

Tender specification

Sl no	Tender specification number	Unit number & project
1	BHE/PW/PUR/MAUDT2-STR U-4/1458	Unit 4 of 2x660 MW bunker structure

Supplying (Excluding BHEL supplied materials), Receipt, Collection & handling of materials from BHEL/CLIENT'S works/ stores/ storage yard; Transportation to erection site; Pre assembly, erection, alignment, bolting/ welding/ fastening, grouting, testing, final painting and handing over of bunker structures, raw coal bunkers, coal handling transfer points, coal conveyor galleries and its supporting trestle of bunker structures etc. at site of Unit # 4 of 2X660 MW NTPC MOUDA STPP STAGE II.

At

NATIONAL THERMAL POWER CORPORATION LIMITED (NTPC),

MOUDA

District: Nagpur

MAHARASHTRA

Technical bid - 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



Volume No	Description	Hosted in website bhel.com as files titled
NIL	Tender Specification Issue Details	(Part of <u>Vol-IA-1458</u>)
NIL	Notice Inviting Tender	(Part of <u>Vol-IA-1458</u>)
I-A	Technical Conditions of Contract	Vol-IA- <u>1458</u>
I-B	Special Conditions of Contract	Vol-IBCD- <u>1458</u>
I-C	General Conditions of Contract	(Part of <u>Vol-IBCD-1458</u>)
I-D	Forms & Procedures	(Part of <u>Vol-IBCD-1458</u>)
II B	TECHNICAL SPECIFICATIONS	Vol-II B- <u>1458</u>
II	Price Bid Specification	Vol-II- <u>1458</u>
	Drawings 2 Nos	Drawings-1 <u>458</u>

Tender specification

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At

NATIONAL THERMAL POWER CORPORATION LIMITED (NTPC),

MOUDA

District: Nagpur

MAHARASHTRA

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR TENDER SUBMISSION: Refer Notice Inviting Tender

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING VOLUME-IA AND VOLUME- II ARE ISSUED TO:

M/s.

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PLEASE NOTE:

THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

AGM (Purchase)

Place: Nagpur

Date:

1458

NOTICE INVITING TENDER

Ref: BHE/PW/PUR/MAUDT-STR U # 4/1458

Date: 19/05/2015

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	TENDER NUMBER	BHE/PW/PUR/MAUDT-STR U # 4/1458	
ii	Broad Scope of job	Supplying (Excluding BHEL supplied materials), Receipt, Collection & handling of materials from BHEL/CLIENT'S works/ stores/ storage yard; Transportation to erection site; Pre assembly, erection, alignment, bolting/ welding/ fastening, grouting, testing, final painting and handing over of bunker structures, raw coal bunkers, coal handling transfer points, coal conveyor galleries and its supporting trestle of bunker structures etc. at site of Unit # 4 of 2X660 MW NTPC MOUDA STPP STAGE II At NATIONAL THERMAL POWER CORPORATION LIMITED (NTPC) MOUDA District: Nagpur MH	
iii	DETAILS OF TENDER DOCUMENT		
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>	

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/MADT2-STR U 4/1458

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e	Volume-II	Price Schedule (Absolute value).	Applicable
iv	Issue of Tender Documents	<p>1. Sale from BHEL PS Regional office at : Start : 19/05/2015 , Closes: 28/05/2015 , Time : 16.00 Hrs</p> <p>2. From BHEL website (www.bhel.com) Tender documents will be available for downloading from website till due date of submission</p>	Applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	<p>Date : 29/05/2015, Time 15.00 Hrs Place : BHEL PS Regional office at :Nagpur</p> <p>Tenders being submitted through representative shall be submitted at dispatch section of PSWR HQ Office after making entry/registration at the reception. For any assistance on the matter kindly contact following officials:</p> <ul style="list-style-type: none"> • Pratih Gee Varghese / Sr Engineer (Purchase) • Shivkesh Meena / Engineer (Purchase) 	Applicable
vi	OPENING OF TENDER	<p>1 hours after the latest due date and time of Offer submission</p> <p>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</p>	Applicable
vii	EMD AMOUNT	Rs 2,00,000/- (Rupees Two Lakhs Only)	Applicable
viii	COST OF TENDER	Rs 2000/- (Rupees Two Lakhs Only)	Applicable
ix	LAST DATE FOR SEEKING CLARIFICATION	<p>Five days before the due date of offer submission. Along with soft version also, addressing to undersigned & to others as per contact address given below</p>	Applicable
x	SCHEDULE OF Pre Bid Discussion (PBD)	Date :	Not applicable.

xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	<p>Shri V.V.R. Sastry, Ex-CMD/ BEL 957, 9th Main 3 Stage, 3 Block Basaveswaranagar Bangalore- 560079 Email: sastryvvr@gmail.com</p>	<i>Applicable</i>
xii	Latest updates	<p>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) and not in the newspapers. Bidders to keep themselves updated with all such information</p>	

- 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.
- 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
	Part-I A	
	<p><u>ENVELOPE – I superscribed as :</u> PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p><u>CONTAINING THE FOLLOWING:-</u></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><u>Note:</u></p> <p>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.</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: 40px;">i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</p> <p style="padding-left: 40px;">ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</p>	
iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.	

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/MADT2-STR U 4/1458

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	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.	

PART-I B		
	<p>ENVELOPE – II superscribed as: PART-I (EMD/COST of TENDER) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p>CONTAINING THE FOLLOWING:-</p>	
i.	<p>1. Earnest Money Deposit (EMD) in the form as indicated in this Tender</p> <p align="center">OR</p> <p>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>	

PART-II	
	PRICE BID consisting of the following shall be enclosed
	<p><u>ENVELOPE-III</u> superscribed as: PART-II (PRICE BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p>CONTAINING THE FOLLOWING</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)

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

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 (i.e $T_T = T_1 + T_2 + T_3 + T_4 + \dots + T_N$)
- 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 ' (i.e $S_1 = S_{1-1} + S_{1-2} + S_{1-3} + S_{1-4} + S_{1-5} + \dots + S_{1-N}$). 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 (i.e ' $S_T = S_1 + S_2 + S_3 + S_4 + S_5 + \dots + S_N$).
- d) **Overall Performance Rating ' R_{BEHL} ' 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**

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

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 n o	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
1	Similar Packages for all Regions → (under execution/ executed during period of assessment)	P ₁	P ₂	P ₃	P ₄	P ₅	...	P _N	Total No of similar packages for all Regions = P_T 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 ₁	T ₂	T ₃	T ₄	T ₅	...	T _N	Sum (Σ) of columns (iii) to (ix) = T_T
3	Monthly performance	S ₁₋₁ ,	S ₂₋₁ , S ₂₋₂ ,	S ₃₋₁ , S ₃₋	S ₄₋₁ , S ₄₋	S ₅₋₁ , S ₅₋	S _{N-1} , S _{N-2} ,	-----

	scores for the corresponding period (as in Row 2)	S ₁₋₂ , S ₁₋₃ , S ₁₋₄ , ... S _{1-T1}	S ₂₋₃ , S ₂₋₄ , ... S _{2-T2}	2, S ₃₋ 3, S ₃₋ 4, ... S _{3-T3}	2, S ₄₋ 3, S ₄₋ 4, ... S _{4-T4}	2, S ₅₋ 3, S ₅₋ 4, ... S _{5-T5}	...	S _{N-3} , S _{N-4} , ... S _{N-TN}	
4	Sum of Monthly Performance scores of the corresponding Package for the corresponding period (as in row-3)	S ₁	S ₂	S ₃	S ₄	S ₅	...	S _N	Sum (Σ) of columns (iii) to (ix) = S_T

- ii) Calculation of Overall ‘Performance Rating’ (**R_{BHEL}**) 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_{BHEL}’ shall be calculated subject to availability of ‘performance scores’ for at least.6 ‘package months’ in the order of precedence below:

- a) ‘Period of Assessment.
- b) 12 months preceding the cut-off month
- c) 24 months preceding the cut-off month
- d) 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 ≤ 65	0.4
3	> 65 and ≤ 70	0.35

4	> 70 and ≤ 75	0.25
5	> 75 and < 80	0.2
6	≥ 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:

- i. 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
- ii. For $R_{BHEL} = 60$, $P_{Max} = ‘1’$
- iii. For $R_{BHEL} ≥ 80$, 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 $P ≤ P_{Max}$
(where P is calculated as per clause 9.I)

