIPTION
IS 10204	1982		PORTABLE FIRE EXTINGUISHERS MECHANICAL FOAM TYPE
IS 10245	1994		SPECIFICATION FOR BREATHING APPARATUS
IS 10291	1982		SAFETY CODE FOR DRESS DRIVERS IN CIVIL ENGINEERING WORKS
IS 10658	1983		HIGHER CAPACITY DRY POWDER FIRE EXTINGUISHERS (TROLLEY MOUNTED)
IS 10662	1992		COLOUR TELEVISION
IS 10667	1983		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR PROTECTION OF FOOT AND LEG
IS 11037	1984		ELECTRONIC FAN REGULATORS
IS 11057	1984		INDUSTRIAL SAFETY NETS
IS 11451	1998		RECOMMENDATION FOR SAFETY AND HEALTH REQUIREMENT RELATING TO OCCUPATION EXPOSURE TO ASBESTOS
IS 1169	1967		PEDESTAL FANS
IS 1179	1967		SPECIFICATION FOR EQUIPMENT FOR EYE AND FACE PROTECTION DURING WELDING
IS 11833	1986		DRY POWDER FIRE EXTINGUISHERS FOR METAL FIRES
IS 11972	1987		CODE OF PRACTICE FOR SAFETY PRECAUTION TO BE TAKEN WHEN ENTERING A SEWAGE SYSTEM
IS 1287	1986		ELECTRIC TOASTER
IS 13063	1991		STRUCTURAL SAFETY OF BUILDINGS ON SHALLOW FOUNDATIONS ON ROCKS
IS 13385	1992		SPECIFICATIONS FOR FIRE EXTINGUISHERS 50 LITRE WHEEL MOUNTED WATER TYPE (GAS CARTRIDGES)
IS 13386	1992		SPECIFICATIONS FOR FIRE EXTINGUISHERS 50 LITRE MECHANICAL FOAM TYPE
IS 13415	1992		CODE OF SAFETY FOR PROTECTIVE BARRIERS IN AND AROUND BUILDINGS
IS 13416	1992		RECOMMENDATIONS FOR PREVENTIVE MEASURES AGAINST HAZARDS AT WORKING PLACE PART 1 TO PART 5
IS 13430	1992		CODE OF PRACTICE FOR SAFETY DURING ADDITIONAL CONSTRUCTION AND ALTERATION TO EXISTING BUILDINGS
IS 13849	1993		PORTABLE FIRE EXTINGUISHERS DRY POWDER TYPE (CONSTANT PRESSURE)
IS 1446	1985		CLASSIFICATION OF DANGEROUS GOODS (FIRST REVISION)
IS 1476	1979		REFRIGERATORS
IS 1641	1988		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): GENERAL PRINCIPLES OF FIRE GRADING AND CLASSIFICATION
IS 1642	1989		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS- DETAILS OF CONSTRUCTION
IS 1643	1988		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): EXPOSURE HAZARD
IS 1646	1997		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): ELECTRICAL INSTALLATIONS
IS 1904	1986		CODE OF PRACTICE FOR DESIGN AND CONSTRUCTION OF FOUNDATIONS IN SOIL
IS 1905	1987		STRUCTURAL SAFETY OF BUILDINGS MASONARY WALLS
IS 2082	1985		ELECTRICAL GEYSERS
IS 2171	1985		PORTABLE FIRE EXTINGUISHERS DRY POWDER TYPE (CARTRIDGE)

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IS No	YEAR	Amd upto	DESCRIPTION
IS 2309	1989		PRACTICE FOR THE PROTECTION OF BUILDINGS AND ALLIED BUILDINGS AGAINST LIGHTENING
IS 2312	1967		EXHAUST FANS
IS 2361	1994		SPECIFICATION FOR BUILDING GRIPS - FIRST REVISION
IS 2418	1977		TUBULAR FLUORSCENT LAMPS IS 2418 (FT-1)
IS 2750	1964		STEEL SCAFFOLDINGS
IS 2762	1964		SAFE WORKING LOADS IN KGS FOR WIRE ROPE SLINGS
IS 2878	1986		FIRE EXTINGUISHERS CARBON DIOXIDE TYPE (PORTABLE AND TROLLEY MOUNTED)
IS 2925	1984		SPECIFICATION FOR INDUSTRIAL SAFETY HELMETS
IS 3016	1982		CODE OF PRACTICE FOR FIRE PRECAUTIONS IN WELDING AND CUTTING OPERATIONS- FIRST REVISION
IS 3315	1974		DESERT COOLERS
IS 3521	1989		INDUSTRIAL SAFETY BELTS AND HARNESS
IS 368	1983		IMMERSION WATER HEATERS
IS 3696	1991		SAFETY CODE OF SCAFFOLDS AND LADDERS PART 1 TO 2
IS 3737	1996		LEATHER SAFETY BOOTS FOR WORKERS IN HEAVY METAL INDUSTRIES
IS 374	1979		CEILING FANS INCLUDING REGULATORS
IS 3764	1992		EXCAVATION WORK - CODE OF SAFETY
IS 3786	1983		METHOD FOR COMPUTATION OF FREQUENCY AND SEVERITY RATES FOR INDUSTRIAL INJURIES AND CLASSIFICATION OF INDUSTRIAL ACCIDENTS
IS 3935	1966		CODE OF PRACTICE FOR COMPOSITE CONSTRUCTION
IS 4014	1967		CODE OF PRACTICE FOR STEEL TUBULAR SCAFFOLDING
IS 4081	1986		SAFETY CODE FOR BLASTING AND RELATED DRILLING OPERATIONS
IS 4082	1977	1996	STACKING AND STORAGE OF CONSTRUCTION MATERIALS AND COMPONENTS AT SITE
IS 4130	1991		DEMOLITION OF BUILDINGS - CODE OF SAFETY PART 1 TO 2
IS 4138	1977		SAFETY CODE FOR WORKING IN COMPRESSED AIR (FIRST REVISION)
IS 4155	1966		GLOSSARY OF TERMS RELATING TO CHEMICAL AND RADIATION HAZARDS AND HAZARDOUS CHEMICALS
IS 4209	1967		CODE OF SAFETY FOR CHEMICAL LABORATORY
IS 4250	1980		FOOD MIXERS
IS 4262	1967		CODE OF SAFETY FOR SULFURIC ACID
IS 4756	1978		SAFETY CODE FOR TUNNELING WORK
IS 4912	1978		SAFETY REQUIREMENTS FOR FLOOR AND WALL OPENINGS, RAILINGS AND TOE BOARDS
IS 5121	1969		SAFETY CODE FOR PILING AND OTHER DEEP FOUNDATIONS
IS 5182	1969	1982	METHODS FOR MEASUREMENT OF AIR POLLUTION
IS 5184	1969		CODE OF SAFETY FOR HYDROFLUORIC ACID
IS 5216	1982	2000	RECOMMENDATIONS ON SAFETY PROCEDURES AND PRACTICE IN ELECTRICAL WORK PART I AND II
IS 555	1979		TABLE FANS
IS 5557	1995		INDUSTRIAL AND SAFETY LINED RUBBER BOOTS (SECOND REVISION)

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IS No	YEAR	Amd upto	DESCRIPTION
IS 5916	1970		SAFETY CODE FOR CONSTRUCTION INVOLVING USE OF HOR BITUMINOUS MATERIALS
IS 5983	1980		SPECIFICATION FOR EYE PROTECTORS - FIRST REVISION
IS 6234	1986		PORTABLE FIRE EXTINGUISHERS WATER TYPE (STORED PRESSURE)
IS 692	1994		CRITERIA FOR SAFETY AND DESIGN OF STRUCTURES SUBJECTED TO UNDERGROUND BLASTS
IS 6994	1973		SPECIFICATION FOR SAFETY GLOVES
IS 7155	1986		CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY (PART 1 TO 8)
IS 7205	1974		SAFETY CODE FOR ERECTION OF STRUCTURAL STEEL WORK
IS 7293	1974		SAFETY CODE FOR WORKING WITH CONSTRUCTION MACHINERY
IS 7323	1994		GUIDELINES FOR OPERATIONS OF RESERVOIRS
IS 7812	1975		CODE OF SAFETY FOR MERCURY
IS 7969	1975		SAFETY CODE FOR HANDLING AND STORAGE OF BUILDING MATERIALS
IS 8089	1976		CODE OF SAFE PRACTICE FOR LAYOUT OF OUTSIDE FACILITIES IN AN INDUSTRIAL PLANT
IS 8091	1976		CODE OF PRACTICE FOR INDUSTRIAL PLANT LAYOUT
IS 8095	1976		ACCIDENTS PREVENTION TAGS
IS 818	1968	1997	CODE OF PRACTICE FOR SAFETY AND HEALTH REQUIREMENTS IN ELECTRIC AND GAS WELDING, AND CUTTING OPERATIONS
IS 8448	1989		AUTOMATIC LINE VOLTAGE CORRECTOR (STABILISER)
IS 8519	1977		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR BODY PROTECTION
IS 8520	1977		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR EYE, FACE AND EAR PROTECTION
IS 875	1987		STRUCTURAL SAFETY OF BUILDING: LOADING STANDARD PART 1 TO 5
IS 8807	1978		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR PROTECTION OF ARMS AND HANDS
IS 8978	1985		INSTANTANEOUS WATER HEATERS
IS 8989	1978		SAFETY CODE FOR ERECTION OF CONCRETE FRAMED STRUCTURES
IS 940	1989		PORTABLE FIRE EXTINGUISHERS WATER TYPE (GAS CARTRIDGE)
IS 9457	1980		SAFETY COLOURS AND SIGNS
IS 9679	1980		CODE OF SAFETY FOR WORK ENVIRONMENTAL MONITORING
IS 9706	1997		CODE OF PRACTICE FOR THE CONSTRUCTION OF AERIAL RPEWAYS FOR THE TRANSPORTATION OF MATERIAL
IS 9759	1981		GUIDELINES FOR DEWATERING DURING CONSTRUCTION
IS 9815	1989		SERVO MOTOR OPERATED LINE VOLTAGE CORRECTOR (SERVO STABILISER)
IS 9944	1992		RECOMMENDATIONS ON SAFE WORKING LOAD FOR NATURAL AND MAN-MADE FIBRE ROPE SLINGS
IS 996	1979		SINGLE PHASE ELECTRIC MOTORS
ISO 3873	1977		SAFETY HELMET

SECTION-10

SPECIAL CONDITIONS OF CONTRACT

10.0 DRAWINGS AND DOCUMENTS

10.1

The detailed drawings, specifications available with BHEL engineers will also form part of this tender specification. Revision of drawings/documents may take place due to various considerations as is normal in such large project. Work will have to be carried out as per revised drawings/ documents. These documents will be made available to the contractor during execution of work at site.

10.2

One set of necessary drawings/documents to carry out the erection work will be furnished to the contractor by BHEL on loan that shall be returned to BHEL after completion of the work. Contractor's personnel shall take care of these documents given to them.

10.3

The data furnished in various sections and appendices and the drawings enclosed with this tender specification describe the equipment to be installed, tested and commissioned under this specification, briefly. However, the changes in the design and in the quantity may be expected to occur as is usual in any such large scale of works.

10.4

If any error or ambiguity is discovered in the specification/information contained in the documents/drawings and tender, the contractor shall forthwith bring the same to the notice of BHEL before submission of offer.

10.5

In case an ambiguity is detected after award of work, the same must be brought to the notice of BHEL before commencement of the work/activity. BHEL's interpretation in such cases will be final and binding on the contractor.

10.6

In case of any conflict between general instructions to tenderness, general conditions of contract contained in sections 1 & 2 respectively and special conditions of contract contained in sections 4 to 15 and appendices, provisions contained in special conditions of contract in sections 4 to 15 and appendices shall prevail.

SECTION-11

SPECIAL CONDITIONS OF CONTRACT

11.0 TIME SCHEDULE, MOBILIZATION, OVERRUN, QUANTITY VARIATION, PRICE VARIATION, PROGRESS MONITORING ETC.

11.1 MOBILIZATION OF RESOURCES & CONTRACT PERIOD

11.1.1 INITIAL MOBILIZATION

Contractor shall reach site, make his site establishment and deploy necessary resources so as to be ready to commence the work within three weeks from the date of fax letter of intent; or later - if so directed by the construction manager of BHEL.

11.1.2 AUGMENTATION OF MOBILISATION

Contractor shall subsequently augment his resources in such a manner that the entire work is completed within the time schedule / contract period. Mobilization of contractor's resources shall be made and augmented from time to time in such a manner that the work in scope is carried out in an uninterrupted manner.

11.1.3 CONTRACT PERIOD / TIME SCHEDULE

Regular contract period shall be **39 (thirty nine) months**. The date of receipt / unloading the very first consignment or the date of commencement of Materials Management Services by the contractor as defined in scope of this contract- whichever is earlier, shall be reckoned as the start of the contract period.

11.1.4 GRACE PERIOD

NOT APPLICABLE

11.1.5 CONSEQUENCE OF DELAY

It may be noted that in the event of delay in completion is attributable to the contractor, BHEL will impose penalty on the contractor as per GCC.

11.2 PROGRESS MONITORING, CONTRACT EXTENSION AND OVERRUN

11.2.1 PROGRESS MONITORING

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.2.2 CONTRACT PERIOD EXTENSION

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.2.3 OVERRUN COMPENSATION

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.4 VARIATION IN RATES / PRICE

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.5 VARIATION IN QUANTITIES & MEASUREMENT OF WORK

11.5.1 VARIATION IN QUANTITIES

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.5.2 MEASUREMENT OF WORK AND PAYMENT

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.5.2 INTEREST BEARING RECOVERABLE ADVANCE

REFER 'GENERAL CONDITIONS OF CONTRACT'

11.6 DEFINITION OF WORK COMPLETION

The contractor's scope of work under these specifications will be deemed to have been completed in all respect, only when all the activities are completed satisfactorily and so certified by BHEL. The decision of BHEL in this regard shall be final and binding on the contractor.

