

# TENDER SPECIFICATION

SI No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/KST-APH/1063	210MW, APH R&M work of Unit 2

FOR

Erection, Testing & Commissioning of Rotary Air Preheater at 4x210MW Unit#2 HTPS Korba West

VOLUME – I

## CONSISTING OF:

- Notice Inviting Tender,
- Volume-IA : Technical Conditions of Contract,
- Volume-IB : Special Conditions of Contract,
- Volume-IC : General Conditions of Contract
- Volume-ID : Forms & Procedures



**Bharat Heavy Electricals Limited**  
(A Government of India Undertaking)  
Power Sector - Western Region  
345-Kingsway, Nagpur-440001

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## Tender Specification Issue Details

### **TENDER SPECIFICATION**

SI No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/KST-APH/1063	210MW, APH R&M work of Unit 2

FOR

Erection, Testing & Commissioning of Rotary Air Preheater at 4x210MW Unit#2 HTPS Korba West

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR                      Refer Notice Inviting Tender

TENDER SUBMISSION .

M/s. ....

.....

PLEASE NOTE:

THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

AGM (Purchase)

Place: Nagpur

Date :

1063

# NOTICE INVITING TENDER

(Document No PS:MSX:NIT:Rev 01 dated 1<sup>st</sup>  
Jun 2012)

Bharat Heavy Electricals Limited



Ref: BHE/PW/PUR/KST-APH U 2/1063

Date: 13/10/2012

**NOTICE INVITING TENDER (NIT)**  
**NOTE: BIDDER MAY DOWNLOAD FROM WEB SITES  
OR  
PURCHASE TENDERS FROM THIS OFFICE ALSO**

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	TENDER NUMBER	<b>BHE/PW/PUR/KST-APH U 2/1063</b>	
ii	Broad Scope of job	Erection, Testing & Commissioning of Rotary Air Preheater at 4x210MW Unit#2 HTPS Korba West	
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>	Applicable
b	Volume-IB	<i>Special Conditions of Contract (SCC)</i>	Applicable
c	Volume-IC	<i>General Conditions of Contract (GCC)</i>	Applicable
d	Volume-ID	<i>Forms and Procedures</i>	Applicable
e	Volume-II	<i>Price Schedule (Absolute value).</i>	Applicable
iv	Issue of Tender Documents	<b>1. <u>Sale from BHEL PS WR office at NAGPUR :</u></b> <b>Start : 13/10/2012:</b> <b>Closes: 20/10/2012 , Time : 14.00 Hrs</b> <b>2. From BHEL website (<a href="http://www.bhel.com">www.bhel.com</a>)</b> Tender documents will be available for downloading from website till due date of submission	Applicable/ Not applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	<b>Date : 20/10/2012 , Time : 15.00 Hrs</b> <b>Place : <u>BHEL PS Regional office at :Nagpur</u></b>	Applicable

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		Tenders being submitted through representative shall be handed over to any of the following BHEL officials after making entry/registration at the reception: RK Ranade/ Sr. Manager (Purchase) Saravana Kumar/Engineer(Purchase)	
vi	<b>OPENING OF TENDER</b>	<b>Date : 20/10/2012 , Time : 16.00 Hrs</b> Notes: (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. (2) Bidder may depute representative to witness the opening of tender	Applicable
vii	<b>EMD AMOUNT</b>	Rs 1,00,000/- (Rupees One Lakh Only)	Applicable
viii	<b>COST OF TENDER</b>	Rs 2000/-.	Applicable/Not Applicable
ix	<b>LAST DATE FOR SEEKING CLARIFICATION</b>	Atleast 3 days before the due date of offer submission 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>	Date :	Applicable/Not applicable.
xi	<b>INTEGRITY PACT &amp; DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)</b>	-----	Applicable/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 ( <a href="http://www.bhel.com">www.bhel.com</a> -->Tender Notifications →View Corrigendums) <b>and not in the newspapers</b> . Bidders to keep themselves updated with all such information	<b>Applicable</b>

- 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 Nagpur 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 Nagpur, 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 Nagpur. For other details and for 'One Time EMD' please refer General Conditions of Contract.

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- 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>	
	<p><b>ENVELOPE – I superscribed as :</b> PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p><b>CONTAINING THE FOLLOWING:-</b></p>	
i.	Covering letter/Offer forwarding letter of Tenderer.	
ii.	<p>Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.</p> <p><b>Note:</b></p> <p>a. In case of any deviation, the same should be submitted separately for technical &amp; 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.</p> <p>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.</p> <p style="padding-left: 20px;">i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</p> <p style="padding-left: 20px;">ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</p>	
iii.	<p>Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.</p> <p>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.</p>	
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 Conditions of Contract (TCC)</u> consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc	

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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> PART-I (EMD/COST of TENDER) TENDER NO : NAME OF WORK : PROJECT: 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 <b>OR</b> 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> superscribed as: PART-II (PRICE BID) TENDER NO : NAME OF WORK : PROJECT: 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 (MAIN ENVELOPE / OUTER ENVELOPE)</b> superscribed as: TECHNO-COMMERCIAL BID, PRICE BID &amp; EMD TENDER NO: NAME OF WORK: PROJECT: DUE DATE OF SUBMISSION:</p>	

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<b>CONTAINING THE FOLLOWING:</b>	
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.~~

~~ii) Weightage "A" assigned to bidders based on Total number of Packages 'P':~~

- ~~a) If 'P' = 0-9, : "A" will be equal to '4'~~
- ~~b) If 'P' = 10-18, : "A" will be equal to '3'~~
- ~~c) If 'P' = 19-36, : "A" will be equal to '2'~~
- ~~d) If 'P' = 37-60, : "A" will be equal to '1'~~
- ~~e) If 'P' is above 60 : "A" will be equal to '0'~~

