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## TENDER SPECIFICATION

**TENDER NO. BHEL/ NR /SCT/ UNCHAHAR/MM/963**

**FOR**

**“Receipt of materials, Unloading, verifying, shifting, stacking, preservation and handing over of components of boiler & auxiliaries, ESP, Steam Turbine & auxiliaries, Turbo-Generator & auxiliaries, Electrical and C&I equipments, HP & LP piping, refractory & insulation and providing services for materials management at 1X500 MW, NTPC-UNCHAHAR TPP, Stage-IV, Dist-RAEBARELI (UP)”**

### **PART I – TECHNICAL BID**



**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
**Plot No. 25 , Sector - 16A ,**  
**Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)**



ISO 9001, ISO 14001,  
OHSAS 18001 & SA 8000  
certified company  
SubContract and Purchase Deptt.

**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northern Region,**  
**Plot No. 25 , Sector - 16A ,**  
**Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)**  
**Phone: 0091-0120- 2416513/ 2416404**  
**Fax 091-0120-2416528**  
**Email: prashant@bhelpsnr.co.in/ rb@bhelpsnr.co.in**

**TENDER NO. BHEL/ NR /SCT/ UNCHAHAR/MM/963**

**IMPORTANT NOTE**

PURCHASER OF THIS TENDER DOCUMENT IS ADVISED TO CHECK AND ENSURE COMPLETION OF ALL PAGES OF TENDER DOCUMENT AND REPORT ANY DISCREPANCY TIMELY FOR CORRECTIVE ACTION, IF ANY, TO THE ISSUING AUTHORITY BEFORE THE BIDS ARE SUBMITTED. ORIGINAL COPY OF TENDER DOCUMENT COMPLETE IN ALL RESPECTS MUST BE SUBMITTED BACK AS PART OF THE BID WITHOUT WHICH THE SAME IS LIABLE TO BE REJECTED BY BHEL.

THIS TENDER SPECIFICATION ISSUED TO:

M/S-----  
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Rev 01  
1<sup>st</sup> Jun  
2012

# NOTICE INVITING TENDER

(Document No PS:MSX:NIT)

Bharat Heavy Electricals Limited



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**NOTICE INVITING TENDER (NIT)**

**NOTE: BIDDER MAY DOWNLOAD FROM WEB SITES**

**OR**

**PURCHASE TENDERS FROM THIS OFFICE ALSO**

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To

Dear Sir/Madam

**Sub : NOTICE INVITING TENDER**

Sealed offers in two part bid system are invited from reputed & experienced bidders (meeting PRE QUALIFICATION CRITERIA as mentioned in Annexure-I) for the subject job by the undersigned on the behalf of BHARAT HEAVY ELECTRICALS LIMITED as per the tender document. Following points relevant to the tender may please be noted and complied with.

**1.0 Salient Features of NIT**

| SL NO | ISSUE  | DESCRIPTION  |                   |
|-------|--|--|-------------------|
| i     | <b>TENDER NUMBER</b>                           | <b><i>BHEL/ NR /SCT/ UNCHAHAR/MM/963</i></b>   |                   |
| ii    | <b>Broad Scope of job</b>                      | "Receipt of materials, Unloading, verifying, shifting, stacking, preservation and handing over of components of boiler & auxiliaries, ESP, Steam Turbine & auxiliaries, Turbo-Generator & auxiliaries, Electrical and C&I equipments, HP & LP piping, refractory & insulation and providing services for materials management at 1X500 MW, NTPC-UNCHAHAR TPP, Stage-IV, Dist-RAEBARELI (UP)" |                   |
| iii   | <b>DETAILS OF TENDER DOCUMENT</b>              |  |                   |
| a     | Volume-IA                                      | <i>Technical Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc</i>  | <i>Applicable</i> |
| b     | Volume-IB                                      | <i>Special Conditions of Contract (SCC)</i>  | <i>Applicable</i> |
| c     | Volume-IC                                      | <i>General Conditions of Contract (GCC)</i>  | <i>Applicable</i> |
| d     | Volume-ID                                      | <i>Forms and Procedures</i>  | <i>Applicable</i> |
| e     | Volume-II                                      | <i>Price Schedule (Absolute value).</i>  | <i>Applicable</i> |
| iv    | <b>Issue of Tender Documents</b>               | <ol style="list-style-type: none"> <li><b><u>Sale from BHEL PS Regional office at :</u></b><br/> <b>Start : 18/07/14 , Time : 0900 HRS</b><br/> <b>Closes: 08/08/14 , Time :1200 HRS</b></li> <li>From BHEL website (<a href="http://www.bhel.com">www.bhel.com</a>)<br/> Tender documents will be available for downloading from website till due date of submission</li> </ol>             | <i>Applicable</i> |
| v     | <b>DUE DATE &amp; TIME OF OFFER SUBMISSION</b> | <b><i>Date : 08/08/14 , Time : 1500 HRS</i></b><br><b><i>Place : Noida</i></b>   | <i>Applicable</i> |

|      |   |  |                 |
|------|---|--|-----------------|
| vi   | <b>OPENING OF TENDER</b>  | <b>Date : 08/08/14</b><br>(within 2 hours of the latest due date and time of offer submission).<br>Notes:<br>(1) In case the due date of opening of tender becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day.<br>(2) Bidder may depute representative to witness the opening of tender | Applicable      |
| vii  | <b>EMD AMOUNT</b>   | Rs 2,00,000/-  | Applicable      |
| viii | <b>COST OF TENDER</b>   | Rs 2000/-.   | Applicable      |
| ix   | <b>LAST DATE FOR SEEKING CLARIFICATION</b>                                | <b>Date:28/07/2014</b><br>Along with soft version also, addressing to undersigned & to others as per contact address given below   | Applicable      |
| x    | <b>SCHEDULE OF Pre Bid Discussion (PBD)</b>                               |  | Not applicable. |
| xi   | <b>INTEGRITY PACT &amp; DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)</b> |  | Not Applicable  |
| xii  | <b>Latest updates</b>   | Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage (www.bhel.com -->Tender Notifications →View Corrigendums) <b>and not in the newspapers</b> . Bidders to keep themselves updated with all such information         |                 |

- 2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly signed & stamped on each page, as part of offer. **Rates/Price including discounts/rebates, if any, mentioned anywhere/in any form in the techno-commercial offer other than the Price Bid, shall not be entertained.**
- 3.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at Noida issuing the Tender, along with techno-commercial offer. Bidder may also choose to deposit the Tender document cost by cash at the Cash Office as stated above against sl no iv of 1, on any working day; and in such case copy of Cash receipt is to be enclosed with the Techno Commercial offer. Sale of tender Documents shall not take place on National Holidays, holidays declared by Central or State Governments and BHEL PS HQ at Noida, Sundays and second/ last Saturdays
- 4.0 Unless specifically stated otherwise, bidder shall deposit EMD through Demand Draft/Pay Order in favour of Bharat Heavy Electricals Ltd, payable at Noida. For other details and for 'One Time EMD' please refer General Conditions of Contract.
- 5.0 **Procedure for Submission of Tenders:** The Tenderers must submit their Tenders to Officer inviting Tender, as detailed below:
- PART-I consisting of 'PART-I A (Techno Commercial Bid)' & 'PART-I B (EMD/COST of TENDER)' in two separate sealed and superscribed envelopes (ENVELOPE-I & ENVELOPE-II)
  - PART-II (Price Bid) – in sealed and superscribed envelope (ENVELOPE-III)
  - One set of tender documents shall be retained by the bidder for their reference

- 6.0 The contents for ENVELOPES and the superscription for each sealed cover/Envelope are as given below.  
**(All pages to be signed and stamped)**

| Sl no           | Description   | Remarks       |
|-----------------|---|---------------|
| <b>Part-I A</b> |   |               |
|                 | <b>ENVELOPE – I superscribed as :</b><br>PART-I (TECHNO COMMERCIAL BID)<br>TENDER NO :<br>NAME OF WORK :<br>PROJECT:<br>DUE DATE OF SUBMISSION:<br><br><b>CONTAINING THE FOLLOWING:-</b>  |               |
| i.              | Covering letter/Offer forwarding letter of Tenderer.  |               |
| ii.             | Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.<br><br><b>Note:</b><br>a. In case of any deviation, the same should be submitted separately for technical & commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.<br>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.<br>i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL<br>ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender |               |
| iii.            | Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.<br><br>It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact ph no, FAX no, etc.   |               |
| iv.             | All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.   |               |
| v.              | Integrity Pact Agreement (Duly signed by the authorized signatory)  | If applicable |
| vi.             | Duly filled-in annexures, formats etc as required under this Tender Specification/NIT   |               |
| vii.            | Notice inviting Tender (NIT)  |               |
| viii.           | Volume – I A : <u>Technical</u> Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc  |               |
| ix.             | Volume – I B : Special Conditions of Contract (SCC)   |               |
| x.              | Volume – I C : General Conditions of Contract (GCC)   |               |
| xi.             | Volume – I D : Forms & Procedures   |               |
| xii.            | Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item  |               |
| xiii.           | Any other details preferred by bidder with proper indexing.   |               |

|                 |  |  |
|-----------------|--|--|
| <b>PART-I B</b> |  |  |
|-----------------|--|--|

|    |  |  |
|----|--|--|
|    | <p><b>ENVELOPE – II superscribed as:</b><br/> PART-I (EMD/COST of TENDER)<br/> TENDER NO :<br/> NAME OF WORK :<br/> PROJECT:<br/> DUE DATE OF SUBMISSION:</p> <p><b>CONTAINING THE FOLLOWING:-</b></p>   |  |
| i. | <p>1. Earnest Money Deposit (EMD) in the form as indicated in this Tender<br/> <u>OR</u><br/> Documentary evidence for 'One Time EMD' with the Power Sector Region of BHEL floating the Tender</p> <p>2. Cost of Tender ( Demand Draft or copy of Cash Receipt as the case may be)</p> |  |

|    |  |  |
|----|--|--|
|    | <b>PART-II</b>   |  |
|    | <b>PRICE BID</b> consisting of the following shall be enclosed   |  |
|    | <p><b>ENVELOPE-III</b><br/> superscribed as:<br/> PART-II (PRICE BID)<br/> TENDER NO :<br/> NAME OF WORK :<br/> PROJECT:<br/> DUE DATE OF SUBMISSION:</p> <p><b>CONTAINING THE FOLLOWING</b></p> |  |
| i  | Covering letter/Offer forwarding letter of Tenderer enclosed in Part-I   |  |
| ii | Volume II – PRICE BID ( Duly Filled in Schedule of Rates – rate/price to be entered in words as well as figures)   |  |

|   |  |  |
|---|--|--|
|   | <b>OUTER COVER</b>   |  |
|   | <p><b>ENVELOPE-IV</b> (MAIN ENVELOPE / OUTER ENVELOPE)<br/> superscribed as:<br/> TECHNO-COMMERCIAL BID, PRICE BID &amp; EMD<br/> TENDER NO:<br/> NAME OF WORK:<br/> PROJECT:<br/> DUE DATE OF SUBMISSION:</p> <p><b>CONTAINING THE FOLLOWING:</b></p> |  |
| i | <ul style="list-style-type: none"> <li>○ Envelopes I</li> <li>○ Envelopes II</li> <li>○ Envelopes III</li> </ul>   |  |

**SPECIAL NOTE:** All documents/ annexures submitted with the offer shall be properly annexed and placed in respective places of the offer as per enclosure list mentioned in the covering letter. BHEL shall not be responsible for any missing documents.

7.0 Deviation with respect to tender clauses and additional clauses/suggestions in Techno-commercial bid / Price bid shall NOT be considered by BHEL. Bidders are requested to positively comply with the same.