SECTION-12

SPECIAL CONDITIONS OF CONTRACT

12.0 TERMS OF PAYMENT

12.0.1

The contractor shall submit his monthly RA account bills with all the details required by BHEL on specified date every month covering progress of work in all respects and areas for the previous calendar month. However, first RA Bill shall be released only after signing of Contract Agreement.

12.0.2

Clause 2.6 of general conditions of contract shall be referred to as regards mode of payment, and measurement of the work completed.

12.0.3

Release of payment in each running bill will be restricted to 95% of the value of work admitted, as per the percentage break-up for the stage of work completion stipulated vide clauses hereinafter.

The 5% thus remaining shall be on account of workmanship guarantee of work executed. The same will be released after completion of the guarantee period of **12 months** from the date of completion of entire work as certified by BHEL.

12.0.4

The payment for running bills will normally be released within around 30 days of submission of running bill with measurement sheets. Contractor shall make his own arrangement for making payment of impending labour wages and other dues in the meanwhile.

12.0.5

BHEL will release payment through Electronic Fund Transfer (EFT)/RTGS. In order to implement this system, the following details are to be furnished by the Contractor pertaining to his Bank Accounts where proceeds will be transferred through BHEL's banker:

1. Name of the Company
2. Name of Bank
3. Name of Bank Branch
4. City/Place
5. Account Number
6. Account type
7. IFSC code of the Bank Branch
8. MICR Code of the Bank Branch

BHEL may also choose to release payment by other alternative modes as suitable

12.1 STAGES OF PROGRESSIVE PRO-RATA PAYMENTS

12.1.1 Deployment of Major Resources

The **5%** of award value of rate schedule will be released on following events of contractor's T&P mobilization:

- (i) 0.75 % of award value on deployment of 1st 40 ton crane at site
- (ii) 0.75 % of award value on deployment of 2nd 40 ton crane at site
- (iii) 0.50% of award value on deployment of 1st 18 ton crane at site
- (iv) 0.50% of award value on deployment of 2nd 18 ton crane at site
- (v) 0.25% of award value on deployment of 1st 8 ton Pick & Carry crane at site.
- (vi) 0.25% of award value on deployment of 2nd 8 ton Pick & Carry crane at site.
- (vii) 2.0% of award value on deployment of 4000 wooden / concrete sleepers at site on pro rata basis @ 0.5% for every 1000 sleepers.

However the total amount payable towards the aforesaid deployment shall be equal to 5% of the actual executed value of work.

12.1.2 Receipt, unloading, verification, stacking, re-arranging / re-stacking, handling of out going materials.

Another **60%** of the agreed item rates shall stand assigned for progressive pro- rata release towards material handling work of the rate schedule. Detailed break up for release on progressive pro-rata payment will be as following.

12.1.2.1 INCOMING MATERIALS BY ROAD TRANSPORT (item nos. A.1.1 of rate schedule)

(a) Unloading & Preliminary Verification of Materials

30 % of agreed rates shall be paid after the materials are received and unloaded at project site and verified (verification of physical quantities and externally detectable damages) with reference to LR / LWB / PWB subject to furnishing following information and record along with the bill.

- (i) Shortage / damage report of the consignment, if applicable, recorded on the LR / LWB / PWB and duly counter signed by the transporters / driver.
- (ii) Material management forms duly filled in by contractor and certified by BHEL engineer.

(b) Detailed Verification & Stacking

30 % of the agreed rates shall be paid after the materials are duly stacked and verified as per packing slip / loading advice slip by repacking, stacking etc wherever necessary. Payment will be released on submission of information as per materials management forms by the contractor immediately after verification of materials and certified by BHEL engineers. Site engineer will provide the requisite proforma. Verification of material shall be done within the time frame specified by BHEL normally within 3 weeks after receipt of consignment.

12.1.2.2 INCOMING MATERIALS BY RAIL TRANSPORT

(a) Unloading & Preliminary Verification of Materials

20 % of agreed rates shall be paid after the materials are received and unloaded at the railway siding and verified (verification of physical quantities and externally detectable damages) with reference to RR subject to furnishing following information and record along with the bill.

- (i) Shortage / damage report of the consignment, if applicable, recorded on the RR and duly counter signed by the Railway authorities.
 - (ii) Proof of the claim lodged with railways in respect of above shortage / open delivery.
 - (iii) Material management forms duly filled in by contractor and certified by BHEL engineer.
- (b) Local Transport from Railway siding upto project site.

25% of the agreed rate shall be paid after the materials are picked up from the railway siding and than transported inside the project premises.

(c) Detailed Verification & Stacking

15 % of the agreed rates shall be paid after the materials are duly stacked and verified as per packing slip / loading advice slip by repacking, stacking etc wherever necessary. Payment will be released on submission of information as per materials management forms by the contractor immediately after verification of materials and certified by BHEL engineers. Site engineer will provide the requisite proforma. Verification of material shall be done within the time frame specified by BHEL normally within 3 weeks after receipt of consignment.

12.1.2.3 Shifting / Re-Arranging / Re-Stacking Of Materials (Item Sl. No. A.2 of Rate Schedule)

60% of the accepted item rate on pro-rata basis for respective work completed and corresponding records prepared in the month.

12.1.2.4 OUTGOING MATERIALS (Item No. A.3 of Rate Schedule)

60% of accepted rate will be paid after proper packing / bundling of materials as and where necessary, loading on the outgoing vehicle, preparation of packing list and material outgoing gate pass, getting the consignment inspected and endorsed by the security personnel of BHEL as well as that of customer, getting the out-going gate pass registered at the 'out gate' of the project.

Payments in respect of material handling activities (listed in section-a of rate schedule) will be made for the actual quantities executed.

12.1.3 **Payment for Materials Management services.**

The remaining 35% of the agreed item rates shall be assigned for progressive pro-rata release towards various Material Management Services as described in detail in these specifications. Payment towards MM services will be made after availing such services as per agreed plan. This is irrespective of any materials handled or not in that month.

12.1.3 .1 Break Up of Assigned % towards Materials Management Services for Pro-Rata Progressive Payment

The break up of **assigned 35% of award value** towards various MM services shall be as under:

A. Supervision services:	05%
B. Preservation services:	03%
C. Record keeping services:	15%
D. Secretarial & miscellaneous services:	12%

12.1.3.2

For the purpose of release of progressive payments, month-wise break up for each of the above services will be jointly worked out by BHEL and the contractor at site at the time of start of work. This will be dynamically and regularly reviewed every month or mutually agreed periodicity and shall be re-set based on expected requirement of various services keeping in view relevant aspects. On all the issues as above, BHEL engineer's decision shall be final & binding.

12.1.3.3

These services are to be rendered even during extended period (the contract extension may be due to any reason) without any additional payment / compensation other than what is provided for, in the contract. The periodical review of monthly billing / payment break up shall take this aspect in consideration. Progressive payment for each service of these will be made on certification of BHEL accordingly.

12.1.3.4

To start with contract value will be considered as the award value. Contract value will be periodically reviewed depending on the quantity of materials to be handled by the contractor for completion of the contractual work in totality. Finally, the contract value shall be arrived at by multiplying the agreed item rates of the rate schedule applied on actually executed final quantity of all the material handling activities and the total payment towards break up envisaged in clause 12.1 herein above shall be adjusted accordingly.

12.2 Mode of Payment and Measurement of Work Completed

REFER 'GENERAL CONDITIONS OF CONTRACT'

SECTION-13

SPECIAL CONDITIONS OF CONTRACT

13.1 EXTRA CHARGES FOR RECTIFICATION AND MODIFICATION

REFER 'GENERAL CONDITIONS OF CONTRACT'

**SECTION-14
SPECIAL CONDITIONS OF CONTRACT**

INSURANCE

**Marine, Storage cum Erection (MCE) Insurance and Repairing
Damages**

REFER 'GENERAL CONDITIONS OF CONTRACT'

**SECTION-15
SPECIAL CONDITION OF CONTRACT**

15.0 EARNEST MONEY DEPOSIT, SECURITY DEPOSIT & BANK GUARANTEE

15.1 EARNEST MONEY DEPOSIT:

REFER 'GENERAL CONDITIONS OF CONTRACT'

15.2 SECURITY DEPOSIT

REFER 'GENERAL CONDITIONS OF CONTRACT'

15.3 BANK GUARANTEE

REFER 'GENERAL CONDITIONS OF CONTRACT'

15.3.1 Guidelines for acceptance of Bank Guarantees are as follows :

- Vendors are advised to obtain BG from any of the following BHEL consortium banks

State Bank of India	The Hongkong and Shanghai banking Corporation Ltd.
ICICI Bank Ltd	ABN Amro Bank N.V
Bank of Baroda	IDBI Ltd
Canara Bank	Punjab National Bank
Citi bank N.A	Standard Chartered Bank
Corporation Bank	State Bank of Travancore
Detshe Bank	State Bank of Hyderabad
HDFC Bank Ltd	Syndicate Bank

- The Bank Guarantees of all Public sector banks shall be accepted (Other than consortium banks also).
- The Bank Guarantees of Co-operative banks shall not be accepted.
- Bank Guarantees of other banks (banks other than consortium bank, public sector bank, & Co-operative banks) can be accepted subject to an overall exposure limit (at BHEL, PSWR, Nagpur) of RS. 10 crores for banks with net worth of more than Rs. 500 crores as on last balance sheet date and Rs 5 crores for banks with net worth between Rs. 350 to Rs 500 crores (A certificate and copy of latest Balance Sheet to be given at the time of submission of bank guarantees .
- In case Bank Guarantees given by non consortium banks (Private sector or Public sector), the bank Guarantees shall be enforceable at Nagpur, Maharashtra.

SECTION 16
SUSPENSION OF BUSINESS DEALING WITH CONTRACTORS
(w.e.f 18.05.09)

16.1 A bidder may be put on HOLD for a period of 6 months, for future tenders for specific works on the basis of one or more of the following reasons:

- I. Bidder does not honour his own offer or any of its conditions within the validity period.
- II. Bidder fails to respond against **three consecutive** enquires of BHEL.
- III. After placement of order, Bidder fails to execute a contract.
- IV. Bidder fails to settle sundry debt account, for which he is legitimately liable, within one year of its occurrence.
- V. Bidder's performance rating falls below 60% in specific category.
- VI. Bidder works are under strike/ lockout for a long period.

16.2 A Bidder may be de-listed from the list of registered Bidders of the region for a period of 1 year on the basis of one or more of the following reasons:-

- I. Bidder tampers with tendering procedure affecting ordering process or commits any misconduct which is contrary to business ethics.
- II. Bidder has substituted, damaged, failed to return, short returned or unauthorizedly disposed off materials/ documents/ drawings/ tools etc of BHEL.
- III. Bidder no longer has the technical staff, equipment, financial resources etc. required to execute the orders/ contracts.

16.3 A Bidder can be banned from doing any business with all Units of BHEL for a period of 3 years on the basis of one or more of the following reasons:

- I. Bidder is found to be responsible for submitting fake/ false/ forged documents, certificates, or information prejudicial to BHEL's interest.
- II. In spite of warnings, the Bidder persistently violates or circumvents the provisions of labour laws/ regulations/ rules and other statutory requirements.
- III. Bidder is found to be involved in cartel formation.
- IV. The Bidder has indulged in malpractices or misconduct such as bribery, corruption and fraud, pilferage etc which are contrary to business ethics.
- V. The Bidder is found guilty by any court of law for criminal activity/ offences involving moral turpitude in relation to business dealings.
- VI. The Bidder is declared bankrupt, insolvent, has wound up or been dissolved; i.e ceases to exist for all practical purposes.
- VII. Bidder is found to have obtained Official Company information/ documentation by questionable means.
- VIII. Communication is received from the administrative Ministry of BHEL to ban the Bidder from business dealings.

APPENDIX-I

LIST OF MAJOR T&P TO BE PROVIDED BY BHEL FREE OF CHARGES ON SHARING BASIS

NIL

SIGNATURE OF THE BIDDER
DATE:

APPENDIX-II

LIST OF MAJOR T&P TO BE PROVIDED BY CONTRACTOR

SN	DESCRIPTION & CAPACITY OF T&P	RANGE / CAPACITY (Minimum)	MINIMUM QUANTITY	TENTATIVE DEPLOYMENT SCHEDULE (Availability at project site for work)
01	Crawler / Mobile Crane	40 Ton	2	First crane from start of work. Second crane from 3 rd month from start of work
02	Crawler / Mobile Crane	18 Ton	2	Both Crane From Start of Work.
03	Pick & Carry Mobile Crane	8 Ton	2	Both Crane From Start of Work.
04	Fork Lift	2 Ton	3	1 st - After 3 months of start of work 2 nd & 3 rd After 6 months of start of work
05	Trailer with Prime Mover	Adequate Capacity	As required	While furnishing the deployment plan the need for transport of material, recd on delivery at transporters' go-down basis up to BHEL stores is to be kept in view.
06	Wooden / Concrete Sleepers	Assorted Cross Sectional Sizes, 3ft / 6 ft. Length	10,000 Nos.	Deployment schedule: 1 st 2000 nos – 1 st month, 2 nd 2000 nos – 3 rd month, Bal 6000 nos – progressively from 4 th month to 7 th month from start of work. Contractor shall take out all such sleepers at the end of contract and leave the project premises clean.
07	SLINGS, 'D'-SHACKLES, HYDRAULIC JACKS, ETC.	AS REQUIRED	AS REQUIRED	Deployment as per project requirement.

The list and deployment schedule furnished above is **tentative and only for general guidance** to the bidders for the purpose of estimation. Successful bidder shall deploy all necessary T&P required to carry out the contractual work **at appropriate times to suit actual requirement of project**. Deployment schedule and augmentation of the tools & plants shall be strictly as per actual requirement of the work as decided by BHEL from time to time.