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
	i). Enabling works	i). Electrical ii). CI	i). Boiler & Aux (All types including CW Piping if applicable)
	ii). Pile and Pile	iii). Others	

	Caps ii). Civil Works including foundations v). Structural Steel Fabrication & Erection v). Chimney vi). Cooling Tower ii). Others (Civil)	(Elec & CI)	ii). Power Cycle Piping/Critical Piping iii). LP Piping iv). ESP v). Steam Turbine Generator set & Aux vi). Gas Turbine Generator set & Aux vii). Hydro Turbine Generator set & Aux iii). Turbo Blower (including Steam Turbine) ix). Material Handling x). Material Management xi). Material Handling & Material Management xii). Others (Mechanical)
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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_{BHEL}’** 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

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- 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 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 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

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.

for BHARAT HEAVY ELECTRICALS
LTD

AGM Pur

Enclosure

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

ANNEXURE - 1

PRE QUALIFYING CRITERIA

JOB	Supplying (Excluding BHEL supplied materials), Receipt, Collection & handling of materials from BHEL/CLIENT'S works/ stores/ storage yard; Transportation to erection site; Pre assembly, erection, alignment, bolting/ welding/ fastening, grouting, testing, final painting and handing over of bunker structures, raw coal bunkers, coal handling transfer points , coal conveyor galleries and its supporting trestle of bunker structures etc. at site of Unit # 4 of 2X660 MW NTPC MOUDA STPP STAGE II At NTPC, MOUDA District: Nagpur MAHARASHTRA	
Sl No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/MADUT2-STR U # 4/1458	660 MW U # 4

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. Bidder must fill up this column as per applicability
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)	APPLICABLE	
B	Technical Bidders shall satisfy any of the following in last 7 years as on the latest date of bid submission: 1. Bidder must have executed Erection & Commissioning (E&C) of Complete Bunker & Bunker Structure of one unit of 400 MW or higher rating OR 2. Bidder must have executed Erection of Bunkers (AND/OR) Bunker Structures (AND/OR) Power house Structure (AND/OR) Boiler Structure of 6000 MT or above against a single order OR 3. Bidder must have executed E&C one job of PF Boiler of rating 400 MW or higher.	APPLICABLE	

C-1	<u>Financial TURNOVER</u> Bidders must have achieved an average annual financial turnover (audited) of Rs 510 Lakhs or more over last three Financial Years (FY) i.e. 2012-2013, 2013-14, 2014-15 OR 2011-2012, 2012-2013, 2013-14 if Annual Accounts for FY 2014-15 are not audited.	APPLICABLE	
C-2	<u>NETWORTH</u> (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	<u>PROFIT</u> 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)	APPLICABLE	By BHEL
E	Approval of Customer (if applicable) Note: 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 Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E		BY BHEL
F	Technical Tie up criteria (if applicable)	Not applicable	
<p><u>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</u></p> <ol style="list-style-type: none"> 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 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. 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, 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. Term 'Commissioning' indicated in PQR refers to 'assistance to commissioning' / 'commissioning'

3. ~~"SYNCHRONISATION" in respect of STG/GTG and 'SPINNING' in case of HTG~~

4. ~~"STEAM BLOWING COMPLETION" in respect of at least Main Steam Line of Power Cycle Piping~~

5. ~~"HYDRAULIC TEST" of the system in respect of Structures, Pressure parts/IBR Piping~~

6. ~~"CHARGING" in respect of power Transformers, Bus ducts, HT/LT switchgears.~~

7. ~~"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.~~

8. Achievement of physical Quantities as per respective PQRs in respect of Civil & Structures and Piling Works

9. 'Readiness for coal Filling' in respect of Bunker Structure Work.

8. Boiler means HRSG or WHRB or any other types of Steam Generator consisting of

	<p>Boiler structure, Non pressure parts and pressure parts.</p> <p>9. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines</p> <p>10. 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.</p> <p>11. 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.</p> <p>12. 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.</p> <p>13. 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</p> <p>14. The value of work (Experience submitted against PQR B) shall be updated as per the PVC indices for "All India Avg. Consumer Price Index for Industrial Workers" with base month as date of execution (completion of contract/work) and indexed upto two months prior to bid opening month.</p>
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BIDDER SHALL SUBMIT ABOVE PRE-QUALIFICATION CRITERIA FORMAT, DULY FILLED-IN, SPECIFYING RESPECTIVE ANNEXURE NUMBER AGAINST EACH CRITERIA AND FURNISH RELEVANT DOCUMENT IN THE RESPECTIVE ANNEXURES IN THEIR OFFER.