~~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 1)~~

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- i). ~~Calculation of Overall 'Performance Rating' for 'similar Package/Packages' for the tendered scope under execution at Power Sector Regions:  
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<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub>, ... P<sub>N</sub> 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<sub>T</sub> (ie P<sub>T</sub> = P<sub>1</sub> + P<sub>2</sub> + P<sub>3</sub> + P<sub>4</sub> + ... P<sub>N</sub>)~~
- b) ~~Number of Months 'T<sub>1</sub>' for which 'Monthly Performance Evaluation' as per relevant formats, should have been done in the 'Period of Assessment' for the corresponding similar package P<sub>1</sub>. Similarly T<sub>2</sub> for package P<sub>2</sub>, T<sub>3</sub> for package P<sub>3</sub>, etc for the tendered scope. Now calculate cumulative total months 'T<sub>T</sub>' for total similar Packages 'P<sub>T</sub>' for all Regions (ie T<sub>T</sub> = T<sub>1</sub> + T<sub>2</sub> + T<sub>3</sub> + T<sub>4</sub> + ... T<sub>N</sub>)~~
- c) ~~Sum 'S<sub>1</sub>' of 'Monthly Performance Evaluation' Scores (S<sub>1,1</sub>, S<sub>1,2</sub>, S<sub>1,3</sub>, S<sub>1,4</sub>, S<sub>1,5</sub>, ... S<sub>1,N</sub>) for similar package P<sub>1</sub>, for the 'period of assessment' 'T<sub>1</sub>' (ie S<sub>1</sub> = S<sub>1,1</sub> + S<sub>1,2</sub> + S<sub>1,3</sub> + S<sub>1,4</sub> + S<sub>1,5</sub> + ... S<sub>1,N</sub>). Similarly S<sub>2</sub> for package P<sub>2</sub> for period T<sub>2</sub>, S<sub>3</sub> for package P<sub>3</sub> for period T<sub>3</sub>, etc for the tendered scope for all Regions. Now calculate cumulative sum 'S<sub>T</sub>' of 'Monthly Performance Evaluation' Scores for total similar Packages 'P<sub>T</sub>' for all Regions (ie S<sub>T</sub> = S<sub>1</sub> + S<sub>2</sub> + S<sub>3</sub> + S<sub>4</sub> + S<sub>5</sub> + ... S<sub>N</sub>)~~
- 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):~~

~~Aggregate of Performance scores for all similar packages in all the Regions~~

~~=~~

~~Aggregate of months for each of the similar package for which performance should have been evaluated in all the Regions~~

~~S<sub>T</sub>~~

~~=~~

~~T<sub>T</sub>~~

- 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 n e	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
1	Similar Packages for all Regions →	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	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>

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	'period of assessment for corresponding similar Package ( as in row 1)								
3	Monthly performance scores for the corresponding period (as in Row 2)	S <sub>1-1T</sub> S <sub>1-2T</sub> S <sub>1-3T</sub> S <sub>1-4T</sub> ... S <sub>1-T1</sub>	S <sub>2-1T</sub> S <sub>2-2T</sub> S <sub>2-3T</sub> S <sub>2-4T</sub> ... S <sub>2-T2</sub>	S <sub>3-1T</sub> S <sub>3-2T</sub> S <sub>3-3T</sub> S <sub>3-4T</sub> ... S <sub>3-T3</sub>	S <sub>4-1T</sub> S <sub>4-2T</sub> S <sub>4-3T</sub> S <sub>4-4T</sub> ... S <sub>4-T4</sub>	S <sub>5-1T</sub> S <sub>5-2T</sub> S <sub>5-3T</sub> S <sub>5-4T</sub> ... S <sub>5-T5</sub>	... ... ... ... ...	S <sub>N-1T</sub> S <sub>N-2T</sub> S <sub>N-3T</sub> S <sub>N-4T</sub> ... 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) Weightage "B" assigned to bidders based on Overall Performance Rating (R<sub>BHEL</sub>) at Power Sector Regions, for the respective Package:

- a) If R<sub>BHEL</sub> is ≥ 80%, "B" will be equal to '6'
- b) If R<sub>BHEL</sub> is ≥ 75% < 80%, "B" will be equal to '5'
- c) If R<sub>BHEL</sub> is ≥ 70% < 75%, "B" will be equal to '4'
- d) If R<sub>BHEL</sub> is ≥ 65% < 70%, "B" will be equal to '3'
- e) If R<sub>BHEL</sub> is ≥ 60% < 65%, "B" will be equal to '2'
- f) If R<sub>BHEL</sub> is < 60%, "B" will be equal to '0'

**III. 'Assessment of Capacity of Bidder' to be Qualified for the tender:**

Shall be based on the sum of the weightages obtained in 'LOAD' (A) and 'PERFORMANCE' (B) as below:

- a) If the sum (A+B) is 6 or above for each of the applicable Package, then the Bidder is considered 'Qualified' for the tender
- b) If the sum (A+B) is less than 6 for any of the applicable Package, then the Bidder is considered 'NOT Qualified' for the tender

**IV. Explanatory note:**

- a) 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
- b) Identified Packages (Unit wise)

**Table-1**

	Civil	Electrical & CI	Mechanical
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<ul style="list-style-type: none"> <li>i). Enabling works</li> <li>ii). Pile and Pile Caps</li> <li>iii). Civil Works including foundations</li> <li>iv). Structural Steel Fabrication &amp; Erection</li> <li>v). Chimney</li> <li>vi). Cooling Tower</li> <li>vii). Others (Civil)</li> </ul>	<ul style="list-style-type: none"> <li>i). Electrical</li> <li>ii). CI</li> <li>iii). Others (Elec &amp; CI)</li> </ul>	<ul style="list-style-type: none"> <li>i). Boiler &amp; Aux (All types including CW Piping if applicable)</li> <li>ii). Power Cycle Piping/Critical Piping</li> <li>iii). LP Piping</li> <li>iv). ESP</li> <li>v). Steam Turbine Generator set &amp; Aux</li> <li>vi). Gas Turbine Generator set &amp; Aux</li> <li>vii). Hydro Turbine Generator set &amp; Aux</li> <li>viii). Turbo Blower (including Steam Turbine)</li> <li>ix). Material Handling</li> <li>x). Material Management</li> <li>xi). Material Handling &amp; Material Management</li> <li>xii). Others (Mechanical)</li> </ul>
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e) ~~Vendors who are first timers to any BHEL Region, may be considered subject to satisfying other tender conditions. Eligibility of the party for the next tender of any package in that Region, shall be subject to the bidder satisfying the 'Assessment of Capacity of Bidder' for a period of first **nine months** after commencement of work or contract duration whatever is lesser.~~

