

TENDER SPECIFICATION
No. BHE/PW/PUR/GNR-MMS/513

FOR

THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF CIVIL STRUCTURAL AND RE-INFORCEMENT MATERIALS, COMPONENTS OF BOILER & AUXILIARIES, STEAM TURBINE & AUXILIARIES, TURBO-GENERATOR & AUXILIARIES, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES, STATION C&I EQUIPMENTS, ELECTRICAL PACKAGES, HP & LP PIPING, REFRACTORY & INSULATION, BOUGHT OUT PACKAGES, BHEL'S T & P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER PACKAGES AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR R&M WORK OF 2x 120 MW UNIT No.1 & 2

AT

GANDHINAGAR THERMAL POWER STATION

GESCL

DISTRICT: GANDHINAGAR

(GUJARAT)

PART –I

(TECHNICAL BID SPECIFICATION, NOTICE INVITING TENDER & GCC)

BOOK NO.



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

CONTENTS

SN	DESCRIPTION	SECTION/ APPENDIX NO.	NO. OF PAGES
01	TENDER SPECIFICATION ISSUE DETAILS	--	1
02	PROCEDURE FOR SUBMISSION OF SEALED TENDER	--	1
03	PROJECT INFORMATION	--	1
04	CHECK LIST	--	2
05	DECLARATION BY BIDDER'S AUTHORISED SIGNATORY	--	1
06	CERTIFICATE OF NO DEVIATION	--	1
07	CERTIFICATE CONFIRMING KNOWLEDGE ABOUT SITE CONDITIONS	--	1
08	NOTICE INVITING TENDER (INCLUDES QUALIFICATION REQUIREMENTS)	\$	3
09	REVERSE AUCTION PROCEDURE	\$	11
10	GENERAL CONDITIONS OF CONTRACT	SECTION-1 & 2 \$	28
11	OFFER OF CONTRACTOR	SECTION-3	1
----	SPECIAL CONDITIONS OF CONTRACT:	-----	-----
12	SCOPE OF WORK	SECTION -4	07
13	OBLIGATIONS OF THE CONTRACTOR (TOOLS AND TACKLES, CONSUMABLES, INFRASTRUCTURES ETC.)	SECTION -5	03
14	OBLIGATIONS OF THE CONTRACTOR (EMPLOYMENT OF SUPERVISORY STAFF AND WORKMEN)	SECTION -6	01
15	OBLIGATIONS OF BHEL	SECTION -7	01
16	INSPECTION, QUALITY ASSURANCE, QUALITY CONTROL AND STATUTORY INSPECTION	SECTION -8	01
17	SAFETY, OCCUPATIONAL HEALTH AND ENVIRONMENTAL MANAGEMENT	SECTION -9	13
18	DRAWINGS AND DOCUMENTS	SECTION -10	01
19	TIME SCHEDULE, QUANTITY VARIATION, PRICE VARIATION ETC	SECTION –11	02
20	TERMS OF PAYMENT	SECTION -12	02
21	EXTRA CHARGES FOR MODIFICATION & RECTIFICATION	SECTION -13	01
22	INSURANCE	SECTION -14	02
23	EARNEST MONEY DEPOSIT AND SECURITY DEPOSIT	SECTION-15	02

CONTENTS

SN	DESCRIPTION	SECTION/ APPENDIX NO.	NO. OF PAGES
24	RATE SCHEDULE (PART -II: PRICE BID)	@	
	APPENDICE		
1	LIST OF MAJOR T& P TO BE DEPLOYED BY CONTRACTOR	APPENDIX-I	01
2	LIST OF SIMILAR JOBS COMPLETED BY BIDDER IN LAST SEVEN YEARS	APPENDIX-II	01
3	DETAILS OF BIDDER'S CURRENT COMMITMENTS	APPENDIX-III	01
4	MONTHWISE MANPOWER DEPLOYMENT PLAN	APPENDIX-IV	01
5	MAJOR T&P DEPLOYMENT PLAN	APPENDIX-V	01
6	ANALYSIS OF UNIT RATES QUOTED	APPENDIX-VI	01

LEGEND:

\$: Attached at the end of hard copy of Tender Specifications Part-I. Hosted in BHEL web page (www.bhel.com) as file titled “**NIT+RA+GCC-513**”.

@: Issued as separate hard copy booklet ‘Tender Specifications Part-II (Price Bid)’. Hosted in BHEL web page (www.bhel.com) as file titled “**PRICE BID-513**”

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-513**”

BHARATH HEAVY ELECTRICALS LIMITED

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

TENDER SPECIFICATION No. BHE/PW/PUR/GNR-MMS/513

NAME OF THE WORK: RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF CIVIL STRUCTURAL AND RE-INFORCEMENT MATERIALS, COMPONENTS OF BOILER & AUXILIARIES, STEAM TURBINE & AUXILIARIES, TURBO-GENERATOR & AUXILIARIES, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES, STATION C&I EQUIPMENTS, ELECTRICAL PACKAGES, HP & LP PIPING, REFRACTORY & INSULATION, BOUGHT OUT PACKAGES, BHEL'S T & P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER PACKAGES AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR R&M WORK OF 2x 120 MW UNIT No.1 & 2

AT

GANDHINAGAR THERMAL POWER STATION

DISTRICT: GANDHINAGAR

EARNEST MONEY DEPOSIT: Please see Special Conditions of Contract (Section-15)

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

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

M/s.

.....

PLEASE NOTE:

THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.
BIDDER SHALL NOTE THAT THEIR OFFER WILL BE CONSIDERED SUBJECT TO THE APPROVAL OF
BHEL'S CUSTOMER.

For Bharat Heavy Electricals Limited

DGM (Purchase)

Place: Nagpur

Date :

BHARAT HEAVY ELECTRICALS LIMITED

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

PROCEDURE FOR SUBMISSION OF SEALED TENDERS

The bidders must submit their tenders as required in two parts in separate sealed covers prominently super-scribed 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".

These two separate covers-I and II (part-I and part-II) shall together be enclosed in a third envelope (cover-III) along with requisite EMD as indicated earlier and this sealed cover shall be super-scribed and submitted to Head (Purchase) at the above mentioned address before the due date as indicated.

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

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

- Contractor should have adequate resources including major T&P at his disposal for this job.
- Contractor should have sound financial stability.
- Bidder 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. Please refer the checklist. The details so furnished by bidder should be complete in all respects and as per formats specified in tender specification.
- Clarification on tender specification if any may be obtained by the bidder at least seven days before the Last Date of tender submission.
- Offers must be submitted without any deviation, after seeking clarification, if any.
- 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

INTRODUCTION

2 X 120 MW Unit -1&2 Thermal power plants of Gandhinagar site were erected and commissioned in the year 1980s. Now BHEL has got the order from GSECL customer for Renovation and Modernization of both the units.

APPROACH TO SITE

The site is approximately 22 km from Gandhinagar. Nearest Railway station is Gandhinagar.