SIGNATURE OF THE BIDDER

DATE:

.....
BHARAT HEAVY ELECTRICALS LIMITED: PSWR: NAGPUR

Tender Spec No. BHE / PW / PUR /AMRT-MMS/717(Rev-01 dated 31/03/2010)

APPENDIX-III

DETAILS OF SIMILAR WORK DONE DURING THE LAST SEVEN YEARS

SL. NO.	FULL ADDRESS OF CLIENT & NAME OF OFFICER IN CHARGE	POSTAL OF IN	DESCRIPTION OF WORK	VALUE OF CONTRACT	DATE OF AWARD OF WORK	DATE OF COMMENCEMENT OF WORK	ACTUAL COMPLETION TIME (MONTHS)	DATE OF ACTUAL COMPLETION OF WORK	REMARKS
1									
2									
3									
4									
5									

BIDDERS SHALL ENCLOSE COPIES OF DETAILED WORK ORDER (GIVING BILL OF QUANTITIES AND SCOPE OF WORK) AND COMPLETION CERTIFICATE IN SUPPORT OF THIS STATEMENT.

DATE

SIGNATURE OF BIDDER WITH SEAL

APPENDIX –IV

CURRENT COMMITMENTS OF THE BIDDER

S N	FULL POSTAL ADDRESS OF CLINT & NAME OF OFFICER IN CHARGE	DESCRIPTI ON OF WORK	VALUE OF CONTRACT	DATE OF COMMEN CEMENT OF WORK	SCHEDUL E OF COMPLE- TION	% OF WORK COMPLETED AS ON DATE	EXPECTED DATE OF COMPLETION	REMARKS

DATE

SIGNATURE OF BIDDER WITH SEAL

APPENDIX-V
FORMAT FOR MONTH-WISE MANPOWER DEPLOYMENT PLAN FOR MATERIAL HANDLING
(CATEGORY-WISE NUMBERS TO BE INDICATED FOR EACH MONTH)

***USE ADDITIONAL SHEETS TO COVER THE TOTAL CONTRACT PERIOD**

SL. NO.	CATEGORY	MONTHS											
		1	2	3	4	5	6	7	8	9	10	SO ON*	
01	RESIDENT MANAGER												
02	SUPERVISORS												
03	FOREMAN												
04	STOREKEEPER												
05	COMPUTER OPERATOR												
06	CRANE OPERATOR												
07	ELECTRICIAN												
08	TRUCK / TRAILER DRIVER												
09	SARANG												
10	RIGGER												
11	CARPENTER												
12	UNSKILLED WORKER												
13	OTHERS (PLEASE SPECIFY)												
	MONTH WISE TOTAL												

DATE

SIGNATURE & SEAL OF BIDDER

APPENDIX-VI**FORMAT FOR MONTH-WISE DEPLOYMENT PLAN FOR MATERIALS MANAGEMENT SERVICES
(CATEGORY-WISE NUMBERS PROPOSED TO BE DEPLOYED INDICATED FOR EACH MONTH)**

Months	Service Category				Month Wise Total
	Supervision	Record Keeping	Preservation	Secretarial & Other Misc. Services	
1	1	3	2	3	9
2	1	3	2	3	9
3	1	3	2	3	9
4	1	3	2	3	9
5	1	3	2	3	9
6	1	3	2	4	10
7	2	6	4	4	16
8	2	6	4	4	16
9	2	6	4	4	16
10	2	6	4	4	16
11	2	6	4	4	16
12	2	6	4	4	16
13	2	9	4	4	19
14	2	9	4	4	19
15	2	9	4	4	19
16	2	9	4	4	19
17	2	9	4	4	19
18	2	9	4	4	19
19	2	9	4	4	19
20	2	9	4	4	19
21	2	9	4	4	19
22	2	9	4	4	19
23	2	9	4	4	19
24	2	9	4	4	19
25	2	9	4	4	19
26	2	9	4	4	19
27	2	9	4	4	19
28	2	9	4	4	19
29	2	9	4	4	19
30	2	6	2	4	14
31	2	6	2	4	14
32	2	6	2	4	14
33	2	6	2	4	14
34	2	6	2	4	14
35	2	6	2	4	14
36	2	6	2	4	14
37	2	6	2	4	14
38	2	6	2	4	14
39	2	6	2	4	14
40	2	6	2	4	14
41	2	6	2	4	14
42	2	6	2	4	14
43	2	6	2	4	14
44	2	6	2	4	14
45	2	6	2	4	14
46	2	6	2	4	14

Note : The no of persons indicated for MM services is tentative for peak load. The deployment may increase or decrease based upon work load & site requirement. Bidder has to deploy the manpower in consultation with BHEL Engineer vide clause no 4.12.3.

DATE

SIGNATURE AND SEAL OF BIDDER

.....
BHARAT HEAVY ELECTRICALS LIMITED: PSWR: NAGPUR

Tender Spec No. BHE / PW / PUR /AMRT-MMS/717(Rev-01 dated 31/03/2010)

Part I: Technical Specifications

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APPENDIX-VII

FORMAT FOR DEPLOYMENT PLAN FOR MAJOR TOOLS AND PLANTS

*** USE ADDITIONAL SHEETS TO COVER THE TOTAL CONTRACT PERIOD**

SN	DESCRIPTION AND CAPACITY OF T&P		QUANTITY OF DEPLOYMENT IN THE MONTH											
	AS PER TENDER SPECS	PLANNED BY BIDDER	1	2	3	4	5	6	7	8	9	10	SO ON *	
01	Crawler / Mobile Crane 40 MT 1 st Crane													
02	Crawler / Mobile Crane 40 MT 2 nd Crane													
03	Crawler / Mobile Crane 18 MT 1 st Crane													
04	Crawler / Mobile Crane 18 MT 2 nd Crane													
05	Pick & Carry Mobile Crane 8 MT 1 st Crane													
06	Pick & Carry Mobile Crane 8 MT 2 nd Crane													

07	Fork Lift												
08	Trailer with Prime Mover												
09	Wooden / Concrete Sleepers												
10	SLINGS, 'D'-SHACKLES, HYDRAULIC JACKS, ETC.												

DATE

SIGNATURE & SEAL OF BIDDER

APPENDIX-VIII

ANALYSIS OF UNIT RATE QUOTED

SN	DESCRIPTION	% OF QUOTED RATE	REMARKS
01	SITE FACILITIES VIZ., ELECTRICITY, WATER, AREA LIGHTING IN YARD, OTHER INFRASTRUCTURES		
02	SALARY AND WAGES + RETRENCHMENT BENEFITS		
03	CONSUMABLES		
04	T&P DEPRECIATION & MAINTENANCE		
05	ESTABLISHMENT & ADMINISTRATIVE EXPENSES		
06	OVERHEADS		
07	PROFIT		
TOTAL		100 %	-----

DATE

SIGNATURE & SEAL OF BIDDER

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CHAPTER -1

1. GENERAL INSTRUCTION TO TENDERERS

1.1. DESPATCH INSTRUCTION

- i) The General Conditions of Contract form part of the Tender specifications. All pages of the tender documents shall be duly signed, stamped and submitted along with the offer in token of complete acceptance thereof. The information furnished shall be complete by itself. The tenderer is required to furnish all the details and other documents as required in the following pages
- ii) Tenderers are advised to study all the tender documents carefully. Any submission of tender by the tenderer shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. Should the tenderers have any doubt about the meaning of any portion of the Tender Specification or find discrepancies or omissions in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, the scope of work etc., he shall at once, contact the authority inviting the tender well in time (so as not to affect last date of submission) for clarification before the submission of the tender. Tenderer's request for clarifications shall be with reference to Sections and Clause numbers given in the tender documents. The specifications and terms and conditions shall be deemed to have been accepted by the tenderer in his offer. Non compliance with any of the requirements and instructions of the tender enquiry may result in the rejection of the tender.
- iii) Integrity pact (IP) shall be applicable for all tenders / contracts if indicated in NIT. This integrity pact shall be issued as part of the Tender documents and shall be returned by the bidder along with Techno-commercial bid duly filled, signed and stamped by the authorized signatory who signs the bid. Only those vendors / bidders who have entered into such an IP with BHEL shall be considered competent to participate in the bidding. Entering into this pact shall be a preliminary qualification.

1.2. SUBMISSION OF TENDERS

- i) The tenderers must submit their tenders to Officer inviting tender as per instructions in the NIT
- ii) Tenders submitted by post shall be sent by 'REGISTERED POST ACKNOWLEDGEMENT DUE / by COURIER' and shall be posted with due allowance for any postal/courier delays. BHEL takes no responsibility for delay, loss or non-receipt of tenders sent by post/courier. The tenders received after the specified time of their submission are treated as 'Late Tenders' and shall not be considered under any circumstances. Offers received by Fax/Email/Internet shall be considered as per terms of NIT.
- iii) Tenders shall be opened by authorised Officer of BHEL at his office at the time and date as specified in the NIT, in the presence of such of those tenderers or their authorised representatives

who may be present

- iv) Tenderers whose bids are found techno commercially qualified shall be informed the date and time of opening of the Price Bids and such Tenderers may depute their representatives to witness the opening of the price bids. BHEL's decision in this regard shall be final and binding.
- v) Before tendering, the tenderers are advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour, means of transport and access to Site, accommodation, etc. No claim will be entertained later on the grounds of lack of knowledge of any of these conditions.

1.3. LANGUAGE

- i) The tenderer shall quote the rates in English language and international numerals. These rates shall be entered in figures as well as in words. For the purpose of the tenders, the metric system of units shall be used.
- ii) All entries in the tender shall either be typed or written legibly in ink. Erasing and over-writing is not permitted and may render such tenders liable for rejection. All cancellations and insertions shall be duly attested by the tenderer.

1.4. PRICE DISCREPANCY:

If there are differences between the rate given by the tenderer in words and figures or in amount worked out by him, the following procedure for evaluation and award shall be followed:

- i) When there is a difference between the rates in figures and in words, the rates which corresponds to the amounts worked out by the contractor, shall be taken as correct
- ii) When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figure or in words, then the rate quoted by the contractor in words shall be taken as correct
- iii) When the rate quoted by the contractor in figures and words tallies but the amount is not worked out correctly, the rate quoted by the contractor shall be taken as correct and not the amount.
- iv) In case of lumpsum bids, if there is any difference between the amount in figures and in words, the amount quoted by the bidder in words shall be taken as correct.
- v) In case of omission in quoting any rate for one or more items, the evaluation shall be done considering the highest quoted rate obtained against the respective items by other tenderers for the subject tender. If the tenderer becomes L-1, the notional rates for the omission items shall be the lowest rates quoted for the respective items by the other tenderers for the subject job and the 'Total quoted price (loaded for omissions)' shall be arrived at. However the over all price remaining the same as quoted originally, the rates for all the items shall be reduced item wise in proportion to the ratio of 'Original' total price' and 'Total quoted price (loaded for omissions)'
- vi) In case of Reverse Auction, no plea on account of omission of any rate shall be entertained by BHEL. The successful bidder shall undertake to execute the work as per overall price offered by him during the Reverse auction process. In case of omission of rates, the rates for all the items shall reduced item wise in proportion to the ratio of 'Total quoted price (loaded for omissions)' and price offered during Reverse Auction process. Total quoted price (loaded for omissions) shall be in line with the manner described in sl no v above

1.5. QUALIFICATION OF TENDERERS

- i) Only tenderers who have previous experience in the work of the nature and description detailed in the Notice Inviting Tender and/or tender specification are expected to quote for this work duly

BHARAT HEAVY ELECTRICALS LIMITED: PSWR: NAGPUR
Tender Spec No. BHE / PW / PUR / AMRT-MMS/717 (REV -01 Dtd 31.03.2010)

- ii) detailing their experience along with offer.
- ii) Offers from tenderers who do not have proven and established experience in the field shall not be considered
- iii) Offers from tenderers who are under suspension (banned) by any Unit/Region/Division of BHEL shall not be considered.
- iv) Offers from tenderers who do not comply with the latest guidelines of Ministry/Commissions of Govt of India shall not be considered.

1.6. EVALUATION OF BIDS

- i) Technical Bids submitted by the tenderer will be opened first and evaluated for fulfilling the Pre Qualification criteria and other conditions in NIT/Tender documents, based on documentary evidences submitted along with the offer
- ii) In case the same qualifying experience is claimed by more than one agency, then the agency who has executed the work as per documentary evidence submitted shall only be qualified. Scope of qualifying work should be totally with the agency who has executed and in case it is only labour+consumables without T&P, then the responsibility of execution is assigned to the first agency and not to the agency who has executed only as labour supply contractor. Further, BHEL reserves the right to ask for further proofs including submission of TDS certificates for the said job
- iii) In case the qualifying experience is claimed by private organizations based on Work Order and completion certificates from another private organization, BHEL reserves the right to ask for further proofs including submission of TDS certificates for the said job
- iv) Price Bids of shortlisted bidders shall be opened either through the conventional price bid opening or through electronic Reverse Auction, at the discretion of BHEL

1.7. DATA TO BE ENCLOSED

Full information shall be given by the tenderer in respect of the following. Non-submission of this information may lead to rejection of the offer.

- i) **INCOME TAX PERMANENT ACCOUNT NUMBER**
Certified copies of Permanent Account Numbers as allotted by Income Tax Department for the Company/Firm/Individual Partners, etc. shall be furnished along with tender.
- ii) **ORGANIZATION CHART**
The organization chart of the tenderer's organization, including the names, addresses and contact information of the Directors/Partners shall be furnished along with the offer.
- iii) An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor
- iv) **IN CASE OF INDIVIDUAL TENDERER:**
His / her full name, address and place & nature of business.
- v) **IN CASE OF PARTNERSHIP FIRM**
The names of all the partners and their addresses, A copy of the partnership deed/instrument of partnership duly certified by the Notary Public shall be enclosed.
- vi) **IN CASE OF COMPANIES:**
 - a. Date and place of registration including date of commencement certificate in case of Public

- Companies (certified copies of Memorandum and articles of Association are also to be furnished).
- b. Nature of business carried on by the Company and the provisions of the Memorandum relating thereof.

1.8 AUTHORISATION AND ATTESTATION

Tenders shall be signed by a person duly authorized/empowered to do so. An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor shall be submitted along with the tenders

1.9 EARNEST MONEY DEPOSIT

- 1.9.1 Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the manner described herein.