BIDDER SHALL CLEARLY INDICATE IN THE TABLE BELOW, HOW THEY ARE SATISFYING TECHNICAL PQR. EXPLANATION AND THE DOCUMENTS REFERRED IN THE TABLE BELOW SHALL ONLY BE CONSIDERD BY BHEL FOR TECHNICAL PQR EVALUATION:

Bidder's Response to BHEL TECHNICAL PQR (WHICHEVER IS APPLICABLE)

PQR No	Pre-Qualifying Requirement	Credentials based on which bidder is claiming PQR	Reference of the documents	Page No
B.1	Bidder must have executed Erection & Commissioning (E&C) of Complete Bunker & Bunker Structure of one unit of 400 MW or higher rating			
B2	Bidder must have executed Erection of Bunkers (AND/OR) Bunker Structures (AND/OR) Power house Structure (AND/OR) Boiler Structure of 6000 MT or above against a single order			
B.3	Bidder must have executed E&C one job of PF Boiler of rating 400 MW or higher.			

NOTE:

BIDDERS MUST CLEARLY INDICATE IN THE TABLE ABOVE, HOW THEY ARE SATISFYING TECHNICAL PQR ALONG WITH THE REFERENCE OF THE SUPPORTING DOCUMENTS AND THE PAGE NUMBER IN WHICH THE REFERRED DOCUMENTS ARE ANNEXED IN THE BID DOCUMENT. BHEL WILL NOT CONSIDER ANY OTHER DOCUMENT OTHER THAN THOSE SPECIFIED BY THE BIDDERS IN THE TABLE ABOVE FOR EVALUATION OF TECHNICAL PQR. BIDDER MAY ATTACH SEPERATE SHEET IF NECESSARY

7	Audited profit and Loss Account for the last three years	Applicable / Not Applicable	YES/NO
8	Copy of PAN Card	Applicable / Not Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable / Not Applicable	YES/NO
10	Integrity Pact	Applicable / Not Applicable	YES/NO
11	Declaration by Authorised Signatory	Applicable / Not Applicable	YES/NO
12	No Deviation Certificate	Applicable / Not Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions	Applicable / Not Applicable	YES/NO
14	Declaration for relation in BHEL	Applicable / Not Applicable	YES/NO
15	Non Disclosure Certificate	Applicable / Not Applicable	YES/NO
16	Bank Account Details for E-Payment	Applicable / Not Applicable	YES/NO
17	Capacity Evaluation of Bidder for current Tender	Applicable / Not Applicable	YES/NO
18	Tie Ups/Consortium Agreement are submitted as per format	Applicable / Not Applicable	YES/NO
19	Power of Attorney for Submission of Tender/Signing Contract Agreement	Applicable / Not Applicable	YES/NO
20	Analysis of Unit rates	Applicable / Not 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-3

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at “BHEL House” Siri Fort, New Delhi – 110049 (India) hereinafter referred to as “The Principal”, which expression unless repugnant to the context of meaning hereof shall include its successors or assigns of the ONE PART

And

_____, (description of the party along with address), hereinafter referred to as “The Bidder/ Contractor” which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for itself or third person, any material or immaterial benefit which the person is not legally entitled to.

-
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 the Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The bidder(s)/ Contractors(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

2.1.4 The Bidders (s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and execution from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per separate “Guidelines on for Suspension of Business Dealings with Suppliers/ Contractors” framed by the Principal.