~~In case the first timer is executing any other packages in any BHEL Region, then the performance evaluation will be based on the data available for the other packages though not similar, for the 'Period of assessment', for the purpose of 'Assessment of Capacity of Bidder'~~

d) ~~Vendors who are not first timers and who have not been executing any package or packages similar to the packages under the tender in the 'Period of assessment', shall be considered qualified subject to them satisfying all other tender conditions.~~

e) ~~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', 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.~~

f) ~~'Under execution' shall mean works in progress as per the following:~~

i. ~~upto Boiler Steam Blowing in case of Steam Generator and Auxilliaries~~

ii. ~~upto Synchronisation in case of all other works excepting sl no (i) and (iii)~~

iii. ~~upto execution of at least 75% of anticipated contract value (unit wise), in case of Enabling works or Civil & Structures.~~

~~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.~~

g) ~~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 **one year** 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 Consortium Bidding (or Technical Tie up) shall be allowed only if specified in Pre Qualifying Requirement (PQR) criteria, and in such a case the following shall be complied with:
- 23.1 Prime Bidder and Consortium Partner or partners are required to enter into a consortium agreement with a validity period of six months initially. In case the consortium is awarded the contract, then the Consortium Agreement between the Prime Bidder and Consortium Partner or partners shall be extended till contractual completion period including extension periods if any applicable.
- 23.2 ‘Stand alone’ bidder cannot become a **‘Prime Bidder’ or a ‘Consortium bidder’ or ‘Technical Tie up bidder’ in a consortium (or Technical Tie up) bidding**. Prime bidder shall neither be a consortium partner to other prime bidder nor take any other consortium partners. However, consortium partner may enter into consortium agreement with other prime bidders. In case of non compliance, consortium bids of such Prime bidders will be rejected.
- 23.3 Number of partners for a consortium Bidding (or Technical Tie up) shall be as specified in the PQR
- 23.4 Prime Bidder shall be as specified in the Pre Qualification Requirement, else the bidder who has the major share of work
- 23.5 In order to be qualified for the tender, Prime Bidder and Consortium partner or partners shall satisfy (i) the Technical ‘Pre Qualifying Requirements’ specified for the respective package, (ii) “Assessment of Capacity of Bidder’ as specified in clause 9.0
- 23.6 Prime Bidder shall comply with additional ‘Technical’ criteria of PQR as defined in ‘Explanatory Notes for the PQR’
- 23.7 Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified
- 23.8 In case customer approval is required, then Prime Bidder and Consortium Partner or partners shall have to be individually approved by Customer for being considered for the tender.
- 23.9 Prime Bidder shall be responsible for the overall execution of the contract
- 23.10 In case of award of job, Performance shall be evaluated for Prime Bidder and Consortium Partner or partners for their respective scope of work(s) as per prescribed formats
- 23.11 In case the Consortium partner or partners back out, their SDs shall be encashed by BHEL. In such a case, other consortium partner or partners meeting the PQR have to be engaged by the Prime Bidder, and if not, the respective work will be withdrawn and executed on risk and cost basis of the Prime Bidder. The new consortium partner or partners shall submit fresh SDs as applicable.
- 23.12 In case the prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.
- 23.13 After execution of work, the work experience shall be assigned to the Prime Bidder and the consortium partner or partners for their respective scope of work. After successful execution of two similar works with the same consortium partner or partners under direct orders of BHEL, the Prime Bidder shall be

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.....  
eligible for becoming a 'stand alone' bidder for similar works, subject to certification from BHEL about the active involvement of the Prime Bidder for satisfactory execution of the works.

- 23.14 The consortium partner shall submit SD equivalent to 2% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value. In case there are two consortium partners, then each partner shall submit SD equivalent to 1% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value.
- 23.15 In case of a Technical Tie up, all the clauses applicable for the Consortium partner shall be applicable for the Technical Tie up partner also
- 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 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:
- a. Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL
  - b. Notice Inviting Tender (NIT)
  - c. Price Bid
  - d. 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

AGM/Purchase

**Enclosure**

01. Annexure-1: Pre Qualifying criteria.
02. Annexure-2: Check List .
- ~~03. Annexure-3: Integrity Pact~~
04. Annexure-4: Important Infor
05. Other Tender documents as per this NIT.

**ANNEXURE - 1**

**PRE QUALIFYING REQUIREMENTS**

JOB	Erection, Testing & Commissioning of Rotary Air Preheater at 4x210MW Unit#2 HTPS Korba West
TENDER NO	BHE/PW/PUR/KST-APH U 2/1063

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. <b>Bidder must fill up this column as per applicability</b>
A	Submission of Integrity Pact duly signed (if applicable) (Note: To be submitted by Prime Bidder & Consortium/Technical Tie up partner jointly in case Consortium bidding is permitted, otherwise by the sole bidder)	NOT APPLICABLE	
B	<b><u>Technical</u></b> <b>B.1</b> Executed Erection, Testing & Commissioning (E T & C) of APH (Air Pre Heater) of a Boiler rating 100 MW or Higher	APPLICABLE	
C-1	<b><u>Financial TURNOVER</u></b> Bidders must have achieved an average annual financial turnover (Audited) of <b>Rs 36 Lakhs</b> or more over last three Financial Years (FY) i.e. 2009-2010, 2010-2011, 2011-12.	APPLICABLE	
C-2	<b>NETWORTH</b> (only in case of Companies) Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive	APPLICABLE	
C-3	<b>PROFIT</b> 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.	APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)	NOT APPLICABLE	By BHEL
E	Approval of Customer (if applicable)  <b>Note:</b> Names of bidders (including consortium/Technical Tie up partners in case consortium bidding is permitted) who stand qualified after compliance of criteria A to D shall be forwarded to customer for their approval.	NOT APPLICABLE	BY BHEL
F	Price Bid Opening <b>Note:</b> Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E	APPLICABLE	BY BHEL
G	Technical Tie up criteria (if applicable)	NOT APPLICABLE	