- i) EMD shall be furnished along with the offer in full as per the amount indicated in the Special Conditions of Contract / NIT
- ii) EMD is to be paid in cash (as permissible under Income Tax Act), Pay order or Demand Draft in favour of 'Bharat Heavy Electricals Limited' and payable at Regional HQ issuing the tender.
- iii) No other form of EMD remittance shall be acceptable to BHEL
- iv) Bidder may opt to deposit "One Time EMD" of Rs. 2.0 lakhs (Rupees Two lakhs only) with BHEL:Power Sector Region HQ issuing the tender, which will enable them to participate in all the future tender enquiries in respect of Erection and Commissioning services issued from the respective office. Interested bidders may clearly send their consent for converting the present EMD into a "One Time EMD" in their offer.
 - Note : The 'One Time EMD' cannot be withdrawn by the tenderers within 3 years from the date of deposit, under any circumstances. The Tenderer who wishes to withdraw after three years will not be allowed to submit 'One Time EMD' again.
- v) Bidders who have already deposited such "One Time EMD" of Rs. 2.00 lakh are exempted from submission of EMD for this tender. However a copy of 'One Time EMD' certificate issued by BHEL Regional HQ issuing the tender shall be enclosed along with the offer.

- 1.9.2 EMD by the bidder will be forfeited as per Tender Documents if

- i) After opening the tender, the bidder revokes his tender within the validity period or increases his earlier quoted rates.
- ii) The bidder does not commence the work within the period as per LOI/Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.

- 1.9.3 EMD shall not carry any interest.

- 1.9.4 In the case of unsuccessful bidders, the Earnest Money will be refunded to them within a reasonable time after acceptance of award by successful tenderer.

1.10 SECURITY DEPOSIT

- 1.10.1 Upon acceptance of Tender, the successful Tenderer should deposit the required amount of Security Deposit for satisfactory completion of work, as per the rates given below:

SN	Contract Value	Security Deposit Amount
----	----------------	-------------------------

1	Up to Rs. 10 lakhs	10% of Contract Value
2	Above Rs. 10 lakhs upto Rs.50 lakhs	1 lakh + 7.5% of the Contract Value exceeding Rs. 10 lakhs.
3	Above Rs. 50 lakhs	Rs 4 lakhs + 5% of the Contract Value exceeding Rs. 50 lakhs.

1.10.2 The security Deposit should be furnished before start of the work by the contractor.

1.10.3 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order / Demand Draft in favour of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
- v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for SD shall be in the prescribed proforma (Format GCC-1).
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited in any form as prescribed before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful bidder can be converted and adjusted against the cash portion of Security Deposit excepting for such bidders who have remitted One Time EMD.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

1.10.4 The Security Deposit shall not carry any interest.

1.10.5 In case the value of work exceeds / reduces from the awarded / accepted value, the Security Deposit shall be correspondingly enhanced / reduced as given below:

- i) The enhanced part of the Security Deposit shall be immediately deposited by the Contractor or adjusted against payments due to the Contractor.
- ii) There will be no reduction in Security Deposit value in case of variation in contract value upto the lower limit specified in Quantity variation clause. In case of reduction of contract value beyond the lower limit specified in Quantity Variation clause, then the Security Deposit shall be re adjusted in proportion.
- iii) In case of reduction, the reduced Contract value shall be certified by Site Engineer after ascertaining / freezing of BOQ / Drawings from the Design / Engineering Centre. The reduced SD value can only be considered after taking into account the cumulative liabilities of the Contractor to BHEL at that particular point in time, and the adequacy of the securities held by BHEL to meet such liabilities and the performance of the contract in general. In such cases, the revised value of SD shall be worked out only after execution of not less than the lower limit of the revised scope of work/contract value as per quantity variation clause, and as justified by the Site Engineer. This

reduction in value of security deposit shall not entitle the contractor to any amendment of Contract and shall be operated at the discretion of BHEL

- iv) Contract value for the purpose of operating the reduced/increased value of Security deposit, shall be exclusive of Price Variation Clause and Over Run Compensation

1.10.6 The validity of Bank Guarantees towards Security Deposit shall be initially upto the completion period as stipulated in the Letter of Intent/Award + 3 months, and the same shall be kept valid by proper renewal till the acceptance of Final Bills of the Contractor, by BHEL

1.10.7 BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the Contractor's failure to fulfil any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit against any claims of other contracts with BHEL.

1.11 RETURN OF SECURITY DEPOSIT

Security Deposit shall be released to the contractor after deducting all expenses / other amounts due to BHEL under the contract / other contracts entered into with them on completion of the following:

- i) Submission of final bill in the prescribed format duly signed by the contractor along with 'No Claim Certificate' and 'Work Completion Certificate from BHEL Engineers and settlement of the bills by BHEL with respect to all liabilities of contractor to BHEL.
- ii) Submission of Clearance Certificates from Customer and from various Statutory Authorities viz. Labour Department, PF Authorities, Commercial Tax Department, etc.

1.12 BANK GUARANTEE

- i) It is the responsibility of the bidder to get the Bank Guarantees revalidated/extended for the required period (subject to a minimum period of six months), as per the advice of BHEL Site Engineer / Construction Manager. BHEL shall not be liable for issue of any reminders regarding expiry of the Bank Guarantees.
- ii) In case extension/further extensions of any Bank Guarantees are not required, the bidders shall ensure that the same is explicitly conveyed through the Construction Manager to Regional HQ issuing the tender
- iii) In case the Bank Guarantees are not extended before the expiry date, BHEL reserves the right to invoke the same by informing the concerned Bank in writing, without any advance notice/communication to the concerned bidder.
- iv) Bidders to note that any corrections to Bank Guarantees shall be done by the issuing Bank, only through an amendment in an appropriate non judicial stamp paper.
- v) Bidders to ensure that the Bank Guarantees submitted are exactly as per **format** given in the Tender documents.
- vi) The Original Bank Guarantee shall be sent directly by the Bank to BHEL under Registered Post (Acknowledgement Due), addressed to the Subcontracting Department of the respective Region.
- vii) Acceptance of Bank Guarantees shall be as per BHEL guidelines issued from time to time

1.13 VALIDITY OF OFFER

The rates in the Tender shall be kept open for acceptance for a minimum period of **SIX MONTHS** from the last date for submission of Tenders. In case BHEL (Bharat Heavy Electricals Ltd) calls for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer which shall be binding on the tenderers.

1.14 EXECUTION OF CONTRACT AGREEMENT

The successful tenderer's responsibility under this contract commences from the date of issue of the Letter of Intent by Bharat Heavy Electricals Limited. The Tenderer shall submit an unqualified acceptance to the Letter of Intent/Award within the period stipulated therein.

The successful tenderer shall be required to execute an agreement in the prescribed form, with BHEL, within a reasonable time after the acceptance of the Letter of Intent/Award, and in any case before releasing the first running bill. The contract agreement shall be signed by a person duly authorized/empowered by the tenderer. The expenses for preparation of agreement document shall be borne by BHEL.

1.15 REJECTION OF TENDER AND OTHER CONDITIONS

1.15.1 The acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:-

- a. To reject any or all of the tenders.
- b. To split up the work amongst two or more tenderers as per NIT
- c. To award the work in part if specified in NIT
- d. In case of either of the contingencies stated in (b) and (c) above, the time for completion as stipulated in the tender shall be applicable.

1.15.2 Conditional and unsolicited tenders, **tenders containing absurd or unworkable rates and amounts**, tenders which are incomplete or not in the form specified or defective or have been materially altered or not in accordance with the tender conditions, specifications etc., are liable to be rejected.

1.15.3 Tenders are liable to be rejected in case of unsatisfactory performance of the tenderer with BHEL, or tenderer under suspension (hold/banning /delisted) by any unit / region / division of BHEL or tenderers who do not comply with the latest guidelines of Ministry/Commissions of Govt of India. The decision of BHEL will be final in this regard.

1.15.4 If a tenderer who is a proprietor expires after the submission of his tender or after the acceptance of his tender, BHEL may at their discretion, cancel such tender. If a partner of a firm expires after the submission of tender or after the acceptance of the tender, BHEL may then cancel such tender at their discretion, unless the firm retains its character.

1.15.5 BHEL will not be bound by any Power of Attorney granted by changes in the composition of the firm made subsequent to the execution of the contract. They may, however, recognise such

power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.

- 1.15.6 If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract if awarded and forfeit the Earnest Money/Security Deposit/any other money due.
- 1.15.7 Canvassing in any form in connection with the tenders submitted by the Tenderer shall make his offer liable to rejection.
- 1.15.8 Should a tenderer in the case of a firm or company one or more of its partners/shareholders/Directors have a relation or relatives employed in BHEL, the authority inviting tender shall be informed of the fact along with the offer as per Format GCC3. Failing to do so, BHEL may, at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money/Security Deposit.
- 1.15.9 The successful tenderer should not sub-contract part or complete work detailed in the tender specification undertaken by him without written permission of BHEL. The tenderer is solely responsible to BHEL for the work awarded to him.
- 1.15.10 The Tender submitted by a techno commercially qualified tenderer shall become the property of BHEL who shall be under no obligation to return the same to the bidder. However unopened price bids and late tenders shall be returned to the bidders
- 1.15.11 Unsolicited discounts received after opening of Tender (Techno Commercial Bid) shall not be considered for evaluation. However, if the party who has submitted the unsolicited discount/rebate becomes the L-I party, then the awarded price i.e contract value shall be worked out after considering the discount so offered.
- 1.15.12 BHEL shall not be liable for any expenses incurred by the bidder in the preparation of the tender irrespective of whether the tender is accepted or not.

CHAPTER-2

2.1 **DEFINITION:** The following terms shall have the meaning hereby assigned to them except where the context otherwise requires

- i) BHEL shall mean Bharat Heavy Electricals Limited (of the respective Power Sector Region inviting the Tender), a company registered under Indian Companies Act 1956, with its Registered Office at BHEL HOUSE, SIRI FORT, NEW DELHI – 110 049, or its Power Sector Regional Offices or its Authorised Officers or its Site Engineers or other employees authorised to deal with any matters with which these persons are concerned on its behalf.
- ii) “EXECUTIVE DIRECTOR” or ‘GROUP GENERAL MANAGER’ or “GENERAL MANAGER (Incharge)” or “GENERAL MANAGER” shall mean the Officer in Administrative charge of the respective Power Sector Region.
- iii) “COMPETENT AUTHORITY” shall mean Executive Director or Group General Manager or General Manager (Incharge) or General Manager or BHEL Officers who are empowered to act on behalf of the Executive Director or General Manager (Incharge) or General Manager of BHEL.
- iv) “ENGINEER” or “ENGINEER IN CHARGE” shall mean an Officer of BHEL as may be duly appointed and authorized by BHEL to act as “Engineer” on his behalf for the purpose of the Contract, to perform the duty set forth in this General Conditions of Contract and other Contract documents. The term also includes ‘CONSTRUCTION MANAGER’ or ‘SITE INCHARGE’ as well as Officers at Site or at the Headquarters of the respective Power Sector Regions.
- v) “SITE” shall mean the places or place at which the plants/equipments are to be erected and services are to be performed as per the specification of this Tender.
- vi) “CLIENT OF BHEL” or “CUSTOMER” shall mean the project authorities with whom BHEL has entered into a contract for supply of equipments or provision of services.
- vii) “CONTRACTOR” shall mean the successful Bidder/Tenderer who is awarded the Contract and shall include the Contractor’s successors, heirs, executors, administrators and permitted assigns.
- viii) “CONTRACT” or “CONTRACT DOCUMENT” shall mean and include the Agreement of Work Order, the accepted appendices of Rates, Schedules, Quantities if any, General Conditions of Contract, Special Conditions of Contract, Instructions to the Tenderers, Drawings, Technical Specifications, the Special Specifications if any, the Tender documents, subsequent amendments mutually agreed upon and the Letter of Intent/Acceptance issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or subsequent letters shall not form part of the contract unless, specifically accepted in writing by BHEL in the Letter of Intent/Award and incorporated in the agreement.
- ix) “GENERAL CONDITIONS OF CONTRACT” shall mean the ‘Instructions to Tenderers’ and ‘General Conditions of Contract’ pertaining to the work for which above tenders have been called for.

x)	“TENDER SPECIFICATION” or “TENDER” or “TENDER DOCUMENTS” shall mean General Conditions, Common Conditions, Special Conditions, Price Bid, Rate Schedule, Technical Specifications, Appendices, Annexures, Corrigendums, Amendments, Formats, Site information, etc and drawings pertaining to the work for which the tenderers are required to submit their offers. Individual specification number will be assigned to each Tender Specification.
xi)	“LETTER OF INTENT” shall mean the intimation by a Letter/Fax/email to the tenderer that the tender has been accepted in accordance with provisions contained in the letter. The responsibility of the contractor commences from the date of issue of this letter and all terms and conditions of the contract are applicable from this date.
xii)	“COMPLETION TIME” shall mean the period by ‘date/month’ specified in the ‘Letter of Intent/Award’ or date mutually agreed upon for handing over of the intended scope of work, the erected equipment/plant which are found acceptable by the Engineer, being of required standard and conforming to the specifications of the Contract.
xiii)	“PLANT” shall mean and connote the entire assembly of the plant and equipments covered by the contract.
xiv)	“EQUIPMENT” shall mean equipment, machineries, materials, structural, electricals and other components of the plant covered by the contract.
xv)	“TESTS” shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL, in order to ascertain the quality, workmanship, performance and efficiency of the contractor or part thereof.
xvi)	“APPROVED”, “DIRECTED” or “INSTRUCTED” shall mean approved, directed or instructed by BHEL.
xvii)	“WORK or CONTRACT WORK” shall mean and include supply of all categories of labour, specified consumables, tools and tackles and Plants required for complete and satisfactory site transportation, handling, stacking, storing, erecting, testing and commissioning of the equipments to the entire satisfaction of BHEL.
xviii)	“SINGULAR AND PLURALS ETC” words carrying singular number shall also include plural and vice versa, where the context so requires. Words imparting the masculine Gender shall be taken to include the feminine Gender and words imparting persons shall include any Company or Associations or Body of Individuals, whether incorporated or not.
xix)	“HEADING” – The heading in these General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken as instructions thereof or of the contract.
xx)	“MONTH” shall mean calendar month unless otherwise specified in the Tender.
xxi)	Day’ or ‘Days’ unless herein otherwise expressly defined shall mean calendar day or days of twenty four (24) hours each. A week shall mean continuous period of seven (7) days.