CHECK LIST

(vide Para 1.3 of section-I of General Conditions of Contract)

1	Name of the bidder with Postal Address for Correspondence		
2	Name of Contact Person with Telephone & Fax No.	Mr./Ms Tel No. Fax No.	
3	Nature of the firm	PROPRIETARY / PARTNERSHIP / LIMITED CO.	
4	Details of EMD Please Indicate whether 1) One Time EMD or, 2) Only for this Tender	DD No. DD date..... Name of Bank..... Amount: Rs.....	
5	Validity of Offer (BHEL's Requirement: 180 days from Due Date)	Validity _____ days	
6	Mobilization Time (Please refer Section-11 of SCC)	Mobilization Time _____	
7	Whether any conditions stipulated?	Yes (vide Document reference:	No
		Bidder to note that tender with conditions unacceptable to BHEL shall be rejected.	
8	Bidder has visited the project site and acquainted with the site conditions	Yes	No
9	Details of concurrent jobs (as per appendix- III) are furnished	Yes	No
10	Headquarters Organization is furnished	Yes	No
11	Proposed Site Organisation is furnished	Yes	No
12	Names and particulars of Directors /Partners are furnished	Yes	No
13	Financial status of the company (Annexure 'A' of GCC) is furnished	Yes	No
14	Audited Profit & Loss Account for preceding three years authenticated by Bidder's Chartered Accountants is furnished	Yes	No

CHECK LIST			
(vide Para 1.3 of section-I of General Conditions of Contract)			
15	Latest Certificate by Bidder's Banker for Overdraft & BG Limits is Furnished (Certificate shall not be older than six months from the Last Date for offer submission)	Yes	No
16	Month-wise Manpower Deployment Plan (Appendix-IV) is furnished	Yes	No
17	Month -wise deployment plan for major T&P (Appendix-I) furnished	Yes	No
18	Whether all the pages of the Tender Specifications documents are read, understood and signed	Yes	No
19	Power of Attorney enclosed in favour of person making offer.	Yes	No
20	Bidder has familiarized himself with all Relevant local laws & Local Conditions.	Yes	No
21	Safety Requirement of this work in a Running plant premises has been understood.	Yes	No
22	Erection and Commissioning Programme furnished.	Yes	No
23	List of Jobs completed (Appendix-II) in last seven years is furnished	Yes	No
24	Copy of IT Return of last three financial years along with copy of PAN Card are Furnished	Yes	No
25	Analysis of Unit Rates (Appendix -VI) quoted is furnished	Yes	No
26	Whether copies of detailed Work Orders (with Scope and BOQ) and Completion Certificates in support of above furnished	Yes	No
27	Whether contractor has left any job unfinished? If so, give reasons.	Yes	No
28	Whether any client has terminated the contractor's work before completion? If so, furnish reasons for the same	Yes	No

NOTE : STRIKE OFF YES OR NO, AS APPLICABLE

DECLARATION BY BIDDER'S AUTHORIZED SIGNATORY

I, _____, HEREBY CERTIFY THAT ALL THE INFORMATION AND DATA FURNISHED BY ME WITH REGARD TO THIS **TENDER SPECIFICATION No. BHE/PW/PUR/GNR-MMS/513** 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/GNR-MMS/513

I/WE, M/s

HEREBY CERTIFY THAT IN OUR OFFER I/WE HAVE NEITHER SET ANY TERMS AND CONDITIONS NOR THERE ANY DEVIATION TAKEN FROM THE CONDITIONS OF CONTRACT, EITHER TECHNICAL OR COMMERCIAL, AND I/WE AGREE TO ALL THE TERMS AND CONDITIONS MENTIONED IN THE TENDER SPECIFICATION UNDER REFERNCE ABOVE INCLUDING NOTICE INVITING TENDER, ALL ASSOCIATED CLARIFICATIONS AND AMENDMENTS.

DATE:

SIGNATURE OF THE TENDERER

**CERTIFICATE CONFIRMING
KNOWLEDGE ABOUT SITE CONDITIONS**

We, M/s
hereby declare and confirm that we have visited the project site as
referred in BHEL's Tender Specification No. BHE/PW/PUR/GNR-
MMS/513 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
AUTHORISED SIGNATORY**

PLACE:

DATE:

SECTION-3

OFFER OF THE CONTRACTOR

To,
DGM (PURCHASE)
BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR - WESTERN REGION
345, Shree Mohini Complex,
KINGS WAY
NAGPUR - 440001

DEAR SIR,

I/WE HEREBY OFFER TO CARRY OUT THE WORK DETAILED IN TENDER SPECIFICATION NO.BHE/PW/PUR/GNR-MMS/513 ISSUED BY BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR-WESTERN REGION, BARODA, IN ACCORDANCE WITH THE TERMS AND CONDITIONS THEREOF.

I/WE HAVE CAREFULLY PERSUED THE FOLLOWING LISTED DOCUMENTS CONNECTED WITH THE ABOVE WORK AND AGREE TO ABIDE BY THE SAME.

1. INSTRUCTIONS TO TENDERERS
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 AS SPECIFIED IN THE TENDER SPECIFICATION. DETAILS OF 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.

OR

WE HAVE ALREADY DEPOSITED ONE TIME EMD OF Rs. 2,00,000/- (RUPEES TWO LAKHS ONLY). DETAILS OF WHICH ARE FURNISHED IN THE CHECK LIST.

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 FOR R&M WORK OF 2x120 MW UNIT Nos. 1 & 2 AT GANDHINAGAR THERMAL POWER STATION SHALL BROADLY BE AS UNDER:

- UNLOADING OF CIVIL STRUCTURAL AND RE-INFORCEMENT STEEL ETC
- UNLOADING OF HEAVIER CONSIGNMENTS
- RECEIPT OF MATERIALS DISPATCHED BY ROAD TRANSPORT ON DOOR DELIVERY BASIS AT THE BHEL STORES AND UNLOADING THEREOF.
- RECEIPT OF MATERIALS DISPATCHED BY RAIL CONSIGNED TO PROJECT SIDING, UNLOADING, AT SIDING, LOADING ON TRANSPORT, TRANSPORTATION TO & UNLOADING AT BHEL STORES/STORAGE YARD.
- COLLECTION OF MATERIALS DISPATCHED BY ROAD TRANSPORT/ RAIL ON GODOWN DELIVERY BASIS FROM TRANSPORTERS'/RAILWAY GODOWNS, LOADING AT TRANSPORTERS'/ RAILWAY GODOWN, LOCAL TRANSPORT UP TO BHEL STORES/ STORAGE YARD AND UNLOADING THEREOF.
- PRELIMINARY VERIFICATION OF MATERIALS AT THE TIME OF UNLOADING FROM RAIL/ ROAD TRANSPORT VEHICLE OR WHILE RECEIVING CONSIGNMENTS FROM RAILWAY/ TRANSPORTERS' GODOWN - AS THE CASE MAY BE, REPORTING DISCREPANCIES LIKE DAMAGES AND SHORTAGES NOTICED IMMEDIATELY.
- DETAILED VERIFICATION OF MATERIALS WITH REFERENCE TO PACKING LIST AND LOADING ADVICE SLIP AFTER UNPACKING OF BOXES & CRATES; REPACKING AFTER DETAILED VERIFICATION; PREPARATION OF RECEIPT INSPECTION REPORTS.
- STACKING AND STORING AT BHEL OPEN STORAGE YARD/ COVERED STORES/ CLOSED & SEMI-CLOSED SHEDS, SUBMISSION OF STACKING/STORING RECORDS.
- PRESERVATION OF THE MATERIALS IN ACCORDANCE WITH BHEL'S PRESERVATION MANUAL AND/OR 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 SERVICES FOR MATERIALS MANAGEMENT (OPERATION OF COMPUTERIZED MATERIALS MANAGEMENT SYSTEM – FEEDING DATA, UPDATION AND GENERATION OF VARIOUS REPORTS ETC.).