**Explanatory Notes for the PQR (unless otherwise specified in the PQR):**

1. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against C-1 above along with all annexures
2. In case audited Financial statements have not been submitted for all the three years as indicated against C-1 above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e total divided by three.
3. C-2:-NETWORTH : Shall be calculated based on the latest Audited Accounts as furnished for C-1 above. Net worth = Paid up share capital + Reserves. (Net worth is required to be evaluated in case of companies)
4. C-3:- PROFIT : shall be NET profit (PAT + Non cash expenditure viz depreciation) earned during any one of the three financial years as in C-1 above
5. ~~'Additional' Criteria in respect of 'Technical' criteria of PQR (as in 'B' above) for Civil, Electrical, CI, unless otherwise specified :-~~
  1. ~~Bidder should have executed similar work of any one of the following:~~
    - a. ~~One (1) work of value not less than Rs XXX~~  
~~OR~~
    - b. ~~Two (2) works of not less than Rs YYY~~  
~~OR~~
    - c. ~~Three (3) works of not less than Rs ZZZ~~  
(Value XXX, YYY, ZZZ shall be as indicated by BHEL
  2. ~~'Similar' work for criteria 5 above means~~
    - a. ~~Civil or Structures or Civil & Structures or Chimney respectively as applicable to the tendered scope in respect of 'CIVIL' Works~~
    - b. ~~Electrical works in respect of 'ELECTRICAL'~~
    - c. ~~CI works in respect of 'CI' Works~~
    - d. ~~Material Handling and/or Management works in respect of 'MM' works~~
6. Time period for achievement of the 'Technical' criteria of PQR (as in 'B' above) will be the last 7 years ending on the 'latest date' of Bid submission
7. 'EXECUTED' means the Vendor should have achieved the criteria specified in the Technical criteria of PQR (as in 'B' above) even if the Contract has not been completed or closed
8. Unless otherwise specified, for the purpose of 'Technical' criteria of PQR ( as in 'B' above), the word 'EXECUTED' means:
  1. "BOILER LIGHT UP" in respect of Boiler & Aux and ESP
  2. "SYNCHRONISATION" in respect of STG/GTG and 'SPINNING' in case of HTG
  3. "STEAM BLOWING COMPLETION" in respect of at least Main Steam Line of Power Cycle Piping
  4. "HYDRAULIC TEST" of the system in respect of Structures, Pressure parts/IBR Piping
  5. "CHARGING" in respect of power Transformers, Bus ducts, HT/LT switchgears
  6. "Completion of RCC Shell and liner (steel or brick as per tendered scope) up to the HEIGHT specified using slip form" in case of RCC Chimney.
  7. Achievement of physical Quantities as per respective PQRs in respect of Civil & Structures and Piling Works
  8. "Readiness for coal Filling" in respect of Bunker Structure Work.
9. Boiler means HRSG or WHRB or any other types of Steam Generator
10. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines
11. For the purpose of evaluation of the PQR, one MW shall be considered equivalent to 3.5TPH where ever rating of HRSG/BOILER is mentioned in MW. Similarly, where ever rating of Gas Turbine is mentioned in terms of Frame size, ISO rating in terms of MW shall be considered for evaluation.
12. In case the experience/PO/WO certificate enclosed by bidders do not have separate break up prices for the E&C portion of Electrical and CI Works, (i.e. the certificates enclosed are for composite order for supply and erection of Electrical & CI and other works if any), then value of Erection and Commissioning for the Electrical & CI portion shall be considered as 15% of the supply & erection of Electrical & CI, unless otherwise specifically indicated in the PQR.
13. ~~Scope for capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine unless otherwise specifically indicated in the PQR.~~
14. In case the tendered scope is not a Pulverised Fuel Boiler, experience of Oil/Gas Fired Boilers also can be considered unless otherwise specifically indicated in the PQR.

BIDDER SHALL SUBMIT ABOVE PRE-QUALIFICATION CRITERIA FORMAT, DULY FILLED-IN, SPECIFYING RESPECTIVE ANNEXURE NUMBER AGAINST EACH CRITERIA AND FURNISH RELEVANT DOCUMENT INCLUSIVE OF WORK ORDER AND WORK COMPLETION CERTIFICATE ETC IN THE RESPECTIVE ANNEXURES IN THEIR OFFER.

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**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 Designation: Telephone No: Mobile No: Email ID: Fax No:	
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:	
4	EMD DETAILS	DD No:                      Date : Bank :                      Amount: <u>Please tick ( ✓ ) whichever applicable:-</u> ONE TIME EMD / ONLY FOR THIS TENDER	
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE	
		APPLICABILITY (BY BHEL)	ENCLOSED BY 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	YES/NO
8	Copy of PAN Card	Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable	YES/NO
10	Integrity Pact	Applicable	YES/NO
11	Declaration by Authorised Signatory	Applicable	YES/NO
12	No Deviation Certificate	Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions	Applicable	YES/NO
14	Declaration for relation in BHEL	Applicable	YES/NO
15	Non Disclosure Certificate	Applicable	YES/NO
16	Bank Account Details for E-Payment	Applicable	YES/NO

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17	Capacity Evaluation of Bidder for current Tender	Applicable/	YES/NO
18	Tie Ups/Consortium Agreement are submitted as per format	Applicable	YES/NO
19	Power of Attorney for Submission of Tender/Signing Contract Agreement	Applicable	YES/NO
20	Analysis of Unit rates	Applicable	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 4: **IMPORTANT INFORMATION**