xxii)	"COMMISSIONING" shall mean the synchronisation testing and achieving functional operation of the Equipment with associated system after all initial adjustments, trials, cleaning, re-assembly required at site if any, have been completed and Equipment with associated system is ready for taking into service.
xxiii)	"WRITING" shall include any manuscript type written or hand written or printed statement or electronically transmitted messages, under the signature or seal or transmittal of BHEL.
xxiv)	"TEMPORARY WORK" shall mean all temporary works for every kind required in or for the execution, completion, maintenance of the work.
xxv)	'CONTRACT PRICE' or 'CONTRACT VALUE' shall mean the sum mentioned in the LOI/LOA/Contract Agreement subject to such additions thereto or deductions there from as may be made under provisions hereinafter contained
xxvi)	"COMMENCEMENT DATE" or "START DATE" shall mean the commencement/start of work at Site as per terms defined in the Tenderl
xxvii)	"SHORT CLOSING" or "FORE CLOSING" of Contract shall mean the premature closing of Contract, for reasons not attributable to the contractor and mutually agreed between BHEL and the contractor
xxviii)	"TERMINATION" of Contract shall mean the pre mature closing of contract due to reasons as mentioned in the contract
xxix)	"DE MOBILISATION" shall mean the temporary winding up of Site establishment by Contractor leading to suspension of works temporarily for reasons not attributable to the contractor
xxx)	"RE MOBILISATION" shall mean the resumption of work with all resources required for the work after demobilization.
2.2	<p style="text-align: center;">LAW GOVERNING THE CONTRACT AND COURT JURISDICTION</p> <p>The contract shall be governed by the Law for the time being in force in the Republic of India. The Civil Court having original Civil Jurisdiction at Delhi for PSNR, at Kolkata for PSER, at Nagpur for PSWR and at Chennai for PSSR, shall alone have exclusive jurisdiction in regard to all claims in respect of the Contract. No other Civil Court shall have jurisdiction in case of any dispute, under this contract</p>
2.3	<p style="text-align: center;">ISSUE OF NOTICE</p> <p>2.3.1 <u>Service of notice on contractor</u></p> <p>Any notice to be given to the Contractor under the terms of the contract shall be served by sending the same by Registered Post / Speed Post to or leaving the same at the Contractor's last known address of the principal place of business (or in the event of the contractor being a company, to or at its Registered Office). In case of change of address, the notice shall be served at changed address as notified in writing by the Contractor to BHEL. Such posting or leaving of the notice shall be deemed to be good service of such notice and the time mentioned to the condition for doing any act after notice shall be reckoned from the date so mentioned in such notice.</p> <p>2.3.2 <u>Service of notice on BHEL</u></p> <p>Any notice to be given to BHEL in-charge/Region under the terms of the Contract shall be served by sending the same by post to or leaving the same at BHEL address or changed address as notified in writing by BHEL to the Contractor.</p>

2.4 USE OF LAND

No land belonging to BHEL or their Customer under temporary possession of BHEL shall be occupied by the contractor without written permission of BHEL.

2.5 COMMENCEMENT OF WORK

2.5.1 The contractor shall commence the work as per the time indicated in the Letter of Intent from BHEL and shall proceed with the same with due expedition without delay.

2.5.2 If the contractor fails to start the work within stipulated time as per LOI or as intimated by BHEL, then BHEL at its sole discretion will have the right to cancel the contract. The Earnest Money and/or Security Deposit with BHEL will stand forfeited without any further reference to him without prejudice to any and all of BHEL's other rights and remedies in this regard.

2.5.3 All the work shall be carried out under the direction and to the satisfaction of BHEL.

2.6 MEASUREMENT OF WORK AND MODE OF PAYMENT:

2.6.1 All payments due to the contractors shall be made by e mode only, unless otherwise found operationally difficult for reasons to be recorded in writing

2.6.2 For progress running bill payments: - The Contractor shall present detailed measurement sheets in triplicate, duly indicating all relevant details based on technical documents and connected drawings for work done during the month/period under various categories in line with terms of payment as per contract. The basis of arriving at the quantities, weights shall be relevant documents and drawings released by BHEL. These measurement sheets shall be prepared jointly with BHEL Engineers and signed by both the parties.

2.6.3 These measurement sheets will be checked by BHEL Engineer and quantities and percentage eligible for payment under various groups shall be decided by BHEL Engineer. The abstract of quantities and percentage so arrived at based on the terms of payment shall be entered in Measurement Book and signed by both the parties.

2.6.4 Based on the above quantities, contractor shall prepare the bills in prescribed Proforma and work out the financial value. These will be entered in Measurement Book and signed by both the parties. Payment shall be made by BHEL after effecting the recoveries due from the contractor.

2.6.5 All recoveries due from the contractor for the month/period shall be effected in full from the corresponding running bills unless specific approval from the competent authorities is obtained to the contrary.

2.6.6 Measurement shall be restricted to that portion of work for which it is required to ascertain the financial liability of BHEL under this contract.

2.6.7 The measurement shall be taken jointly by persons duly authorized on the part of BHEL and by the Contractor.

2.6.8 The Contractor shall bear the expenditure involved if any, in making the measurements and testing

of materials to be used/used in the work. The contractor shall, without extra charges, provide all the assistance with appliances and other things necessary for measurement.

- 2.6.9 If at any time due to any reason whatsoever, it becomes necessary to re-measure the work done in full or in part, the expenses towards such re measurements shall be borne by the contractor unless such re measurements are warranted solely for reasons not attributable to contractor.
- 2.6.10 Passing of bills covered by such measurements does not amount to acceptance of the completion of the work measured. Any left out work has to be completed, if pointed out at a later date by BHEL.
- 2.6.11 Final measurement bill shall be prepared in the final bill proforma prescribed for the purpose based on the certificate issued by BHEL Engineer that entire works as stipulated in tender specification has been completed in all respects to the entire satisfaction of BHEL. Contractor shall give unqualified "No Dues" and "No Demand" Certificate. All the tools and tackles loaned to him should be returned in satisfactory condition to BHEL. The abstract of final quantities and financial values shall also be entered in the Measurement Books and signed by both parties to the contract. The Final Bill shall be prepared and paid within a reasonable time after completion of work. **After the payment of final bill only the guarantee obligation percentage will remain unpaid which shall be released in accordance with clause 2.18.**

2.7 RIGHTS OF BHEL

BHEL reserves the following rights in respect of this contract during the original contract period or its extensions if any, as per the provisions of the contract, without entitling the contractor for any compensation.

- 2.7.1 To withdraw any portion of work and/or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through other agencies to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergent reasons/ BHEL's obligation to its customer.
- 2.7.2 To terminate the contract or get any part of the work done through other agency or deploy BHEL's own/hired/otherwise arranged resources, at the risk and cost of the contractor after due notice of a period of two weeks by BHEL, in the event of:-
- i) Contractor's continued poor progress
 - ii) Withdrawal from or abandonment of the work before completion of the work
 - iii) Contractor's inability to progress the work for completion as stipulated in the contract
 - iv) Poor quality of work
 - v) Corrupt act of Contractor
 - vi) Insolvency of the Contractor
 - vii) Persistent disregard to the instructions of BHEL
 - viii) Assignment, transfer, sub-letting of contract without BHEL's written permission
 - ix) Non fulfillment of any contractual obligations
- 2.7.3 To meet the expenses including BHEL overheads of 30% & Liquidated damage/penalties arising out of "Risk & Cost" as explained above under SI.No. 2.7.2. BHEL shall recover the amount from any money due from Contractor, from any money due to the Contractor including Security Deposit or by forfeiting any T&P or material of the contractor under this contract or any other

contract of BHEL or by any other means or any combination thereof

- 2.7.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customer are terminated for any reason, as per mutual agreement.
- 2.7.5 To effect recovery from any amounts due to the contractor under this or any other contract or in any other form, the moneys BHEL is statutorily forced to pay to anybody, due to contractor's failure to fulfill any of his obligations. BHEL shall levy overheads of 15% on all such payments.
- 2.7.6 While every endeavour will be made by BHEL to this end, they cannot guarantee uninterrupted work due to conditions beyond their control. The Contractor will not be normally entitled for any compensation/extra payment on this account unless otherwise specified elsewhere in the contract.
- 2.7.7 In case the execution of works comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than two months, due to reasons not attributable to the contractor and other than Force Majeure conditions, BHEL may consider permitting the contractor to de mobilize forthwith and re mobilize at an agreed future date. Cost of such demobilization/remobilization shall be mutually agreed. ORC in such cases shall not be applicable for the period between the period of demobilization and re mobilisation. The duration of contract/time extension shall accordingly get modified suitably. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.
- 2.7.8 In the unforeseen event of inordinate delay in receipt of materials, drawings, fronts, etc, due to which inordinate discontinuity of work is anticipated, BHEL at its discretion may consider contractor's request to short close the contract, provided that the balance works are minor vis a vis the scope of work envisaged as per the contract. At the point of requesting for short closure, contractor shall establish that he has completed all works possible of completion and he is not able to proceed with the balance works due to constraints beyond his control. In such a case, the estimated value of the unexecuted portion of work as mutually agreed, shall however be reduced from the final contract value. Contract value for this purpose shall mean executed contract value plus value of unexecuted portion of work as per rate schedule.
- 2.7.9 **LIQUIDATED DAMAGES/PENALTY**
If the contractor fails to maintain the required progress of work which results in delay in the completion of the work as per the contractual completion period, BHEL shall have the right to impose Liquidated Damage/Penalty at the rate of 0.5% of the contract value, per week of delay or part thereof subject to a maximum of 10% of the contract value. For this purpose, the period of delay shall be the delay attributable to the Contractor for the completion of work as per contract. Contract Value for this purpose, shall be the final executed value net of taxes if quoted separately, ORC, Extra Works executed on Manday rate basis, Supplementary/Additional Items.

2.8 RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF LOCAL LAWS, EMPLOYMENT OF WORKERS ETC.

The following are the responsibilities of the contractor in respect of observance of local laws, employment of personnel, payment of taxes etc. The subcontractor shall fully indemnify BHEL

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against any claims of whatsoever nature arising due to the failure of the contractor in discharging any of his responsibilities hereunder:

- 2.8.1 As far as possible, Unskilled Workers shall be engaged from the local areas in which the work is being executed.
- 2.8.2 The contractor at all times during the continuance of this contract shall, in all his dealings with local labour for the time being employed on or in connection with the work, have due regard to all local festivals and religious and other customs.
- 2.8.3 The contractor shall comply with all applicable State and Central Laws, Statutory Rules, Regulations etc. such as Payment of Wages Act, Minimum Wages Act, Workmen Compensation Act, Employer's Liability Act, Industrial Disputes Act, Employers Provident Act, Employees State Insurance Scheme, Contract Labour (Regulation and Abolition) Act 1970, Payment of Bonus & Gratuity Act and other Acts, Rules and Regulations for labour as may be enacted by the Government during the tenure of the Contract and having force or jurisdiction at Site. The Contractor shall also give to the local Governing Body, Police and other relevant Authorities all such notices as may be required by the Law.
- 2.8.4 The contractor shall obtain independent License under the Contract Labour (Regulations and Abolition Act, 1970) as required from the concerned Authorities based on the certificate (Form-V) issued by the Principal Employer/Customer
- 2.8.5 The contractor shall pay all taxes, fees, license charges, deposits, duties, tolls, royalties, commission or other charges which may be leviable on account of his operations in executing the contract.
- 2.8.6 While BHEL would pay the inspection fees and Registration fees of Boiler/Electrical Inspectorate, all other arrangements for site visits periodically by the Inspectorate to site, Inspection certificate etc. will have to be made by contractor. However, BHEL will not make any payment to the Inspectorate in connection with contractor's Welders/Electricians qualification tests etc.
- 2.8.7 Contractor shall be responsible for provision of Health and Sanitary arrangements (more particularly described in Contract Labour Regulation & Abolition Act), Safety precautions etc. as may be required for safe and satisfactory execution of contract.
- 2.8.8 The contractor shall be responsible for proper accommodation including adequate medical facilities for personnel employed by him.
- 2.8.9 The contractor shall be responsible for the proper behavior and observance of all regulations by the staff employed by him.
- 2.8.10 The contractor shall ensure that no damage is caused to any person/property of other parties working at site. If any such damage is caused, it is responsibility of the contractor to make good the losses or compensate for the same.
- 2.8.11 All the properties/equipments/components of BHEL/their Client loaned with or without deposit to the contractor in connection with the contract shall remain properties of BHEL/their Client.

- 2.8.12 The contractor shall use such properties for the purpose of execution of this contract. All such properties/equipments/components shall be deemed to be in good condition when received by the contractor unless he notifies within 48 hours to the contrary. The contractor shall return them in good condition as and when required by BHEL/their Client. In case of non-return, loss, damage, repairs etc, the cost thereof as may be fixed by BHEL Engineer will be recovered from the contractor
- 2.8.13 In case the contractor is required to undertake any work outside the scope of this contract, the rates payable shall be those mutually agreed upon if the item rates are not mentioned in existing contract
- 2.8.14 Any delay in completion of works/or non achievement of periodical targets due to the reasons attributable to the contractor, the same may have to be compensated by the contractor either by increasing manpower and resources or by working extra hours and/or by working more than one shift. All these are to be carried out by the contractor at no extra cost.
- 2.8.15 The contractor shall arrange, coordinate his work in such a manner as to cause no hindrance to other agencies working in the same premises.
- 2.8.16 All safety rules and codes applied by the Client/BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment/material and works to be performed by him and shall maintain all light, fencing guards, slings etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the Engineer with a view to prevent pilferage, accidents, fire hazards. Due precautions shall be taken against fire hazards and atmospheric conditions. Suitable number of Clerical staff, watch and ward, store keepers to take care of equipment/materials and construction tools and tackles shall be posted at site by the contractor till the completion of work under this contract.
- The contractor shall arrange for such safety devices as are necessary for such type of work and carry out the requisite site tests of handling equipment, lifting tools, tackles etc. as per prescribed standards and practices.
- Contractor has to ensure the implementation of Health, Safety and Environment (HSE) requirements as per directions given by BHEL/Customer. The contractor has to assist in HSE audit by BHEL/Customer and submit compliance Report. The contractor has to generate and submit record/reports as per HSE plan/activities as per instruction of BHEL/Customer
- 2.8.17 The contractor will be directly responsible for payment of wages to his workmen. A pay roll sheet giving all the payments given to the workers and duly signed by the contractor's representative should be furnished to BHEL site for record purpose, if so called for.
- 2.8.18 In case of any class of work for which there is no such specification as laid down in the contract, such work shall be carried out in accordance with the instructions and requirements of the Engineer.
- 2.8.19 Also, no idle charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour and Tools & Plants being rendered idle due to any reason at any time.