- REHANDLING AND RESTACKING OF MATERIALS AS AND WHEN CALLED FOR BY BHEL. THIS ALSO INCLUDES EXCESS/REDUNDANT MATERIALS RETURNED TO STORES BY BHEL'S ERECTION CONTRACTORS.
- HANDLING AND LOADING OF OUTGOING MATERIALS THOSE ARE TO BE SENT TO OTHER DESTINATIONS.

SCOPE OF WORK IS FURTHER DETAILED IN VARIOUS CLAUSES HEREAFTER.

4.2 MAJOR PACKAGES TO BE HANDLED ARE AS UNDER:

1. STRUCTURALS SUCH AS PLATES OF VARIOUS THICKNESSES, ROLLED SECTIONS ETC AND REINFORCEMENT STEELS SUPPLIED BY BHEL
2. COMPONENTS OF BOILER, FANS, MILLS, FEEDERS, DUCTS & DAMPERS, ESP ALONG WITH THEIR AUXILIARIES AND TRIM PIPING.
3. TURBINE COMPONENTS, PUMPS WITH DRIVE MOTORS AND THEIR AUXILIARIES INCLUDING HEATERS, HEAT EXCHANGERS AND DE-AERATOR COMPONENTS.
4. BOILER CONTROLS & INSTRUMENTATION AND ACCESSORIES
5. TG CONTROLS AND INSTRUMENTATION AND ACCESSORIES
6. ACCESSORIES OF GENERATOR TRANSFORMERS, STATION TRANSFORMERS.
7. STATION C&I PACKAGE WITH CABLES.
8. COMPLETE ELECTRICAL PACKAGE INCLUDING BUS DUCTS, CABLING, PANELS, SWITCH GEARS, LIGHTING AND DG SETS ETC
9. GENERATOR PROTECTION RELAY PANELS AND AUXILIARIES
10. CW & ACW PUMPS AND THEIR AUXILIARIES AND ACCESSORIES
11. GENERATOR BUS DUCT AND AUXILIARIES PACKAGE
12. POWER CYCLE AND TG CYCLE PIPING, TANKS, VESSELS ETC.
13. THERMAL INSULATION PACKAGE
14. OTHER BHEL SUPPLIED (MANUFACTURED/BOUGHT OUT ITEMS) PACKAGES
15. CONSTRUCTION EQUIPMENTS OF BHEL AND OTHER ITEMS RECEIVED FROM OTHER SITES/LOCATIONS.

SOME OF THE MAJOR HEAVY CONSIGNMENTS ARE:

SL.NO.	DESCRIPTION	APPROX WT
01	IP ROTOR	8.0 MT
02	HP ROTOR	4.0 MT
03	HP HEATER COILS	13.0 MT
04	CEP	6.0 MT

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

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 DESPATCH DOCUMENTS.

4.10.2

THE CONTRACTOR SHALL REMAIN IN REGULAR CONTACT WITH THE CONCERNED TRANSPORTERS OR RAILWAYS BASED ON THE DESPATCH 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, VARIFICATION AND STACKING WILL BE MADE AS PER UNIT RATE VIDE ITEM SL.NO. A.1 OF RATE SCHEDULE SHALL BE MADE. HOWEVER FOR TRASPORT OF SMALLS FROM GODOWN TO SITE, PAYMENT ONLY@ RS 5/PER KM 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).

SIMILARY, FOR ANY SMALLS TO BE SENT TO DIFFERENT LOCATIONS/SITES FROM SITE AND WHICH NEEDS TO BE BROUGHT TO TRNASPORTER'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 DEMMURAGE/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 OCCASSIONS WITHUT 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 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.

NO SEPARATE ITEM RATE SHALL BE QUOTED FOR RESTACKING/RE-ARRANGING/ SHIFTING OF STAKED MATERIALS, THE SAME HAS TO BE CARRIED OUT IN THE SAME RATE.

4.11 OTHER POINTS

4.11.1

BEFORE QUOTING FOR THIS TENDER, THE CONTRACTOR SHALL VISIT THE SITE AND ASSESS THE LOCAL CONDITIONS AND AVAILABLE INFRASTRUCTURES, ENTRY AND TRAFFIC RESTRICTIONS AND GET AQUAINTED WITH GENERAL PROCEDURES BY CUSTOMER RELATED TO BHEL/ITS AGENCIES' INTERFACE ACTIVITIES. CLAIMS FOR NOT HAVING PROPER KNOWLEDGE ON SITE CONDITION SHALL NOT BE ENTERTAINED.

4.11.2

THE DISTANCES INDICATED IN THESE SPECIFICATIONS ARE ONLY APPROXIMATE. HOWEVER, THE TENDERERS 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.

4.12 SCOPE OF WORK FOR PROVIDING MATERIALS MANAGEMENT SERVICES (REFER "SECTION-B" OF RATE SCHEDULE):

CONTRACTOR SHALL PROVIDE MINIMUM TWO WELL QUALIFIED PERSONS FOR PROVIDING MATERIAL MANAGEMENT SERVICES AT SITE; CONTRACTOR SHOULD QUOTE HIS MAN MONTH RATE FOR THE SAME IN THE ENCLOSED RATE SCHEDULE GIVEN IN PRICE BID.

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 other activities associated with the regular material handling activities (like Receipt, Unloading, Verification, Stacking and regular Stock Verification of Project materials).

THE PERSONNEL DEPLOYED FOR MATERIALS MANAGEMENT SERVICES SHALL BE EXCLUSIVELY AVAILABLE TO BHEL. THEY SHOULD POSSESS QUALIFICATION AND EXPERIENCE AS PER BHEL'S REQUIREMENT.

4.11.2

BHEL IS OPERATING COMPUTERIZED SITE OPERATIONS MANAGEMENT SYSTEM (SOMS) THAT INCLUDES MATERIALS MANAGEMENT, PROGRESS REPORTING, SUB-CONTRACTOR BILLING AND MATERIAL RECONCILIATION THROUGH A FULLY COMPUTERIZED DATA BASE MANAGEMENT SYSTEM. CONTRACTOR SHALL ENGAGE PERSONNEL WITH PROFICIENCY IN OPERATION OF COMPUTERIZED DATA BASE MANAGEMENT SYSTEM FOR THE PURPOSE OF REGULAR OPERATION AND UPDATION OF "SOMS". THE PERSONS SHALL ALSO BE FLUENT IN BASIC COMPUTER OPERATIONS LIKE 'MS OFFICE' ETC.

4.11.3

SCOPE OF SERVICES SHALL INCLUDE MAINTENANCE OF STORES RECORDS, SUPERVISION OF ISSUE AND RETURN OF MATERIALS IN RESPECT OF BHEL'S ERECTION AGENCIES.

4.11.4

CONTRACTOR SHALL GENERATE PERIODIC STATUS REPORTS AS REQUIRED BY BHEL (REPORTS REGARDING MATERIAL DESPATCHES, RECEIPTS, SHORTAGE, DAMAGE, LOSS, ISSUE, RETURN, PENDING AND CRITICAL MATERIALS ETC.