1. 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) ---> Tender Notification -> List of Banned Firms )
2. **This is a tender for E,T & C of Air Pre Heater of 210 MW Boiler (Unit2 at HTPS Korba Project).**

TYPICAL

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



# TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

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<b>SI No</b>	<b>DESCRIPTION</b>	<b>Chapter</b>	<b>No. OF PAGES</b>
<b>Volume-IA</b>	<b>Part-I: Contract specific details</b>		
1	Project Information	Chapter-I	1
2	Scope of Works	Chapter-II	1
3	Other Conditions	Chapter-III	7
4	T&Ps and MMEs to be deployed by Contractor	Chapter-IV	2
5	Quality Requirements	Chapter-V	1
6	Time Schedule	Chapter-VI	1
7	Terms of Payment	Chapter-VII	1
8	Taxes and other Duties	Chapter-VIII	3

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - I : PROJECT INFORMATION

1.0	Project Information
	<p>1: Purchaser : M/s Chhattisgarh State Power Generation Corporation Ltd. (CSPGPL)</p> <p>2: Project Title : 210 MW HTPS Korba West, Korba</p> <p><b>Location &amp; Approach</b></p> <p>3: Location : PO - Jamnipali, Dist-Korba, State– Chhattisgarh (India)</p> <p>4: Address Details : HTPS Korba West Dist-Korba Chattisgarh- 495 450</p> <p>5 : Nearest Railway Station : Korba</p> <p>6: Road approach :</p> <p>7: Nearest airport : Raipur</p> <p>8: Nearest port : -</p> <p>9: Data of Seismic Design :</p> <p>10: Rainfall :</p> <p>11: Ambient air temperature (Average) :</p> <p>    a) Maximum :</p> <p>    b) Minimum :</p> <p>12: Soil Bearing Capacity :</p> <p>13: Average Relative Humidity :</p> <p>14 Climatic Condition :</p>

The Bidder shall visit site and get acquainted himself with the conditions prevailing at site before submission of the bid. The information given here in under are for general guidance and shall not be contractually binding on BHEL/ Owner. All relevant site data/information as may be necessary shall have to be obtained /collected by the Bidder.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - II : SCOPE OF WORK

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**2.0** The work under the scope of these specifications is broadly as follows.

### **2.1 PRE SHUT DOWN ACTIVITIES**

1. Mobilization of site one week before the shutdown of the unit with manpower and T&P for Erection of temporary structures / platforms, arrangement of electric winches / lifting equipment as required for dismantling & erection of APH components.
2. Verification of all the APH materials as per shipping list.
3. Arrangement of consumables like welding electrodes, Oxy-acetylene gases, etc.
4. Arrangement of consumables, Truck, Teller, Crane with operator or any other material handling equipment is in the bidders scope .
5. Verification of all the APH materials stacked in the store yard as per PGMA list.

### **2.2 E & C OF AIR PREHEATER OF UNIT# 2, 210 MW AT KORBA WEST, CSPGCL BROAD SCOPE OF WORK:**

1. Erection of temporary arrangements like installation of electric winches, chain pulley blocks, structures for facilitating dismantling and erection of Air Pre-heater components.
2. Complete Dismantling of existing Rotary Air Pre-heaters. (2 Nos.)
3. Removal of dismantled materials and its deposition at an identified area within the plant.
4. Shifting of newly supplied materials from stores to work spot.
5. Erection of Air Heater with all supplied materials. Details of materials supplied are enclosed.
6. Replacement of gas ducting up to 4 meter height from existing APH gas inlet side.
7. Replacement of Hot Air & Cold Air ducts as per drawing.
8. Removal and Application of Insulation of Air Pre-heater and Air & Gas ducting.
9. Providing assistance for carrying out testing and commissioning of Air Pre-heaters.
10. Providing assistance for carrying out Performance Guarantee (PG) Test. Whenever Conducted. (First PG test will be carried out just after commissioning of APH & Second PG test will be carried out after completion of Six Months )
11. Providing qualified manpower assistance for observing performance & submission of report as and when required by customer up to 6 Months Parameters to be observed are as follows –
  - i. Primary/Secondary air inlet & out let Temp & Pressure
  - ii. Gas inlet/out let Temp. & Pressure. % of air Ingress tec
12. NOTE:
  1. Total weight of the components to be erected : 537.000 M TONS
  2. List of items / components to be erected is enclosed

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – III : OTHER CONDITIONS

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### 03.1. Site Organization of contractor.

- A. The contractor must establish a contact point at Korba West TPS, where he or his Representative can be contacted during the validity period of the contract.
- B. Contractor must designate one Site In charge for the contract period.

### 03.2. Work time

The work shall be done round the clock in all the 3 shifts and on all days including Sundays and holidays except between 4.00 AM to 8.00 AM everyday, if radiography is carried out on Boiler area (by other agencies).

### 03.3. QUALITY PLAN :

In General, all works rendered by the party shall be of excellent quality and comply with the standard quality procedures pertaining to that work, whether mentioned in this specification or not. Maintaining quality of work shall be the responsibility of the contractor. SITE IN CHARGE or his nominee shall only issue required guidelines from time to time depending upon necessity.

### 03.4) **CUSTOMER INPUTS:**

All the components / parts, Power, compressed air and water shall be made available by customer (CGPGCL) at one single point. Further distribution shall be in the scope of the contractor.

### 3.5. LAISION WITH ALL STATUTORY AUTHORITIES :

- a) Compliance of statutory provisions, whether mentioned in this contract or not shall be binding on the contractor.
- b) If there is any change in labour laws after the contract has been awarded, then the new law shall automatically be binding on the contractor.
- c) No additional financial compensation shall be paid by BHEL to the contractor on account of increased expenditure caused by a) and b) above.
- d) Liasoning with local commercial tax dept. to obtain Coml. Tax exemption certificate.