- 2.8.20 The contractor shall take all reasonable care to protect the materials and work till such time the plant/equipment has been taken over by BHEL or their Client whichever is earlier.
- 2.8.21 The contractor shall not stop the work or abandon the site for whatsoever reason of dispute, excepting force majeure conditions. All such problems/disputes shall be separately discussed and settled without affecting the progress of work. Such stoppage or abandonment shall be treated as breach of contract and dealt with accordingly
- 2.8.22 The contractor shall keep the area of work clean and shall remove the debris etc. while executing day-to-day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places specified by the Engineer. The contractor will also demolish all the hutments, sheds, offices, etc. constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be done by the Engineer and the expenses recovered from the contractor.
- 2.8.23 The contractor shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and timely execution shall be the essence of this contract. The contractor shall be responsible to ensure that the quality, assembly and workmanship conform to the dimensions and clearance given in the drawings and/ or as per the instructions of the Engineer.

2.9 PROGRESS MONITORING, MONTHLY REVIEW AND PERFORMANCE EVALUATION

- 2.9.1 A detailed plan/programme for completion of the contractual scope of work shall be jointly agreed between BHEL and Contractor before commencement of work. The above programme shall be supported by monthwise deployment of resources viz Manpower, T&P, Consumables, etc. Progress will be reviewed periodically (Daily/Weekly/Monthly) vis a vis this jointly agreed programme. The Contractor shall submit periodical progress reports (Daily/Weekly/Monthly) and other reports/information including manpower, consumables, T&P mobilization etc as desired by BHEL.
- 2.9.2 Monthly progress review between BHEL and Contractor shall be based on the agreed programme, availability of inputs/fronts etc, and constraints if any. The burden of proof that the causes leading to any shortfall is not due to any reasons attributable to the contractor is on the contractor himself. The monthly progress review shall record shortfalls attributable to (i) Contractor, (ii) Force Majeure Conditions, and (iii) BHEL
- 2.9.3 Quarterly performance of the contractor shall be assessed as per relevant formats and shall form the basis of 'Performance Evaluation' of the Contractor.

2.10 TIME OF COMPLETION

- 2.10.1 The time schedule shall be as prescribed in the Contract. The time for completion shall be reckoned from the date of commencement of work at Site as certified by BHEL Engineers
- 2.10.2 The entire work shall be completed by the contractor within the time schedule or within such extended periods of time as may be allowed by BHEL under clause 2.11

2.11 EXTENSION OF TIME FOR COMPLETION

- 2.11.1 If the completion of work as detailed in the scope of work gets delayed beyond the contract period, the contractor shall request for an extension of the contract and BHEL at its discretion may extend

the Contract. Depending upon the balance amount of work left out, the number of months of 'Time Extension' required for completion shall be worked out based on monthly reviews jointly signed with the contractor during the contract period.

- 2.11.2 The 'Time Extension' required for completion shall clearly spell out the portion of time attributable to (i) Contractor, (ii) Force Majeure Conditions, and (iii) BHEL, and shall be exhausted in the same order
- 2.11.3 A joint programme shall be drawn for the balance amount of work to be completed during the period of 'Time Extension', along with matching resources to be deployed by the contractor. Review of the programme and record of shortfall shall be done every month of the extended period in the same manner as is done for the regular contract period.
- 2.11.4 During the extended period, contractor shall maintain their resources as per mutually agreed program
- 2.11.5 In case the completion of balance works gets delayed beyond the extended period, the contractor shall request for subsequent extension and BHEL at its discretion may agree for the extension. Depending upon the amount of work balance, the number of months of subsequent 'Time Extension' required for completion shall be worked out based on monthly reviews jointly signed with the contractor during such extended period. Further actions shall be as per clauses 2.11.2 to 2.11.4
- 2.11.6 The cumulative of portions of 'Time Extensions' attributable to Contractor shall be considered as the period of delay attributable to the Contractor for the completion of work as per contract.

2.12 OVERRUN COMPENSATION

- 2.12.1 The contractor shall be entitled for Over Run Compensation (ORC) for portion of 'Time Extension' attributable to BHEL, in the manner as described herein below.
- 2.12.2 Rates of ORC payable per month shall be as per following
- a. **For a period of one year after completion of original contract period:**
 - 5% of {(Value of work balance at the end of original contract period) divided by (original contract period in months)} rounded off to the next Rs 1000.
 - b. **For a period of one year after 'a' above:**
 - 5% of {(Value of work balance at the end of : original contract period+12 months) divided by (original contract period in months)} rounded off to the next Rs 1000
 - c. Step b to be repeated for every subsequent years considering the value of work balance at the start of the year in consideration, rounded off to the next Rs 1000
 - d. Values so arrived at 'a', 'b' and 'c' are subject to maximum of Rs 5.0 lakhs per month and minimum of Rs 50,000/- per month.
- 2.12.3 Payment of ORC shall be regulated as follows:
- i) ORC shall be paid only for the portion of Time extensions attributable to BHEL
 - ii) Payment of ORC is subject to Contractor maintaining minimum resources as per agreed program and certified by BHEL
 - iii) Total Over Run Compensation shall be limited to 10% of the executed contract value excluding PVC, ORC, Supplementary/Additional Items and Extra Works done on Manday rate basis

2.12.4 Example for ORC for delays attributable to BHEL (All Values in Rs Lakhs)

Sl No	Particulars	Case I	Case II	Case III	Case IV
1	Contract Value	15000	6000	300	100
2	Original Contract period in Months	36	30	24	12
3	ORC for Year-1	37 th - 48 th month	31 st – 42 nd month	25 th -36 th month	13 th -24 th month
3.1	Value of work balance at the end of original contract period	6000 i.e. 40%	1500 i.e. 25%	90 i.e. 30%	40 i.e. 40%
3.2	ORC calculated @ 5% of (sl no 3.1 / sl no 2)	8.333333	2.5	0.1875	0.16666
3.3	ORC rounded off to next 1000	8.34	2.5	0.19	0.17
3.4	ORC payable (upper limit of Rs 5.0 lakhs, AND Lower limit of Rs 0.50 Lakhs)	5.0	2.5	0.5	0.5
4	ORC for Year-2	49 th – 60 th month	43 rd -54 th month	37 th -48 th month	25 th -36 th month
4.1	Value of work balance at the end of original contract period + 12 months	3000 i.e. 20%	600 i.e 10%	60 i.e. 20%	20 i.e. 20%
4.2	ORC calculated @ 5% of (sl no 4.1 / sl no 2)	4.16666	1.0	0.125	0.08333
4.3	ORC rounded off to next 1000	4.17	1.0	0.13	0.09
4.4	ORC payable (upper limit of Rs 5.0 lakhs, AND Lower limit of Rs 0.50 Lakhs)	4.17	1.0	0.50	0.50

2.13 INTEREST BEARING RECOVERABLE ADVANCES

2.13.1 Normally no advance is payable to the contractor. However, advance payment in exceptional circumstances shall be interest bearing and secured through an equivalent Bank Guarantee and shall be limited to a maximum of 5% of contract value.

2.13.2 In exceptional circumstances, with due justification, Competent Authority of BHEL is empowered to approve proposals for payment of additional interim interest bearing advance against matching Bank Guarantee, for resource augmentation towards expediting work for project implementation.

2.13.3 Payment and recovery of Interest Bearing Recoverable advance shall be at the sole discretion of BHEL and shall not be a subject matter of arbitration.

2.13.4 The rate of interest applicable for the above advances shall be the prime lending rate of State Bank of India prevailing at the time of disbursement of the advance + 2%, on the monthly reducing balance, and such rate will remain fixed till the total advance amount is recovered

2.13.5 Unadjusted amount of advances paid shall not exceed 5% of the total contract value at any point of time. Recovery of advances shall be made progressively from each Running Bill; such that the advance amounts paid along with the interest is fully recovered by the time the contractor's

billing reaches 80% of contract value.

- 2.13.6 Recovery rate per month shall be on higher of the two options given below:
- a. 10% of Running Bill
 - b. {Principal amount of Additional Advance outstanding + unadjusted portion of earlier advance + estimated interest } divided by { 80% of estimated contract value less value of work billed upto date}
- 2.13.7 Contractor to submit Bank Guarantee as per format GCC-4 for each of the advance and shall be valid for at least one year or the recovery duration or the balance contract period which ever is later. In case the recovery of dues does not get completed within the aforesaid BG period, the contractor shall renew the BG or submit fresh BG for the outstanding amount and the remaining recovery period.
- 2.13.8 BHEL is entitled to make recovery of the entire outstanding amount in case the contractor fails to comply with the BG requirement

2.14 QUANTITY VARIATION

- 2.14.1 The quoted rates shall remain firm irrespective of any variations in the individual quantities. No compensation becomes payable in case the variation of the final executed contract value is within the limits of :
- a) Plus (+) or Minus (-) 30% of contract value in case of Civil or Structural or Civil & Structural or Electrical or CI or Electrical & CI Packages
 - b) Plus (+) or Minus (-) 10% of contract value in case of Mechanical and all other Packages
 - c) Variations limits as specified in 'a' or 'b' above for respective components in case of Composite Packages.
- 2.14.2 Compensation due to variation of final executed value in excess of the limits defined in clause above, shall be as follows:
- i) In case the finally executed contract value reduces below the lower limit of quantity variation specified above for the respective packages, the contractor will be eligible for compensation @ 15% of the difference between the lower limit of the contract value and the actual executed value.
 - ii) In case the finally executed contract value increases above the upper limit of quantity variation specified above for the respective packages, there will be no revision in the rates within the contract period.

2.15 EXTRA WORKS

- 2.15.1 All rectifications/modifications, revamping, and reworks required for any reasons not due to the fault of the contractor, or needed due to any change in deviation from drawings and design of equipments, operation/maintenance requirements, mismatching, or due to damages in transit, storage and erection/commissioning, and other allied works which are not very specifically indicated in the drawings, but are found essential for satisfactory completion of the work, will be considered as extra works.
- 2.15.2 Each Extra works requiring less than 50 manhours shall be considered as minor and shall be carried out by the contractor free of cost. Each Extra work requiring more than 50 man hours will be

considered for payment on man hour basis in excess of 50 hours. The decision of BHEL shall be final and binding on the contractor. Example:

- i) Extra work requiring 45 manhours : Work considered minor and to be executed free of cost by Contractor
- ii) Extra Work requiring 125 Manhours : 75 Manhours (125-50 =75) considered for payment subject to acceptance of work as extra by BHEL.

2.15.3 Extra works arising on account of the contractor's fault, irrespective of time consumed in rectification of the damage/loss, will have to be carried out by the contractor free of cost. Under such circumstances, any material and consumable required for this purpose will also have to be arranged by the contractor at his cost.

2.15.4 All the extra work should be carried out by a separately identifiable gang, without affecting routine activities. Daily log sheets in the pro-forma prescribed by BHEL should be maintained and shall be signed by the contractor's representative and BHEL engineer. No claim for extra work will be considered/entertained in the absence of the said supporting documents i.e. daily log sheets. Signing of log sheets by BHEL engineer does not necessarily mean the acceptance of such works as extra works.

2.15.5 BHEL retains the right to award or not to award any of the major repair/rework/modification/rectification/fabrication works to the contractor, at their discretion without assigning any reason for the same

2.15.6 After eligibility of extra works is established and finally accepted by BHEL engineer/designer, payment will be released on competent authority's approval at the following rate.

MAN-HOUR RATE FOR ELIGIBLE EXTRA WORKS: Single composite average labour man-hour rate, including overtime if any, supervision, use of tools and tackles and other site expenses and incidentals, consumables for carrying out any major rework/ repairs/ rectification/ modification/ fabrication as certified by site as may arise during the course of erection, testing, commissioning or extra works arising out of transit, storage and erection damages, payment, if found due will be at Rs 50/- per man hour.

2.15.7 The above composite labour man hour rate towards extra works shall remain firm and not subject to any variation during execution of the work. PVC will not be applicable for extra works. Rate revision, Over Run Charges/compensation etc will not be applicable due to extra works.