8.0 BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the Tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).

9.0 **Assessment of Capacity of Bidders:**

**Bidders capacity for executing the job under tender shall be assessed 'LOAD' wise and 'PERFORMANCE' wise as per the following:**

- I. **LOAD:** Load takes into consideration **ALL** the contracts of the Bidder under execution with BHEL Regions, irrespective of whether they are similar to the tendered scope or not. The 'Load' is the sum of the unit wise identified packages (refer Table-1) for contracts with BHEL Regions. The cut off month for reckoning 'Load' shall be the month, two (2) months preceding the month corresponding to the 'latest date of bid submission', in the following manner:

(Note: For example if latest bid submission is in Aug 2011, then the 'load' shall be calculated upto and inclusive of June 2011)

i). Total number of Packages

Total number of Packages in hand = P

Where

- 'P' is the sum of all unit wise identified packages under execution with BHEL Regions as of the cut off month defined above, including packages yet to be commenced, excepting packages which are on HOLD due to reasons not attributable to Bidder..

- II. **PERFORMANCE:** Here 'Monthly Performance' of the bidder for all the packages (**under execution/** executed during the 'Period of Assessment' in all the Power Sector Regions of BHEL) **SIMILAR** to the packages covered under the tendered scope, excepting packages not commenced shall be taken into consideration. The 'Period of Assessment' shall be 6 months preceding the cut off month. The cut off month for reckoning 'Period of Assessment' shall be the month two (2) months preceding the month corresponding to the 'latest date of bid submission', in the following manner:

(**Note:** For example if 'latest date of bid submission' is in Aug 2011, then the 'performance' shall be assessed for a 6 month period upto and inclusive of June 2011, for all the unit wise identified packages (refer Table I)

i). Calculation of Overall 'Performance Rating' for 'similar Package/Packages' for the tendered scope under execution at Power Sector Regions for the 'Period of Assessment':

This shall be obtained by summing up the 'Monthly Performance Evaluation' scores obtained by the bidder in all Regions for all the similar Package/packages', divided by the total number of Package months for which evaluation should have been done, as per procedure below:

- a)  $P_1, P_2, P_3, P_4, P_5, \dots, P_N$  etc be the packages (**under execution/** executed during the 'Period of Assessment' in all Regions) **SIMILAR** to the packages covered under the tendered scope, excepting packages not commenced. Total number of similar packages for all Regions =  $P_T$  (ie  $P_T = P_1 + P_2 + P_3 + P_4 + \dots + P_N$ )
- b) Number of Months ' $T_1$ ' for which 'Monthly Performance Evaluation' as per relevant formats, should have been done in the 'Period of Assessment' for the corresponding similar package  $P_1$ . Similarly  $T_2$  for package  $P_2$ ,  $T_3$  for package  $P_3$ , etc for the tendered scope. Now calculate cumulative total months ' $T_T$ ' for total similar Packages ' $P_T$ ' for all Regions (ie  $T_T = T_1 + T_2 + T_3 + T_4 + \dots + T_N$ )
- c) Sum ' $S_1$ ' of 'Monthly Performance Evaluation' Scores ( $S_{1-1}, S_{1-2}, S_{1-3}, S_{1-4}, S_{1-5}, \dots, S_{1-N}$ ) for similar package  $P_1$ , for the 'period of assessment' ' $T_1$ ' (ie  $S_1 = S_{1-1} + S_{1-2} + S_{1-3} + S_{1-4} + S_{1-5} + \dots + S_{1-N}$ ). Similarly  $S_2$  for package  $P_2$  for period  $T_2$ ,  $S_3$  for package  $P_3$  for period  $T_3$ , etc for the tendered scope for all Regions. Now calculate cumulative sum ' $S_T$ ' of 'Monthly Performance Evaluation' Scores for total similar Packages ' $P_T$ ' for all Regions (ie ' $S_T = S_1 + S_2 + S_3 + S_4 + S_5 + \dots + S_N$ ')

d) Overall Performance Rating 'R<sub>BHEL</sub>' for the similar Package/Packages (under execution/ executed during the 'Period of Assessment') in all the Power Sector Regions of BHEL):

$$= \frac{\text{Aggregate of Performance scores for all similar packages in all the Regions}}{\text{Aggregate of months for each of the similar package for which performance should have been evaluated in all the Regions}}$$

$$= \frac{S_T}{T_T}$$

e) Bidders to note that the risk of non evaluation or non availability of the 'Monthly Performance Evaluation' reports as per relevant formats is to be borne by the Bidder

f) Table showing methodology for calculating 'a', 'b' and 'c' above

| Sl no | Item Description  | Details for all Regions  |  |  |  |  |                                |  | Total   |
|-------|---|--|--|--|--|--|--------------------------------|--|---|
| (i)   | (ii)  | (iii)  | (iv)   | (v)  | (vi)   | (vii)  | (viii)                         | (ix)   | (x)   |
| 1     | Similar Packages for all Regions → (under execution/ executed during period of assessment)  | P <sub>1</sub>   | P <sub>2</sub>   | P <sub>3</sub>   | P <sub>4</sub>   | P <sub>5</sub>   | ...                            | P <sub>N</sub>   | Total No of similar packages for all Regions = P <sub>T</sub> ie Sum (Σ) of columns (iii) to (ix) |
| 2     | Number of Months for which 'Monthly Performance Evaluation' as per relevant formats should have been done in the 'period of assessment for corresponding similar Package ( as in row 1) | T <sub>1</sub>   | T <sub>2</sub>   | T <sub>3</sub>   | T <sub>4</sub>   | T <sub>5</sub>   | ...                            | T <sub>N</sub>   | Sum (Σ) of columns (iii) to (ix) = T <sub>T</sub>   |
| 3     | Monthly performance scores for the corresponding period (as in Row 2)   | S <sub>1-1</sub> ,<br>S <sub>1-2</sub> ,<br>S <sub>1-3</sub> ,<br>S <sub>1-4</sub> ,<br>...<br>S <sub>1-T1</sub> | S <sub>2-1</sub> ,<br>S <sub>2-2</sub> ,<br>S <sub>2-3</sub> ,<br>S <sub>2-4</sub> ,<br>...<br>S <sub>2-T2</sub> | S <sub>3-1</sub> ,<br>S <sub>3-2</sub> ,<br>S <sub>3-3</sub> ,<br>S <sub>3-4</sub> ,<br>...<br>S <sub>3-T3</sub> | S <sub>4-1</sub> ,<br>S <sub>4-2</sub> ,<br>S <sub>4-3</sub> ,<br>S <sub>4-4</sub> ,<br>...<br>S <sub>4-T4</sub> | S <sub>5-1</sub> ,<br>S <sub>5-2</sub> ,<br>S <sub>5-3</sub> ,<br>S <sub>5-4</sub> ,<br>...<br>S <sub>5-T5</sub> | ..<br>...<br>...<br>...<br>... | S <sub>N-1</sub> ,<br>S <sub>N-2</sub> ,<br>S <sub>N-3</sub> ,<br>S <sub>N-4</sub> ,<br>...<br>S <sub>N-TN</sub> | -----   |
| 4     | Sum of Monthly Performance scores of the corresponding Package for the corresponding period (as in row-3)   | S <sub>1</sub>   | S <sub>2</sub>   | S <sub>3</sub>   | S <sub>4</sub>   | S <sub>5</sub>   | ...                            | S <sub>N</sub>   | Sum (Σ) of columns (iii) to (ix) = S <sub>T</sub>   |

ii) Calculation of Overall 'Performance Rating' (R<sub>BHEL</sub>) in case 'similar Package/Packages' for the tendered scope ARE NOT AVAILABLE, during the 'Period of Assessment':

This shall be obtained by summing up the 'Monthly Performance Evaluation' scores obtained by the bidder in all Regions for ALL the packages, divided by the total number of Package months for which evaluation should have been done. 'R<sub>BHEL</sub>' shall be calculated subject to availability of 'performance scores' for at least.6 'package months' in the order of precedence below:

- Period of Assessment.
- 12 months preceding the cut-off month
- 24 months preceding the cut-off month
- 36 months preceding the cut-off month

In case,  $R_{BHEL}$  cannot be calculated as above, then Bidder shall be treated as 'NEW VENDOR'. Further eligibility and qualification of this bidder shall be as per definition of 'NEW VENDOR' described in 'Explanatory Notes'

iii) Factor "L" assigned based on Overall Performance Rating ( $R_{BHEL}$ ) at Power Sector Regions.:

| Sl no | Overall Performance Rating ( $R_{BHEL}$ ) | Corresponding value of 'L' |
|-------|---|----------------------------|
| 1     | =60                                       | NA                         |
| 2     | > 60 and $\leq$ 65                        | 0.4                        |
| 3     | > 65 and $\leq$ 70                        | 0.35                       |
| 4     | > 70 and $\leq$ 75                        | 0.25                       |
| 5     | > 75 and < 80                             | 0.2                        |
| 6     | $\geq$ 80                                 | NA                         |

III. **'Assessment of Capacity of Bidder':**

'Assessment of Capacity of Bidder' is based on the Maximum number of packages for which a vendor is eligible, considering the performance scores of similar packages, as below:

Max number of packages  $P_{Max} = (R_{BHEL} - 60)$  divided by corresponding value of 'L'  
i.e.  $(R_{BHEL} - 60)/L$

**Note:**

- In case the value of  $P_{Max}$  results in a fraction, the value of  $P_{Max}$  is to be rounded off to next whole number
- For  $R_{BHEL} = 60$ ,  $P_{Max} = '1'$
- For  $R_{BHEL} \geq 80$ , there will be no upper limit on  $P_{Max}$

The Bidder shall be considered 'Qualified' as per 'Assessment of Capacity of Bidder' for the subject Tender if  $P \leq P_{Max}$   
(where P is calculated as per clause 9.1)

IV. **Explanatory note:**

- Similar package means Boiler or ESP or Piping or Turbine or Civil or Structure or Electrical or CI, etc at the individual level irrespective of rating of Plant, and irrespective of whether the subject tender is a single package or as part of combined/composite packages. Normally Boiler, ESP, Piping, Turbine, Electrical, CI, Civil, Structure, etc is considered individual level of package. For example in case the tendered scope is a Boiler Vertical Package comprising of Boiler, ESP and Power Cycle Piping (i.e the 'identified packages as per Table-1 below), the 'PERFORMANCE' part against sl no II above, needs to be evaluated considering all the identified packages (ie Boiler, ESP and Power Cycle Piping) and finally the Bidder's capacity to execute the tendered scope is assessed in line with III above
- Identified Packages (Unit wise)

**Table-1**

|  | Civil   | Electrical & CI                                       | Mechanical   |
|--|---|---|--|
|  | i). Enabling works<br>ii). Pile and Pile Caps<br>iii). Civil Works including foundations<br>iv). Structural Steel Fabrication & Erection<br>v). Chimney<br>vi). Cooling Tower<br>vii). Others (Civil) | i). Electrical<br>ii). CI<br>iii). Others (Elec & CI) | i). Boiler & Aux (All types including CW Piping if applicable)<br>ii). Power Cycle Piping/Critical Piping<br>iii). LP Piping<br>iv). ESP<br>v). Steam Turbine Generator set & Aux<br>vi). Gas Turbine Generator set & Aux<br>vii). Hydro Turbine Generator set & Aux<br>viii). Turbo Blower (including Steam Turbine)<br>ix). Material Handling<br>x). Material Management |

|  |  |  |   |
|--|--|--|---|
|  |  |  | xi). Material Handling & Material Management<br>xii). Others (Mechanical) |
|--|--|--|---|

- c) Bidders who have not been evaluated for at least six package months in the last 36 months in the online BHEL system for contractor performance evaluation in BHEL PS Regions, wef July'2010 shall be considered "NEW VENDOR".

A 'NEW VENDOR' shall be considered qualified subject to satisfying all other tender conditions

A 'NEW VENDOR' if awarded a job (of package/packages identified under this clause) shall be tagged as "FIRST TIMER" on the date of first LOI from BHEL.

The "FIRST TIMER" tag shall remain till execution of work for a period of not less than 09 months, from the commencement of work of first package

A Bidder shall not be eligible for the next job as long as the Bidder is tagged as "FIRST TIMER" excepting for the Tenders which have been opened on or before the date of the bidder being tagged as 'FIRST TIMER'.

After removal of 'FIRST TIMER' tag, the Bidder shall be considered 'QUALIFIED' for the future tenders subject to satisfying all other tender conditions including 'Capacity Evaluation of Bidders'.