### 3.6. PAYMENT TO WORKERS:

- a) Payment to workers shall be done in the presence of BHEL/ CGPGCL representative.
- b) The contractor shall intimate the day of payment at least three days in advance in writing along with copy of the pay sheet and attendance cards.
- c) All workmen shall be covered by PF Rules irrespective of their period of employment.
- d) Payment shall be made inside the plant premises and during office hours of CGPGCL.

### 3.7. PAINTING :

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – III : OTHER CONDITIONS

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All exposed metal parts of the equipments including piping, structures, railings etc. if required after installation shall be first painted with at least one coat of suitable primer which matches the shop primer paint used, after thoroughly cleaning all such parts of all dirt, rust.

The quality of the paint shall be as per the standards of ISI or equivalent and to be of the color as approved by the Engineer. **Supply of oil paint (Primer) is in the bidders scope .**

### 3.8 SUBMISSION OF DOCUMENTS :

The contractor shall submit following documents at appropriate time either before or during the execution of the work and as directed by Site In-Charge.

- 1.0. Test certificates of Pulling and Lifting machines / appliances.
- 2.0. Details of workers to be deployed with name, address and category.
- 3.0. Details of supervisory staff to be deployed.
- 4.0. Authorization for receipt of materials and for signing of Measurement Books etc,
- 5.0. Labour license specific to the contract.
- 6.0. List of T&P brought into plant premises along with their serial numbers and dates/years of purchase.
- 7.0. List of consumables brought into plant premises along with their serial numbers and dates/years of purchase, along with test certificates wherever applicable.
- 8.0. Insurance policy for the workers to be deployed in this contract.
- 9.0. Safety undertaking.

The contractor shall submit following documents in report form within 15 days from commissioning of unit after erection work is completed (except Sl.No.9 and 14 which are required before final bill is processed ) :

1. Details of work executed.
2. Measurements against different schedules in compiled form.
3. Material issue details.
4. Material consumption details.
5. Material return details.
6. DPT protocols.
7. Copies of pay sheets to workmen.
8. Details and proof of remittance of PF to workmen (before final bill).
9. Details of retrenchment benefits given to workmen.
10. Details of issue of PF slip to workmen.
11. Details of settlement of accident benefits if any to workmen.
12. No dues clearance from different stores of CGPGCL.
13. No objection certificate from district labour officer (before final bill).

### 3.9. Essential Conditions:

- 1.0. It is the responsibility of contractor to keep the plant, equipment, machinery and surrounding area clean.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – III : OTHER CONDITIONS

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- 2.0. The names of working persons like Site in-charge, supervisors, foreman, main fitters to be deployed during the job with full details has to be submitted stating their area of work and experience and specialization of the work to site in-charge before the Start of work. BHEL may ask to change/delete the person not found suitable for the work at any point of time during execution of job. For any addition and deletion of the working person prior permission from BHEL shall be taken.
- 3.0. You have to ensure that all the key persons must continue till completion of job i.e.tillcommissioning. Your manpower should remain at site for a period of 3 daysafter machine comeson full load.
- 4.0. Mobilization of full strength shall be done at least two days before start of the work.
- 5.0. Work distribution sheet for all the workers/supervisors deployed shall be submittedto BHEL one day in advance on daily basis.
- 6.0. You should mobilize additional resources such as plant, equipments, material asmay be requiredby site in-charge to improve the progress of the work if the progressof the work is not satisfactory.
- 7.0. Subcontractor should be registered under relevant sales tax and or work contract actof respectivestates where the jobs are executed.
- 8.0. The contractor should be required to submit along with their bills, an audited statement of material and/or consumables used by them in the execution of the job and invoices for the purchases of such material or consumables.
- 9.0. The material/consumable shall be purchased from registered dealers in the respective states.
- 10.0. One administrative personnel to control the resources and attendance of the workersto beensured and one safety personnel to be exclusively deputed.
- 11.0. Contractor shall arrange one certified HP welder for welding job whose welding test will be conducted.
- 12.0. If the duration of work continues beyond stipulated period due to any reason, no claim for compensation will be entertained.
- 13.0. The work details are brief & for your knowledge only. You will have to do all the relatedworks as per requirement.
- 14.0. The contractor will be responsible to pay the damages to the property of Board or individual caused by his worker during the course of contract. If the contractor fails to pay the same it will be recovered from his bill.
- 15.0. No compensation claimed for idle labor for any reason will be entertained by BHEL.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – III : OTHER CONDITIONS

- 16.0. All general tools and plants for execution of the work will have to be arranged/maintained by the contractor at his own cost & risk.
- 17.0. In normal course, the interpretation of the under signed on any matter or decision given by him on any disputable points will be final and binding on the contractor.
- 18.0. It is the responsibility of the contractor to maintain the discipline of his staff and any hindrance to the running of the power station or to the board staff will be viewed seriously and will make contract liable for termination by BHEL without entering any claims from the contractor in this regards. Any damages to the board properties due to non-observance of safety measures will be recovered from the contractor.
- 19.0. The contractor should prepare identification passes for all their employee entering power house premises (before commencement of their work) and get them countersigned by Security Incharge of power station after submitting the list of such employee. Any change in the manpower should be intimated to site-in-charge. The identity passes should bear his name of the employee, age, sex, his employers name, date of issue and expiry. The copy of identity pass should be in possession of the employee, otherwise they will not be allotted to enter to the power station premises. Same should be returned to Security Section after contract is completed/over.
- 20.0. Successful bidder should obtain labor license before the start of work.
- 21.0. Successful bidder is to obtain necessary “No Dues” certificate before de-mobilization from site.
- 22.0. **LIST OF MANPOWER REQUIRED**

Sl.No.	Description	Numbers
01.	Site Incharge	01
02.	Supervisor	04
03.	MW Fitters	05
04.	General Fitters	10
05.	Riggers	10
06.	Gas Cutters / Grinders	15
07.	Electricians	03
08.	Welders	15
09.	Storekeeper	02

## TECHNICAL CONDITIONS OF CONTRACT (TCC)

### Chapter – III : OTHER CONDITIONS

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10.	Insulation /refractory lager	10
11	Unskilled workers	50

This is an indicative list, the sub-contractor shall deploy manpower as per requirement of the site during execution.