2.16 **SUPPLEMENTARY ITEMS**

Supplementary items are items/works required for completion of entire work but not specified in the scope of work. Subject to certification of such items/works as supplementary items by BHEL Engineer, payments shall be regulated on the basis of any one of the following on mutual agreement,

- i) Based on percentage breakup/rates indicated for similar/nearby items
- ii) In case above does not exist, then BHEL/site may derive the percentage breakup/rates to suit the type of work

2.17 **PRICE VARIATION COMPENSATION**

- 2.17.1 In order to take care of variation in cost of execution of work on either side, due to variation in the index of LABOUR, DIESEL and ELECTRODE, Price Variation Formula as described herein shall be applicable
- 2.17.2 80% component of Contract Value shall be permitted to be adjusted for variation in various relevant indices during execution of work. The remaining 20% shall be treated as fixed component
- 2.17.3 The basis for calculation of price variation in each category, their component, Base Index, Base Date of accounting shall be as under:

SL NO.	CATEGORY	BASE INDEX	COMPONENT ('K')		
			CIVIL PACKAGES (With OR without STRUCTURES)	MECHANICAL PACKAGES	LABOUR ORIENTED PACKAGES (***)
A)	LABOUR (ALL CATEGORIES)	'MONTHLY ALL-INDIA AVERAGE CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS' published by Labour Bureau, Ministry of Labour and Employment, Government of India. (Website: labourbureau.nic.in)	40	60	75
B)	HIGH SPEED DIESEL OIL	Name of Commodity : HSD OIL. Type : INDIVIDUAL COMMODITY (See Note below)	5	5	5
C)	WELDING ELECTRODE	Name of Commodity : ELECTRODES Type: INDIVIDUAL COMMODITY (See Note below)		15	
D)	CEMENT	Name of Commodity : CEMENT Type: INDIVIDUAL COMMODITY (See Note below)	15		
E)	IRON & STEEL	Name of Commodity : a1. IRON & STEEL Type: GROUP ITEM (See Note below)	20		

Note: As per the 'MONTHLY WHOLE SALE PRICE INDEX' for the respective Commodity and Type, published by Office of Economic Adviser, Ministry of Commerce and Industry, Government of India. (Website : www.eaindustry.nic.in)

- 2.17.4 Payment/recovery due to variation in index shall be determined on the basis of the following notional formula without any initial absorption, in respect of the identified components viz LABOUR, HIGH SPEED DIESEL OIL, ELECTRODE, CEMENT, IRON & STEEL

$$A = K \times R \times \frac{(X_N - X_0)}{X_0}$$

Where

A = Amount to be paid/recovered due to variation in the Index for Labour, Electrode, High Speed Diesel Oil, Cement and Iron & Steel

K = Percentage component applicable for Labour, Electrode, High Speed Diesel Oil, Cement and Iron & Steel.

➤ Predominantly 'Labour Oriented' works include Material Handling & Management, Insulation, Painting, Electrical and CI or a combination thereof, which are separately tendered and awarded,

➤ For Composite packages (i.e. Civil+Mechanical+Electrical/CI or Civil+Mechanical or Mechanical+Electrical/CI), the components for various categories shall be as per respective packages

➤ For Civil packages (With or without Structures), in case Cement and/or Steel if provided free of cost, then the respective component to be added to 'labour' component.

R = Value of work done for the billing month (Excluding Taxes and Duties if payable extra)

XN = Revised Index No for Labour, Electrode, High Speed Diesel Oil, Cement and Iron & Steel for the billing month under consideration

Xo = Index no for Labour, Electrode, High Speed Diesel Oil, Cement and Iron & Steel as on the Base date.

2.17.5 **Base date shall be calendar month of the date of opening of Tender.**

2.17.6 PVC shall not be applicable to ORC, Supplementary/Additional Items, Extra works executed on manday rates basis.

2.17.7 The contractor shall furnish necessary monthly bulletins for the necessary indices from the relevant websites along with his Bills.

2.17.8 The contractor will be required to raise the bills for price variation payments on a monthly basis along with the running bills irrespective of the fact whether any increase/decrease in the index for relevant categories has taken place or not. In case there is delay in publication of bulletins (final figure), the provisional values as published can be considered for payments and arrears shall be paid/recovered on getting the final values.

2.17.9 The Total Quantum of Price Variation amount payable/recoverable shall be regulated as follows:

- i) PVC shall not be applicable for the first 12 (twelve) months from the date of opening of Tender.
- ii) Subject to (i) above, PVC for the period up to original contract period shall be as per prevailing indices for respective categories
- iii) PVC for the period beyond original contract period shall be as follows:
 - a) Initially PVC shall be provisionally paid as per indices indicated against sl no (i) of the table below.
 - b) At the end of completion of contract when the months of extensions attributable to (i) Contractor, (ii) Force majeure Conditions, (iii) BHEL, are assessed, PVC shall be regulated as per Table below and any balance shall be paid/recovered.
- iv) Total PVC payable is limited to 10% of executed Contract value
- v) Executed Contract value for the purpose of operation of PVC is exclusive of Overrun charges, Supplementary/Additional Items, Taxes and Duties if payable extra, Extra works done on Manday rate basis, etc.
- vi) The quantum of price variation amount per month shall be restricted to the ceiling percentage for each RA Bill Amount. The final adjusted amount of PVC shall be paid along with the final Bill.

Table for Applicability of PVC Indices

SI No	Applicable PVC Indices	For the Number of Months of Extension attributable to
i	Frozen at the average of monthly indices for respective categories for the period defined below:- ➤ Start month: Month of actual start of work ➤ Ending Month : End of original contract period (month) reckoned from date of start of work	Contractor
ii	Frozen at the indices obtaining at the end of the original contract period (month), reckoned from date of start of work	Force Majeure Conditions

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iii	As prevailing for the number of months up to end of extended contract period	BHEL
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2.17.10 Example for PVC

PVC calculation for 3 different cases of execution for a typical contract of 15 months
(All dates/data in Months)

SI No	Particulars	As per Contract	As per Actual		
			Case-I	Case-II	Case-III
1	Start of Work (Start of Contract)	1 st Month	1 st Month	10 th Month	18 th Month
2	Contractual Completion	15	15	25	33
3	Actual Completion		25	35	43
4	Total delay (in Months)		10	10	10
5	Delay due to Contractor (say 6 months)		16 th to 21 st Month	26 th to 31 st Month	34 th to 39 th Month
6	Delay due to Force Majeure Conditions (say 1 month)		22 nd Month	32 nd Month	40 th Month
7	Delay due to BHEL (say 3 months)		23 rd to 25 th Month	33 rd to 35 th Month	41 st to 43 rd Month
8	PVC start (from)	13 th Month	13 th Month	13 th Month	18 th Month
9	PVC upto (Contractual completion period with respective Monthly Indices)	15 th Month	15 th Month	25	33
10	PVC for period of delay due to contractor (for period of six months)	NA	Average of respective indices from 1 st to 15 th Month	Average of respective indices from 10 th to 25 th Month	Average of respective indices from 18 th to 33 rd Month
11	PVC for period of delay due to Force Majeure Conditions (for period of one month)	NA	Respective Indices frozen at 15 th Month	Respective Indices frozen at 25 th Month	Respective Indices frozen at 33 rd Month
12	PVC for period of delay due to BHEL (for period of three months)	NA	Respective Indices for the months 23 to 25	Respective Indices for the months 33 to 35	Respective Indices for the months 41 to 43

2.18 PERFORMANCE GUARANTEE FOR WORKMANSHIP

2.18.1 Even though the work will be carried out under the supervision of BHEL Engineers the Contractor will be responsible for the quality of the workmanship and shall guarantee the work done for a period of twelve months from the date of commencement of guarantee period as defined in Special Conditions of Contract, for good workmanship and shall rectify free of cost all defects due to faulty erection detected during the guarantee period. In the event of the Contractor failing to repair the

defective works within the time specified by the Engineer, BHEL may proceed to undertake the repairs of such defective works at the Contractor's risk and cost, without prejudice to any other rights and recover the same from the Guarantee money which will be due for payment after completion of guarantee period as per terms of contract.

2.18.2 The Guarantee money shall be 5% of contract value executed and shall be recovered at the rate of 5% of the gross value of each Running Bill admitted

2.18.3 BHEL shall release the guarantee money along with the settlement of Final Bill or completion of Guarantee period whichever is later.

2.19 **INSURANCE**

2.19.1 BHEL/their customer shall arrange for insuring the materials/properties of BHEL/customer covering the risks during transit, storage, erection and commissioning.

2.19.2 It is the sole responsibility of the contractor to insure his materials, equipments, workmen, etc. against accidents and injury while at work and to pay compensation, if any, to workmen as per Workmen's compensation Act. The work will be carried out in a protected area and all the rules and regulations of the client /BHEL in the area of project which are in force from time to time will have to be followed by the contractor.

2.19.3 If due to negligence and or non-observation of safety and other precautions by the contractors, any accident/injury occurs to the property / manpower belong to third party, the contractor shall have to pay necessary compensation and other expense, if so decided by the appropriate authorities.

2.19.4 If due to contractor's carelessness, negligence or non-observance of safety precautions, damage to BHEL's /Customer's property and personnel should occur and if BHEL is unable to recover in full the cost from the insurance Company, the same including the "Deductible Franchise" will be recovered from the contractor.

2.19.5 The contractor will take necessary precautions and due care to protect the material, while in his custody from any damage/ loss till the same is taken over by BHEL or customer. For lodging / processing of insurance claim the contractor will submit necessary documents. BHEL will reserve the right to recover the loss including the deductibles from the contractor, in case the damage / loss is due to carelessness / negligence on the part of the contractor. In case of any theft of material under contractor's custody, matter shall be reported to police by the contractor immediately and copy of FIR and subsequently police investigation report shall be submitted to BHEL for taking up with insurance. However this will not relieve the contractor of his contractual obligation for the material in his custody.

2.20 **STRIKES & LOCKOUT**

2.20.1 The contractor will be fully responsible for all disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the Contractor resorting to lockout and if the strike or lockout declared is not settled within a period of one month, BHEL shall have the right to get the work executed through any other agencies and the cost so incurred by BHEL shall be deducted from the Contractor's bills.

2.20.2 For all purposes whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL

2.21 FORCE MAJEURE

The following shall amount to Force Majeure:-

- 2.21.1 Acts of God, act of any Government, War, Sabotage, Riots, Civil commotion, Police action, Revolution, Flood, Fire, Cyclones, Earth quake and Epidemic and other similar causes over which the contractor has no control.
- 2.21.2 If the contractor suffers delay in the due execution of the contractual obligation due to delays caused by force majeure as defined above, the agreed time of completion of the job covered by this contract or the obligations of the contractor shall be extended by a period of time equal to period of delay, provided that on the occurrence of any such contingency, the contractor immediately reports to BHEL in writing the causes of delay and the contractor shall not be eligible for any compensation.

2.22 ARBITRATION & RECONCILIATION

- 2.22.1 In the event of any dispute or difference arising out of the execution of the Contract or the respective rights and liabilities of the parties or in relation to interpretation of any provision by the Contractor in any manner touching upon the Contract, such dispute or difference shall (except as to any matters, the decision of which is specifically provided for therein) be referred to BHEL/In charge(Region) who will appoint General Manager/BHEL as Arbitrator

The award of the Arbitrator shall be binding upon the parties to the dispute

Subject as aforesaid, the provisions of Arbitration and Reconciliation Act 1996 (India) or statutory modifications or re enactments thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. The venue of the arbitration shall be the place from which the contract is issued or such other place as the Arbitrator at his discretion may determine

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

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred to by either party to the arbitration of one of the arbitrators in the department of public enterprises. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively.

- 2.22.3 The cost of arbitration shall be borne equally by the parties.

- 2.22.4 Work under the contract shall be continued during the arbitration proceedings

2.23 REVERSE AUCTION:

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BHEL reserves the right to go for Reverse Auction for Price Bid Opening by BHEL appointed service provider, instead of opening the submitted sealed price bid in the conventional way. The Business Rules for Reverse Auction shall be as per BHEL guidelines issued from time to time. In the case of resorting to Reverse Auction, (a) BHEL reserve the right to open the sealed bid of the bidder who becomes the winner after reverse auction is over. (b) BHEL reserve the right to open all the sealed bids of the qualified bidders after reverse auction is over, if reverse auction is not successful or no bid is received during reverse auction.

2.24 CLOSING OF CONTRACTS

The Contract shall be considered completed and closed upon completion of all contractual obligations and settlement of Final Bill or completion of Guarantee period whichever is later. Upon closing of Contract, BHEL shall issue a completion certificate as per standard format, based on specific request of Contractor.

2.25 SUSPENSION OF BUSINESS DEALINGS

BHEL reserves the right to take action against Contractors who either fail to perform or Tenderers/Contractor who indulge in malpractices, by suspending business dealings with them in line with BHEL guidelines issued from time to time.

2.26 OTHER ISSUES

- 2.26.1 Value of Non judicial Stamp Paper for Bank Guarantees and for Contract Agreement shall be not less than Rs 100/- unless otherwise required under relevant statutes.
- 2.26.2 In case of any conflict between the General Conditions of Contract and Special Conditions of Contract, provisions contained in the Special Conditions of Contract shall prevail.
- 2.26.3 Unless otherwise specified in NIT, offers from consortium/JVs shall not be considered.
- 2.26.4 BHEL may not insist for signing of Contract Agreements in respect of Transportation, Low value and short time period contracts like providing services for Hot water flushing, Chemical Cleaning, etc

2.27 INTERPRETATIONS/CLARIFICATIONS AND REVISIONS

- 2.27.1 Director (P) shall constitute a Committee every year, for deliberations, interpretations/clarifications for implementation, and for revisions of this General Conditions of Contract. The Committee shall consist of a Chairman and members as per the following:
- **Chairman** : Head of Subcontracts of Power Sector Region on rotation basis
 - **Members (total 3)** : Heads of Subcontracts, Project Management and Finance, each one from the other three Power Sector Regions
- 2.27.2 Based on the decision of the Committee, necessary clarifications shall be issued by the Head of Subcontracting of the Power Sector Region who is officiating as Chairman
- 2.27.3 Committee shall endeavour to revise the General Conditions of Contract once every two years for refinement, standardization or for aligning with contemporary requirements.
- 2.27.4 The Chairman of Committee shall be the custodian of all approvals and original documents and shall pass on the same to the next incoming Chairman.

GCC-1

BANK GUARANTEE FOR SECURITY DEPOSIT (PROFORMA)

Guarantee no _____

In consideration of the Bharat Heavy Electricals Limited, having its registered office at BHEL House, Siri Fort, New Dehi – 110 049 the concerned division being Power Sector - **Western Region, located at 345, Kingsway, Nagpur – 440001. Maharashtra** (hereinafter called BHEL) having agreed to exempt

(hereinafter called “**the said contractor(s)**” from the demand, under terms and conditions of an agreement arising out of **Letter of Intent** Ref.No..... dated.....made between BHEL and..... (Name of the Contractor) for (**type of work**) hereinafter called “**the said LOI**” of Security Deposit for the due fulfillment by said contractors of the terms and conditions contained in the said LOI, or production of bank guarantee for Rs..... (Rupeesonly).