4.11.5 PRESERVATION OF COMPONENTS

CONTRACTOR SHALL ARRANGE FOR PRESERVATION OF COMPONENTS AS PER BHEL'S STORAGE AND PRESERVATION MANUAL AND/OR AS PER INSTRUCTIONS OF BHEL ENGINEER.

ONE OR MORE OF FOLLOWING METHODS SHALL BE ADOPTED FOR PRESERVATION:

- 1) COATING WITH PRESERVATIVE PAINTS/LUBRICANT/INHIBITORS.
- 2) CAPING/WRAPPING/COVERING.
- 3) FILLING/IMMERSION IN OIL/CHEMICALS ETC.
- 4) PERIODIC CHECKS/MAINTAINING REQUIRED NITROGEN PRESSURE IN TANKS OF ALL TRANSFORMERS. BHEL WILL PROVIDE THE NITROGEN GAS FOR THE SAME. HOWEVER CONTRACTOR SHALL HANDLE THE CYLINDERS, FIT-UP REFILLS AND RETURN EMPTY CYLINDERS TO BHEL STORES.
- 5) HT MOTORS

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 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 MANUFACTURERS (E.G. ASIAN PAINTS, BERGER, JENSON & NICHOLSON, BOMBAY PAINTS, SHALIMAR, ETC.) REQUIRED FOR PRESERVATION SHALL BE USED FOR THIS PURPOSE.

ALL OTHER RESOURCES INCLUDING CONSUMABLES (EXCLUDING THOSE IN BHEL'S SCOPE), TOOLS AND PLANTS AND MANPOWER HAVE TO BE PROVIDED BY THE CONTRACTOR. FOR PRESERVATION ACTIVITIES NOT INVOLVING USE OF CRANE, ONLY THE ACCEPTED MANDAY RATE WILL BE APPLICABLE FOR PAYMENT. WHERE USE OF CRANE IS NECESSITATED FOR HANDLING OF MATERIALS FOR PRESERVATION, PAYMENT WILL BE MADE FOR REHANDLING/RE-STACKING OF MATERIALS FOR WEIGHT HANDLED AS PER CORRESPONDING RATE IN ADDITION TO MANDAY RATE FOR PRESERVATION.

IN THIS PROCESS THE IDENTIFICATION MARKS, COMPONENT/MATERIAL CODES, MATCH MARKS, MAY HAVE TO BE REPAINTED. THE CONTRACTOR SHALL PROVIDE HIS OWN SUPERVISORS FOR 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.

4.11.6 RECORD KEEPING AND REPORT GENERATION

ALL THE ABOVE FUNCTIONS OF MATERIAL DESPATCHES, RECEIPT, STACKING, PRESERVATION, ISSUING ETC WILL HAVE TO BE PROPERLY RECORDED IN THE PRESCRIBED FORMATS, REGISTERS ETC. MANUALLY AND ON COMPUTER AND MADE AVAILABLE FOR VERIFICATION BY BHEL. THE REPORT GENERATION WILL BE EXHAUSTIVE AND WILL COVER DETAILS LIKE STOCK AT SITE,

PENDING MATERIALS TO BE RECEIVED, MATERIALS IN TRANSIT, COMPONENTS ISSUED TO THE CONTRACTOR, LOCATION PLANS OF ITEMS STACKED AND OTHER MATERIAL STATUS DOCUMENTS.

ALL PERSONNEL DEPLOYED FOR MATERIALS MANAGEMENT SHOULD NECESSARILY BE PROFICIENT IN COMPUTER OPERATION. THEY SHOULD BE CAPABLE OF DATA ENTRY IN COMPUTERS, REPORT GENERATION AS PRESCRIBED AND INFORMATION MANAGEMENT. THESE PERSONNEL SHALL TAKE PRINTOUT OF REQUIRED INFORMATION IN THE PRESCRIBED MANNER.

NOTE : CONTRACTOR SHOULD UNLOAD AND STACK THE MATERIALS IMMEDIATELY AS AND WHEN MATERIALS ARE RECEIVED AT SITE .

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 AND PLANTS THAT ARE REQUIRED FOR THE SCOPE OF WORK COVERED IN THIS TENDER SPECIFICATION AS PER THE NEED AT SITE TO AVOID ANY DELAY. CONTRACTOR SHALL SUBMIT PROPOSED T&P DEPLOYMENT PLAN ALONGWITH OFFER.

5.1.2

IN THE EVENT OF CONTRACTOR FAILING TO ARRANGE THE REQUIRED TOOLS AND 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.

5.1.3

THE T&P ARRANGED BY THE CONTRACTOR SHALL BE IN PROPER WORKING CONDITION, AND SHALL NOT LEAD TO UNSAFE CONDITIONS.

5.2

THE CONTRACTOR AT HIS COST SHALL ARRANGE FOR TEMPORARY RESIDENCE FOR HIS EMPLOYEES AND LOCAL OFFICE, 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 FIELD OFFICE

5.3.1

The contractor shall make his own arrangements for field office and stores for accommodating necessary equipments, tools room for execution of the work. Only open space will be provided by BHEL / customer, free of charges within the project premises as per the availability of space.

5.3.2

On completion of work, all the temporary buildings, structures, pipelines, cables, etc shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, BHEL will arrange to remove and expenditure thereof including overhead expenses (presently @30%) will be recovered from the contractor. The decision of BHEL engineer in this regard shall be final. However, the scope of dismantling and leveling the area is limited only to the contractor's site office, yard and other spaces occupied by the contractor.

5.4 CONSTRUCTION POWER & WATER

5.4.1

Construction power (three phase, 415v / 440v, will be provided at single point on Chargeable basis as per the prevailing rate of M/s GESCL. Present tariff is Rs.7/- per unit which is changing time to time. All taxes, duties, levies, charges etc, as applicable, shall also be born by the contractor. Accordingly, required energy meter, all cables, fuses, distribution boards, switches, switchboards, bus bars, earthing arrangements, protection

devices e.g. ELCB, if any, and any other installation as specified by Statutory Authority, Client in this regard, for drawl of construction power shall be arranged by the contractor. Obtaining approvals, payment of necessary fees, duties etc towards the clearance of such installations, if any, prior to these being put to use or as may be specified, shall be the responsibility of the contractor.

5.4.2

It shall be the responsibility of the contractor to provide, maintain the complete installation on the load side of the supply with due regard to the safety requirements at site. All cabling and installations shall comply in all respects with the appropriate statutory requirements. The installation and maintenance of this shall be done by licensed and experienced Electrician.

5.4.3

The Customer will provide **water for Construction purpose** at a single point free of charge. However, Taxes, Duties, Levies, charges if any shall be borne by the contractor. All arrangements for further distribution beyond this point have to be made by contractor.

5.4.4

In case of non-availability of customer supplied power, it is the responsibility of the contractor to make alternative arrangements for back-up power supply arrangement like DG set and Diesel operated welding machine etc. to tackle the situations arising due to failure of customer supply power, so as to ensure continuity and completion of critical processes that are underway at the time of power failure or important activities planned in immediate future.

5.4.5

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. Contractor shall take suitable insurance policy for such accidental loss/ damages.