Successful bidder has to arrange suitable mobile communication facility for BHEL site-in charge

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – IV: T&Ps and MMEs to be deployed by Contractor

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### LIST OF T& P AND MEASURING INSTRUMENTS

Sl.No.	Description	Quantity
01.	Welding Generator / Rectifier	12 nos.
02.	Portable Grinding Machines of assorted sizes / types	10 nos.
03.	Welding cable	500 Mtr.
04.	Gas cutting set	12 sets
05.	Chain pulley blocks 3MT/5MT/10MT cap.	20 nos./10 nos./10 nos.
06.	Lifting tackles including slings of assorted sizes	As per requirement
07.	Pulling Machines / Hook chooks	06 nos.
08.	24V lamps with cable and plug tops	10 nos.
09.	Crane 8 MT/15 MT cap.	01 no. each
10.	Tractor / Trailor 10 MT cap.	01 no.
11.	Electric Winch 5T/10T cap.	04 nos./2 NOS.
12.	Torque Wrench with Torque Multifier	01 no. each (35 kg.M/65 kg.M)
13.	Slogging spanners 52 mm & 54 mm	4 nos. each.
14.	Master Level of 0.02 mm LC	02 nos.
15.	Vernier calipers 0-150 m 0-300 M 0-600 M	02 nos. 02 nos. 01 no.
16.	Inside Micrometer upto 600 mm	01 no.
17.	Outside Micrometer upto 600 mm range	01 no.
18.	Measuring Tape upto 15 M length	04 nos.
19.	Dial Gauges	03 nos.
20.	Grinding Machine AG-7 & GQ 4	8 nos. / 4 nos.
21.	Diesel grinders	2 nos.
22.	Tap set M 39 x 3	1 set.
23.	Filler gauge (loose) 200 mm long	4 nos.

#### NOTE

- The above list is only indicative and not exhaustive. Arrangement for any other T and P required for completion of the job shall be the responsibility of the contractor and shall be arranged by him.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – IV: T&Ps and MMEs to be deployed by Contractor

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### LIST OF CONSUMABLES

01. Kerosene/Diesel.
02. Rustolene.
03. CTC.
04. Waste cloth/Cotton.
05. Marking cloth.
06. Cutoff wheels / Grinding wheels.
07. Mounted wheels/ rotary cutters.
08. Insulation tape / Johnson tape.
09. Sander discs and wheels.
10. Polyethylene sheets.
11. Electric fuse wire and cables.
12. Cutting Electrodes.
13. Welding Electrodes( E7018).
14. DA and Oxygen gases.
15. Paints for painting.

### NOTE

The above list is only indicative & not exhaustive. Arrangement for any other consumables required for completion of the job shall be the responsibility of the contractor & shall be arranged by him

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – V: QUALITY REQUIREMENT

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### QUALITY REQUIREMENT

1.0 Various inspection/ quality control / quality assurance procedure/ methods at various stages will be as per BHEL/ customer quality control procedure/ codes/ IBR and other statutory provisions and as per BHEL Engineer's instructions.

2.0 Preparation of quality assurance log sheets and protocols with customer's engineers, welding logs, other quality control and quality assurance documentation as per BHEL Engineer's instructions, is within the scope of work/ specification.

3.0 A daily log book should be maintained by Area In-charge of contractor on the job incorporating erection / alignment / welding clearance/ progress of work etc. and the same shall be submitted to BHEL. Also, daily reports shall be submitted to BHEL.

4.0 All the important measurements like pre-assembly checking of alignment leveling/ centering work etc. shall be recorded in the daily log book with sketches based on BHEL drawings indicating readings/ measurements actually taken and signed by BHEL/ Customer/ Contractor representatives.

5.0 All the lifting, electrical equipment and the inspection/measuring and testing equipments should be of brand, quality and accuracy, as specified by BHEL engineer and should have valid calibration certificates traceable to national/international standards.

6.0 Total quality is the watchword of the work and contractor shall strive to achieve the quality standards, procedures laid down by BHEL. He will follow the instructions as per BHEL drawings and quality standards.

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

8.0 All the welders including HP welders shall carry identity cards. Only welders duly authorized by BHEL/ Boiler inspector/ customer / consultant shall be engaged on the work.

### 9.0 STAGE INSPECTION BY BHEL / CUSTOMERS ENGINEERS

Apart from day-to-day inspection/ stage inspection of equipments by BHEL engineers, the equipments may be checked at various stages by customer's engineers and quality assurance teams. Contractor shall arrange all labour, tools/tackles etc. for such inspections free of cost.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – VI: Time Schedule

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### 6.1 TIME SCHEDULE & MOBILIZATION

#### 6.1.1 INITIAL MOBILIZATION

After receipt of fax LOI, Contractor shall discuss with Project Manager / Construction Manager/BHEL In charge regarding initial mobilization. A small team of manpower consisting of riggers, welders, fitters, helpers along with T& P has to be mobilized 10 days in advance before shutdown of the unit for making necessary arrangements for installation & testing of winches, chain pulley blocks etc. Full-fledged team shall be mobilized one week before shutdown of the unit

#### 6.1.2 MOBILIZATION FOR ERECTION, TESTING, ASSISTANCE FOR COMMISSIONING ETC.

The activities for erection, testing etc. shall be started as per directions of Construction Manager/BHEL In charge of BHEL. Contractor shall mobilize further resources (in addition to those required for activities under clause no. 6.1.1) as per requirement to commence the work of erection, testing etc. of boiler and auxiliaries and progressively augment the resources to match schedule of the project.

The entire work of Erection, Testing & Commissioning shall be completed within **40 days** of handing over site. However, contractor will have to put all-out efforts to complete the job in **35 days**.