1. We(**hereinafter**
(indicate the name of Bank)

referred to as “the Bank”) at the request of the said Contractor, do hereby undertake to pay to BHEL an amount not exceeding Rs..... against any loss or damage caused to or suffered or would be caused to or suffered by BHEL, by reasons of any breach by the said contractor of any of the terms or conditions contained in the said LOI..

2. We do hereby
(Indicate the name of Bank)

undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from BHEL stating that the amount claimed is due by way of loss / damage caused to BHEL or suffered by BHEL by reason of breach by the said contractor of any of the terms and conditions contained in the said LOI or by reason of the said contractor’s failure to perform the said LOI. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....

3. Weundertake to pay to BHEL any money so
(indicate the name of the bank)

demand not withstanding any dispute or disputes raised by the said contractor in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under these presents being absolute and unequivocal. The payment so made by under this guarantee shall be valid discharge of our liability for payment there under and the said contractor shall have no claim against us for making such payment.

4. We.....further agree that the guarantee
(indicate of the name of Bank)

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herein contained shall remain in full force and effect during the period that would be taken for the performance of the said LOI and that it shall continue to be enforceable till all the dues of BHEL under or by virtue of the terms and conditions of the said LOI have been fully paid and its claim satisfied or discharged or till BHEL certifies that the terms and conditions of the said LOI have been fully and properly carried out by the said contractor and accordingly discharge this guarantee, unless a demand or claim under this guarantee is made on us in writing on or before We shall be discharged from all liability under this guarantee thereafter.

5. We.....further agree with BHEL that BHEL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said LOI or to extend time of performance by the said contractor from time to time or to postpone at any time, any of the powers exercisable by the BHEL against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said LOI and we shall not be relieved from our liability by reasons of any such variation, or extension being granted to the said Contractor or for any forbearance, act, or omission on the part of BHEL or any indulgence BHEL to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the said Contractor.

7. We (indicate the name of bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of BHEL in writing.

8. The Bank hereby declares that it has power to issue this Guarantee and the undersigned has full power to do so on behalf of the Bank.

9. The address of BHEL of services, correspondence in respect of matters relating to this guarantee shall be

**ADDITIONAL GENERAL MANAGER (Purchase)
BHARAT HEAVY ELECTRICAL LIMITED
POWER SECTOR, WESTERN REGION
SRI MOHINI COMPLEX, 345 KINGSWAY
NAGPUR, 440001**

Address of the Bank in full

Telephone No.

Fax No.

Dated theday of20.....

(Name of bank and place)

DESIGNATION OF THE AUTHORISED
PERSON SIGNING THE GUARANTEE

Bank Seal:

NOTE: Expiry date to be shown in para-4 above should not be earlier than 90 days after the completion date contemplated under the contract.

GCC-2

BHARAT HEAVY ELECTRICALS LIMITED
 (A Government of India Undertaking)
Power Sector – Western Region
345, Kingsway
Nagpur – 440 001

CONTRACT AGREEMENT

AGREEMENT NO. _____

NAME OF WORK	
NAME OF THE CONTRACTOR WITH FULL ADDRESS	
AMOUNT OF TENDER ACCEPTED	
LETTER OF INTENT NO.	
TIME ALLOTTED FOR COMPLETING THE WORK (DATE OF COMPLETION)	

SIGNATURE OF CONTRACTOR_____
(SIGNATURE OF BHEL OFFICER)

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Tender Spec No. BHE / PW / PUR / AMRT-MMS/717 (REV -01 Dtd 31.03.2010)

CONTRACT AGREEMENT

This Agreement made this day, the _____ between Bharat Heavy Electricals Limited, having its Registered Office at BHEL House, Siri Fort, New Delhi 110 049, (hereinafter called BHEL), through **BHEL, Power Sector, Western Region, Shreemohini Complex, 345, Kingsway, Nagpur-440 001**, of the First Part _____ (hereinafter called the "Contractor" or the Second Part).

- 2 WHEREAS the first party is desirous of executing the work of _____ more particularly described in the appendices including drawings and specifications attached herewith.
- 3 WHEREAS in pursuance of the said Contractor's tender having been accepted, the first party has decided to give the above said work to the Contractor.
- 4 WHEREAS the said Contractor has agreed to do the aforesaid work of the first party subject to the conditions herein contained in these presents, Instructions to Tenderer, General Conditions of Contract, Special Conditions, Annexures, Letter of Intent, and such other Instructions, Drawings, Specifications (hereinafter referred as the said Contract schedule) at the approved rates (hereinafter referred to as the said Contract Rates)
- 5 The Contractor is required to furnish to BHEL, Security Deposit in the form of Cash/approved Securities/Bank Guarantee valid upto ----- for a sum of Rs ----- towards satisfactory performance and completion of the Contract
- 6 AND WHEREAS the said Contractor has agreed to furnish to BHEL, amount of Rs-----in the form of Cash/approved Securities towards 100% Security Deposit for the complete work in the manner specified in the Tender
- 7 AND WHEREAS the said Contractor hereby agrees to extend the validity of the said Bank Guarantee, for the extended period of contract periods as may be required by BHEL, and in the event of his failure to do so, the contractor shall pay forthwith or accept the recovery of this amount of Rs. _____ from the bills in one installment, and the Contractor further agrees that the failure to extend the validity of Bank Guarantee or failure to pay the aforesaid amount in the manner specified above shall constitute breach of Contract and first party reserves the right to take any legal action deemed fit and proper for recovery of the said sum of Rs. _____.
- 8 This amount of Rs. _____ will be refunded (and Bank Guarantee returned) to the contractor on satisfactory completion of the work as specified in the Contract documents.
- 9 Now these presents witness that in consideration of the said Contract schedule and said Contract Rates, as also of agreement of good and faithful service to be rendered and performed by the contractor in the execution of the said work subject to the stipulation hereinafter expressed.
- 10 That the said Contractor will perform the aforesaid work subject to the conditions contained in these presents, Instructions to the Tenderers, General Conditions of Contract, Special Conditions of Contract and the Contract documents attached herewith including the said schedule, Specifications, Appendices, Letter of Intent, drawings attached and also such other drawings and instructions as may from time to time be given by the first party.

- 11 And that the said Contractor shall be deemed to have carefully examined the specifications and Conditions of Contract, Appendices, Schedules, Letter of Award, Drawings etc. as aforesaid and also to have satisfied himself as to the nature and character of work to be executed.
- 12 That the said Contractor shall carryout and complete the execution of the said work to the entire satisfaction of the Engineer-In-charge within the agreed time schedule.
- 13 That the first party after proper scrutiny of the bills submitted by the said Contractor will pay to him during progress of the said work at said contract rates and agreed terms of payment, a sum as determined by the first party in respect of the work executed by the Contractor.
- 14 That the contract shall come into force with retrospective effect from the date on which Letter of Intent was issued by BHEL to the said Contractor.
- 15 That whenever under this contract or otherwise any sum of money shall be recoverable from or payable by the Contractor, the same may be deducted in the manner as set out in the conditions of the Contract as aforesaid.
- 16 That all charges on account of Octroi, terminal and Sales Tax or other duties on material obtained for the work shall be borne and paid by the said Contractor.
- 17 That it is hereby agreed between the parties that the non-exercise, forbearance or omission of any of the powers conferred on the authorities of the first party, will not in any manner constitute waiver of the conditions hereto contained in these presents, and the liability of the said Contractor with respect to compensation payable to BHEL, or the Contractor's obligation shall remain unaffected.
- 18 That the expression BHEL means the Bharat Heavy Electricals Limited, BHEL House, Siri Fort, New Delhi, through **BHEL, Power Sector-Western Region, "Shreemohini Complex", 345, Kingsway, Nagpur – 440 001.**

The documents hereto attached shall also form part of this agreement:-

- 1 _____
- 2 _____
- 3 _____ etc.

In WITNESS hereof, the parties have respectively set their signature in presence of:

WITNESS (with full address)

- 1.
- 2.

Signature of the Contractor
(To be signed by a person holding valid Power of Attorney of the Company)

WITNESS (with full address)

- 1.
- 2.

For and on behalf of
BHARAT HEAVY ELECTRICALS LTD

BHARAT HEAVY ELECTRICALS LIMITED: PSWR: NAGPUR
Tender Spec No. BHE / PW / PUR / AMRT-MMS/717 (REV -01 Dtd 31.03.2010)

DATE _____

DECLARATION SHEET
(Refer Clause 1.19.8 of General Instructions to the Tenderer)

The Bidders are requested to furnish the following information while quoting, failing which their offer will be summarily rejected.

1. Whether any relative(s) of Partner/Director /Owner is presently employed in BHEL?
If so, his connection with the Firm : **YES/ NO**
(If yes, please give particulars)
2. Whether any BHEL employee is Holding any share in Firm? : **YES/NO** (If yes, please give particulars)

Signature of the Tenderer

Note:

1. Attach separate sheet, if necessary.
2. If the BHEL Management comes to know, at a later date, that the information furnished by the Bidder is false, suitable action will be taken according to law against the contractor.

GCC-4**BANK GUARANTEE FOR INTEREST BEARING RECOVERABLE
ADVANCE (PROFORMA)**

Guarantee no _____

This deed of guarantee made this _____ day of _____ 20__ between **(NAME OF THE BANK AND ADDRESS)** hereinafter called 'THE GUARANTOR' (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successor and assignee) of the one part and BHARAT HEAVY ELECTRICALS LIMITED (a Government of India Undertaking), having its registered office at **BHEL HOUSE, Siri Fort, New Delhi - 110 049 through its division at PSWR Sri Mohini Complex, 345 Kingsway Nagpur, 440001,** hereinafter called 'the company' (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successor and assigns) of the other part:

Whereas **(NAME OF THE CONTRACTOR WITH ADDRESS)** (hereinafter called the contractor') has entered into a contract, arising out of letter of intent/work order/supply order number _____ (hereinafter called 'the contract') with 'the company' for **(NAME OF THE WORK OR DESCRIPTION OF SUPPLY)** and whereas the contract inter alia provides that the company will pay to the contractor an advance of Rs _____ (Rupees _____ only) on certain terms and conditions specified therein subject to the contractor furnishing a bank guarantee for Rs _____ (Rupees _____ only) in favour of the company.

And whereas the contractor has approached the guarantor and in consideration of the arrangement arrived at between the contractor and the guarantor, the guarantor has agreed to give the guarantee as hereinafter mentioned in favour of the company.

Now this deed witnessed as follows:

01. In consideration of the company having agreed to advance a sum of Rs _____ (Rupees _____ only) to the contractor, the guarantor do hereby guarantee the due recovery by the company of the said advance as provided according to the terms and conditions of the contract. If the said contractor fails to utilise the said advance for the purpose of the contract and/or the said advance is not fully recovered by the company, the guarantor do hereby unconditionally and irrevocably undertake to pay to the company without demur and merely on a demand to the extent of the said sum of Rs _____ (Rupees _____ only) any claim made by the company on them for the loss or damage caused to or suffered by the company by reason of the company not being able to recover in full the said sum of Rs _____ (Rupees _____ only).

02. The decision of the company whether the contractor has failed to utilise the said advance or any part thereof for the purpose of the contract and/or as to the extent of the loss or damage caused to suffered by the company by reason of the company not being able to recover in full the said sum of Rs _____ (Rupees _____ only) shall be final and binding on the guarantor, irrespective of the fact the contractor admits or denies the default or questions the

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correctness of any demand made by the company in any court, tribunal or arbitration proceedings or before any other authority.

03. The company shall have fullest liberty without affecting in any way the liability of the guarantor under this guarantee, from time to time to vary any of the terms and conditions of the contract or the advance or to extend time of performance by the contractor or to postpone for any time or from time to time any of the powers exercisable by it against the said contractor and either to enforce or to forbear from enforcing any of the terms and conditions governing the said contract or the advance or the securities available to the company and the guarantor shall not be released from its liability under these presents by any exercise by the company of the liberty with reference to the matter aforesaid or by reason of time being given to the contractor or any other forbearance, act or omission on the part of the company or any indulgence by the company to the said contractor or of any other matter or thing whatsoever which under the law relating to sureties would, but for this provision have the effect of so releasing the guarantor from its liability under this guarantee.

04. The guarantor further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the contract and till the said advance has been fully recovered and its claims satisfied or discharged and till the company certifies that the said advance has been fully recovered from the said contractor and accordingly discharges this guarantee subject, however, that the company shall have no claim under this guarantee after _____, unless a notice of the claim under the guarantee has been served on the guarantor before the expiry of the said period in which case the same shall be enforceable against the guarantor notwithstanding the fact that the same is enforced after the expiry of the said period.

05. The guarantor undertake not to revoke guarantee during the period it is in force except with the previous consent of the company in writing, and agree that any liquidation or winding up or insolvency or any change in the constitution of the contractor or the guarantor, shall not discharge the guarantor's liability hereunder.

06. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the contractor shall, at the time when proceeding are taken against the guarantor hereunder be outstanding on unrealised.

07. The guarantor hereby declares that it has power to execute this guarantee and the executant has the full powers to do so on its behalf under the power of attorney, dated _____, granted to him by the proper authorities of the guarantor.

08. The bank hereby agrees and undertake to renew from time to time this guarantee until all the dues of the company under or by virtue of the said agreement or the said advance have been fully paid and the company's all claims against the contractor have been fully satisfied or discharged.

09. Notwithstanding anything contained in the preceding paragraphs, the liabilities of the guarantor is restricted to a sum of Rs _____ (Rupees _____ only) and this guarantee remains in force upto _____. Unless a demand or claim under this guarantee is made in writing on guarantor within six months from the aforesaid date of expiry, ie on or

before _____, the guarantor shall be relieved and discharged from all liabilities under this guarantee thereafter and all the rights of the company shall stand forfeited thereafter.

10. All disputes or differences arising out of or in connection with the guarantee shall be subject to the exclusive jurisdiction of the courts within the local limits or whose jurisdiction of the company's office at Calcutta is situated.

In witness whereof the **(NAME OF THE BANK)** have hereunto set and subscribe their respective hands the day, month and year first above written.

(NAME AND SIGNATURE)

WITNESS

01

02.