5.5 TAXES, DUTIES, LEVIES

Refer to Clause 2.8.4 of General Conditions of Contract. Notwithstanding anything contained therein, the following provisions shall be applicable for this contract.

5.5.1

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 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.

5.5.2 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 and remittance record of such tax immediately after depositing the tax with concerned authorities. 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.

5.5.3 VAT/WCT

As regards Sales Tax on transfer of property in goods involved in Works Contract 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.

5.5.4 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.

5.5.5 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.

5.4 Submission of Periodical Reports

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

- Consumption of welding electrodes and gases
- Consumption of construction power
- Availability and utilization of cranes
- Manpower reports
- Progress reports - periodically
- Field calibration / test reports
- Safety Reports as specified in Section-9 of SCC

BHEL at site will inform formats for these reports.

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 laid down by the customer for making 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 AND AS WELL AS TO SUIT THE MATERIAL FLOW .IT IS TO BE NOTED THAT THE MATERIAL FLOW MAY NOT FOLLOW LINEAR PATTERN.. THE CONTRACTOR SHOULD ENGAGE THE MANPOWER TO SUIT THE MATERIAL RECEIPT AND TO AVOID ANY DELAY. 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 AND WORKMEN 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 WORK PERMITS FROM BHEL/ CUSTOMER PRIOR TO TAKING 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

CONTRACTOR SHALL ARRANGE AND PROVIDE WATCH AND WARD ROUND THE CLOCK FOR THE MATERIALS/EQUIPMENTS ISSUED TO HIM.

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.

THE SCOPE INCLUDES GETTING THE LICENCES 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.

SECTION-7

SPECIAL CONDITIONS OF CONTRACT

7.0 OBLIGATIONS OF BHEL

7.1 FACILITIES PROVIDED BY BHEL

7.1.1

BHEL WILL NOT PROVIDE ANY CRANE ETC OTHER THAN SOME SPECIAL MATERIAL HANDLING TOOLS SUPPLIED BY THE MANUFACTURING UNITS ALONG WITH THE EQUIPMENTS FOR THE ABOVE WORK. CONTRACTOR HAS TO MAKE HIS OWN ARRANGEMENT ACCORDING TO THE NEED OF THE WORK.

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

MATERIALS REQUIRED FOR PRESERVATION OF COMPONENTS (PAINTS, GREASE ETC.,) WILL BE PROVIDED BY BHEL FREE OF COST.

7.1.3

CONSTRUCTION WATER AND DRINKING WATER WILL BE PROVIDED AS PER THE AVAILABILITY FROM THE CUSTOMER.

7.2 OTHER ISSUES

THE DU/ DESS NOS SUPPLIED BY MANUFACTURING UNITS AS PART OF SUPPLY FOR HANDLING OF MATERIALS WILL BE PROVIDED FREE OF CHARGE TO THE CONTRACTOR ON RETURNABLE BASIS.

SECTION-8

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 WORK WILL BE AS PER BHEL/ BESCL 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 BHEL AND BESCL ENGINEERS AND OTHER QUALITY CONTROL AND QUALITY ASSURANCE DOCUMENTATION AS PER BHEL ENGINEER'S INSTRUCTIONS, ARE WITHIN THE SCOPE OF WORK.

8.3

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 DOCUMENTS AND QUALITY STANDARDS.

8.4

THERE WILL BE PERIODICAL INSPECTION AND AUDITS OF THE WORK BY BHEL'S INTERNAL AND EXTERNAL AUDITORS. SUCH INSPECTIONS/AUDITS MAY CALL FOR REWORK/RE-HANDLING OF MATERIAL FOR REASONS ATTRIBUTABLE TO THE CONTRACTOR, WHICH SHALL BE DONE BY THE CONTRACTOR WITH THE REQUIRED MANPOWER AND T&P WITHOUT ANY ADDITIONAL PAYMENT BY BHEL.

SECTION-9

SPECIAL CONDITIONS OF CONTRACT

SAFETY, OCCUPATIONAL HEALTH AND ENVIRONMENTAL MANAGEMENT

INTRODUCTION:-

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 AUTHORISED 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 SIGN BOARD GIVING THE FOLLOWING INFORMATION AND DISPLAY IT NEAR THE WORK SITE:

- 1.NAME OF CONTRACTOR
- 2.NAME OF CONTRACTOR SITE-IN-CHARGE & TELEPHONE NUMBER
- 3.JOB DESCRIPTION IN SHORT
- 4.DATE OF START OF JOB
- 5.DATE OF EXPECTED COMPLETION
- 6.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.

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR-MMS/513

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 AUTHORISED 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 IT'S AUTHORISED 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 AUTHORISED 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 CARRYOUT 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 ENERGISED 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 AUTHORISED 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 GUARD RAILS, COVERS OR PROTECTIVE DEVICES UNLESS AUTHORISED 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 AUTHORISED PERSONS HOLDING RELEVANT LICENSE WILL DRIVE AND OPERATE SITE PLANT AND EQUIPMENTS EG CRANES, DUMPERS, EXCAVATORS, TRANSPORT VEHICLES ETC.

9.2.1.15 ONLY AUTHORISED PERSONNEL ARE ALLOWED TO REPAIR, COMMISSION ELECTRICAL EQUIPMENTS.

9.2.1.16 GAS CYLINDERS SHALL BE HANDLED AND STORED AS PER GAS CYLINDER 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 ADMINISTRATORS 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

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR-MMS/513

- 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 AUTHORISED 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

9.2.1.15.1 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.

9.2.1.15.2 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 AID PERSONNEL SHALL BE INCLUDED IN THE EMERGENCY RESPONSE TEAM. CONTRACTOR EMPLOYEES AND WORKMEN ARE ENCOURAGED TO PARTICIPATE IN FIRST AID TRAINING PROGRAMMES WHENEVER ORGANISED 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 PPES 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 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 MINIMISATION. 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 ADVISE

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 NEUTRALISED 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.

9.3.3 CONTRACTOR, SUPERVISOR MUST ATTEND ALL SCHEDULE SAFETY MEETINGS AS WOULD BE INTIMATED TO HIM BY THE BHEL ENGINEER IN CHARGE.

9.3.4 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.

9.3.5 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 THAT 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 AUTHORISED 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

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR-MMS/513

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 PPES
- 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 CO-ORDINATOR 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

SL NO	EQUIPMENT	SCOPE OF INSPECT ION	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	TO CHECK FOR DEFECTS	USER	DAILY

SL NO	EQUIPMENT	SCOPE OF INSPECT ION	INSPECTION BY	SCHEDULE
	EQUIPMENT/ TACKLES	AND EFFICACY OF BRAKES	THIRD PARTY	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:

SN	Incidence 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 Sliding property	200/-
07.	Using Damaged Sling	200/-
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/-
14.	Accident Resulting in Partial Loss in Earning Capacity	25,000/- per victim
15.	Fatal Accident/Accidents Resulting in total loss in Earning Capacity	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 RECOGNISE 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:

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 AUTHORISED REPRESENTATIVE OF M/S -----

NAME :

PLACE & DATE: _____

9.10.1 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 NO.	YEAR	AMD. UPTO	DESCRIPTION
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)
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

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR-MMS/513

IS NO.	YEAR	AMD. UPTO	DESCRIPTION
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)
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 NO.	YEAR	AMD. UPTO	DESCRIPTION
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

- 10.4 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 tenderers, 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.
- 10.7 In case of discrepancy between quoted item rate and corresponding amount in the rate schedule, the **quoted item rates shall be reckoned as correct and amount recalculated**. Quoted item rates shall also prevail for arriving at the total price quoted for offer evaluation.
- 10.8 Bank Guarantees to be furnished by the contractor towards security deposit and performance guarantee (last 5% payment against workmanship warranty/defect liability) shall have a claim period of six months over and above the validity period required for the case.