- d) In the unlikely event of all bidders shortlisted against Technical and Financial Qualification criteria not meeting the criteria on 'Assessment of Capacity of Bidders' detailed above, OR leads to a single tender response on applying the criteria of 'Assessment of Capacity of Bidders' or due to non-approval by Customer, then BHEL at its discretion reserves the right to consider the further processing of the Tender based on the **Overall Performance Rating 'R<sub>BHEL</sub>'** only, starting from the upper band.
- e) 'Under execution' shall mean works in progress as per the following:
- i. up to Boiler Steam Blowing in case of Steam Generator and Auxiliaries
  - ii. upto Synchronisation in case of all other works excepting sl no (i) and (iii)
  - iii. Upto execution of at least 90% of anticipated contract value in case of Civil & Structures (unit wise), Enabling works and upto 90% of material unloading (in tonnage) as per the original contract in case of MM Package.
- Note : BHEL at its discretion can extend (or reduce in exceptional cases in line with Contract conditions) the period defined against (i), (ii) and (iii) above, depending upon the balance scope of work to be completed.
- f) Performance evaluation in CL 9 above is applicable to Prime bidder and consortium partner (or Technical tie up partner) for their respective scope of work.

10.0 Since the job shall be executed at site, bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation, applicable wage structure, wage rules, etc before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions.

11.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay

or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.

- 12.0 BHEL may decide holding of pre-bid discussion [PBD] with all intending bidders as per date indicated in the NIT. The bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Bidders shall plan their visit accordingly. The outcome of pre-bid discussion (PBD) shall also form part of tender.
- 13.0 In the event of any conflict between requirement of any clause of this specification/ documents/drawings/data sheets etc or requirements of different codes/standards specified, the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error/missing pages/ other clerical errors in the tender documents, noticed must be pointed out before pre-bid meeting/submission of offer, else BHEL's interpretation shall prevail.
- 14.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.
- 15.0 Bidders shall submit Integrity Pact Agreement (Duly signed by authorized signatory who signs in the offer), **if applicable**, along with techno-commercial bid. This pact shall be considered as a preliminary qualification for further participation. **The names and other details of Independent External Monitor (IEM) for the subject tender is as given at point (1) above.**
- 16.0 The Bidder has to satisfy the Pre Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened who will be qualified for the subject job on the basis of satisfying the Pre Qualification Criteria specified in this NIT as per Annexure-I (as applicable), past performance etc. and date of opening of price bids shall be intimated to only such bidders. BHEL reserves the right not to consider offers of parties under HOLD.
- 17.0 In case BHEL decides on a 'Public Opening', the date & time of opening of the sealed PRICE BID shall be intimated to the qualified bidders and in such a case, bidder may depute one authorised representative to witness the price bid opening. BHEL reserves the right to open 'in-camera' the 'PRICE BID' of any or all Unsuccessful/Disqualified bidders under intimation to the respective bidders.
- 18.0 Validity of the offer shall be for **six months** from the latest due date of offer submission (including extension, if any) unless specified otherwise.
- 19.0 BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction process. In such case all qualified bidders will be intimated regarding procedure/ modality for Reverse Auction process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. .
- However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDs' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.
- 20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.
- 22.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 23.0 **Not used**
- 24.0 The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self certified and stamped by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.

- 25.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 26.0 The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site [www.bhel.com](http://www.bhel.com).
- 27.0 BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit „online sealed bid“ in the Reverse Auction. Non-submission of „online sealed bid“ by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.”

Information and General Terms and Conditions governing RA shall form part of the RFQ/ Enquiry.

- 28.0 It may please be noted that guidelines/rules in respect of Suspension of Business dealings', 'Vendor evaluation format', 'Quality, Safety & HSE guidelines', etc may undergo change from time to time and the latest one shall be followed.
- 29.0 **Micro and Small Enterprises (MSE)**  
Any Bidder falling under MSE category, shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer

| Type under MSE | SC/ST owned | Others |
|----------------|-------------|--------|
| Micro          |             |        |
| Small          |             |        |

**Note:** - If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.

MSE suppliers can avail the intended benefits only if they submit along with the offer, or before price bid opening, attested copies of either EM-II certificate having deemed validity (two years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM-II certificate along with CA certificate (format enclosed as Annexure - 3) applicable for the year, certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or Small) where the deemed validity of EM-II is over. Date to be reckoned for determining the deemed validity will be last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.

MSEs shall be exempted from payment of earnest money at the time of tender deposit. However, there is no exemption of security deposit submission

No benefits shall be applicable for that particular enquiry if the required documents are not submitted before price bid opening.

### 30.0 Order of Precedence

In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:

- Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL
- Notice Inviting Tender (NIT)
- Price Bid
- Technical Conditions of Contract (TCC)—Volume-1A

- e. Special Conditions of Contract (SCC) —Volume-1B
- f. General Conditions of Contract (GCC) —Volume-1C
- g. Forms and Procedures —Volume-1D

for BHARAT HEAVY ELECTRICALS LTD

(SCT)

**Enclosure**

- 01. Annexure-1: Pre Qualifying criteria.
- 02. Annexure-2: Check List.
- 03. Annexure-3: Chartered Accountant certificate for MSMED
- 04. Annexure-4: GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION (RA)
- 05. Other Tender documents as per this NIT.

**ANNEXURE - 1****PRE QUALIFYING REQUIREMENTS**

|           |   |
|-----------|---|
| JOB       | <b>"Receipt of materials, Unloading, verifying, shifting, stacking, preservation and handing over of components of boiler &amp; auxiliaries, ESP, Steam Turbine &amp; auxiliaries, Turbo-Generator &amp; auxiliaries, Electrical and C&amp;I equipments, HP &amp; LP piping, refractory &amp; insulation and providing services for materials management at 1X500 MW, NTPC-UNCHAHAR TPP, Stage-IV, Dist-RAEBARELI (UP)"</b> |
| TENDER NO | <b>BHEL/ NR /SCT/ UNCHAHAR/MM/963</b>   |

| SL NO. | PRE QUALIFICATION CRITERIA  | Bidders claim in respect of fulfilling the PQR Criteria |                                |
|--------|---|---|--------------------------------|
|        |   | Name and Description of qualifying criteria             | Page no of supporting document |
| A      | <b>Submission of Integrity Pact duly signed</b>   | <b>Not Applicable</b>                                   |                                |
| B      | <p><b>Technical</b></p> <p>1.0 Tenderer who wish to participate should have executed during the last seven years, as on date of technical bid opening, work of similar nature covered in this tender, as per following:</p> <p>1.1 One single work of similar nature in power plant / industrial unit valuing Rs. 120 Lacs or above.<br/>`OR`</p> <p>1.2 Two works of similar nature in power plant / industrial unit valuing each Rs. 75 Lacs or above.<br/>`OR`</p> <p>1.3 Three works of similar nature in power plant / industrial unit valuing each Rs. 60 Lacs or above.<br/>`OR`</p> <p>1.4 Should have executed works of similar nature, as covered in this tender during last seven years as on date of technical bid opening, against direct BHEL's order for a 190 MW Unit or above rating</p> | <b>Applicable</b>                                       |                                |
| C-1    | <p><b>Financial</b></p> <p><b><u>TURNOVER</u></b></p> <p><b>Bidders should have achieved an average annual financial turnover (Audited) of Rs 45 Lakhs or more over last three Financial Years (FY) i.e 2010-11, 2011-12 &amp; 2012-13</b></p>  | <b>Applicable</b>                                       |                                |
| C-2    | <p><b><u>NETWORTH (only in case of Companies)</u></b></p> <p>Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive</p>   | <b>Applicable</b>                                       |                                |

|   |   |                             |  |
|---|---|-----------------------------|--|
| C-3   | <b>PROFIT</b><br>Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three Financial Years defined in 'C-1' above based on latest Audited Accounts. | <b>Applicable</b>           |  |
| D   | <b>Assessment of Capacity of Bidder to execute the work as per sl no. 9 of NIT</b>  | <b>Applicable (By BHEL)</b> |  |
| E   | <b>Approval of Customer</b>   | <b>Not Applicable</b>       |  |
| F   | <b>Consortium criteria</b>  | <b>Not Applicable</b>       |  |
| <p><b><u>Explanatory Notes for QR 'B' &amp; 'C'</u></b></p> <ol style="list-style-type: none"> <li>For B-1.1, B-1.2 and B-1.3 the word 'executed' means the bidder should have achieved the criteria specified in the QR even if the total contract has not been completed or closed.</li> <li>For B-1.1, B-1.2 and B-1.3, value of work is to be updated as per the PVC formula of GCC with indices for "All India Avg. Consumer Price Index for Industrial Workers" (i.e. 'K' in this case shall be 80%) with base month as date of execution (completion of contract/ work) and indexed upto two months prior to bid opening months. This condition will be applicable only for the completed jobs and not for the jobs in progress as on date of technical bid opening.</li> <li>For B-1.4, 'Executed' means the unit should have been synchronized by the date of Technical Bid opening.</li> <li>If the qualifying work is completed in the Seven (7) years period specified above, even if it has been started earlier, the same will also be considered meeting the qualifying requirements.</li> <li>'Similar' work means- Material Handling and/or Material management works.</li> <li>Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as given above along with all annexure.</li> </ol> |   |                             |  |

**ANNEXURE - 2****CHECK LIST****NOTE:- Tenderers are required to fill in the following details and no column should be left blank**

|     |  |   |                       |
|-----|--|---|-----------------------|
| 1   | Name and Address of the Tenderer   |   |                       |
| 2   | Details about type of the Firm/Company   |   |                       |
| 3.a | Details of Contact person for this Tender  | Name : Mr/Ms<br>Designation:<br>Telephone No:<br>Mobile No:<br>Email ID:<br>Fax No:   |                       |
| 3.b | Details of alternate Contact person for this Tender  | Name : Mr/Ms<br>Designation:<br>Telephone No:<br>Mobile No:<br>Email ID:<br>Fax No:   |                       |
| 4   | EMD DETAILS  | DD No:                      Date :<br>Bank :                      Amount:<br>Please tick ( <input type="checkbox"/> ) whichever applicable:-<br>ONE TIME EMD / ONLY FOR THIS TENDER |                       |
| 5   | Validity of Offer  | TO BE VALID FOR SIX MONTHS FROM DUE DATE  |                       |
|     |  | APPLICABILITY<br>(BY BHEL)  | ENCLOSED BY<br>BIDDER |
| 6   | Whether the format for compliance with <b>PRE QUALIFICATION CRITERIA</b> (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format | Applicable  | YES / NO              |
| 7   | Audited profit and Loss Account for the last three years   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 8   | Copy of PAN Card   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 9   | Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 10  | Integrity Pact   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 11  | Declaration by Authorised Signatory  | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 12  | No Deviation Certificate   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 13  | Declaration confirming knowledge about Site Conditions   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 14  | Declaration for relation in BHEL   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 15  | Non Disclosure Certificate   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 16  | Bank Account Details for E-Payment   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 17  | Capacity Evaluation of Bidder for current Tender   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |
| 18  | Tie Ups/Consortium Agreement are submitted as per format   | Applicable/ <del>Not</del><br>Applicable  | YES/NO                |

|    |   |                                       |        |
|----|---|---------------------------------------|--------|
| 19 | Power of Attorney for Submission of Tender/Signing Contract Agreement | Applicable/ <del>Not Applicable</del> | YES/NO |
| 20 | Analysis of Unit rates  | Applicable/ <del>Not Applicable</del> | YES/NO |

NOTE : STRIKE OFF 'YES' OR 'NO', AS APPLICABLE. TENDER NOT ACCOMPANIED BY THE PRESCRIBED **ABOVE APPLICABLE DOCUMENTS** ARE LIABLE TO BE SUMMARILY REJECTED.