The tentative outage schedule of the Boiler as informed by CSPGCL, Korba West shall be in the third week of Oct'2012

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VII: Terms of Payment

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Payment will be released on completion of activities as below:

- 1.0 10% of contract price after the mobilization of site and submission of Insurance & Labour License (5% for T & P and consumables, 5% for Deployment of manpower).
- 2.0 80% after completion of dismantling & Erection activities and putting the Air Preheaters on trial run
- 3.0 Final 10% on completion of all the other activities like Insulation, cladding & commissioning and removal of scrap etc. from site and on submission of documents like No Dues certificate from Customer, EPF challan, Insurance, Labour License and Labour Payment sheets etc) .

Note:

1. Penalty of 1% per day of the total contract value will be levied for improper mobilization of man power and 1% per day for T & P and consumables separately subject to maximum 10% of the contract value shall be deducted from contractor's bill
2. While submitting the invoices, Vendor should mention their Bank Account No. on each of their invoices for the purpose of making e-payment.

The bill due for payment shall be submitted to the Engineer in-charge of BHEL at site for necessary verification and processing through proper channel. It may be noted that payment will be released from the office of the RSM/Nagpur after minimum fifteen days from the date of receipt of the duly verified bill from site.

Note: While submitting invoices, Vendor should mention their Bank Account No. on each of their invoices for making e-payment

**Performance Guarantee Period for Workmanship:** Guarantee Period as indicated in Clause 2.24.1 of 'General Conditions of Contract' shall be 6 Months.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII TAXES & DUTIES

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### 8.0 TAXES, DUTIES, LEVIES (Consolidated Rev 02 dated 20/09/2012)

#### 8.1. For All types of works excepting works covered under sl no 8.2

##### 8.1.1

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

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

##### 8.1.2 Service Tax & Cess on Service Tax

Contractor's price/rates shall be exclusive of Service Tax and Cess on Services. In case, it becomes mandatory for the contractor under provisions of relevant act/law to collect the Service Tax & Cess from BHEL and pay the same to the concerned tax authorities, such applicable amount will be paid by BHEL at the prevailing Service Tax Rate (presently 12.36 %) on the admitted bill value.

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

1. The name, address and the registration number of the contractor,
2. The name and address of the party receiving taxable service,
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 before release of service tax payment.**

**Wherever, more than one route/option are available for discharge of service tax liability under a particular service, (e.g. "works contract Service"), contractor shall obtain prior written consent from BHEL site before billing the amount towards Service Tax.**

##### 8.1.3 VAT (Sales Tax /WCT)

As regards Value Added Tax (VAT)/CST on transfer of property in goods involved in Works Contract (previously known as Works Contract Tax) applicable as per local laws, the price quoted by the contractor shall be inclusive of the same and in no case input or output VAT/CST will be reimbursed extra.

In any case the Contractor shall register himself with the respective Sales Tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. Contractor will submit all the details of VAT/CST paid for the contract in the prescribed format of the respective state VAT laws. Also, the

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII TAXES & DUTIES

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contractor will issue the tax Invoices to BHEL as per the Tax laws of respective state on monthly basis. Contractor shall also be required to furnish to BHEL necessary proof of VAT remittance on monthly basis.

Deduction of tax at source shall be made as per the provisions of law and is to be construed as an advance tax paid by the contractor and no reimbursement thereof will be made.

Further, if BHEL, at the instance of customer or otherwise adopts the specific route for discharging output VAT liability itself, benefit of the reduction in liability of the contractor will be passed on to BHEL.

In case, BHEL is forced to pay any VAT liability on behalf of contractor, the same will be recovered from contractor's bill or otherwise as deemed fit

### 8.2 —‘Enabling Works’

~~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. ( i.e. rates quoted by bidder shall be inclusive of Service Tax, VAT/WCT and all other taxes and duties )~~

~~However, Since the proposed work is in the nature of ‘Works Contract service’ as per Service tax law, Hence, For non-corporate contractors being Individual, HUF, Proprietary Firm, Partnership Firm or Association of Persons (AOP), BHEL shall recover the applicable Service Tax under reverse charge mechanism from the contractor and remit the same with the Government as per the provisions of Law. Necessary advice/confirmation of remittance shall be issued to the contractor. The contractor shall not be eligible for any refund/reimbursement of such service tax from BHEL. It shall be the responsibility of the contractor to submit proper invoice giving all the requisite details as per Service Tax Law for the determination of the service tax liability of BHEL under reverse charge mechanism. BHEL reserves the right to determine such liability based on the invoice submitted by the contractor or otherwise independently and remittance of the same with the Government.~~

### 8.3 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

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII TAXES & DUTIES

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make his own assessment of the impact of future variation if any, in rates of taxes/duties/ levies etc. in his price bid.

### **8.4 BUILDING & OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 (BOCW Act) AND RULES OF 1998 READ WITH BUILDING & OTHER CONSTRUCTION WORKERS CESS Act, 1996 & CESS RULES, 1998.**

In case any portion of work involves execution through building or construction workers, then compliance to the above titled Acts shall be ensured by the contractor and contractor shall obtain license and deposit the cess under the Act. In the circumstances it may be ensured as under:-

- i. It shall be the sole responsibility of the contractor in the capacity of employer to forthwith (within a period of 15 days from the award of work) apply for a licence to the Competent Authority under the BOCW Act and obtain proper certificate thereof by specifying the scope of its work. It shall also be responsibility of the contractor to furnish a copy of such certificate of licence / permission to BHEL within a period of one month from the date of award of contract.
- ii. It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under these act and rules including that of payment / deposit of 1% cess on the extant of work involving building or construction workers engaged by the contractor within a period of one month from the receipt of payment.
- iii. It shall be the responsibility of the sub-contractor to furnish the receipts / challans towards deposit of the cess together with the number, name and other details of beneficiaries (building workers) engaged by the sub-contractor during the preceding month.
- iv. It shall be the absolute responsibility of the sub-contractor to make payment of all statutory payments & compensations to its workers including that is provided under the Workmen's Compensation Act, 1923.