SECTION-11

SPECIAL CONDITIONS OF CONTRACT

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

11.1 TIME SCHEDULE (CONTRACT PERIOD) AND MOBILIZATION OF RESOURCES

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 **ONE WEEK** 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

THE MATERIALS/EQUIPMENTS/COMPONENTS ARE LIKELY TO BE RECEIVED FOR THE PROJECT OVER A PERIOD OF 36 MONTHS. CONTRACT PERIOD SHALL BE CONSIDERED AS **36 (THIRTY SIX) 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

A GRACE PERIOD **OF 5 MONTHS** WILL BE GRANTED AFTER COMPLETION OF 36 MONTHS AS ABOVE. DURING THE ENTIRE PERIOD OF CONTRACT AND EXTENSION THEREOF, IF ANY, CONTRACTOR SHALL MAINTAIN PROPER PROGRESS, ADEQUATE MANPOWER, REQUISITE HANDLING AND TRANSPORTATION EQUIPMENTS, TOOLS & PLANTS AND CONSUMABLES ETC. TO MEET THE SCHEDULED PROGRAMME AS PER THE PRIORITY SET BY BHEL SITE ENGINEER.

11.1.5 CONSEQUENCE OF DELAY

IT MAY BE NOTED THAT IN THE EVENT 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

PROGRESS WILL BE REVIEWED PERIODICALLY (DAILY/WEEKLY/MONTHLY) INCLUDING MONTH END REVIEW VIS-A-VIS THE PLANS DRAWN AS ABOVE. THE CONTRACTOR SHALL SUBMIT PERIODICAL PROGRESS REPORTS AND OTHER REPORTS/INFORMATION INCLUDING MANPOWER, CONSUMABLES ETC AS DESIRED BY BHEL.

11.2.2 ASCERTAINING AND ESTABLISHING THE REASONS FOR SHORTFALL

THE ONUS PROBANDI THAT THE CAUSES LEADING TO EXTENSION OF THE CONTRACT PERIOD IS NOT DUE TO ANY REASONS ATTRIBUTABLE TO THE CONTRACTOR IS ON HIM (THE CONTRACTOR). REVIEW OF THE PERFORMANCE AS STATED VIDE CL. 11.2.1 ABOVE WILL BE MADE CONSIDERING THE AVAILABILITY OF COMPONENTS TO BE ERRECTED AND OTHER INPUTS / CONSTRAINTS OVER WHICH THE CONTRACTOR HAS NO CONTROL. THE PROGRAMME WILL BE REVIEWED AREA -WISE AND THE FOLLOWING FACTS WILL BE RECORDED IN CASE OF SHORTFALL AT THE END OF EVERY MONTH:

- A) OUTPUT OF WORK NOT ACHIEVED OWING TO NON-AVAILABILITY OF FRONTS.
- B) OUTPUT OF WORK NOT ACHIEVED OWING TO NON-AVAILABILITY OF MATERIALS.
- C) ERECTION/COMMISSIONING PROGRAMME NOT ACHIEVED OWING TO NON-AVAILABILITY OF TOOLS AND PLANTS, MANPOWER AND CONSUMABLES BY THE CONTRACTOR OR ANY OTHER REASON ATTRIBUTABLE TO THE CONTRACTOR.
- D) ERECTION / COMMISSIONING PROGRAMME NOT ACHIEVED DUE TO ANY OTHER REASONS NOT ATTRIBUTABLE TO THE CONTRACTOR.

11.2.3 CONTRACT PERIOD EXTENSION

IF THE COMPLETION OF WORK AS DETAILED IN THESE SPECIFICATION GETS DELAYED BEYOND THE END OF CONTRACT PERIOD AND GRACE PERIOD THEN DEPENDING ON THE BALANCE WORK LEFT OUT, BHEL AT ITS DISCRETION MAY EXTEND THE CONTRACT ON EXISTING TERMS AND CONDITIONS FOR A PERIOD OF MAXIMUM 6 SIX MONTHS AFTER THE END OF CONTRACT PERIOD AND GRACE PERIOD.

11.2.4

A JOINT PROGRAMME SHALL BE DRAWN FOR THE WORK TO BE COMPLETED DURING THE EXTENDED CONTRACT PERIOD. REVIEW OF THE PROGRAM AND RECORD OF SHORTFALL AS DESCRIBE VIDE CLAUSE NO. 11.2.2 SHALL BE DONE DURING THE EXTENDED PERIOD. THE OVER RUN CHARGES WILL BE PAID IN PROPORTION TO THE ACHIEVEMENT OF THE RESPECTIVE MONTH VIS-À-VIS THE PLAN FOR THE MONTH (FOR ASSESSING PERFORMANCE, AGREED PLAN SHALL BE REDUCED BY SHORTFALL ATTRIBUTABLE TO THE BHEL). BHEL MAY DISALLOW CONTRACTOR'S CLAIM FOR OVERRUN CHARGES IF MONTHLY PROGRAMME AS MENTIONED HEREIN ARE NOT MADE BY HIM.

11.2.5

THE PART OF EXTENSION ATTRIBUTABLE TO THE CONTRACTOR, IF ANY, IN TOTAL CONTRACT EXTENSION SHALL BE EXHAUSTED FIRST i.e., IMMEDIATELY AFTER END OF GRACE PERIOD. THIS SHALL BE FOLLOWED BY THE EXTENSION ON ACCOUNT OF FORCE MAJEURE CONDITIONS, IF ANY, AND LASTLY ON ACCOUNT OF BHEL.

11.3 OVERRUN COMPENSATION

THERE IS NO PROVISION OF OVERRUN COMPENSATION IF THE CONTRACT IS EXTENDED AS EXPLAINED ABOVE. ANY EXTENSION REQUIRED BEYOND STIPULATIONS AS ABOVE, THE SAME INCLUDING THE RATES ETC. WILL BE DISCUSSED AND AGREED TO MUTUALLY.

11.4 VARIATION IN RATES/PRICE

ITEM RATES AS AGREED BETWEEN BHEL AND THE CONTRACTOR SHALL REMAIN FIRM THROUGHOUT THE CONTRACT PERIOD, GRACE PERIOD AND EXTENSION PERIOD, IF ANY. NO PRICE VARIATION IS PROVIDED FOR IN THIS CONTRACT. ACCORDINGLY CLAUSE 2.15 OF GENERAL CONDITIONS OF CONTRACT IS NOT APPLICABLE.

11.5 VARIATION IN QUANTITIES & MEASUREMENT OF WORK

11.5.1 VARIATION IN QUANTITIES

QUANTITIES INDICATED IN RATE SCHEDULE ARE APPROXIMATE AND LIABLE TO VARY/ALTER AT THE DISCRETION OF BHEL. THE ACCEPTED UNIT RATES SHALL REMAIN FIRM FOR ANY VARIATION IN THE INDICATED QUANTITIES.