DATE :

**AUTHORISED SIGNATORY**  
(With Name, Designation and Company seal)

**ANNEXURE - 3**

**Certificate by Chartered Accountant on letter head**

This is to Certify that M/S ..... ,  
(hereinafter referred to as 'company') having its registered office at  
..... is registered under MSMED Act 2006, (Entrepreneur  
Memorandum No (Part—II) ..... dtd: ..... ,  
Category: ..... (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company  
as on date..... as per MSMED Act 2006 is as follows:

**1. For Manufacturing Enterprises:** Investment in plant and machinery (i.e.  
original cost excluding land and building and the items specified by the Ministry of Small  
Scale Industries vide its notification No. S.O.1722(E) dated October 5, 2006:  
Rs ..... Lacs

**2. For Service Enterprises:** Investment in equipment (original cost excluding land and  
building and furniture, fittings and other items not directly related to the service rendered or as  
may be notified under the **MSMED** Act, 2006:  
Rs ..... Lacs

The above investment of Rs . .....Lacs is within permissible limit of  
Rs..... Lacs for ..... Micro / Small **(Strike off which is not applicable)**  
Category under MSMED Act 2006.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant

**ANNEXURE - 4****GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION (RA)**

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit “online sealed bid” in the Reverse Auction. Non submission of “online sealed bid” by the bidder for any of the eligible items for which techno commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL’s standard practice.
12. Bidders shall be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service

provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction“, which will be communicated before the Reverse Auction.

13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1(s) bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

**ANNEXURE – 5****Authorization of representative who will participate in the on line Reverse Auction Process;**

|   |   |  |
|---|---|--|
| 1 | NAME & DESIGNATION OF OFFICIAL  |  |
| 2 | POSTAL ADDRESS (COMPLETE)   |  |
| 3 | TELEPHONE NOS. (LAND LINE & MOBILE BOTH)  |  |
| 4 | FAX NO.   |  |
| 5 | E-MAIL ADDRESS  |  |
| 6 | NAME OF PLACE/ STATE/ COUNTRY, WHEREFROM S/HE WILL PARTICIPATE IN THE REVERSE AUCTION |  |

Rev 01  
1<sup>st</sup> June  
2012

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

(Document No PS:MSX:TCC)

BHARAT HEAVY ELECTRICALS LIMITED



## TECHNICAL CONDITIONS OF CONTRACT (TCC)

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**TECHNICAL CONDITIONS OF CONTRACT OF THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF COMPONENTS OF BOILER & AUXILIARIES, ESP, STEAM TURBINE & AUXILIARIES, TURBO-GENERATOR & AUXILIARIES, ELECTRICAL AND C&I, HP& LP PIPING, REFRACTORY & INSULATION, AND PROVIDINGSERVICES FOR MATERIALS MANAGEMENT AT 1X500 MW, UNCHAHR THERMAL POWER PROJECT, STAGE-IV OF NATIONAL THERMAL POWER CORPORATION LTD (NTPC)**



**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**Power Sector – Northren Region,**  
**Plot No. 25 , Sector - 16A ,**  
**Distt.GautamBudh Nagar, NOIDA – 201 301 (INDIA)**

## TECHNICAL CONDITIONS OF CONTRACT (TCC)

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| <b>SI No</b> | <b>DESCRIPTION</b>                                    | <b>Chapter</b> | <b>PAGE NO.</b> |
|--------------|---|----------------|-----------------|
|              | <b>Contract specific details</b>                      |                |                 |
| 1            | Project Information                                   | Chapter-I      |                 |
| 2            | Scope of Works  | Chapter-II     |                 |
| 3            | Facilities in the scope of BHEL/Contractor            | Chapter-III    |                 |
| 4            | T&Ps and MMEs to be deployed by Contractor            | Chapter-IV     |                 |
| 5            | T&Ps and MMEs to be deployed by BHEL on sharing basis | Chapter-V      |                 |
| 6            | Time Schedule   | Chapter-VI     |                 |
| 7            | Terms of Payment                                      | Chapter-VII    |                 |
| 8            | Taxes and other Duties                                | Chapter-VIII   |                 |
| 9            | Other Requirements                                    | Chapter-IX     |                 |
| 10           | Important Conditions                                  | Chapter-X      |                 |
| 11           | Annexures   | Chapter-XI     |                 |
| 12           | Rate Schedule   | Chapter-XII    |                 |

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter II: Scope of Works

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|                         |   |  |
|-------------------------|---|--|
| Name of the Owner       | : | <b>NATIONAL THERMAL POWER CORPORATION LTD. (NTPC)</b>  |
| Name of Customer        | : | <b>NTPC BHEL POWER PROJECTS PVT. LTD. (NBPPL)</b>  |
| Address                 | : | NTPC Unchahar Thermal Power Plant<br>Village: Mustafabad , Tehsil - Unchahar<br>District– Raebareli, Uttar Pradesh |
| New Installation        | : | 1 x 500 MW   |
| Nearest Railway station | : | Unchahar Railway Station on Kanpur-Allahabad line<br>(1 Km from site)  |
| Nearest Road            | : | Unchahar Lucknow-Allahabad Road<br>(115 Km from Lucknow)   |
| Nearest City            | : | Raebareli  |
| Nearest Airport         | : | Lucknow-115 KM<br>Allahabad- 85 KM   |
| Highest Temperature     | : | 45 deg C   |
| Lowest Temperature      | : | 1 deg C  |
| Elevation               | : | 354.77 metres  |

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter II: Scope of Works

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### 2.0 SCOPE OF WORK

- 2.1 BHEL has been awarded the work of Design, Engineering, Supply, Erection, Testing, Commissioning of 1X500 MW Unchahar Thermal Power plant at Unchahar, Distt.- Raebareli, UttarPradesh of M/s NTPC Ltd.
- 2.2 THE SCOPE OF WORK OF THIS TENDER SPECIFICATION OF MATERIAL HANDLING AND MATERIALS MANAGEMENT SERVICES FOR 1X500 MW UNCHAHAR, TPP AT RAEBARELI (U. P.) SHALL BE BROADLY AS UNDER:

GENERATOR STATOR  
GENERATOR TRANSFORMER  
BOILER DRUM

- a. UNLOADING OF ALL TYPES OF HEAVY CONSIGNMENTS AND/OR OD CONSIGNMENTS (e.g. Stator, HP, IP, LP Turbine, TRANSFORMERS, BOILER DRUM etc.) DIRECTLY FROM TRAILORS/WAGONS BY SUITABLE CRANE OR BY JACK AND SLEEPER METHOD (ALL TO BE ARRANGED BY THE CONTRACTOR), INCLUDING LEVELLING OF THE UNLOADING AREA AND ATTENDANT WORK.  
EOT CRANE IF AVAILABLE AND SPAREABLE BY NTPC CAN BE UTILISED FOR UNLOADING OF STG HEAVY CONSIGNMENT/ ODC CONSIGNMENTS IN TURBINE HALL.
- b. RECEIPT OF MATERIALS DISPATCHED BY ROAD TRANSPORT ON DOOR DELIVERY BASIS AT THE BHEL STORES AND UNLOADING THEREOF.
- c. COLLECTION OF MATERIALS DISPATCHED BY ROAD TRANSPORT/ RAIL ON GODOWN DELIVERY BASIS FROM TRANSPORTERS'/RAILWAY GODOWNS, LOADING AT TRANSPORTERS/ RAILWAY GODOWN, LOCAL TRANSPORT UP TO BHEL STORES/ STORAGE YARD AND UNLOADING THEREOF.
- d. PRELIMINARY VERIFICATION OF MATERIALS AT THE TIME OF UNLOADING FROM ROADTRANSPORT VEHICLE OR WHILE RECEIVING CONSIGNMENTS FROM RAILWAY/ TRASPORTERS' GODOWN - AS THE CASE MAY BE, REPORTING IMMEDIATELY THE DISCREPANCIES LIKE DAMAGES AND SHORTAGES NOTICED.
- e. DETAILED VERIFICATION OF MATERIALS WITH REFERENCE TO PACKING LIST AND LOADING ADVICE SLIP AFTER UNPACKING OF BOXES & CRATES; REPACKING, WHERE CALLED FOR, AFTER DETAILED VERIFICATION; PREPARATION OF RECEIPT INSPECTION REPORTS.
- f. STACKING AND STORING AT BHEL OPEN STORAGE YARD/ COVERED STORES/ CLOSED & SEMICLOSED SHEDS, SUBMISSION OF STACKING/STORING RECORDS.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter II: Scope of Works

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- g. PRESERVATION OF THE MATERIALS IN ACCORDANCE WITH BHEL'S PRESERVATION MANUAL AND/OR AS PER BHEL'S INSTRUCTIONS.
- h. GENERAL CLEANING, GRASS CUTTING AND UPKEEP OF STORAGE YARD, COVERED AND SEMICLOSED STORES SHEDS WITHIN THE QUOTED RATES FOR UNLOADING, VERIFICATION AND STACKING.
- i. PROVIDING MATERIALS MANAGEMENT SERVICES AS SPECIFIED IN RELEVANT CHAPTER
- j. REHANDLING AND RESTACKING OF MATERIALS AS AND WHEN CALLED FOR BY BHEL. THIS ALSO INCLUDES EXCESS/REDUNDANT/SCRAP MATERIALS RETURNED TO STORES BY BHEL'S CONSTRUCTION & ERECTION CONTRACTORS.
- k. HANDLING AND LOADING OF OUTGOING MATERIALS THOSE ARE TO BE SENT TO OTHER DESTINATIONS.

**SCOPE OF WORK IS FURTHER DETAILED IN VARIOUS CLAUSES HEREAFTER.**

### **2.3 MAJOR PACKAGES TO BE HANDLED ARE AS UNDER:**

- 1. BOILER, FANS, MILLS, FEEDERS, DUCTS & DAMPERS ALONG WITH THEIR AUXILIARIES AND TRIM PIPING.
- 2. TURBINE, TURBO-GENERATOR, CONDENSER, VARIOUS PUMPS WITH DRIVE MOTORS AND THEIR AUXILIARIES INCLUDING HEATERS, HEAT EXCHANGERS AND DE-AERATOR.
- 3. STRUCTURAL STEEL
- 4. BOILER & AUX, ELECTRICAL AND C&I EQUIPMENT, ACCESSORIES AND CABLES, TRAYS
- 5. STG & AUX CONTROLS AND INSTRUMENTATION AND ACCESSORIES
- 6. STATION C&I PACKAGE WITH ASSOCIATED ELECTRICALS AND CABLES.
- 7. POWER CYCLE AND TG CYCLE PIPING, TANKS, VESSELS ETC.
- 8. THERMAL INSULATION PACKAGE
- 9. OTHER BHEL SUPPLIED (MANUFACTURED/BOUGHT OUT ITEMS) PACKAGES
- 10. CONSTRUCTION EQUIPMENTS OF BHEL INCLUDING HIGH CAPACITY CRANES SENT IN DISMANTLED CONDITION AND OTHER ITEMS RECEIVED FROM OTHER SITES/LOCATIONS.
- 11. ESP

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter II: Scope of Works

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- 2.4 Approx. weight to be handled **as indicated in Annexure-I** is of the order of **45700 MT**. Most of these materials required for erection shall arrive at site well in time for which the contractor shall be required to carry out proper handling, verification, storage and issue as per the scope mentioned in this NIT.

However depending on site requirements, some of delayed items may need to be delivered directly at site, which may be got done by BHEL through its respective erection agency. In such cases where material is received, unloaded and verified by erection agency, the contractor (Material Handling Contractor) will not be eligible for any payment for such works. Besides above, BHEL entirely at its discretion (including cases where the contractor is not able to mobilize adequately), may arrange unloading / handling of items like Generator, LP Rotors, Feed storage tank, boiler panels, headers, wind box etc and any other materials through its other contractors. The contractor (Material Handling Contractor) in such cases will not be eligible for any payment.

**Annexure-I attached with this NIT gives** the general idea about the weights and dimensions of some major components / equipments to be handled by the contractor. The weights and dimensions shown are approximate and are liable to vary. No change in quoted / accepted rates /prices shall be allowed due to change in weights and dimensions of the equipment / materials

**Quantities mentioned in the rate schedules are approximate only and liable for variation due to change of scope of work / variation in schedule of quantities, changes in design etc. The contractor has to handle whatever actual materials are dispatched for the project irrespective of any variations and payments shall be released for the actual gross tonnage handled. The quantities indicated against each item may vary to any extent and no additional compensation will be payable due to variation of Individual quantity.**

Tenderers are required to take above into account while quoting the unit rates quoted as per Rate Schedule so as to take care of such variation during execution stage.