Section 4 – Compensation for Damages

4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 – Previous Transgression

- The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- If the Bidder makes incorrect statement on his subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-Contractors

6.1 The Bidder(s)/ Contractor(s) undertake(s) to obtain from his sub-contractors a commitment consistent with this Integrity Pact and report

-
- Compliance to the Principal. This commitment shall be taken only from those sub-contractors whose contract value is more than 20% of Bidder's/ Contractor's contract value with the Principal. The Bidder(s)/Contractor(s) shall continue to remain responsible for any default by his Sub-contractor(s).
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section -7 Criminal Charges against violating Bidders/ Contractors/ Sub-contractors

If the Principal obtains knowledge of conduct of a Bidder. Contractor or Sub-contractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section – 8 Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractors(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Sub-contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meeting could have an impact on the contractual relations between the Principal

-
- and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.10 The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

- 9.1 This Pact begins and shall be binding on and from the submission of bid(s) by bidder(s). It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.
- 9.2 If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 – Other Provisions

-
- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those Bidders/ Contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

For & On Behalf of the Principal
of the Bidder/ Contractor
(Office Seal)
(Office Seal)

For & On Behalf

Annexure-4**IMPORTANT INFORMATION**

Sealed Tenders shall be submitted at following address to AGM /Purchase BHEL PSWR NAGPUR:

BHEL PSWR, SRIMOHINI COMPLEX , 345 KINGSWAY, NAGPUR 440001, INDIA

All correspondences regarding this tender shall be addressed to AGM / PURCHASE BHEL PSWR at above address. Bidders may also opt to correspond with following BHEL officials regarding this tender through email at following email ids . However please be informed that sealed tenders shall necessarily be submitted in original at above address:

AGM Purchase, Email id: ska@bhhelpswr.co.in. Ph: +91 – 712 – 3048633

Sr Engineer Purchase, Email: pgv@bhhelpswr.co.in, Ph: +91 – 712 – 3048713

Engineer Purchase, Email id: svm@bhhelpswr.co.in , Ph: +91 – 712 – 3048715

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 ---> Tender Notification -> List of Banned Firms)**
2. **Refer Chapter XII of Volume IB Special Conditions of Contract regarding Suspension of Business Dealings: The abridged version of extant ‘Guidelines for suspension of business dealings with suppliers/ contractors’ has now been uploaded on www.bhel.com on “supplier registration page” at the following link: http://www.bhel.com/vender_registration/pdf/Suspension-of-Business-Dealings-with-Supplier-issued-Sept13_abridged.pdf**
3. **All Statutory Requirements as applicable for this project shall be complied with.**
4. **Please take note of following Revised Tender Clauses:**
 - i. Notice Inviting Tender: Sl No 9
 - ii. General conditions of Contract: Clause No 1.15.13 (New), Clause No 2.8.3, 2.8.4 and 2.8.5
5. Following Notes are added to Form F- 15 of Volume I D ‘Forms & procedures’
 - i. It is only indicative and shall be as per the online format issued by BHEL time to time.

- ii. No request will be entertained after specified date of the current month w.r.t the changes requested in the scores of immediate previous month.

6. PRICE VARIATION CLAUSE

Revision in Price Variation Compensation Clause no. 2.17 of Vol I C GCC:

Clause No. 2.17.9 of Vol IC GCC is revised as below:-

PVC shall be applicable only during the extended period of contract (if any) after the schedule completion date for the portion of work delayed / backlog for the reasons not attributable to Contractor. However total quantum of Price Variation amount payable/recoverable shall be regulated as follows:

- i. For the portion of backlog attributable to the contractor and for the portion of backlog due to force majeure condition during contract period, PVC shall not be paid.
- ii. For the period of force Majeure during extended contract period, PVC will be as per the indices applicable at the beginning of the force majeure period.
- iii. void
- iv. The total amount of PVC shall not exceed 20% of the cumulatively executed contract value during the extended contract period. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items and Extra works.

Clause No. 2.17.5 of is modified as below:-

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 contract period as defined in Chapter VI 'Vol IA TCC'

7. OVER RUN COMPENSATION

Modification in Price Variation Compensation Clause no. 2.12 of Vol I C GCC:

Clause No. 2.12 of Vol IC GCC is Revised as below:-

IF THE CONTRACT IS EXTENDED BEYOND THE CONTRACT PERIOD FOR ANY REASON OTHER THAN THOSE ATTRIBUTABLE TO THE CONTRACTOR OR FORCE MAJEURE CONDITIONS, THE CONTRACTOR WILL BE COMPENSATED BY PAYMENT OF OVERRUN CHARGES AT THE RATE OF **RS.1,00,000/- (Rupees One Lakh Only)** PER MONTH. OVERRUN COMPENSATION WILL BE PAID FOR THE EXTENSION ATTRIBUTABLE TO BHEL ONLY. NO OVERRUN COMPENSATION WILL BE PAYABLE FOR THE EXTENSION ON ACCOUNT OF REASONS ATTRIBUTABLE TO CONTRACTOR AND/OR FORCE MAJEURE CONDITIONS. OVERRUN COMPENSATION FOR ELIGIBLE PERIOD SHALL BE IN PROPORTION TO THE PROGRESS ACHIEVED AGAINST THE PLAN FOR RESPECTIVE PERIOD.