11.5.2 MEASUREMENT OF WORK AND PAYMENT

PAYMENT WILL BE MADE FOR THE WORK MEASURED AND ACCEPTED BY BHEL AS PER THE AGREED ITEM RATES OF THE CONTRACT. FOR THE PURPOSE OF PAYMENT, GROSS WEIGHT HANDLED INCLUDING WEIGHT OF PACKING WILL BE TAKEN INTO ACCOUNT. GENERALLY WEIGHT INDICATED IN LR/RR/LWB WILL BE TAKEN FOR THIS PURPOSE. IN CASE WEIGHT INDICATED ON LWB IS 'FTL' OR 'FIXED', THE WEIGHT SHALL BE ASSESSED BY BHEL AND PAID ACCORDINGLY WHICH SHALL BE FINAL/BINDING ON CONTRACTOR.

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 ON ACCOUNT BILLS WITH ALL THE DETAILS REQUIRED BY BHEL ON SPECIFIED DATE EVERY MONTH COVERING PROGRESS OF WORK IN ALL RESPECTS AND AREAS FROM THE 25TH OF PREVIOUS CALENDAR MONTH TO 24TH OF THE CURRENT MONTH.

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 BREAKUP 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. HOWEVER, THIS AMOUNT MAY BE RELEASED EARLIER (INCLUDING BEFORE COMPLETION OF WORK) SUBJECT TO RECEIPT AND ACCEPTANCE OF BANK GUARANTEE OF EQUAL AMOUNT IN BHEL'S PRESCRIBED FORMAT AND THE BG SHALL BE KEPT VALID TILL COMPLETION OF SUCH GUARANTEE PERIOD AND AN ADDITIONAL SIX MONTHS CLAIM PERIOD. THIS IS ALSO SUBJECT TO THE CONDITION THAT THE CONTRACTOR HAS STARTED THE WORK AND ALSO FURNISHED/REMITTED THE INITIAL SECURITY DEPOSIT AS PER CONTRACT.

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:

- NAME OF THE COMPANY
- NAME OF BANK
- NAME OF BANK BRANCH
- CITY/PLACE
- ACCOUNT NUMBER
- ACCOUNT TYPE
- IFSC CODE OF THE BANK BRANCH
- MICR CODE OF THE BANK BRANCH

12.1 STAGE BREAK UP FOR PROGRESSIVE PRO-RATA PAYMENTS

12.1.1 STAGE-WISE BREAK UP FOR PRO-RATA PROGRESSIVE PAYMENT (FOR SECTION-A OF RATE SCHEDULE)

12.1.2 INCOMING MATERIALS (ITEM NOS. A.1 OF RATE SCHEDULE)

12.1.2.1 UNLOADING & PRELIMINARY VERIFICATION OF MATERIALS

45 % 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 RR/LWB/PWB SUBJECT TO FURNISHING FOLLOWING INFORMATION AND RECORD ALONG WITH THE BILL.

- A) SHORTAGES REPORT/OPEN DELIVERY TAKEN W.R.T. RR/LWB, IF ANY, AND ACCEPTANCE THEREOF BY RAILWAY AUTHORITIES/TRANSPORTERS.
- B) PROOF OF THE CLAIM LODGED WITH RAILWAYS/TRANSPORTERS IN RESPECT OF ABOVE SHORTAGE/OPEN DELIVERY.
- C) MATERIAL MANAGEMENT FORMS DULY FILLED IN BY CONTRACTOR AND CERTIFIED BY BHEL ENGINEER.

12.1.2.2 DETAILED VERIFICATION & STACKING

55 % 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. NORMALLY THE VERIFICATION OF MATERIAL SHALL BE DONE WITHIN THE TIME FRAME SPECIFIED BY BHEL.

12.1.3 PAYMENT FOR VARIOUS MATERIALS MANAGEMENT SERVICES (SECTION-B OF RATE SCHEDULE)

MONTHLY PAYMENT WILL BE MADE FOR THE SERVICES PROVIDED AFTER THE CERTIFICATION OF THE SAME FOR THE SATISFACTORY PERFORMANCE OF THE CONTRACTOR, BY THE BHEL INCHARGE

PAYMENT FOR WORK COMPLETED

12.2.1

THE CONTRACTOR SHOULD SUBMIT HIS ON ACCOUNT BILLS WITH ALL THE DETAILS REQUIRED BY BHEL ON 26TH OF EVERY MONTH COVERING PROGRESS OF WORK IN ALL RESPECTS AND AREAS UP TO 24TH DAY OF THE SAME MONTH.

12.2.2

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.

12.2.3

ON RECEIPT OF THE BILL, JOINT MEASUREMENT AND CHECKING OF THE WORK DONE WILL BE CARRIED OUT BY THE CONCERNED BHEL ENGINEER AS PER CLAUSE 2.6 OF GENERAL CONDITIONS OF THE CONTRACT AND BREAK-UP GIVEN VIDE CLAUSE 12.0. IT SHALL BE FINAL AND BINDING ON THE CONTRACTOR.

12.2.4

THE PAYMENT FOR RUNNING BILLS WILL NORMALLY BE RELEASED IN 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.

SECTION-13
SPECIAL CONDITIONS OF CONTRACT

13.1 EXTRA CHARGES FOR RECTIFICATION AND MODIFICATION

NOT APPLICABLE

SECTION-14
SPECIAL CONDITIONS OF CONTRACT

14.0 Insurance

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

- 14.1.1 BHEL/client has an MCE insurance cover, inter-alia, for all the permanent project equipments/components supplied by BHEL under scope of this work under a transit and storage cum erection policy covering liability against damages/ losses etc.

14.2 Reporting Damages and Carrying out Repairs

- 14.2.1 Checking all components/equipments at siding/site and reporting to transporter and /or insurance authorities of any damages/losses will be done by BHEL.
- 14.2.2 Contractor shall render all help to BHEL in inspection including handling, re-stacking etc, assessing and preparing estimates for repairs of components damaged during transit, storage and erection, commissioning and preparing estimates for fabrication of materials lost/damaged during transit, storage and erection. Contractor shall help BHEL to furnish all the data required by railways, insurance company or their surveyors.
- 14.2.3 Contractor shall report to BHEL in writing any damages to equipments/ components on receipt, storing, and during drawl of the materials from stores, in transit to site and unloading at place of work and during erection and commissioning. The above report shall be as prescribed by BHEL site management. Any consequential loss arising out of non-compliance of this stipulation will be borne by contractor.
- 14.2.4 Contractor shall carry out fabrication of any material lost/damaged as per instructions from BHEL engineer.
- 14.2.5 BHEL, however, retains the right to award or not to award to the contractor any of the rectification/rework/repairs of damages and also fabrication of components.
- 14.2.6 All the repairs/rectification/rework of damages and fabrication of materials lost, if any, shall be carried out by a separately identifiable gang for certification of man-hours. Daily log sheets should be maintained for each work separately and should be signed by contractor's representative and BHEL engineer. Signing of log sheets does not necessarily mean the acceptance of these as extra works.
- 14.2.7 All rectification, repairs, rework and fabrication of components lost, which are minor and incidental to erection work (consuming not more than 100 man-hours on each occasion) shall be treated as part of work without any extra cost.

- 14.2.8 Insurance cover under this policy will generally be as per clauses 2.10.1 to 2.10.4 of General Conditions of Contract unless and otherwise specified differently in the Special Conditions.
- 14.2.9 In case the loss/damage is not attributable to the contractor, Payments of all extra works on account of repair / rectification / reworks of damages and fabrication of materials lost will be as per provisions of Section-13.
- 14.2.10 In case the repairs/rectification/rework and fabrication of materials lost, the work has been done by more than one agency including the contractor, the payment towards extra charges will be on pro-rata basis and the decision of BHEL in this regard is final and binding on the contractor.
- 14.2.11 In case of theft / damage / loss of materials due to **repeated and continued instances of negligence/failure** attributable to the contractor, the expenses incurred on account of repair/ replacement of such components including BHEL's overhead expenses as applicable (presently @ 30%) in excess of the amount realized from the underwriters, if any, shall be recovered from the contractor. Recovery will be limited to Normal Deductible Franchise (DF)/Excess as per applicable Insurance (TAC) tariff guidelines for every incidence of loss/damage. However, in case the underwriters citing reasons of wilful negligence/ damage/loss attributable to the contractor summarily reject such insurance claim, the total cost of repair/ replacement with BHEL overhead expenses shall be recovered from the contractor.

14.3 Insurance by the Contractor and indemnification of BHEL

- 14.3.1 BHEL have taken a third party liability insurance, indicating in the proposal for such insurance that sub-contractors will be taking part in the erection work detailed in this tender. However, the tenderer has to bear any expenses/consequences over and above the amount that may be reimbursed to BHEL by such coverage of third party liability insurance taken by BHEL.
- 14.3.2 Such additional liability will be to cover and indemnify BHEL and its customer of all liabilities which may come up and cause harm/damage to other contractors/ customer/BHEL's properties/personnel or all or anybody rendering service to BHEL/ customer or is connected with BHEL/ customer's work in any manner whatsoever. The tenderer's specific attention is also invited to clause 2.10 of General conditions of contract.
- 14.3.3 Contractor shall arrange on his own, insurance for all assets/materials owned by him, which needs to be deployed at site for executing the contractual work. It is also the responsibility of the contractor to arrange for accident risk policy/ workmen compensation insurance policy for their staff and workmen.

SECTION-15

Special Condition of Contract

15.0 Earnest Money Deposit & Security Deposit

15.1 Earnest Money Deposit:

EMD for this tender is Rs. 1,00,000/- (Rupees ONE lakhs only). Bidders who have already deposited One Time EMD of Rs. 2.00 lakh will be exempted from submission of any EMD now for this tender.

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 Nagpur opr Bank Guarantee in BHEL's prescribed format furnished in GCC.

15.1.1 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.

15.1.2 EMD shall not carry any interest.

15.2 Security Deposit

15.2.1 Security Deposit shall be furnished by the successful bidder. The rate of Security Deposit will be as 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.

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

15.2.2 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 subject to a **maximum of 50%** of the total security deposit value. The balance SD has to be remitted either by cash or in the other forms of security. The Bank Guarantee format should have the approval of BHEL.
- 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 remitted (either by cash/DD or **BG for maximum 50%** of total SD) before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful bidder shall be converted and adjusted against the cash Security Deposit excepting for such bidder who has remitted One Time EMD.
- ix) The Security Deposit shall not carry any interest.

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.

- 15.2.3** Security Deposit may be refunded to the contractor on his request but after completion of entire contractual scope of work duly certified by construction manager of BHEL. Alternately it will be released with final bill payment.

APPENDIX-I

LIST OF MAJOR T&P TO BE PROVIDED BY CONTRACTOR

SN	DESCRIPTION & CAPACITY OF T&P	RANGE/ CAPACITY	MINIMUM QUANTITY	REMARKS
01	PICK AND CARRY MOBILE CRANE	8 TO 10 Ton	2 NOS	CRANE SHALL BE ALWAYS AVAILABLE FROM THE VERY BEGINNING.
06	SLINGS, 'D'-SHACKLES, HYDRAULIC JACKS, ETC.	AS REQUIRED	AS REQUIRED	

LIST 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 WORK IN SCOPE OF THIS TENDER SPECIFICATION. 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 TENDERER

DATE:

APPENDIX –II

DETAILS OF SIMILAR WORK DONE DURING THE LAST SEVEN YEARS

SL. NO.	FULL POSTAL ADDRESS OF CLIENT & NAME OF OFFICER IN CHARGE	DESCRIP- TION OF WORK	VALUE OF CONTRACT	DATE OF AWARD OF WORK	DATE OF COMMENCE MENT 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 TENDERER WITH SEAL

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR -MMS/513
Page 51 of 55

APPENDIX –III

CURRENT COMMITMENTS OF THE TENDERER

SL. NO.	FULL POSTAL ADDRESS OF CLINT & NAME OF OFFICER IN CHARGE	DESCRIP- TION OF WORK	VALUE OF CONTRACT	DATE OF COMMENC EMENT OF WORK	SCHEDULE OF COMPLE - TION	% OF WORK COMPLETED AS ON DATE	EXPECTED DATE OF COMPLETION	REMARKS

DATE

SIGNATURE OF TENDERER WITH SEAL

Bharat Heavy Electricals Limited, :PSWR: Nagpur
Tender Specification No: BHE/PW/PUR/GNR -MMS/513

APPENDIX-IV
FORMAT FOR MONTH-WISE MANPOWER DEPLOYMENT PLAN

(CATEGORY -WISE NUMBERS TO BE INDICATED FOR EACH MONTH)

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

SL. NO.	4.1.1.1 CATEGORY	MONTHS											
		1	2	3	4	5	6	7	8	9	10	11	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												

NOTE : PL SUBMITT THIS PLAN FOR TOTAL CONTRACT PERIOD OF 36 MONTHS

DATE

SIGNATURE & SEAL OF BIDDER

APPENDIX–V

FORMAT FOR DEPLOYMENT PLAN FOR MAJOR TOOLS AND PLANTS

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

SN	4.1.1.2 DESCRIPTION T&P	QUANTITY OF DEPLOYMENT IN THE MONTH										
		1	2	3	4	5	6	7	8	9	10	SO ON *
01	10 TON PICK AND CARRY MOBILE CRANE -2NOS											
02	SLINGS, 'D' -SHACKLES, HYDRAULIC JACKS, ETC.											

NOTE : PL SUBMITT THIS PLAN FOR TOTAL CONTRACT PERIOD OF 36 MONTHS
DATE

SIGNATURE & SEAL OF BIDDER

APPENDIX-VI
ANALYSIS OF UNIT RATE QUOTED

SN	DESCRIPTION	% OF QUOTED RATE	REMARKS
01	SALARY AND WAGES + RETRENCHMENT BENEFITS		
02	CONSUMABLES		
03	T&P DEPRECIATION & MAINTENANCE		
04	ESTABLISHMENT & ADMINISTRATIVE EXPENSES		
05	OVERHEADS		
06	PROFIT		
TOTAL		100 %	-----

DATE

SIGNATURE & SEAL OF BIDDER