- 2.4.1 The contractor is to use his own equipment like suitable cranes / trucks / tractor trailers and other material handling equipment including all necessary small / major T&Ps required for the above work for 1 x 500 MW, Unchahar TPP except those specifically provided elsewhere in the tender.

- 2.5 Deleted

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### 2.6 The contractor under this contract shall also provide services of following manpower exclusively for use by BHEL:

- Qualified computer operators / Stenographer capable of operating the material management software package / other packages available at site or for office work for total 72 man months,
- Skilled workers for working in colony and for BHEL office for a total 72 man months and
- Unskilled workers for working in colony & BHEL office for a total 108 man months.

Persons so deployed may have to work in extended hours whenever required at no additional cost to BHEL. Workmen provided as per the above provisions shall be fully trained and experienced in the nature of work for which they are deployed.

**In case contractor fails to provide above-mentioned manpower as desired by BHEL, the latter shall have the right to hire such services from other agencies at the risk and cost of the contractor. In case these services are not utilized for any reason whatsoever, fully or partly, recovery at the rate of the prevailing minimum wages plus 25.08% (for statutory payments) at UNCHAHAR for the categories given plus 10% will be made from the final bill of the contractor. For Computer Operator if the minimum wage is not available in schedule it shall be taken as minimum wage for skilled worker plus 10%.**

- 2.7 It will be responsibility of the contractor to keep in touch with M/s NTPC and BHEL at site to find out the arrival of consignments, and release of truck/trailers after unloading.
- 2.8 Unloading of heavy or OD consignments (i.e. Stator, HP,IP,LP turbine) directly from trailers by suitable crane or by jack and sleeper method (all to be arranged by the contractor), at the location decided by BHEL engineer shall be carried out by the contractor within the quoted rate. All T&Ps including hydraulic jacks and wooden sleepers required for sleeper/jack method of unloading shall be arranged by the contractor. Use of EOT cranes shall be on chargeable basis at the applicable rates of NTPC plus BHEL overheads @ 5%.
- 2.9 Detailed verification of materials with reference to packing list / Loading advise slip / etc., after unpacking of boxes & crates; repacking where called for, after detailed verification; preparation of receipt inspection reports etc shall be carried out within the quoted rate within 30 days of the unloading. **If the verification is not carried out within 30 days for reasons attributable to the contractor, then BHEL is having right to carryout the verification at the risk and cost of the contractor**
- 2.10 BHEL will provide free of cost all necessary preservatives, paints, thinners, rust preventives, grease, lubricants and end caps to contractor for preservation of components. All tools & tackles and other consumables required for preservation of components including supervision shall however be provided by contractor at his own cost. Preservation of components includes applying preservatives, paints, rust preventives, greasing of threaded portions, fixing of end caps in position for pressure

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parts, repainting of work order / DU numbers, component codes etc. After preservation wherever necessary, components will be stacked properly as per original stacking for which no additional payment shall be made.

- 2.11 After the stacking/verification, the materials may need to be restacked / shifted within the storage area as per the instructions of the Engineer. **There shall not be any separate payment to the contractor for restacking/re-shifting of the materials.**
- 2.12 It shall be the responsibility of the contractor to keep in touch with Engineer at site and find out arrival of road consignments. The Contractor shall collect all the parcel way bills / lorry waybills from BHEL site office either personally or through an authorized representative. The contractor or his authorized representative shall, for the purpose, visit the said office every day and collect available GR, RR, LWB, and PWB etc. While collecting the GR, RR, LWB, PWB, contractor or his authorized representative will sign the register maintained for the purpose indicating date and time of collection. The contractor shall keep in touch with carriers and arrange to effect delivery of consignments immediately on their receipts. Delay may cause deterioration of goods apart from attracting demurrage charges. Contractor shall also maintain a register indicating date of RR, LWB, PWB, date of collection of the materials from road transport agencies / lorries and date of stacking them at storage yard of BHEL.
- 2.13 It is possible that in certain cases, dispatch documents may not be received in time but BHEL may receive Photostat copies of the same. It is, therefore, the responsibility of the contractor to collect these Photostat copies & indemnity bond from BHEL authorities at site.
- 2.14 Payment of all demurrage / wharfages that are due to contractor's fault, would be the responsibility of contractor and to his account. If BHEL has to make payment of demurrage / wharfages along with freight, the amount so paid as demurrage / wharfages, for the reasons stated above, shall be paid by the contractor forthwith or would be recovered from bills of the contractor
- 2.15 In any case contractor will pursue with concerned Carrier authorities at all level (local/HQ etc.) for waiver / reduction to the minimum of such demurrage charges. Whenever such demurrages become payables due to reasons not attributable to contractor, contractor will immediately bring it to the notice of BHEL with specific request to bear such charges. The decision of the Engineer in such case will be final and binding on the contractor.
- 2.16 Any discrepancy / shortage / damage found in the consignment after taking delivery from the carriers after giving clear receipt would be the responsibility of the contractor and the amount liable to be lost by BHEL on such accounts is recoverable from the contractor.

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In case of apparent damages / shortages in consignments /packing noticed by the contractor, such cases shall be brought to the notice of BHEL and cleared only with their consent/approval.

2.17 It would be the responsibility of the contractor to examine the packages, consignments, etc. on arrival and bring to the notice of carriers and BHEL Authorities regarding loss / damages, if any, observed in the consignments proposed to be taken delivery. Before taking delivery, particularly of consignments in 'smalls', the weight of the package shall be checked with the invoiced weight / contents of the packages and any discrepancy shall be reported immediately to BHEL/ carriers. In all the cases of loss / damages the contractor will take open delivery from the carriers. They shall forward such Open Delivery Certificates (ODC) to the Engineer within 7 days of retiring such consignments. All expenses connected therewith shall be to the account of contractor. BHEL reserves right to claim losses, if any, accrued to BHEL in the event of contractor's non-compliance to above.

2.18 BHEL reserves the right to recover from the contractor any loss which arises out of undue delay / discrepancy / shortage / damage or any other cause during transit and stacking (between the Road / carriers godowns / weigh bridges and BHEL storage yards / store sheds / project site), when the custody of the equipment is with the contractor.

2.19 Unloading from trailer at storage area / work site stacking and re-stacking of heavy sophisticated equipment like water wall panels, heavy motors, heavy bearings, generators, rotors, C&I panels, turbine components, pumps, panels etc. shall be done in the presence of or as per the directions of BHEL representative.

Certain items may be dispatched with tie rods/ strips welded with frame carrying items and with trailer. These tie rods / strips are required to cut by using Gas flame or by other method as directed by Engineer for unloading of materials.

2.20 Since, the trucks / trailers are expected to arrive during any time of the day / night, the contractor shall have his workmen round the clock at site as well as other places as required to unload the materials.

Consignments coming on Sundays and Holidays are also required to be handled by the contractor promptly. It will be the responsibility of the contractor to contact the site Engineer / his authorized representative of BHEL at their residence, if required, and obtain instructions to make suitable arrangements. The detention charges, if any, in the event of delay in unloading from the carrier due to contractor's fault, will be to contractor's account.

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2.21 It shall be the responsibility of the contractor, to provide all necessary facilities and tools to open the packages, in the presence of the Engineer, verifying their contents, re-packing wherever and whenever necessary, properly stacking them as may be directed by the Engineer. These works should be so done so as to facilitate proper handling, periodical verification of materials, receipt position, stock taking etc.  
The contractor shall have experienced persons at site who can maintain the records of dispatch / receipt/ stacking / verification / shortage / damage / missing items etc.

2.22 **All materials shall be stored at least 6" above ground level by use of concrete sleepers. No material shall be left to remain on ground at any time.** Materials shall not be stacked in low-lying areas, where they are likely to get flooded during rains. *Concrete sleepers qty 2500 nos.as mentioned in chapter-IV, clause no. 4.0 at Sl No.7 will be arranged by contractor* and balance concrete sleepers and tarpaulins for this purpose wherever deemed necessary will be arranged by BHEL free of cost as decided by BHEL ENGINEER. However these items shall be stacked / stored properly at a location(s) specified by BHEL when not in use. The contractor is expected to use these most judiciously. In case it is observed that the contractor is not utilizing these optimally, he could be asked to re-stack the same at his cost.

2.23 It is possible that certain heavy items / consignments will require fabrication of a suitable shed over it. These sheds will be covered with suitable sheets or tarpaulin. The contractor will be required to fabricate such sheds. All materials required for this will be provided by BHEL. However all expenses towards manpower, T&P, consumables etc will be borne by the contractor. After the completion of the work the contractor will dismantle the same and return these materials back to the stores. The contractor will be paid @ Rs. 9500/- per MT for such works.

**NO ADDITIONAL PAYMENT SHALL BE MADE IN CASE THE STRUCTURE IS FABRICATED OF SCAFFOLDING PIPES, CLAMPS & GI SHEETS. IN SUCH CASES THE MATERIAL SHALL BE ISSUED BY BHEL FREE OF CHARGE TO THE CONTRACTOR. HE SHALL ENSURE THAT THE SAME ARE RETURNED TO THE STORE AFTER THE EQUIPMENT HAS BEEN ISSUED.**

2.24 The material / equipment requiring indoor storage will be handled and stacked inside the storage shed (provided by BHEL) by the contractor using own material handling equipments.

2.25 **For checking / verification of the components / packages with packing slips GR/ LWB etc., sufficient experienced persons and other facilities**

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**shall be provided by the contractor as and when required by the Engineer.**

- 2.26 Stacking of the material shall be done as per the instructions and to the satisfaction of the Engineer. The materials shall be so stacked that the same should facilitate easy handling. In the event of any improper stacking BHEL may ask the contractor to re-stack the material properly or failing which BHEL may get the job done by any other agency at the risk and cost of the Contractor.
- 2.27 The contractor shall execute the work in the most substantial and workman like manner. The stores shall be handled with care and diligence. Any loss to BHEL due to contractor's lapse / negligence shall have to be made good by the contractor.
- 2.28 In case contractor is not able to unload, transport, stack the material at a pre-determined area, as per direction of the Engineer for any reason whatsoever (including non-availability of crane, tractor trailer and other T&P etc.), BHEL shall be at liberty to get the work done by engaging other agency / equipment / T&P etc. at the risk and cost of the contractor.
- 2.29 If the contractor or his workmen shall break, deface injure or destroy any part of a building, road, Serbs, fenced enclosures, water pipes, cables, drains, electric or telephone posts or wires, trees, stored components or any other property or to any part of erected equipment etc., the contractor shall make the same good at his cost or in default the Engineer may cause the same to be made good by other workmen/agency or by other means and deduct the expense (of which the BHEL Engineer's decision is final) from any sum that may be then or at any time thereafter become due to the contractor or from his security deposit or any other money due
- 2.30 **It shall be the responsibility of the contractor to keep the storage areas (closed / semi-closed / open) in neat and tidy conditions. Any vegetation like grass, bushes, Sarkandas etc. shall be cut periodically in open storage area & removed as per requirement & instructions of BHEL Engineer within the contractual value.** All surplus / unusable packing materials shall be removed and deposited at location(s) specified by BHEL within the project premises (including weighing of the same within the project premises if required).
- 2.31 Normally the consignments from BHEL's manufacturing units / their sub-suppliers are sent on freight paid basis. In case any consignment is received at any place on freight to pay basis, it will be the responsibility of the contractor to pay the freight and take delivery of such consignments. The amount of freight paid by the contractor at any point of time in such

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cases will be limited to Rs. 5,000/-. However, the freight paid by the Contractor will be reimbursed by BHEL within a week's time on production of relevant receipts. In case of freight amounts exceeds Rs. 5,000/- contractor may request BHEL well in time to issue cheque/draft for such amounts in favor of carriers towards freight charges.

2.32 Normally the consignments are expected to be received inside the Project area. But in case any consignment is booked to any other place in and around UNCHAHAR, it will be the responsibility of the contractor, if necessary and desired by BHEL, takes delivery as desired by BHEL Engineer. The reimbursement of freight paid, as envisaged in clause 2.31 will be made to the contractor.