8. Acceptance of Bank Guarantee (BG)

Revision in Acceptance of Bank Guarantee (BG) Clause no. 1.10.3 (V) of Vol I C GCC:

Clause No. 1.10.3 (V) of Vol IC GCC is revised as below:-

“Bank Guarantee issued by:

- a. Any of the BHEL consortium bank listed below :

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

- b. Any public sector Bank (other than consortium banks) with a clause in the text of Bank Guarantee that it is enforceable at Nagpur, Maharashtra
- c. Any private sector banks, with a clause in the text of Bank Guarantee that it is enforceable by being presented at any branch of the bank

Note: “Bank Guarantees issued by Co-operative Banks are not acceptable”.

9. Interchangeability of Scope:

BHEL reserves right to swap any particular scope of work/any portion of work between Package C and Package D of subject tender as per the requirement of the site during execution of the job.

10. Broad Terms & Conditions of Reverse Auction

In continuation to Clause 19.0 of NIT (Notice Inviting Tender) following are the broad terms and conditions of Reverse Auction is given in Annexure V of NIT:

- 10.1. 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).

- 10.2. 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 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.
- 10.3. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 10.4. 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.
- 10.5. 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.
- 10.6. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 10.7. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 10.8. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
- 10.9. 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 noncompliance 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.
- 10.10. Reverse auction will be conducted on scheduled date & time.

- 10.11. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 10.12. 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, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
- 10.13. 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.
- 10.14. 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.
- 10.15. 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.
- 10.16. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
- 10.17. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

Sl no	Description	Chapter	No. Of pages
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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I : Project Information

1.0	Project information
1.1	<p style="text-align: center;"><u>Project information</u></p> <p>Introuction</p> <p>1. Purchaser / owner : M/s National Thermal Power Corporation Limited. (NTPC)</p> <p>2. Project title : 2x660 mw NTPC Mouda Phase II (Extension of 2x500 MW Phase- I)</p> <p><u>Location and approach :</u></p> <p>1. Location : Village-Mouda, dist- nagpur state–maharashtra, india.</p> <p>2. Address details : 2x660 MW NTPC Mouda. Village – Mouda Taluka – Mouda Dist.- Nagpur Maharashtra state, India"</p> <p>3. Nearest port : Mumbai</p> <p>4. Nearest Air Port : Nagpur/ 50 km from Mouda town</p> <p>5. Approach road : Mouda site is connected to Mouda town by 04 km long all weather roads. Mouda town is 40 km from Nagpur on NH-6.</p> <p>6. Railway approach : Nearest railway station Chacher 8 kms away from site on Nagpur-Kolkata broad gauge section of south eastern railway (main line)</p> <p>7. Data of seismic design : As per IS 1893</p> <p>8. Ambient air temperature (average) :</p> <p>a) Maximum : 50 degree centigrade</p> <p>b) Minimum : 6 degree centigrade</p> <p>11: Average relative humidity: 60 %</p> <p>12: Wind speed : 44 m/s at ten meters above the ground level as per IS 875 (part-3).</p> <p>13. Geographical condition: Latitude- 21-10-50 N Longitude -79-23-52 E</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I : Project Information

The bidder is advised to visit and examine the site of works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into the contract. All costs for and associated with site visits shall be borne by the bidder.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

2.0 Scope of work

Supply of Materials of MS Embedments, Doors, Windows, Glazing, Roofing / Side Cladding, Rain Water Down Take Pipes, Gratings, Mild Steel Bolts, High Strength Structural Bolts, PTFE Bearings, MS Hand Railings, Concreting etc. as per rate schedule (price bid) for Bunker Structures, Raw Coal Bunkers, Coal Handling Transfer Points, Coal Conveyor Galleries and its Supporting Trestle of Bunker Structures, Miscellaneous Platform Structures, Other Miscellaneous Civil Works of NTPC Mauda Unit # 4 as per specifications, drawings and as directed by BHEL Engineer.

Receipt, loading, transportation, unloading, preservation, handling, erection, commissioning, finish painting & handing over of following for Bunker Structures, Raw Coal Bunkers, Coal Handling Transfer Points, Coal Conveyor Galleries and its Supporting Trestle of Bunker Structures, Miscellaneous Platform Structures, Other Miscellaneous Civil Works of NTPC Mauda Unit # 4:

1. Columns, Beams and Bracings connecting Columns for 4 Mill Bay.
2. Columns, Beams and Bracings connecting Columns for 5 Mill Bay.
3. Columns, Beams and Bracings connecting Columns for Junction Tower TP20.
4. Columns, Beams and Bracings connecting Columns for Junction Tower TP21.
5. Columns, Beams and Bracings connecting Columns for Trestle TR4.
6. Columns, Beams and Bracings connecting Columns for Trestle TR5.
7. Conveyor Galleries between TP20 to 5 Mill Bay.
8. Conveyor Galleries between TP21 to 4 Mill Bay.
9. Conveyor Galleries between TP20 to TR4.
10. Conveyor Galleries between TR4 to TR5.
11. Conveyor Galleries between TR5 to TP21.
12. Bunker Support Beams, Support Post, Ring Girder, Bunker Hopper and Bunker Cylinder, Portion of Bunker Shell between Floor and Bunker Shell. (For 9 Bunkers)
13. Stainless Steel lining for the above Bunker Hopper and 200mm in Cylindrical Shell.
14. Formed 12mm Plate on either side of Bunker Floor Opening to prevent coal Spillage.
15. Structural Beams for Tripper Floor (EI 57356) and Feeder Floor (EI 21456) in Mill bay.
16. Floor Beams in TP20 and TP21.
17. Roof Support Beam (including Rafter and Purlins) in Mill Bay, TP20 and TP21.
18. Cladding Support Beams (Runners and runner support) in Mill Bay, TP20 and TP21.
19. Floor Beams and Roof support Beam in Conveyor Galleries.
20. Horizontal bracings in Mill bay, TP20 and TP21 provided for structural stability.
21. Stairs and Ladders in TP 20 and 21 along with Step Tread.
22. All Concrete work or any attachment associated with this work.
23. Metal Decking and Shear Connectors for RCC work.
24. Embedment's in Concrete.
25. Floor Grills/Gratings and Handrails under the scope of work.
26. Mild Steel Bolts and High Strength Structural Bolts required during erection of Structure for temporary purpose.
27. Flexible open ended bellow strap of Neoprene provided at top of Bunker.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

28. PTFE type Slide Bearings of any capacity.
29. Thermally insulated Sandwiched metal cladding and fasteners.
30. Single Sheet Metal Cladding and fasteners.
31. Rain Water Downcomer Pipes / Gutters, Fixing components, etc.
32. Doors, Windows, Ventilators, Louvers, Roof Ventilators Rolling Shutters, Partition's
33. MS Embedment's, Inserts, Pipe Sleeves, Guide Rails, Angle Pieces etc.
34. Glazing and Translucent Sheets and its fixing.
35. All handling equipment's.
36. Any other items not specifically included in scope but required for completion of job.
37. Finish Painting of erected items.

Pre- assembly (pre-assembly of **columns/Bunker shells** in 2-3 pieces as received from works), erection, alignment, bolting/ welding/ fastening, grouting, testing stability of structures, destructive, non-destructive testing and any other tests as per approved FQP /BHEL requirement etc. as per BOQ of **price bid** of the scope of work.

A provision is made for providing and making arrangements for erection of bunker shells of 4 nos. Mill bunker in each unit (weight of bunker shells in 1 no mill bunker is 176.8 MT) as per S. No. 201 (b) of BOQ of **rate schedule (Price Bid)** of the scope of work by using **Strand Jack Method**, alignment & welding. It includes supply of strand jacks in sets (minimum lifting capacity 50 MT per jack) connected with diesel/electric power packs, set of hydraulic hose and its accessories, set of strands, Hilman roller (if required), spare parts, specialist tools, supervisor/lifting engineer, Rigging Superintendent, Jack operators, labours, upto the specified height as per drawing. Preparation of drawing/scheme for lifting operation, design & detailing of any additional structural modification / fabrication, erection and welding of those structures like track beam for shifting of bunker shell pieces to the designed location, trolley, lifting lugs ,anchor plates, anchor/jack support beams, design checks for safe operation of jacks with respect to the existing/erected structural members and obtaining approval from BHEL-PEM all complete as per specification, drawings and instructions of the Engineer.-In-Charge.(BHEL crane shall be provided for feeding of bunker shell pieces at feeder floor elevation).

The item at S No. 201(b) shall be operated only as required by BHEL on prior intimation and payment shall be made extra over above ST No. 201(a)

Installation of temporary structures (Scaffolding, Access ladders, Working Platforms etc.), setting column bases, surface preparation, touch-up painting, dismantling and removal of all temporary structures (weight of temporary structures not payable) complete with all labour, electrodes and other consumables.

Installation of all items as per BOQ of **rate schedule (Price Bid)** of the scope of work.

Equipment testing (mechanical) and all other activities required for completion of the work.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

Providing and Applying finish coat and final finish coat of paints viz. final finish coat of Polyurethane based colour pigmented paint (solid by volume minimum 40%) of min. 25 micron DFT over finish coat of Polyamide cured colour pigmented Epoxy based paint (solid by volume minimum 60%) of minimum 40 microns DFT (Total 40+25= 65 microns) at site over and above finish product received from works / factory at all elevations to achieve an even shade with all materials, labour, equipment, handling, including protection and cleaning, scaffolding etc. complete as per specification, drawings and instructions of the Engineer. Contractor shall ensure the compatibility of final finish coat paints with Intermediate and finishing coat paints.

Material Re – conciliation and completion of facility including handing over of bunker structures, raw coal bunkers, coal handling transfer points, coal conveyor galleries and its supporting trestle of bunker structures at NTPC Mauda project site as per specification, drawings and instructions of the Engineer.

Note: In view of meeting commissioning schedule of unit 3 & 4, it may happen for interchangeability of erection of similar kind of scope between Unit 3 & 4 as per BHEL / NTPC site requirement.

The following documents are attached as reference documents along with as volume –IIB and form integral part of these specifications:

S N	Volume	Section	Title	Specification no.	Rev. No.
01	VOLUME IIB	SECTION – A	Scope of work	PE-TS-385-600-C01	00
02	VOLUME IIB	SECTION – B	Project information	PE-TS-385-600-C01	00
03	VOLUME IIB	SECTION - C	Specific technical requirements for structural works	PE-TS-385-600-C01	00
04	VOLUME IIB	SECTION – D SUB- SECTION – D2	Cement concrete (plain & reinforced)	PE-TS-385-600-C001	00
05	VOLUME IIB	SECTION – D SUB- SECTION – D5	Metal doors, windows, ventilators, louvers etc	PE-TS-385-600-C001	00
06	VOLUME IIB	SECTION – D SUB- SECTION – D6	Glass and glazing	PE-TS-385-600-C001	00
07	VOLUME IIB	SECTION – D SUB- SECTION – D7	Rolling steel shutters & grills	PE-TS-385-600-C001	00

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

08	VOLUME IIB	SECTION – D SUB- SECTION – D8	Miscellaneous metals	PE-TS-385-600-C01	00
09	VOLUME IIB	SECTION – D SUB- SECTION – D11	Painting, whitewashing, polishing	PE-TS-385-600-C01	00
10	VOLUME IIB	SECTION – D SUB- SECTION – D13	Sheet work in roof & siding	PE-TS-385-600-C01	00
11	VOLUME IIB	SECTION – D SUB- SECTION – D15	Drainage & sanitation	PE-TS-385-600-C01	00
12	VOLUME IIB	SECTION – D SUB- SECTION – D17	Fabrication of structural steel work	PE-TS-385-600-C01	00
13	VOLUME IIB	SECTION – D SUB-SECTION - D18	Erection of structural steelwork	PE-TS-385-600-C01	00

Bidders shall take note of and account for the contents of above document's while submitting their offer. These documents are for reference purpose only and in case of any ambiguity this tender specification / