

**TENDER SPECIFICATION**  
**No. BHE/PW/PUR/WR-CVL/524**

**FOR**

**PLACING VITRIFIED TILES ON THE FLOORS IN  
BHEL OWNED FLATS LOCATED AT VARIOUS  
AREAS IN NAGPUR ( M.S.)**

**PART- I -TECHNICAL BID**  
**(Volume- I)**

**TECHNICAL BID SPECIFICATION, NOTICE INVITING TENDER  
AND GCC**

**Book No.**



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

| <b>C o n t e n t s</b>                |   |                                      |                         |
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| <b>SN</b>                             | <b>Description</b>  | <b>Section/<br/>Appendix<br/>No.</b> | <b>No. of<br/>Pages</b> |
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| 2.                                    | Procedure For Submission of Sealed Tender   | --                                   | 2                       |
| 3.                                    | Project Information   | --                                   | 1                       |
| 4.                                    | Check List  | --                                   | 2                       |
| 5.                                    | Declaration by Bidder's Authorized Representative                                 | --                                   | 1                       |
| 6.                                    | Certificate of <b>No-Deviation</b>  | --                                   | 1                       |
| 7.                                    | Certification of familiarization of site condition                                | --                                   | 1                       |
| 8.                                    | Notice Inviting Tender (includes Qualification Requirements etc.)                 | --                                   | <b>\$</b>               |
| 9.                                    | General Conditions of Contract #  | Sections-1 & 2                       | <b>#</b>                |
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| <b>Special Conditions of Contract</b> |   |                                      |                         |
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| <b>C o n t e n t s</b> |   |                                      |                         |
|------------------------|---|--------------------------------------|-------------------------|
| <b>SN</b>              | <b>Description</b>                                  | <b>Section/<br/>Appendix<br/>No.</b> | <b>No. of<br/>Pages</b> |
| 25                     | MONTH WISE MANPOWER DEPLOYMENT PLAN                 | APPENDIX-III                         | 1                       |
| 26                     | DETAILS OF CONCURRENT COMMITMENT                    | APPENDIX-IV                          | 1                       |
| 27                     | DETAILS OF SIMILAR JOBS EXECUTED IN LAST FIVE YEARS | APPENDIX-V                           | 1                       |
| 28                     | Part-II (Price Bid)                                 |                                      | @:                      |

**LEGEND:**

\$. PLACED BEFORE 'GENERAL CONDITIONS OF CONTRACT' IN BOTH HARD AND SOFT COPY DOCUMENTS.

#: ATTACHED AT THE END OF HARD COPY OF TENDER SPECS. PART-I (TECHNICAL BID) AND AS A SEPARATE FILE TITLED 'WEB\_NIT\_GCC' AS SOFT COPY HOSTED IN WEB PAGE.

@: ISSUED AS SEPARATE BOOKLET IN HARD COPY AS 'PRICE\_BID'. SOFT COPY HOSTED IN WEB PAGE.

**NOTE:** Bidders must Visit BHEL web site [www.bhel.com](http://www.bhel.com) for NIT, Qualifying Requirement of this work( QR ), GCC etc. Further all corrigenda, addenda, amendments and clarifications to Tender Specifications will be hosted in this web page. Bidders shall keep themselves updated with all such amendments.



## **BHARAT HEAVY ELECTRICALS LIMITED**

(A GOVERNMENT OF INDIA UNDERTAKING)  
POWER SECTOR - WESTERN REGION  
SHREEMOHINI COMPLEX  
345, KINGS WAY - NAGPUR 440 001  
PH: 0712-530641, FAX: 0712-530640

### **TENDER SPECIFICATION No. BHE/PW/PUR/WR-QTR-CVL/524**

**NAME OF WORK: PLACING VITRIFIED TILES ON THE FLOORS IN BHEL OWNED FLATS LOCATED AT VARIOUS AREAS IN NAGPUR ( M.S.)**

***EARNEST MONEY DEPOSIT: RS.1,50,000/- (Rupees One lakhs fifty thousand only) . FOR MORE DETAILS OF EMD PL REFER SECTION-15 OF THIS TENDER.***

***OFFERS SHALL BE RECEIVED UPTO 18:00 HOURS OF.....***

These Tender Documents containing Part-I Technical Bid and Part-II Price Bid are issued to

M/s .....

.....

.....

(THESE TENDER DOCUMENTS ARE NOT TRANSFERABLE)

For Bharat Heavy Electricals Limited

**SENIOR MANAGER (PUR)**

PLACE: NAGPUR

DATE:



## BHARAT HEAVY ELECTRICALS LIMITED

(A GOVT. OF INDIA UNDERTAKING)

POWER SECTOR: WESTERN REGION  
345, KINGS WAY, NAGPUR 440 001

### Procedure for Submission of Sealed Tenders & Instructions to Bidders

The bidder 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.

#### EARNEST MONEY DEPOSIT (EMD)

**EMD of Rs.1.50 lakh (Rupees One lakhs fifty thousand only)** shall be included in the Technical Bid. **EMD shall be paid by bidders only in the manner specified in Section-15 Special Conditions of Contract.** No other mode of payment of EMD shall be acceptable. Provisions under clause no. 1.4 of the General Conditions of Contract shall not be applicable for this tender.

Bidder may opt to deposit "One Time EMD" of Rs. 2.0 lacks with this office (BHEL:PSWR:Nagpur) which will enable them to participate in the present and all the future tender enquiries in respect of Erection and Commissioning services issued from this office. Interested bidders may send their explicit consent for converting the present EMD into an "One Time EMD" in their offer.

Bidders who have already submitted such "One Time EMD" will be exempted from submission of any EMD for this tender. However bidder shall furnish details of the "One Time EMD" in his offer including the Check List furnished herein.

#### Part-II (Price Bid) Cover-II:

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

These two separate covers-I and II (part-I and part-II) shall together be enclosed in a third envelope (cover-III) along with requisite EMD as indicated earlier and this sealed cover shall be super scribed and submitted to Addl. Gen Manager (Purchase) at the above-mentioned address on or 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 in completeness. Please refer the checklist.

The bidder, if any, shall obtain clarification on Tender Specifications, before submitting their offer.

Offers must be submitted without any deviation.

Offers received with any deviation or without relevant information as described above are liable to be rejected. Price bids received in the form other than specified in part-II (price bid) are liable to be rejected.

### **PROJECT INFORMATION**

Bharat Heavy Electricals limited is a PSU and this region is a Power Sector- Western region located at NAGPUR ( M. S.). The work specified in this tender shall be carried out in the flats owned by BHEL at four locations at Nagpur. Details if location of flats are mentioned in this tender.

## CHECK LIST

(VIDE PARA 1.3 OF SECTION-I - 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<br>Tel No.<br>Fax No.  |
| 3  | Nature of the firm   | PROPRIETARY / PARTNERSHIP / LIMITED CO.                             |
| 4  | Details of EMD<br>Please Indicate whether<br>1) One Time EMD or,<br>2) Only for this Tender  | DD No. ....<br>DD Date.....<br>Name of Bank.....<br>Amount: Rs..... |
| 5  | Validity of Offer (BHEL's Requirement: 180 days from Last Date for tender submission)  |   |
| 6  | Mobilization Time (Please refer Section-11 of SCC)   |   |
| 7  | Whether Bidder has visited the project site and acquainted themselves with the local conditions and situations.                            | YES/NO  |
| 8  | Whether "Certificate of No-Deviation" Furnished  | YES/NO  |
| 9  | Details of similar jobs executed during the last SEVEN years as in " <b>Appendix-V</b> " enclosed  | YES/NO  |
| 10 | Whether copies of previous Work Orders (with detailed BOQ and total order value) and Completion Certificates in support of above furnished | YES/NO  |
| 11 | Details of Concurrent Jobs Furnished in " <b>Appendix-IV</b> " furnished   | YES/NO  |
| 12 | Headquarter Organization Chart furnished   | YES/NO  |
| 13 | Names & Particulars of Directors/Partners/Proprietor Furnished   | YES/NO  |



| <b>CHECK LIST</b>   |  |                         |
|---|--|-------------------------|
| (VIDE PARA 1.3 OF SECTION-I - GENERAL CONDITIONS OF CONTRACT) |  |                         |
| 14  | Proposed Site Organization Chart indicating executives and supervisors furnished   | YES/NO                  |
| 15  | Financial Viability furnished as in <b>Annexure-I</b> of <b>GCC</b>  | YES/NO                  |
| 16  | Profit & Loss account for the preceding three financial years furnished  | YES/NO                  |
| 17  | Copy of Latest <b>Solvency Certificate from Govt. Authority</b> or <b>Certification by Bidder's Banker on Overdraft &amp; BG Limits</b> is Furnished<br>(Certificate shall not be older than six months from the Last Date for offer submission) | YES/NO                  |
| 18  | Latest <b>Income Tax Clearance Certificate</b> or <b>copy of IT Return along with copy of PAN Card</b> is Furnished  | YES/NO                  |
| 19  | Monthly Manpower Deployment plan as in ' <b>Appendix-III</b> ' enclosed  | YES/NO                  |
| 21  | Month-wise Erection & Commissioning plan enclosed  | YES/NO                  |
| 22  | Analysis of Unit Rate Quoted as in ' <b>Appendix-II</b> ' furnished  | YES/NO                  |
| 23  | List of other tools and plants/tackles/ instruments contractor proposes to deploy for the work and special tools and instruments in his possession.  | ENCLOSED / NOT ENCLOSED |
| 24  | Whether the bidder has left any job unfinished?<br>If so, give reasons.  | YES/NO                  |
| 25  | Whether any client has terminated the contractor's work before completion?<br>If so, furnish reasons for the same  | YES/NO                  |
| 26  | Whether the bidder has understood all Quality Control & Quality Assurance requirements?  | YES/NO                  |
| 27  | Whether the bidder is aware of all safety rules/codes?<br>Whether the list of safety equipments proposed to be employed for this work is enclosed.   | YES/NO                  |
| 28  | Whether Power of Attorney in favour of the person making this offer enclosed?  | YES/NO                  |
| 29  | Whether all the pages are read, understood and signed and the signed copy of tender book submitted?  | YES/NO                  |

Note: strike off 'yes' or 'no' as applicable

Date:

Signature of Bidder

## DECLARATION BY BIDDER'S AUTHORIZED REPRESENTATIVE

I, \_\_\_\_\_, HEREBY CERTIFY THAT ALL THE INFORMATION AND DATA FURNISHED BY ME WITH REGARD TO THE TENDER SPECIFICATION NO. **BHE/PW/PUR/WR-QTR-CVL/524** 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 AUTHORIZED REPRESENTATIVE OF THE UNDER-MENTIONED TENDERER AND A VALID POWER OF ATTORNEY TO THIS EFFECT IS ALSO ENCLOSED.

AUTHORISED REPRESENTATIVE'S SIGNATURE WITH  
NAME AND ADDRESS

DATE:

TENDERER'S NAME AND ADDRESS

**CERTIFICATE OF NO DEVIATION**

**TENDER SPECIFICATION NO.**

**BHE/PW/PUR/WR-QTR-CVL/524**

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

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

DATE:

SIGNATURE OF BIDDER

**CERTIFICATE OF DECLARATION FOR CONFIRMING  
KNOWLEDGE ON SITE CONDITIONS**

WE, M/S -----

HEREBY DECLARE AND CONFIRM THAT WE HAVE VISITED THE OFFICE OF AS REFERRED IN BHEL'S TENDER SPECIFICATION NO. **BHE/PW/PUR/WR-QTR-CVL/524** AND ACQUIRE FULL KNOWLEDGE AND INFORMATION ABOUT THE SITE CONDITIONS & NATURE OF JOB . 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.

BIDDERS'NAME AND ADDRESS

SIGNATURE & OFFICIAL SEAL OF  
AUTHORISED SIGNATORY

PLACE:

DATE:

**SECTION-3**  
**OFFER OF THE BIDDER**

To,  
SR. MANAGER (PURCHASE)  
BHARAT HEAVY ELECTRICALS LIMITED  
POWER SECTOR - WESTERN REGION  
SHREEMOHINI COMPLEX  
345, KINGS WAY  
NAGPUR 440 001

DEAR SIR,

I/WE HEREBY OFFER TO CARRY OUT THE WORK DETAILED IN TENDER SPECIFICATION NO. **BHE/PW/PUR/WR-QTR-CVL/524** ISSUED BY BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR-WESTERN REGION, NAGPUR, IN ACCORDANCE WITH THE TERMS AND CONDITIONS THEREOF.

I/WE HAVE CAREFULLY PERUSED THE FOLLOWING 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 EMD PAYMENT ARE FURNISHED IN THE CHECK LIST.

EMD SHALL BE REFUNDED SHOULD OUR OFFER NOT BE ACCEPTED / EMD **NEED NOT BE REFUNDED AND THE AMOUNT MAY BE TREATED AS "ONE TIME EMD" FOR ERECTION AND COMMISSIONING TENDERS OF BHEL-PSWR, NAGPUR.** SHOULD OUR OFFER BE ACCEPTED, I/WE FURTHER AGREE TO DEPOSIT SECURITY DEPOSIT FOR THE WORK AS PROVIDED FOR IN THE TENDER SPECIFICATION WITHIN THE STIPULATED TIME AS MAY SBE INDICATED BY BHEL, POWER SECTOR-WESTERN REGION, NAGPUR.

OR,  
WE HAVE ALREADY DEPOSITED ONE TIME EMD OF Rs. 2,00,000/- (RUPEES TWO LACS 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 TENDERER:  
ADDRESS:

WITNESSES WITH THEIR ADDRESS

| SIGNATURE | NAME | ADDRESS |
|-----------|------|---------|
|-----------|------|---------|

1.

2.

**SECTION - 4**  
**SPECIAL CONDITIONS OF CONTRACT**

**4.0 SCOPE OF WORK**

**PLACING VITRIFIED TILES ON THE FLOORS IN BHEL OWNED FLATS LOCATED AT VARIOUS AREAS IN NAGPUR ( M.S.)**

**Scope of work:**

1. Supply, Laying, Placing, pasting Vitrified tiles on existing floor surface as per specification and BOQ at BHEL Owned flats
2. Work of vacating the area and rearrangement of items as per occupants instructions

**LOCATION OF SUPPLY & INSTALLATION SHALL BE AS PER INSTRUCTION OF BHEL ENGINEER.**

. The **Consignee Address** is:

GP Dehury  
DGM(HR)  
Power Sector , Western Region,  
345 Kingsway, Shreemohini Complex,  
Nagpur – 440001  
Ph: 0712-3048646  
Fax: 0712-3048698

- 3) Work shall be carried out as per the instruction of DGM/HR of BHEL OR Authorized representative of BHEL/ Engineer in charge for this work..
- 4) Total work consists of laying of vitrified tiles of 21650 Sq. Ft of area in BHEL flats at various locations as detailed below.

**5) DETAILS OF BHEL OWNED FLATS LOCATED AT VARIOUS AREAS IN NAGPUR IS AS BELOW :**

| Sl No | Address  | Details  | No of Flats | Area ( each Flat) in Sq Ft | Total Area in Sq. Ft |
|-------|--|--|-------------|----------------------------|----------------------|
| a     | Vandana Apartments ,<br>Ravi Nagar Square,<br>Nagpur | 1.)House No 7 & 8 – 3rd Floor<br>2.)House No :5 – 2nd Floor              | 3           | 650                        | 1950                 |
| b     | Asha Laxmi Apartments<br>Ravi Nagar Square           | 1.)House No A-401,402,L401 ( 4th Floor)<br>2)House No A-502 ( 5th Floor) | 3<br>1      | 850<br>600                 | 2550<br>600          |

|              |  |   |               |      |                           |
|--------------|--|---|---------------|------|---------------------------|
| c            | Sri Krishna Apartments<br>50, Gowan Square,<br>Mecosabagh Nagpur | 1.)House No : A4, B3 ( 4th Floor) & B3 (3rd Floor)  | 3             | 1200 | 3600                      |
|              |  | 2)House No D4, E3(3rd Floor) & C3 (4th Floor)   | 3             | 850  | 2550                      |
| d            | Pratimbh Society,<br>Trimurthy Nagar                             | 1.) House No 5/1, 5/2,6/1 & 6/2 ( Ground Floor)<br>2).House No (5/3,5/4,6/3 & 6/4( 1st Floor)<br>3).House No 5/5,5/6,6/5 & 6/6 ( 2nd Floor)<br>4.)House No 5/7,5/8,6/7 & 6/8 (3 rd Floor) | 16            | 650  | 10400                     |
| <b>TOTAL</b> |  |   | <b>29 Nos</b> |      | <b>21650.00<br/>Sq Ft</b> |

The total work shall be carried out in two phase. In first phase, out of total quantity, work of 10400 Sq Ft. shall be executed immediately from the date of placements of work order. (i.e. work as specified in sr no 5 (d ) above. )

The second phase of work of 11250 Sq. Ft i.e. 5(a, b & c) above shall be executed after April-2008.

BHEL reserves the right to execute the work either of phase one or phase two or both phase one & two on placement of work order.

**BIDDERS ARE REQUESTED TO QUOTE THE RATES CONSIDERING THE BIFURCATION OF WORK (i.e. Phase one & Phase Two) AS SPECIFIED ABOVE. PAYMENT SHALL BE AS PER THE ACTUAL QUATUM OF WORK EXECUTED AT SITE.**

6)The vendor should visit the actual site of work for acquaintance before submitting their Tender and may contact the Consignee at the above address.

8) Vender should ensure that there will be no loss/damage to the property of BHEL and its employee household items during execution of this contract. Any loss or damage to the BHEL property and its employee household items shall be recovered from vender as decided by BHEL.

9) Vendor should cover all his men, equipment and material with suitable Insurance Policies against loss of property, life, earning capacity of laboures etc. Vendor has to indemnify BHEL from any sort of liabilities on account of such loss/damage.

10) Work shall be carried out strictly as per the BOQ ( Rate Schedule ) and specifications of this tender. All the work shall be executed as per the instructions of BHEL engineer. BHEL will not provide any T&P, material, manpower etc , as such the rate quoted by bidder shall be inclusive of all.

## **11) PATENTS AND TRADEMARKS**

Vendor shall at all times indemnify Purchaser (BHEL) against all claims which may be made in respect of infringement of any rights protected by Patent, Registration of designs or Trademark provided always that in the event of any claim in respect of the alleged infringement of patent, registered designs or trade mark being made against Purchaser, Purchaser shall notify vendor who shall at his own expenses either settle any such dispute or conduct any litigation that may arise therefrom.

## **12) DISPUTES**

Any dispute or difference arising under, or out of, or in connection with, or relating to the Purchase Order shall be settled by arbitration.

## **13) JURISDICTION**

The court of Nagpur shall alone have jurisdiction to decide any dispute arising out of or in connection with the Purchase Order.

## **14) SUB CONTRACT**

The purchase order or any part thereof shall not be subcontracted, assigned or otherwise transferred without obtaining prior consent of the purchaser in writing.

## **15) OTHER TERMS & CONDITIONS**

Purchaser reserves the right to accept or reject any or part of the tender without assigning any reasons thereof. Purchaser also reserves the right to increase or decrease the quantities of individual items at the time of ordering / installation.

Offers should be valid for SIX months from the due date of opening of tenders.

The site work shall be carried out as per the instruction of BHEL Site Engineer whose decision shall be final.

## **16) DOCUMENTS**

Bidder must submit all the documents as specified in check list and as per qualifying requirement of NIT and as specified in this tender. Incomplete offer shall be rejected.

17) On completion of daily work, office area shall be cleaned by the vendor.

18) BHEL will provide water for civil work as per availability from the tapping. In case water for construction is not available, same shall be arranged by bidder at their cost.

19) Electricity shall be provided by BHEL free of cost as per availability. In case of no power/power failure, bidder shall arrange DG set of required capacity.



## **20) EMD & SD**

**Bidder have to submit EMD of Rs 1.50 lakh along with technical bid in the form of cash or DD in favour of BHEL. For more detail pl refer Section-15 of this tender.**

**Security Deposit ( S. D. ) shall be submitted by bidder on award of work as specified in Section-15 of this tender.**

## **SECTION-5**

### **SPECIAL CONDITIONS OF CONTRACT**

**OBLIGATIONS OF THE CONTRACTOR (SITE OFFICE, STORES, LABOUR COLONY, TOOLS & TACKLES, MEASURING AND MONITORING DEVICES, MATERIALS, CONSUMABLES, CONSTRUCTION POWER & WATER etc.)**

#### **5.1 CONSTRUCTION OF SITE OFFICE, STORES, ACCOMODATION FOR LABOURER AND STAFF:**

No space/land for labour colony will be provided by BHEL. The bidder has to make his own arrangements for labour and staff colony including providing the water, electricity, sanitation, etc on bidders cost.

#### **5.2 TOOLS AND TACKLES**

##### **5.2.1**

All tools and tackles required for the work have to be arranged by the contractor.

#### **5.5 CONSUMABLES**

##### **5.5.1**

The contractor shall provide all consumables required for carrying out the work covered under this scope of work & rate quoted shall be inclusive of all those things.

##### **5.5.2**

All consumables to be procured and used for the work shall have prior approval of BHEL engineer in regard to brand and quality specification.

#### **5.6 FIELD OFFICE**

##### **5.6.1**

The contractor shall make his own arrangements for office accommodating necessary equipments, tools room for execution of the work. BHEL will not provide any space for office. For necessary material , storage area in the quarter shall be provided as per availability.

#### **5.7 AREA LIGHTING**

##### **5.7.1**

Contractor shall arrange adequate floodlights, hand lamps and area lighting. Contractor shall use his own materials like cables, fuses, switchboards etc. BHEL will not provide anything in this regard.

#### **5.8 TAXES ,DUTIES, LEVIS**

##### **5.8**

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

##### **5.8.1**

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

However, provisions regarding Service Tax and Value Added Tax (VAT) on output services and goods shall be as per following clauses. **(i.e. Rates quoted by bidder shall be inclusive of all taxes and duties except service tax & VAT/WCT )**

#### **5.8.2 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.

#### **5.8.3 VAT (Sales Tax /WCT)**

As regards Value Added Tax (VAT) on transfer of property in goods involved in Works Contract (previously known as Works Contract Tax) applicable as per local laws, the price quoted by the contractor shall be **exclusive** of the same. Where such taxes are required to be paid by the contractor, this will be reimbursed on production of proof of payment made to the authorities by the Contractor. In any case the Contractor shall register himself with the respective Sales Tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. The contractor has to take all necessary steps to **minimize tax on input goods** by purchasing the materials from any registered dealer of the concerned state only. In case contractor opts for composition, it will be with the prior express consent of BHEL. Deduction of tax at source shall be made as per the provisions of law unless otherwise found exempted. In case tax is deducted at source as per the provisions of law, this is to be construed as an advance tax paid by the contractor and no reimbursement thereof will be made unless specifically agreed to.

#### **5.8.4 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.

#### **5.8.5 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.

## **SECTION-6**

### **SPECIAL CONDITIONS OF CONTRACT**

#### **6.0 CONTRACTOR'S OBLIGATION WITH REGARD TO EMPLOYMENT OF SUPERVISORY STAFF AND WORKMEN**

##### **6.1 SUPERVISORY STAFF AND LABOUR**

###### **6.1.1**

The contractor shall supply all the skilled/unskilled labour, gas cutters, riggers, sarongs, erectors, carpenters, fitters and electricians, masons, plumbers etc. BHEL reserves the right to decide on the suitability of the workers and other personnel who will be employed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time if he is found to be unsuitable and the contractor shall forthwith remove him.

###### **6.1.2**

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

###### **6.1.3**

Contractor shall employ only qualified and experienced engineers/supervisors for this job. They shall have professional approach in executing the work having adequate knowledge and experience in the fields. Contractor shall give an organisation chart indicating the staffing pattern.

###### **6.1.4**

The contractor shall engage all the unskilled, skilled and specially skilled labourer including brick masons, carpenters, plumbers, electricians, fabricators and fitters etc. and supervisory staff. Only trained and competent personnel with previous experience in the job shall be employed. However, BHEL reserves the right to decide on the suitability of the workers and other personnel who will be employed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they found him unsuitable. The contractor shall be bound to follow the instruction of BHEL.

#### **6.2 INDUSTRIAL RELATIONS AND LABOUR LAWS**

###### **6.2.1**

An industrial relations supervisor shall coordinate for the implementation of local labour laws, maintenance of records as required by contract labour (regulation and abolition act) and also coordinate with the local labour authorities. Contractor has to ensure minimum wages payment to their labours as per the rule of the state and they have to produce documentary evidence to that effect to BHEL.

###### **6.2.2**

Contractor shall provide the names and details of Engineer/ Supervisors at the time of mobilization to BHEL as per the proposed organization chart.

###### **6.2.3**

In case at any time the contractor is not in a position to deploy the required Engineers/Supervisors due to any reason, BHEL shall have the option to deploy their Engineers/supervisors. The expenditure incurred with overheads on this account will be recovered from the contractor's bills.

#### 6.2.4

The contractor's supervisory staff shall execute the work in the most substantial and workmanlike manner in the stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. They shall be responsible to ensure that the assembly and workmanship conform to dimensions and tolerances given in the drawings/ instructions given by BHEL Engineer from time to time.

#### 6.2.5

The supervisory staff employed by the contractor shall ensure proper outturn of work and discipline on the part of the labour put on the job by the contractor and in general, see that the works are carried out in a safe and proper manner and in coordination with other labour and staff employed directly by BHEL or other contractors of BHEL or BHEL's Client.

#### 6.2.6

Contractor will deduct the necessary amount from his employees towards provident fund and contribute the equal amount as per Government of India rules. This amount will be deposited regularly to the Provident Fund Commissioner and an account code obtained. Contractor shall submit the above account code duly certified by PF Commissioner to BHEL project in-charge. Also all other employees' benefits are to be borne by the contractor as per statutory laws.

#### 6.2.7

The contractor shall obtain independent Labour License under the Contract Labour (regulation and abolition) Act from the concerned authorities based on the certificate (form-V) issued by the principal employer/customer.

#### 6.2.8

The contractor shall pay for all taxes, fees, license charges, local body clearance, duties, tools, royalty, commissions and other charges, Gate passes which may be leviable on account of his operation in executing the contract. In case BHEL is forced to make any such payments, BHEL shall have the right to recover the same from Contractor's bills.

### 6.3 SITE ORGANISATION

The contractor shall provide adequate staffing in the following areas in addition to the staffing requirements of execution as instructed/informed by BHEL:

- **Overall Planning, Monitoring & Control**
- Materials Management
- Quality Control and Quality Assurance
- Safety, Fire & Security
- Industrial Relations and fulfillment of Labour Laws and other statutory obligations.

## **SECTION-7**

### **SPECIAL CONDITIONS OF CONTRACT**

#### **7.0 OBLIGATIONS OF BHEL**

#### **8.0 FACILITIES PROVIDED BY BHEL**

##### **7.1.1 SPACE FOR CONTRACTOR'S SITE OFFICE & STORES:**

Space for construction of site office and stores for contractor will be provided by BHEL's customer free of charge within the project area on As Is Where Is basis. Contractor shall develop the land to suit his requirement and hand over after completion of work in clean and debris free condition to the satisfaction of BHEL/Client.

##### **7.1.2 CONSTRUCTION POWER AND WATER**

**Construction Power:** As specified in section-5

**Water for Construction:** As specified in section –5.

#### **7.2 TOOLS & PLANTS**

BHEL will **NOT** provide any Tools & Plants for this work.

#### **7.3 CONSUMABLES AND MATERIALS**

BHEL will **NOT** provide any Consumables and Materials for this work.

**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 erection and commissioning will be as per BHEL 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 's engineers, welding logs and other quality control and quality assurance documentation as per BHEL engineer's instructions, is within the scope of work/specification.

**8.3**

A daily logbook should be maintained by every supervisor/ engineer of contractor on the job in duplicate (one for BHEL and one for contractor) for detailing and incorporating alignment/ clearance/ centering/leveling readings and inspection details of various equipments, structures, piping, and others.

**8.4**

All the electrical/mechanical measuring and monitoring devices/ gauges, feeler gauges, height gauges, dial gauges, micrometers, precision levels, spirit levels, water level micrometers surface plates, straight edges, vernier calipers and all other measuring instruments shall be provided by the contractor for checking, leveling, alignment, centering etc Of the erected equipments at various stages.

The instruments/gauges/tools etc provided should be of brand, quality and accuracy specified by BHEL engineer and should have necessary calibration and other certificates as per the requirements of BHEL engineer.

**8.5**

In the course of erection, it may be necessary to re-check or counter check or finally check the work with instruments recently calibrated, recalibrated or of inspection grade gauge/tools or special measuring instruments. Such instruments whenever necessary will be provided by BHEL on specific authorization by BHEL engineer.

**8.6**

The instruments mentioned in clause 8.5 shall be drawn by the contractor from BHEL stores on the specific authorization and use the same on the specific job for the purpose of inspection/ rechecking/counter checking/ finally checking of the work and shall be returned to BHEL stores immediately on completion of the inspection.

## **8.7**

Total quality is the watchword of the work and contractor shall strive to achieve the quality standards, procedures laid down by BHEL. He shall follow all the instructions as per BHEL drawings and quality standards. Contractor shall provide for the services of quality assurance engineer.

## **8.8**

The welder's performance will be reviewed from time to time as per the BHEL standards and any welder not performing to the standards set by BHEL will be removed from working. Contractor shall arrange for the alternate welders immediately.

## **8.9**

All the welders shall carry identity cards as per the pro forma prescribed by BHEL only welders duly authorized by BHEL shall be engaged on the work.

## **8.10**

Contractor shall ensure speedy alignment and welding of all equipments erected by him soon after placement. Also all alignments, welding, NDT tests required for stage inspection shall be completed as per the quality assurance procedures.

### **8.11.1**

Any minor rectification or minor repairs of defective work found at during stage inspection shall be rectified free of cost, by the contractor.

### **8.11.2**

Any major rectification or major repair/major rework of defective work, found out during stage inspection as per clause 8.11, but not attributable to contractor shall also be carried out. Claims of contractor, if any, shall be governed as per clause 13.1 to 13.8.

## **8.12            Statutory Inspection**

### **8.12.1**

During the statutory inspection, contractor shall provide all the manpower assistance as per the requirement within their quoted rate. However, all other arrangements for visiting of statutory authorities at site including fee etc shall be borne by BHEL also refer section 5 in this regard.

### **8.13.0**

BHEL, power sector- western region (PSWR) has already been accredited with ISO 9002 certification and as such this work is subject to various audits to meet ISO 9002



requirements. One particular aspect, which needs special mention, is about arrangement of calibration of instruments by the contractor. Contractor shall ensure deployment of reliable and calibrated MMD (measuring and monitoring devices). The MMD shall have test/calibration certificates from authorized/government approved/ accredited agencies traceable to national/international standards. Retesting/recalibration shall also be arranged at regular intervals during the period of use as advised by BHEL engineer within the contract price.

The contractor will also have alternate arrangements for such MMD so that work does not suffer when the particular equipment/ instrument is sent for re-calibration. Also if any MMD is not found fit for use, BHEL shall have the right to stop the use of such item and instruct the contractor to deploy proper item and recall i.e. Repeat the readings taken by that instrument, failing which BHEL may deploy MMD s and retake the readings at contractor's cost.

**Section-9**  
**Special Conditions**  
**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 endeavor of BHEL and all its subcontractors to meet and implement the requirements by following the guidelines issued under Environmental, Occupational Health and Safety Management (EHS) manual a copy of which will be available with the BHEL Site-in-charge.

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

**9.0 Responsibility Of The Contractor In Respect Of Safety Of Men, Equipment, Material And Environment.**

**9.1 The Contractor Shall**

- 9.1.1 Abide by the Safety Regulations applicable for the Site/Project and in particular as mentioned in the booklet "Safe Work Practices" issued by BHEL. Contractors are also to ensure that their employees and workmen use safety equipments as stipulated in the Factories Act (Latest Revision) during the execution of the work. Failure to use safety equipment as required by BHEL Engineer will be a sufficient reason for issuance of memo, which shall become part of Safety evaluation of the contractor at the end of the Project. Also all site work may be suspended if it is found that the workmen are employing unsafe working practice and all the costs/losses incurred due to suspension of work shall be borne by contractor. A comprehensive list of National Standards from which the contractor can draw references for complying with various requirements under this section is given under 9.10
- 9.1.2 Hold BHEL harmless and indemnified from and against all claims, cost and charges under Workmen's Compensation Act 1923 and 1933 and any amendment thereof and the contractor shall be solely responsible for the same.
- 9.1.3 Abide by the Procedure governing entry/exit of the contractor's personnel within the Customer/Client premises. All the contractors employees shall be permitted to enter only on displaying of authorized Photo passes or any other documents as authorized by the Customer/Client
- 9.1.4 Be fully responsible for the identity, conduct and integrity of the personnel/ workers engaged by them for carrying out the contract work and ensure that none of them are ever engaged in any anti national activity
- 9.1.5 Prepare a sign board giving the following information and display it near the work site:

Name of Contractor

Name of Contractor Site-in-charge & Telephone number

Job Description in short

Date of start of job  
Date of expected completion  
Name of BHEL Site-in-charge.

- 9.1.6 Abide by the rules and regulations existing during the contract period as applicable for the contractors at the Project premises.
- 9.1.7 Observe the timings of work as advised by BHEL Engineer-in-charge for carrying out the contract work.

9.2 **SPECIAL CONDITIONS**

9.2.1 **Safety**

9.2.1.1 **Safety Plan**

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

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

- 9.2.1.2 The contractor shall take all necessary safety precautions and arrange for appropriate appliances and/or as per direction of BHEL or it's authorized person to prevent loss of human lives, injuries to men engaged and damage to property and environment.
- 9.2.1.3 The contractor shall provide to his work force and also ensure the use of Personnel Protection Equipment (PPE) as found necessary and/or as directed and advised by BHEL officials without which permission is liable to be denied.

Safety helmets conforming to IS 2925/1984 (1990)

Safety belts conforming to IS 3521/1989

Safety shoes conforming to IS 1989 part-II /1986(1992)

Eye and face protection devices conforming to IS 2573/1986(1991), IS 6994 (1973), part-I (1991), IS 8807/1978 (1991), IS 8519/1977(1991).

Other job specific PPEs of standard ISI make as may be prescribed

- 9.2.1.4 All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, cages, safety nets, ladders, equipment, etc used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item found to be unsafe
- 9.2.1.5 All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirements of Indian Electricity Act and Rules. Only

electricians licensed by the appropriate statutory authority shall be employed by the contractor to 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 energized by electric power with supply voltage of more than 24 volts. For work in confined spaces, lighting shall be arranged with power source of not more than 24 volts.
- 9.2.1.7 The contractor shall adopt all fire safety measures as per relevant Indian Standards
- 9.2.1.8 Where it becomes necessary to provide and/or store petroleum products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down by the relevant government acts, such as petroleum act, explosives act, petroleum and carbides of calcium manual of the chief controller of explosives, Government of India etc. The contractor in all such matters shall also take prior approval of the authorized BHEL official at the site.
- 9.2.1.9 Proper means of access must be used e.g. ladders, scaffolds, platforms etc. No makeshift access such as oil drums or pallets shall be used. Design of these will be in accordance with relevant standards and certified by competent persons before use.
- 9.2.1.10 Temporary arrangements made at Site for lifting , platforms, approach, access etc should be properly designed and approved before being put to use.
- 9.2.1.11 All excavations and openings must be securely and adequately Fenced/barricaded and warning signs erected when considered Necessary as per relevant code of practice.
- 9.2.1.12 No persons shall remove guard rails, covers or protective devices unless authorized by a responsible supervisor and alternative precautions have been taken
- 9.2.1.13 Access ways, means of escape and fire exits shall be clearly marked, kept clear and unobstructed at all times
- 9.2.1.14 Only authorized persons holding relevant license will drive and operate site plant and equipments eg cranes, dumpers, excavators, transport vehicles etc
- 9.2.1.15 Only authorized personnel are allowed to repair, commission electrical equipments.
- 9.2.1.16 Gas cylinders shall be handled and stored as per Gas 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
  - Safe working load charts for wire ropes, slings, D shackles etc
  - Warning signs
- 9.2.1.22 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.
- 9.2.1.23 In case of a fatal or disabling injury/accident to any person at construction sites due to lapses by the contractor, the contractor as per statutory requirements shall compensate the victim and/or his/her dependents. 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.
- 9.2.1.24 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.
- 9.2.1.25 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.
- 9.2.1.26 If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so, and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.
- 9.2.1.27 **Emergency Response**
- 9.2.1.27.1 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 neighboring
- Protect environment
- Resumption of normal operations as soon as the emergency condition is called off

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

9.2.1.27.2 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 aiders shall be included in the emergency response team. Contractor employees and workmen are encouraged to participate in first aid training programmes whenever organized by BHEL.

## **9.2.2 OCCUPATIONAL HEALTH**

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

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

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

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

- Issue of approved Personnel Protective Equipment
- Verification that the 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. Contractor, supervisor must attend all schedule safety meetings as would be intimated to him by the BHEL Engineer in Charge.
- 9.3.3 Before starting work under any contract, the contractor must ensure that a job specific safety procedures/field practices as required over and above the safety permit conditions are prepared and followed .He should also ensure that all supervisors and workers involved understand and follow this procedures /field practices.
- 9.3.4 Contractor must ensure that in his work site appropriate display boards are put displaying signs for site safety , potential hazards and precautions required

### 9.4.0 **TRAINING & AWARENESS**

- 9.4.1 Contractor shall deploy experienced supervisors and other manpower who are well conversant with the safety and environment regulations of the Project. The electricians to be deployed on the job should have wireman license.
- 9.4.2 All Supervisors & Workmen of the Contractor shall undergo Fire safety training/demonstration whenever arranged by BHEL with the help of either Customer's Fire and Safety department or outside faculty so as to acquire knowledge of fire prevention and also to be able to make use of appropriate fire extinguishers.
- 9.4.3 Contractor must familiarize himself from BHEL Engineer in Charge about all known potential fire, explosion or toxic release hazards related to the contract. He in turn



will ensure that same information has been passed to the supervisors and workmen

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

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

#### 9.5.0 **REPORTING**

9.5.1 The contractor shall submit report of all accidents, fires and property damage, dangerous occurrences to the 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 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 inspection                         | Inspection by             | Schedule             |
|-------|---------------------------|---|---------------------------|----------------------|
| 1     | Hand tools                | To identify unsafe/defective tool           | User                      | Daily                |
| 2     | Power tools               | To identify unsafe/defective tool           | User                      | Daily                |
| 3     | Fire Extinguishers        | To check pressure and any defect            | User / Safety Coordinator | Daily<br>Every month |
| 4     | Lifting equipment/tac les | To check for defects and efficacy of brakes | User<br>Third party       | Daily<br>Every Year  |
| 5     | PPE                       | To check for defects                        | User                      | Daily                |

9.7 **NON COMPLIANCE:-**

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

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

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 authorized representative of M/s-----

Name :

Place & Date:

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

| IS No    | YEAR | Amd upto | DESCRIPTION  |
|----------|------|----------|--|
| IS 10204 | 1982 |          | PORTABLE FIRE EXTINGUISHERS<br>MECHANICAL FOAM TYPE  |
| IS 10245 | 1994 |          | SPECIFICATION FOR BREATHING<br>APPARATUS   |
| IS 10291 | 1982 |          | SAFETY CODE FOR DRESS DRIVERS IN<br>CIVIL ENGINEERING WORKS  |
| IS 10658 | 1983 |          | HIGHER CAPACITY DRY POWDER FIRE<br>EXTINGUISHERS (TROLLEY MOUNTED)                                 |
| IS 10662 | 1992 |          | COLOUR TELEVISION  |
| IS 10667 | 1983 |          | GUIDE FOR SELECTION OF INDUSTRIAL<br>SAFETY EQUIPMENT FOR PROTECTION<br>OF FOOT AND LEG            |
| IS 11037 | 1984 |          | ELECTRONIC FAN REGULATORS  |
| IS 11057 | 1984 |          | INDUSTRIAL SAFETY NETS   |
| IS 11451 | 1998 |          | RECOMMENDATION FOR SAFETY AND<br>HEALTH REQUIREMENT RELATING TO<br>OCCUPATION EXPOSURE TO ASBESTOS |
| IS 1169  | 1967 |          | PEDESTAL FANS  |
| IS 1179  | 1967 |          | SPECIFICATION FOR EQUIPMENT FOR<br>EYE AND FACE PROTECTION DURING<br>WELDING                       |
| IS 11833 | 1986 |          | DRY POWDER FIRE EXTINGUISHERS<br>FOR METAL FIRES   |
| IS       | 1987 |          | CODE OF PRACTICE FOR SAFETY  |

|          |      |  |  |
|----------|------|--|--|
| 11972    |      |  | 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   |
| 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 HOT BITUMINOUS MATERIALS               |
| IS 5983 | 1980 |      | SPECIFICATION FOR EYE PROTECTORS – FIRST REVISION                                    |
| IS 6234 | 1986 |      | PORTABLE FIRE EXTINGUISHERS WATER TYPE ( STORED PRESSURE)                            |
| IS 692  | 1994 |      | CRITERIA FOR SAFETY AND DESIGN OF STRUCTURES SUBJECTED TO UNDERGROUND BLASTS         |
| IS 6994 | 1973 |      | SPECIFICATION FOR SAFETY GLOVES  |
| IS 7155 | 1986 |      | CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY (PART 1 TO 8)                       |
| IS 7205 | 1974 |      | SAFETY CODE FOR ERECTION OF STRUCTURAL STEEL WORK                                    |
| IS 7293 | 1974 |      | SAFETY CODE FOR WORKING WITH CONSTRUCTION MACHINERY                                  |
| IS 7323 | 1994 |      | GUIDELINES FOR OPERATIONS OF RESERVOIRS  |
| IS 7812 | 1975 |      | CODE OF SAFETY FOR MERCURY   |
| IS 7969 | 1975 |      | SAFETY CODE FOR HANDLING AND STORAGE OF BUILDING MATERIALS                           |

|          |      |      |   |
|----------|------|------|---|
| IS 8089  | 1976 |      | CODE OF SAFE PRACTICE FOR LAYOUT OF OUTSIDE FACILITIES IN AN INDUSTRIAL PLANT                           |
| IS 8091  | 1976 |      | CODE OF PRACTICE FOR INDUSTRIAL PLANT LAYOUT  |
| IS 8095  | 1976 |      | ACCIDENTS PREVENTION TAGS   |
| IS 818   | 1968 | 1997 | CODE OF PRACTICE FOR SAFETY AND HEALTH REQUIREMENTS IN ELECTRIC AND GAS WELDING, AND CUTTING OPERATIONS |
| IS 8448  | 1989 |      | AUTOMATIC LINE VOLTAGE CORRECTOR (STABILISER)   |
| IS 8519  | 1977 |      | GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR BODY PROTECTION                                  |
| IS 8520  | 1977 |      | GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR EYE, FACE AND EAR PROTECTION                     |
| IS 875   | 1987 |      | STRUCTURAL SAFETY OF BUILDING: LOADING STANDARD PART 1 TO 5   |
| IS 8807  | 1978 |      | GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR PROTECTION OF ARMS AND HANDS                     |
| IS 8978  | 1985 |      | INSTANTANEOUS WATER HEATERS   |
| IS 8989  | 1978 |      | SAFETY CODE FOR ERECTION OF CONCRETE FRAMED STRUCTURES  |
| IS 940   | 1989 |      | PORTABLE FIRE EXTINGUISHERS WATER TYPE ( GAS CARTRIDGE)   |
| IS 9457  | 1980 |      | SAFETY COLOURS AND SIGNS  |
| IS 9679  | 1980 |      | CODE OF SAFETY FOR WORK ENVIRONMENTAL MONITORING  |
| IS 9706  | 1997 |      | CODE OF PRACTICE FOR THE CONSTRUCTION OF AERIAL RPEWAYS FOR THE TRANSPORTATION OF MATERIAL              |
| IS 9759  | 1981 |      | GUIDELINES FOR DEWATERING DURING CONSTRUCTION   |
| IS 9815  | 1989 |      | SERVO MOTOR OPERATED LINE VOLTAGE CORRECTOR (SERVO STABILISER)  |
| IS 9944  | 1992 |      | RECOMMENDATIONS ON SAFE WORKING LOAD FOR NATURAL AND MAN-MADE FIBRE ROPE SLINGS                         |
| IS 996   | 1979 |      | SINGLE PHASE ELECTRIC MOTORS  |
| ISO 3873 | 1977 |      | SAFETY HELMET   |



**SECTION-10**  
**SPECIAL CONDITIONS OF CONTRACT**

**10.0 Drawings and Documents**

**10.1**

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

**10.2**

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

**10.3**

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

**10.4**

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

**10.5**

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

**10.6**

In case of any conflict between general instructions to 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. Evaluation of offer will be done by BHEL on Total Price of the Rate Schedule.

**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, PROGRESS, PLANNING AND MONITORING, COMPLETION, AND VARIATIONS etc.

##### 11.1

CONTRACTOR HAS TO MOBILISE THEIR MATERIALS, RESOURCES AND WORK FORCE SO AS TO START THE WORK **WITHIN 07 DAYS OF FAX/TELEGRAPHIC INTIMATION OF AWARD OF WORK**. FURTHER MOBILIZATION OF FRESH RESOURCES AND AUGMENTATION OF EXISTING RESOURCES SHALL BE DONE IN CONSULTATION WITH BHEL IN ALL THE AREAS IN SUCH A MANNER THAT THE ENTIRE WORK IS COMPLETED **WITHIN THE CONTRACT PERIOD**.

**Total Contract Time Schedule: 4 (Four ) Months ( i.e. Phase one work in two month & phase two work in another two months )**

##### 11.1.2 GRACE PERIOD

Grace period of **ONE MONTH** beyond the contract period of four month is provided for this contract. However, all milestone events as per actual requirement of project schedule shall have to be achieved by the contractor without taking recourse to the Grace Period.

#### 11.2 Progress Monitoring, Contract Extension and Over Run

##### 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 Clause 11.2.1 above will be made considering the availability of components to be erected 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:

###### 11.2.2.1

A) Work specified in this tender not achieved owing to non-availability of fronts.

B) Work specified in this tender not achieved owing to non-availability of materials.

11.2.2.2 Work specified in this tender not achieved owing to non-availability of tools and plants, manpower and consumables by the contractor or any other reason attributable to the contractor.

11.2.2.3 Work specified in this tender not achieved due to any other reasons not attributable to the contractor.

### **11.3 Contract Extension**

#### **11.3.1**

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.

#### **11.3.2**

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 11.2.2 shall be done during the extended period. The overrun charges will be paid in proportion to the achievement of the respective month vis-à-vis the plan for the month (for assessing the performance, the agreed plan shall be reduced by shortfall attributable to the BHEL). BHEL may disallow contractor's claim for over run charges, if the monthly programme as mentioned here not made by him.

#### **11.3.3**

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.

### **11.4 Overrun Compensation**

Not applicable to this contract

### **11.5 Price Variation**

Agreed price/rate shall remain firm through out the contract period including grace period and extended period thereof. No price variation/adjustment shall be applicable for this contract and clause No.2.15 of General Conditions of Contract shall not be applicable.

### **11.6 Interest Bearing Recoverable Advance**

Interest bearing (rate of interest will be 1% per annum more than bank interest rate, on monthly reducing balance basis) recoverable advance limited to 5% of the contract value may be paid by BHEL at its discretion depending on the merit of the case against receipt & acceptance of bank guarantee from the contractor for the amount sought. This bank guarantee (BG) shall be valid at least for one year or the recovery duration. In case recovery of dues does not get completed within the aforesaid BG validity period, the contractor must renew the validity of BG or submit fresh BG for the outstanding amount and remaining recovery period. BHEL is entitled to make recovery of the entire outstanding amount in case the contractor fails to comply with the BG requirement as above.

Recovery of dues will be made minimum @ 10% of the admitted gross running bill amount from the first applicable running bill onwards till entire due (principal plus interest) is recovered. In the event sufficient time duration is not left for recovery @10%, the rate of recovery shall be suitably enhanced so that entire due is recovered within the contract period (including extensions granted or foreclosure if any).

### **11.7 Definition of Work Completion**

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

### **11.8 SECURED ADVANCE**

No Secured advance is payable under this contract.

### **11.9 SPLITTING OF WORK**

BHEL reserves the right to split up the work and award to more than one agency in case contractor fails to provide adequate resources, manpower etc. to achieve the desired progress of work

### **11.10 ) QUANTITY VARIATION**

The quantity of items in BOM is approximate based on estimate and may vary. The payment of these items will be made as per actual qty at site with quoted unit rate. The quoted rates will be valid for any Quantity Variation of each item.

### **11.11 Liquidated damages ( L D )**

**L D shall be applicable as per General Terms & Conditions ( GCC ) of contract.**

### **11.12 EXTRA WORK**

Rate for Extra work if any required to be executed at site shall be worked out on the following basis.

- Rate shall be derived from the similar nature of item from existing Schedule of Item rates.
- If no similar items are available in existing Schedule, the same shall be worked out as per Analysis of rates of CPWD- 1997 Edition by applying current rate of materials & labour obtained from authentic sources or Finished rate of CPWD (Delhi Schedule of Rate) – 1997 edition plus applicable PVC.

## 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 25<sup>th</sup> of previous calendar month to 24<sup>th</sup> 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 break-up for the stage of work completion stipulated vide clauses hereinafter.

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

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:

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

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

### **12.1.0 STAGES OF PROGRESSIVE PAYMENTS**

Subject to any deductions, which BHEL may be authorized to make under the contract, the contractor shall on the certificate of the engineer at site be entitled for payment as under.

#### **12.1.1**

The percentage of payment for progressive completion of work in various categories of work shall be as under:

- A) 100% of agreed item rate will be released for the completed work against monthly RA Bills.

## **SECTION-13**

### **SPECIAL CONDITIONS OF CONTRACT**

#### **13.0 DETAILS TO BE FURNISHED BY THE BIDDERS**

Apart from other details called for in the tender document under the various other provisions, the following details shall be submitted by the tenderers along with their offers (Technical Bid). Please also refer the checklist furnished in the beginning of the Tender Specification.

##### **13.1**

Contractor shall submit his HQ and Site organization charts.

##### **13.2**

Contractor shall submit tentative month-wise plan to match the Completion Schedule as in Section-11 of Special Conditions of Contract.

##### **13.3**

Contractor shall furnish the list of major tools and plants owned by them as well as T&P deployment plan for this work.

##### **13.4**

Contractor shall furnish the names of engineers, supervisors, and other specialized staff working with him for more than two years.

##### **13.5**

Contractor shall furnish month-wise deployment plan of manpower.

## **SECTION-14**

### **SPECIAL CONDITIONS OF CONTRACT**

#### **14.0 Insurance**

##### **5.9 INSURANCE:**

a) THE CONTRACTOR HAS TO ARRANGE ON HIS OWN, INSURANCE FOR ALL MATERIALS LIKE CEMENT AND OTHER BOUGHT OUT ITEMS, AND FOR THEIR ALL T & P AND OTHER FIXED ASSETS WHICH THEY MAY HAVE TO ACQUIRE AND DEPLOY AT SITE. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR ACCIDENT RISK POLICY/WORKMEN COMPENSATION POLICY. THE CONTRACTOR HAS TO ARRANGE ON HIS OWN INSURANCE FOR THEIR SUPPLIED MATERIALS LIKE CEMENT, AND OTHER VALUABLE BUILDING MATERIALS DURING ITS TRANSPORT, STORAGE, TILL IT GOES TO THE PERMANENT WORK.

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

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



## SECTION-15

### SPECIAL CONDITIONS OF CONTRACT

#### 15.0 Earnest Money Deposit (EMD) & Security Deposit (SD)

##### 15.1 Earnest Money Deposit:

**15.1.1** Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. **The Earnest Money Deposit shall be Rs. 1,50,000/- (Rupees One Lakh Fifty thousand Only).**

One time EMD will be Rs. 2 lakhs.

EMD is to be collected in cash (as permissible under Income Tax Act), Pay order or Demand Draft only. **DD SHOULD BE MADE IN FAVOR OF—‘BHARAT HEAVY ELECTRICALS LIMITED’**

**15.1.2** EMD by the Tenderer will be forfeited as per Tender Documents if,

- i) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
- ii) The tenderer 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.

**15.1.3** EMD shall not carry any interest.

**15.1.3.9 (a )** In the case of unsuccessful bidders, the Earnest Money will be refunded to them after acceptance of tender by successful bidder.

##### 15.2 Security Deposit

**15.2.1** Security Deposit should be collected from the successful tenderer. The rate of Security Deposit will be as below:

| Value of Work                        | Rate of SD   |
|--------------------------------------|--|
| Up to Rs. 10 lakhs                   | 10%  |
| Above Rs. 10 lakhs up to Rs.50 lakhs | 1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs.  |
| Above Rs. 50 lakhs                   | Rs 4 lakhs + 5% of the amount exceeding Rs. 50 lakhs |

The Security Deposit shall be collected 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 favor of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.

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 favor of BHEL and discharged on the back).

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 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.

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.

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 collected by DD/Bank Guarantee before start of the work and the balance 50% may be recovered from the running bills.

EMD of the successful tenderer may be converted and adjusted against the security deposit or specific request by the contractor.

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 favor 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 shall not be refunded to the contractor except in accordance with the terms of the contract.**

## **APPENDIX-I**

### **LIST OF T&P TO BE PROVIDED BY BHEL FREE OF HIRE CHARGES ON SHARING BASIS**

**NO T&P WILL BE PROVIDED BY BHEL TO THE CONTRACTOR FOR THIS PROJECT .**

**APPENDIX- II****ANALYSIS OF UNIT RATE QUOTED**

| SL.NO. | DESCRIPTION  | % OF QUOTED RATE | REMARKS |
|--------|--|------------------|---------|
| 01     | SITE FACILITIES VIZ., ELECTRICITY, WATER OTHER INFRASTRUCTURE. |                  |         |
| 02     | SALARY AND WAGES + RETRENCHMENT BENEFITS                       |                  |         |
| 03     | CONSUMABLES  |                  |         |
| 04     | T&P DEPRECIATION & MAINTENANCE                                 |                  |         |
| 05     | ESTABLISHMENT & ADMINISTRATIVE EXPENSES                        |                  |         |
| 06     | OVERHEADS  |                  |         |
| 07     | PROFIT   |                  |         |

SIGNATURE OF THE TENDERER

DATE:

**APPENDIX-III**  
**FORMAT FOR MONTH-WISE MANPOWER DEPLOYMENT PLAN**  
(CATEGORY-WISE NUMBERS TO BE INDICATED FOR EACH MONTH)

| SL. NO. | CATEGORY  | MONTHS |   |   |   |   |   |   |   |   |    |       |
|---------|---|--------|---|---|---|---|---|---|---|---|----|-------|
|         |   | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | SO ON |
| 01      | RESIDENT ENGINEER                                 |        |   |   |   |   |   |   |   |   |    |       |
| 02      | ENGINEERS   |        |   |   |   |   |   |   |   |   |    |       |
| 03      | SUPERVISORS                                       |        |   |   |   |   |   |   |   |   |    |       |
| 04      | MATERIALS MANAGEMENT SUPERVISORS                  |        |   |   |   |   |   |   |   |   |    |       |
| 05      | SAFETY ENGINEER                                   |        |   |   |   |   |   |   |   |   |    |       |
| 06      | WELDER  |        |   |   |   |   |   |   |   |   |    |       |
| 07      | PLUMBERS  |        |   |   |   |   |   |   |   |   |    |       |
| 08      | CARPENTERS  |        |   |   |   |   |   |   |   |   |    |       |
| 09      | BAR BENDERS                                       |        |   |   |   |   |   |   |   |   |    |       |
| 10      | TRUCK/TRAILER DRIVERS, CONCRETE MIXTURE OPERATORS |        |   |   |   |   |   |   |   |   |    |       |
| 11      | SAFETY ENGINEER                                   |        |   |   |   |   |   |   |   |   |    |       |
| 12      | STORE KEEPERS                                     |        |   |   |   |   |   |   |   |   |    |       |
| 13      | ELECTRICIANS                                      |        |   |   |   |   |   |   |   |   |    |       |
| 14      | SEMISKILLED/ UNSKILLED WORKERS                    |        |   |   |   |   |   |   |   |   |    |       |
| 15      | MASONS  |        |   |   |   |   |   |   |   |   |    |       |
| SO ON   |   |        |   |   |   |   |   |   |   |   |    |       |
|         | MONTH WISE TOTAL                                  |        |   |   |   |   |   |   |   |   |    |       |

**SIGNATURE OF TENDERER**

DATE:

**APPENDIX-IV  
CONCURRENT COMMITMENTS**

| SN | FULL POSTAL ADRESS<br>OF CLIENT AND NAME<br>OF OFFICER IN-<br>CHARGE | DESCRIPTION OF THE<br>WORK | VALUE OF<br>THE<br>CONTRACT | COMMENC-<br>EMENT DATE | SCHEDU-<br>LED<br>COMPLE-<br>TION | % COMPL-<br>TD. AS ON<br>DATE | ANTICIPA-<br>TED<br>COMPLN.<br>DATE | REMARKS |
|----|--|----------------------------|-----------------------------|------------------------|-----------------------------------|-------------------------------|-------------------------------------|---------|
|    |  |                            |                             |                        |                                   |                               |                                     |         |

DATE

SIGNATURE OF THE TENDERER

**APPENDIX-V**

**DETAILS OF SIMILAR WORK DONE DURING THE LAST SEVEN YEARS**

| <b>SL.NO.</b> | <b>FULL POSTAL ADDRESS OF CLIENT &amp; NAME OF OFFICER IN CHARGE</b> | <b>DESCRIPTION OF WORK</b> | <b>VALUE OF CONTRACT</b> | <b>DATE OF AWARD OF WORK</b> | <b>DATE OF COMMENCEMENT OF WORK</b> | <b>ACTUAL COMPLETION TIME (MONTHS)</b> | <b>DATE OF ACTUAL COMPLETION OF WORK</b> | <b>REMARKS</b> |
|---------------|--|----------------------------|--------------------------|------------------------------|-------------------------------------|--|--|----------------|
| 1             |  |                            |                          |                              |                                     |  |  |                |
| 2             |  |                            |                          |                              |                                     |  |  |                |
| 3             |  |                            |                          |                              |                                     |  |  |                |
| 4             |  |                            |                          |                              |                                     |  |  |                |
| 5             |  |                            |                          |                              |                                     |  |  |                |
| 6             |  |                            |                          |                              |                                     |  |  |                |

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