2.33 In case some materials are required to be dispatched from UNCHAHAR to manufacturing units, other sites or any other place, the contractor may be asked by the Engineer to get the same packed, transport it to nearest Railway Station / Carrier's godowns and get the same booked. **There shall not be any separate payment to the contractor for Handling and loading of outgoing materials.**

In case of material is required to be booked as freight paid, the freight for the consignment limited to **Rs.5,000/-** shall be paid by the contractor. However, it shall be reimbursed by BHEL on submission of receipt within a week's time. The funds for freight charges exceeding Rs. 5,000/- shall be arranged by BHEL. Packing material required shall be provided by BHEL free of cost.

2.34 In case some of consignments are to be dispatched on full truck /trailer load basis, where the carriers will place their fleet inside the plant for loading, the contractor shall collect them from different locations of store sheds/yard and load by using his/BHEL crane and labour.

2.35 The contractor will arrange for gate passes and any other permits required for carrying out his work from the respective agencies at his own cost. He will also comply with regulations of the customer within the project area, any of the State Government and other Government agencies.

2.36 NTPC or his authorized agents may inspect stores, storage yard, etc during the currency of the contract awarded to him. The contractor shall make necessary arrangements for such inspection and carry out the rectification pointed out by the owner/employer without any extra cost to the owner / employer. No cost whatsoever for such duplication of inspection of work will be entertained.

2.37 For any exigencies during execution of the contract, the contractor shall have to depute his personnel for collection/delivery of any material meant for site from/to out station if desired and instructed by the Engineer. The

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

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contractor will however be reimbursed expenses incurred for such work for person deputed, as below:-

- Second class train fare with reservation / supplementary charges/bus fare subject to furnishing details regarding ticket numbers, journey details, amount of fare etc.
- Local conveyance charges (Actual bus / cycle rickshaw/ auto rickshaw fare for local journeys at out station) as permitted by the Engineer.
- Daily allowances @ Rs.200/- per day and @ Rs.500/- per day for lodging.
- Postal / telegraphic / telephones charges, if any, subject to production of proof of having incurred such expenditure.
- Freight and other charges, if any, paid on production of actual receipts.
- Payment for the above will be made by BHEL within a month from the date of submission of bill along with details / desired documents by the contractor subject to completion of work assigned to contractor personnel and to the entire satisfaction of the Engineer.

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

I. Manual ledgers & records.

II. Computerized database application:

BHEL has developed a software application named site operations management system (SOMS) that Captures all the data in the entire chain of transactions starting with Master list of project materials, records of dispatch, receipt, inspection, issue, return, consumption etc.

Some of these records are master shipping/packing list, LR/RR register, Daybook register, stock register, records of issues to & return of materials in respect of various erection subcontractors, insurance claim records, periodical status reports in various formats covering desired aspects and output information as per BHEL/Client's requirement.

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

Contractor shall engage skilled & qualified personnel for material management in the area of material receipt & its unloading, verification of materials, preservation of materials, record keeping of materials & for dealing with insurance claims. For some of the above important area of works minimum deployment of workers, for the contract period shall be as follows:

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| SL NO | ACTIVITY/DESCRIPTION  | MINIMUM NO. OF PERSONS | REMARKS   |
|-------|---|------------------------|---|
| 1     | MATERIAL RECEIPT/UNLOADING, COLLECTION/ BOOKINGS                              | 2                      | TO BE DEPLOYED FROM START OF CONTRACT PERIOD  |
| 2     | DETAILED VERIFICATION   | 2                      | TO BE DEPLOYED FROM START OF CONTRACT PERIOD  |
| 3     | MATERIAL ISSUE (BOILER)   | 1                      | TO BE DEPLOYED FROM START OF CONTRACT PERIOD  |
| 4     | MATERIAL ISSUE (TG, T&P, C&I)   | 1                      | FROM THE START OF TG ERECTION   |
| 5     | PRESERVATION  | 1 + 2                  | GANG OF 2 LABOURS LEAD BY 1 QUALIFIED PERSON FROM 5 TH MONTH ONWARDS OF CONTRACT PERIOD |
| 6     | RECORD KEEPING (BOILER STOCK)   | 1                      | FROM START OF CONTRACT PERIOD   |
| 7     | RECORD KEEPING (TG,C&I)   | 1                      | FROM THE START OF TG ERECTION   |
| 8     | RECORD KEEPING (T&P STOCK, MRC, ASSISTANCE IN INSURANCE CLAIMS, PURCHASE, ETC | 1                      | 1ST MONTH FROM START OF CONTRACT PERIOD   |

**NOTE:** THE NO. OF PERSONS INDICATED ABOVE IS TENTATIVE AND ACTUAL DEPLOYMENT MAY VARY BASED ON WORK LOAD AND SITE REQUIREMENT, NOR THE DEPLOYMENT ABSOLVES THE CONTRACTOR FROM HIS RESPONSIBILITY TOWARDS THE SATISFACTORY EXECUTION OF THE JOB

2.39 Contractor shall make necessary arrangements to ensure following :

2.39.1 Contractor has to maintain contact with local hospital having ambulance facility, scanning & other ultra modern medical facilities required during emergency

2.39.2 Contractor has to ensure pre employment medical check for all staff & workers.

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2.39.3 Contractor has to ensure that adequate First Aid facilities with trained nurse are available at work site for emergency purpose. This emergency set-up should include, but not limited to, following

- Male nurse (in shifts)
- Oxygen set up
- Breathing apparatus
- Eye wash facility
- Stretcher
- Trauma blanket
- Medicines.

In addition to above, BHEL (through its other contractor) has arranged ambulance at work site for emergency purpose, which can be utilized by the contractor in case of emergency. The charges for the same will be decided mutually at site. In case, under unavoidable circumstances, if the ambulance is not available / being used elsewhere, the contractor will have to arrange for the same as under clause 2.39.1.

### **2.41 Deleted**

**2.42** Contractor shall ensure daily housekeeping and keep proper cleanliness of work place and do the disposal of wastes to certified area.

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-III: Facilities in the scope of BHEL/Contractor**

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**3.0 FACILITIES IN THE SCOPE OF BHEL/CONTRACTOR**

| S. No.       | Description                     | Scope /to<br>be taken<br>care by |            | Remarks   |
|--------------|---------------------------------|----------------------------------|------------|---|
|              |                                 | BHEL                             | Contractor |   |
| <b>1.1.0</b> | <b>ESTABLISHMENT</b>            |                                  |            |   |
| <b>1.1.1</b> | <b>FOR CONSTRUCTION PURPOSE</b> |                                  |            |   |
| <b>A.</b>    | Open space for office           | <b>YES</b>                       |            | Limited space (free of charge)<br><br>As and where made available by customer<br><br>M/s NTPC |
| <b>B.</b>    | Open space for storage          | <b>YES</b>                       |            | Limited space (free of charge)<br><br>As and where made available by customer<br><br>M/s NTPC |
| <b>1.1.2</b> | <b>FOR LABOUR COLONY</b>        |                                  |            |   |
| <b>A</b>     | Open space                      |                                  | <b>YES</b> | Contractor have to make their own   |

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-III: Facilities in the scope of BHEL/Contractor**

|                |  |            |            | arrangement  |
|----------------|--|------------|------------|--|
| <b>1.2.0</b>   | <b>ELECTRICITY</b>   |            |            |  |
| <b>1.2.1.</b>  | Electricity for construction purposes<br>(chargeable/free)   |            |            |  |
| <b>1.2.1.1</b> | Single point source  | <b>YES</b> |            | FREE BASIS   |
| <b>1.2.1.2</b> | Further distribution for the work to be done<br>which include supply of materials & execution                    |            | <b>YES</b> |  |
| <b>1.2.2</b>   | Electricity for the office, stores, canteen etc<br>of the bidder which include:                                  |            | <b>YES</b> |  |
| <b>1.2.2.1</b> | Distribution from single point including<br>supply of materials & service  |            | <b>YES</b> |  |
| <b>1.2.2.2</b> | Supply, Installation & connection of material<br>of energy meter including operation &<br>maintenance            |            | <b>YES</b> |  |
| <b>1.2.2.3</b> | Duties & deposits including statutory<br>clearances for above  |            | <b>YES</b> |  |
| <b>1.2.2.4</b> | Demobilization of the facilities after<br>completion of works  |            | <b>YES</b> |  |
| <b>1.2.2.5</b> | Electricity for living accommodation of the<br>bidder's Staff, engineers, supervisors etc. on<br>the above Lines |            | <b>YES</b> | <b>Chargeable</b><br><br>As per prevailing rates<br><br>Contractor shall install<br>calibrated energy<br>meter for metering<br>electricity<br>consumption. |

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**Chapter-III: Facilities in the scope of BHEL/Contractor**

|                |   |  |            |                                       |
|----------------|---|--|------------|---------------------------------------|
|                |   |  |            |                                       |
| <b>1.3.0</b>   | <b>WATER SUPPLY</b>   |  |            |                                       |
| <b>1.3.1</b>   | <b>FOR CONSTRUCTION</b>   |  |            |                                       |
| <b>1.3.1.1</b> | Making the water available at single point  |  | <b>YES</b> | Contractor has to arrange on his own. |
| <b>1.3.1.2</b> | Further distribution as per the requirement of work including supply of materials & execution   |  | <b>YES</b> |                                       |
| <b>1.3.2</b>   | <b>FOR LABOUR COLONY</b>  |  |            |                                       |
| <b>1.3.2.1</b> | Making the water available at single point  |  | YES        | Contractor has to arrange on his own. |
| <b>1.3.2.2</b> | Further distribution as per the requirement of work including supply of materials & execution   |  | YES        |                                       |
| <b>1.4.0</b>   | <b>LIGHTING</b>   |  |            |                                       |
| <b>1.4.1</b>   | For Material Handling work (supply of all materials)<br><br>1. At office storage area<br><br>2. At Yard or any other places where material is unloaded/stored |  | <b>YES</b> |                                       |

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**Chapter-III: Facilities in the scope of BHEL/Contractor**

|              |   |  |            |  |
|--------------|---|--|------------|--|
| <b>1.4.2</b> | For material handling work (execution of lighting work/arrangements)<br><br>1. At office storage area<br><br>2. At Yard or any other places where material is unloaded/stored |  | <b>YES</b> |  |
| <b>1.4.3</b> | Providing the necessary consumables like bulbs, tube lights, Switches, etc. for maintaining the lighting system   |  | <b>YES</b> |  |
| <b>1.5.0</b> | <b>Communications facilities for site operations of the bidder</b>  |  |            |  |
| <b>1.5.1</b> | Telephone/mobile, fax, internet, email etc.   |  | <b>YES</b> |  |

- 3.1** BHEL will not be responsible for any loss or damage to the contractor's equipment as a result of variation in voltage or frequency or interruptions in power supply.
- 3.2** The Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical facilities etc. at his own cost as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him.
- 3.3** Provision of distribution lines of both electrical power and water from the central points to the required place with proper distribution boards observing the safety rules laid down by the electrical authorities of the state shall be done by the contractor, supplying all the materials like cables, distribution board, switch boards, TPN, CBS, ELCBS/ MCCBS/ Copper / Brass clamps, copper conductor, change over switches pipes etc. at his own cost. If any failure is caused in supply of the power and water, it is the responsibility of the contractor to make alternate arrangements at his cost. The contractor shall adjust his working shifts / hours accordingly and deploy additional manpower if necessary so as to achieve the targets. **The energy meter to be installed by the contractor & shall be tested and certified by State Electricity Board or any other agency approved by the NTPC at his cost.**
- 3.4** The contractor while drawing construction power supply from Distribution Board should strictly adhere to following points.
- a) All electrical installations should be as per Indian Electricity rules.
  - b) All distribution Boards installed by the contractor should be constructed with fireproof materials viz. Steel frames, Bakelite sheets etc.

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## Chapter-III: Facilities in the scope of BHEL/Contractor

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- c) Connection for single phase should be taken from phase and neutral. Nowhere the connection should be taken with earth as neutral.
  - d) All electrical connections should be made through connectors, nuts and bolts, switches, plug and sockets. Loose connections or hooking up of wires shall not be permitted.
  - e) Contractor has to make their own earthing arrangement for their equipment / DB earthing.
  - f) All electrical equipment / tools and plants should be properly earthed. DBs to be earthed diagonally opposite at two points.
  - g) Contractor should use “MCCB” and “ELCB” either on incoming or outgoing connections to the DBs.
  - h) Contractor should ensure that all the CBs / TPNs/ Fuses/ MCCB / ELCB cables etc. should be of adequate rating/ capacity.
  - i) For permission of supply connections contractor has to submit a test report of their installations with a single line diagram of connected/ proposed loads.
- 3.5** ELCB will be tested once in a week or as directed by BHEL by actually simulating the earth leakage for all installations and the same shall be recorded in the logbook to be maintained by the contractor.
- 3.6** In case of power cuts / load shedding no compensation for idle labour or extension of time for completion of work will be given to contractor.
- 3.7** On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and leveled and debris shall be removed, as per instructions of BHEL, by the contractor at his cost. In the event of his failure to do so, the Engineer will get it done and expenses incurred shall be recovered from the contractor along with prevailing overheads. The decision of BHEL Engineer in this regard shall be final.

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-IV: T&P and MMEs to be deployed by contractor**

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**4.0 T&P DEPLOYED BY CONTRACTOR**

| S.No. | EQUIPMENT  | Qty (in Nos.) | Deployment Period              |           |              |
|-------|--|---------------|--------------------------------|-----------|--------------|
|       |  |               | From                           | To        | Total Period |
| 1.    | 40 T Tyre Mounted/<br>Crawler Crane                              | 01            | From start of contract period* | 30 months | 30 months    |
| 2.    | 20 T Trailer with prime mover.                                   | 01            | Start of contract period*      | 36 months | 36 months    |
| 3.    | 60 T Trailer with prime mover.                                   | APR**         | APR                            |           |              |
| 4.    | 10/20/50/100 Hydraulic Jacks                                     | APR**         | APR                            |           |              |
| 5.    | Precast reinforced concrete sleeper<br>Size (mm)<br>150x300x1200 | 2500          | APR                            |           |              |

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IV: T&P and MMEs to be deployed by contractor

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\*The date of start of contract period shall be the mutually agreed date between the contractor and BHEL engineer to start the work. In case of discrepancy the decision of BHEL engineer is final.

\*\* APR- As per requirement (Contractor shall have to deploy the T&P whenever required at site as decided by BHEL ENGINEER)

4.1 The above list specifies only major T&Ps (may not be complete) to be deployed by the contractor and is based on minimum requirement. All additional / other tools and plants including suitable capacity D shackles, slings, rails, sleepers, hydraulic / mechanical jacks etc which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price.

4.2 Crane log sheet for each of the crane on daily basis are to be certified by the BHEL engineer. Contractor shall submit the monthly Running Account Bills along with duly certified log sheets.

4.3 Contractor shall ensure that all the cranes and trailers mentioned in the deployment plan shall be in good working condition throughout the period mentioned in the deployment plan. In case of non-compliance if any as **listed in clause 4.4 below**, the charges as mentioned in clause 4.5 below shall be deducted in the running bills of the respective months for any or all of the non-compliance if any, as mentioned below.

(Explanation: If there is non-compliance as listed below in any one particular crane in any one month then the charges shall be deducted in the running bill of that month for that crane).

4.4 List of non-compliance:

a) Non availability / not working condition of the particular crane cumulatively for more than ten working days in the calendar month during the period mentioned in the deployment plan.

OR

b) Non availability / not working condition of the particular crane for more than five consecutive working days in the month during the period mentioned in the deployment plan.

Whichever is higher will be considered.

4.5 The deduction shall be as given below:

**Deduction for the month = 1.2 times of the amount of Charges per month calculated as per the Cl. No. 7.5 S.No.2**

## TECHNICAL CONDITIONS OF CONTRACT (TCC)

### Chapter-IV: T&P and MMEs to be deployed by contractor

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- 4.6 In addition to the deduction mentioned in clause 4.4 above, if work gets delayed due to non-availability of any T & P, BHEL reserves the right to get the work done at the risk and cost of contractor.
- 4.7 Any or part or all of the T & Ps of the contractor identified for the tendered package shall not be engaged for any works other than that of the works intended in this tender.
- 4.8 In case BHEL decides to engage the cranes for any of its job then the contractor is bound to operate the cranes with his own operator as per the direction of BHEL engineer. However, the mutually agreed charges towards high speed Diesel only shall be paid to the contractor. No other charges shall be payable to contractor on account of this.
- 4.9 During the extended period of contract, if any, contractor shall arrange all T & Ps excluding the cranes and trailers. Arranging cranes and trailers shall be governed suitably by clause 4.10 below.
- 4.10 Deployment of cranes and trailers mentioned in the deployment plan, if required for more period of deployment, over and above the indicated period, shall be deployed by the contractor against specific request from BHEL. The charges towards deployment of the particular T & P for each month shall be paid which are calculated as per the Cl. No. 7.5 S. No.2.
- 4.11 **PROVIDING PRECAST REINFORCED CONCRETE SLEEPER OF SIZE 300MM WIDE X150MM DEPTHX1200MM LENGTH USING 1:2:4 CONCRETE MIX INCLUDING PROVIDING AND FIXING OF TRANSPORTATION HOOKS OF 10 MM DIA BARS (2 NOS. TO EACH SLEEPER, MIN. 150 MM CLEAR LENGTH), MOULDING AND REINFORCEMENT (2-10 MM DIA T&B AND 10 MM STIRRUPS @ C/C 250MM).**

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter V: T&Ps and MMEs to be deployed by BHEL on sharing basis**

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**5.0 T&P MME DEPLOYED BY BHEL ON SHARING BASIS**

| <b>LIST OF T&amp;P BEING PROVIDED BY BHEL ON FREE OF HIRE CHARGES AND ON SHARING BASIS</b> |   |                  |             |
|--|---|------------------|-------------|
| <b>Sl. No.</b>   | <b>Equipment</b>  | <b>Capacity</b>  | <b>Qty.</b> |
| 1  | <b>CRAWLER CRANE</b>  | 75 / 100 /135 MT | 1 No        |
| 2  | <b>Hydra Crane (To be provided to contractor for full duration)</b> | 14 MT            | 1 No.       |
| 3  | <b>Hydra Crane (To be provided to contractor for full duration)</b> | 14 MT            | 1 No        |

**NOTES:**

1. Cl.4.2.2.16 c.) of SCC shall read as day-to-day upkeep and running maintenance like filling topping up of lubricants, changing filters, etc including repair of self starter, batteries and dynamo of these cranes shall be the responsibility of the contractor. If on checking it is found that the same is not followed, BHEL will exercise its right to get the job/works done at the risk and cost of contractor. BHEL may also provided cranes through crane hiring agencies in which case the day-to-day upkeep and running maintenance shall be excluded from scope of contractor.
2. **Cl.4.2.2.16 e.) of SCC. The operator for BHEL's cranes 100 MT & above capacity being provided by BHEL free of cost. Crane Operators for 14 MT and 75 MT BHEL cranes will be provided by the Contractor. Further, Helpers and fuel for operation of all BHEL cranes shall be provided by contractor within the final accepted rates.**
3. The Cranes at Sl No. 1 will be provided as per requirement & availability for special package handling only at the sole discretion of the BHEL Engineer
4. The contractor shall make necessary arrangement like laying of special sleeper beds, assembly & dismantling of heavy lift attachment, boom, jib etc. for movement and operation of crane.
5. Other T&P mention above contractor shall transport from BHEL stores, install, operate, carry out maintenance, dismantle after use and return to BHEL stores.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VI: Time Schedule

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### 6.0 TIME SCHEDULE

- 6.1 The contractor is required to commence the work within 15 days from the date of issue of letter of intent (LOI) unless BHEL decides to fix any other later date. However, BHEL Engineer will certify the actual date of start of work after adequate mobilization of manpower, material handling equipment and other T&P by the contractor.
- 6.2 Major materials as covered within the scope of this tender are likely to be received in stages up to 36 months from the actual date of start of work.  
**The Contract period shall be considered as 36 (Thirty Six) months.**
- 6.3 The scope of work under this contract is deemed to be completed, when so certified by the Engineer.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VII: Terms of Payment

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### 7.0 TERMS OF PAYMENT

- 7.1 The 'Engineer' will certify regarding the actual work executed in the measurement books and bills, which shall be accepted by the contractor in measurement book.
- 7.2 Contractor shall submit bills for the work completed under the specification, once in a month detailing work done during the month. The format for billing shall be approved by BHEL before raising invoices and payment shall be released within 30 days of receipt of Bill complete in all respect.
- 7.3 Shortage / damage reports on BHEL's standard materials management forms and No payment shall be released till the contractor submits these reports and are verified by the Engineer.
- 7.4 Subject to any deduction which BHEL may be authorized to make under the contract, the contractor on the certificate of the Engineer at site be entitled for payment as explained hereunder

### 7.5 PAYMENT FOR T&P DEPLOYMENT (42 % of ITEM NO. 1.1 of Rate Schedule)

1. Payment for the month as given in (c) below shall be paid on monthly basis on meeting the conditions (a) & (b) below.
  - (a) If the cranes are available in working condition in line with clause no 4.0 of Chapter-IV.
  - (b) If unloading of all the received materials in that billing month is completed.
  - (c) Monthly pro-rata payment for deployment of T & Ps =  
The amount of Charges per month calculated as per annexure-II of Price bid and value which comes for each item (crane / trailer) shall be the amount payable towards deployment of major T & Ps for each month.

Monthly pro-rata payment for deployment of T & Ps shall be as mentioned below:

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VII: Terms of Payment

---

### 2. Monthly pro-rata payment for cranes/trailer

| S.no | Crane / Trailer | The percentage of charges per month per item to be considered for the purpose of payment for the cranes and trailers deployed during the original & extended period of contract, if any. |
|------|-----------------|--|
| 01   | 40T Crane       | 0.0103333% of Lump sum charges of item 1.1.  |
| 02   | 20T trailer     | 0.0030556% of Lump sum charges of item 1.1.  |

### 7.6 58% of Lumpsum rate of item no. 1.1 will be paid per ton basis as below:

Rate per MT of materials = 58% of the Total Value of Item No. 1.1 of Rate Schedule.

Total tonnage (45700MT for this tender)

The 'Rate per MT of materials' calculated as above shall be paid on completion of the activities mentioned in the following table on pro-rata basis.

| SL NO | Description of Activity  | % of Payment |
|-------|--|--------------|
| 1.    | UNLOADING, SHIFTING TO OPEN/ COVERED STORES  | 5%           |
| 2.    | UPDATION OF RECEIPT DETAILS, IN STORE MATERIAL REGISTERS/BHEL MM PACKAGE SYSTEM  | 20%          |
| 3.    | STACKING AND VERIFICATION  | 30%          |
| 4.    | UPDATION OF VERIFICATION DETAILS IN MATERIAL STOCK REGISTERS, SUBMISSION OF REPORTS AS PER SPECIFIED FORMATS FOR SHORTAGE/OPEN DELIVERY, LODGING OF POLICE REPORTS IF REQUIRED, DOCUMENTS FOR INSURANCE CLAIMS ETC, AND PREPARATION OF MATERIAL RECEIPT CERTIFICATES IN PRESCRIBED FORMATS WHERE EVER APPLICABLE | 20%          |

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VII: Terms of Payment

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|    |   |             |
|----|---|-------------|
| 5. | IDENTIFICATION OF MATERIAL IN READY TO LIFT POSITION FOR ISSUE TO BHEL/ERECTION AGENCY, AND UPDATION OF ISSUE DETAILS IN STORES RECORDS | 22%         |
| 6. | REMOVAL OF GRASS/WEEDS AND OTHER PLANT GROWTH IN THE STORE AREA AS PLANNED FOR THE MONTH  | 1%          |
| 7. | Safety+Illumination AS PLANNED FOR THE MONTH  | 1%          |
| 8. | Preservation planned for month  | 1%          |
|    | <b>Total</b>  | <b>100%</b> |

**Note:-**

- **Sr. No.6, 7 &8 of above will be paid only after satisfactory completion as per plan otherwise Forfeited from monthly RA bill and cannot be paid in next RA/Final Bill.**

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VIII: Taxes and other Duties

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### 8.0 TAXES, DUTIES, LEVIES

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:

### 8.1 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.

Contractor shall submit to BHEL documentary evidence of Service Tax registration certificate specifying name of services covered under this contract. For the purpose of claiming any Service Tax from BHEL, the following procedure shall be adopted:

Contractor shall submit serially numbered Service Tax and Cess Invoices, signed by him or a person authorized by him in respect of taxable service provided, and shall contain the following, namely:

- 1-The name, address and registration number of the contractor.
- 2-The name and address of the party receiving taxable service (BHEL).
- 3-Description, classification and value of taxable service provided and.
- 4-The Service Tax payable thereon.

All the four conditions shall be fulfilled in the invoice for payment of Service Tax by BHEL.

Where more than one nature of Service under Service Tax Rules is involved, the invoice mentioned above shall contain the breakup of all values for each nature of Service.

**The Contractor shall be eligible for reimbursement of service tax provided the Service Tax invoice is raised and submitted with BHEL within 30 days from the completion of service, in line with Provisions of Rule 4A of the service tax rules, 1994.**

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VIII: Taxes and other Duties

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### 8.2 VAT (Sales Tax /WCT)

The rates quoted by the Contractor shall be inclusive of VAT/Sales Tax and BHEL shall not reimburse any amount on this account due to any reason whatsoever.

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.

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.

Contractor has to make his own arrangement at his cost for completing the formalities, if required, with Sales Tax/VAT Authorities, for bringing all their material, plant and equipment etc at site for the execution of the work, including arrangement of Road Permits if and as applicable under the relevant VAT Act.

### 8.3 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.

### 8.4 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.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter IX: Other Requirements

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### **9.0 OTHER REQUIREMENTS**

#### **9.1 PERFORMANCE GUARANTEE:**

Irrespective of provisions in tender elsewhere, in view of nature of work, performance guarantee is not required under this contract.

## IMPORTANT CONDITIONS

### 10.1 Price Variation Clause (Clause No. 2.17 of GCC):

- a) PVC shall be applicable only for rates/ payments made as in cl no. 7.6 of TCC.
- b) Calculation criteria for PVC shall be as below:

- I. Clause No. 2.17.5 of GCC: Base date shall be the calendar month **of the schedule completion date of the contract.**

**Schedule Completion date shall be the actual start date plus delivery period as defined in clause no 6.0 of TCC**

- II. Clause No. 2.17.9 of GCC: PVC shall be applicable only **for the extended period of contract (if any) after the schedule completion date.** However, the total Quantum of PriceVariation amount payable/recoverable shall be regulated as follows:

- For the portion of backlog attributable to the contractor, **no PVC shall be paid.**
- For the period of Force Majeure, the PVC (if applicable) will be limited to the indices applicable at the beginning of the force majeure period.
- For the portion of backlog attributable to BHEL, the PVC will be as per the indices applicable for the respective months
- The total amount of PVC shall not exceed 20% of the cumulatively executed contract value. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items and Extra works.

**All other terms & conditions of clause no. 2.17 shall remain same.**

### 10.2 Over Run Compensation (Clause No. 2.12 of GCC):

Over-run compensation shall be applicable only for the rates as calculated in clause 7.6 of Technical conditions of Contract.

### 10.3 Quantity Variation (Clause No. 2.14 of GCC):

For this clause 'Awarded contract value' shall be read as 58 % of the Item rates mentioned at Item No. 1.1 of LOI. If operated, the quantity variation shall be subjected to condition that the value of awarded contract value in the said clause for this tender shall be only 58% of the awarded contract value. (as 42% of the awarded contract value is

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter X: Important Conditions

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fixed for T&P). The variation in executed contract value shall be calculated with respect to 58% of the awarded contract value and not to 100% of awarded contract value.

Explanation: Generally the meaning of awarded contract value in clause 2.14 of General Conditions of Contract (Volume-IC of Book II) shall be the price mentioned in the 'Letter of Intent'. Let this price be say 'X'. For this tender, the awarded contract value shall be only 58% of X instead of 100% of X for the purpose of quantity variation.

Compensation for quantity variation =  $0.15 \times (\text{executed value as per rate schedule sl no 1} - 0.58 \times \text{LOI value})$

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter XI: Annexures

### ANNEXURE – I

#### GENERAL IDEA OF WEIGHTS TO BE HANDLED

The information given below is very tentative and not complete. Only a few of the typical components are listed below to give a general idea to the bidder. The weights and sizes indicated below are only approximate and are liable to vary.

|              |   |                                     |   |
|--------------|---|-------------------------------------|---|
| <b>A.</b>    | <b>Approximate total weight of material</b>   | <b>45700 MT</b>                     |   |
| i            | <b>Approximate Weight of Boiler&amp; Aux.</b>   | <b>27955 MT</b>                     |   |
| ii           | <b>Approximate Weight of Piping System</b>  | <b>3288 MT</b>                      |   |
| iii          | <b>Approximate Weight of TG &amp; Aux</b>   | <b>2173 MT</b>                      |   |
| iv           | <b>Approximate Weight of PEM supply</b>   | <b>489 MT</b>                       |   |
| v            | <b>Approximate Weight C&amp;I, Station C&amp;I</b>  | <b>2234 MT</b>                      |   |
| vi           | <b>Approximate Weight Hyderabad supply</b>  | <b>593 MT</b>                       |   |
| vii          | <b>Approximate Weight of ESP (Fans, RAPH, Gates &amp; Dampers &amp; TR set for ESP)</b>       | <b>8470 MT</b>                      |   |
| viii         | <b>Approximate Weight of Structural Steel plus misc</b>                                       | <b>498 MT</b>                       |   |
| <b>B.</b>    | <b>General idea of some major components (Single Piece) to be handled under this package.</b> |                                     |   |
| <b>S.No.</b> | <b>Description</b>  | <b>Approx. Gross Wt./Piece (MT)</b> | <b>Approx. dimensions of Packages in mm (LxWxH)</b> |
| 1            | Boiler Drum   | 246                                 |   |
| 2.           | Heaviest Ceiling Girder   | 125                                 |   |
| 3.           | HP Turbine  | 88                                  | 5675X3400X2900                                      |
| 4.           | IP Turbine Rotor  | 23                                  | 4800X2120X1995                                      |

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter XI: Annexures

|    |                  |     |                 |
|----|------------------|-----|-----------------|
| 5. | LP Turbine Rotor | 95  | 8800X4000X4162  |
| 6. | Generator stator | 258 | 8830X4100X4120  |
| 7. | Generator rotor  | 68  | 14000X1850X1750 |

### NOTES:

1. The weight mentioned above is approximate and liable to vary as per design consideration of the manufacturing unit.
2. The payment will be made at the quoted / accepted rates for the tonnage actually handled.
3. The list is only illustrative and not exhaustive

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter XI: Annexures

### ANNEXURE-II

#### PRICE BREAK UP DETAILS

(Bidders shall not fill up anything in this page)

| S. no                            | Description   | Break up price in Rs.   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
|----------------------------------|---|---|--------------------------|------------------------|-------------------------|-------------------------|--|------|----|--------------|----|-----------|----|--------------------------|------------------------|-----------|----|-------------|----|--------------------------|----------|-----------|---|----------------------------------|--|-------|----------------|-----------|-----|-------------|-----|
| 01                               | Lumpsum charges towards deploying of cranes and trailers inclusive of crane Operator, trailer driver, maintenance, all consumables and fuels for the following T & Ps and the period as mentioned below: <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sl no</th> <th rowspan="2">Crane</th> <th rowspan="2">Qty in Nos</th> <th colspan="3">Total Deployment period</th> </tr> <tr> <th>From</th> <th>To</th> <th>Total period</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>40T Crane</td> <td>01</td> <td>Start of contract period</td> <td>30<sup>th</sup> month</td> <td>30 months</td> </tr> <tr> <td>02</td> <td>20T trailer</td> <td>01</td> <td>Start of contract period</td> <td>36 month</td> <td>36 months</td> </tr> </tbody> </table> | Sl no   | Crane                    | Qty in Nos             | Total Deployment period |                         |  | From | To | Total period | 01 | 40T Crane | 01 | Start of contract period | 30 <sup>th</sup> month | 30 months | 02 | 20T trailer | 01 | Start of contract period | 36 month | 36 months | <b>42%</b> of total price to be quoted in the item no.1.1 shall be assigned as below: <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Assigned Break up for the cranes</th> </tr> <tr> <th>Crane</th> <th>Assigned value</th> </tr> </thead> <tbody> <tr> <td>40T crane</td> <td>31%</td> </tr> <tr> <td>20T trailer</td> <td>11%</td> </tr> </tbody> </table> | Assigned Break up for the cranes |  | Crane | Assigned value | 40T crane | 31% | 20T trailer | 11% |
| Sl no                            | Crane   |   |                          |                        | Qty in Nos              | Total Deployment period |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
|                                  |   | From  | To                       | Total period           |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| 01                               | 40T Crane   | 01  | Start of contract period | 30 <sup>th</sup> month | 30 months               |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| 02                               | 20T trailer   | 01  | Start of contract period | 36 month               | 36 months               |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| Assigned Break up for the cranes |   |   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| Crane                            | Assigned value  |   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| 40T crane                        | 31%   |   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| 20T trailer                      | 11%   |   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| 02                               | Lumpsum charges towards other services like manpower, T& Ps other than cranes and trailer etc. for Item No. 1.1   | <b>58%</b> of total price to be quoted in the item no.1.1<br>Note: Only this value will be taken into account for the purpose of quantity variation, Over run compensation and Price variation clause |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |
| Total of S. no 01 & 02 above     |   | <b>100%</b>   |                          |                        |                         |                         |  |      |    |              |    |           |    |                          |                        |           |    |             |    |                          |          |           |   |                                  |  |       |                |           |     |             |     |

Note: **Monthly charges =  $\frac{\text{Assigned value of particular crane}}{\text{Total period of deployment of that crane}}$**

| S.no | Crane / Trailer | The percentage of charges per month per item to be considered for the purpose of payment for the cranes and trailers deployed during the original & extended period of contract, if any. |
|------|-----------------|--|
| 01   | 40T Crane       | <b>0.0103333%</b> of Lump sum charges of item 1.1.   |
| 02   | 20T trailer     | <b>0.0030556%</b> of Lump sum charges of item 1.1.   |

**Signature of the bidder**

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter XII: Unpriced Rate Schedule

### UNPRICED RATE SCHEDULE

| Item No                                | DESCRIPTION OF WORK   | Quantity (In MT) | TOTAL VALUE in Rupees (In figures and words) |
|--|---|------------------|--|
| 1.1                                    | <b>MATERIALS HANDLING</b><br><br>Total Lumpsum price for Material handling and Management work involving Receipt, Unloading & Material Handling from Trucks / Trailers / Transport carriers / etc., transportation to site / site stores & storage yard, verification, stacking, documentation / updating MM package in computer systems for various stages of works & preservation of materials / components of Boiler, ESP, TG and their auxiliaries, Electrical system, and C & I System, Structural steel items, non-BHEL system, construction equipments, BHEL office furniture / T&P, miscellaneous items, etc., for unit 1X500 MW at UNCHAHAR TPP. | 45700 MT         |  |
| <b>GRAND TOTAL AMOUNT (In Rupees))</b> |   |                  |  |

#### NOTES:

1. From total rate quoted at 1.1, the 42% of total value would be assigned for deploying of cranes and trailers inclusive of crane operator, trailer driver, maintenance, all consumables and fuels & balance 58% for manpower, T&P other than cranes and trailer etc. as per annexure II.
2. The quantities indicated in above are tentative and are liable to vary depending upon the site requirement. The contractor has to handle / erect / commission all the items indicated by BHEL for achieving the milestones and completion of work.
3. Evaluation of bids shall be done on total price against this Rate Schedule / BOQ.
4. In case of any mismatch in Rate and amount on Price discrepancy, the same will be dealt as per clause No. 1.4 of GCC.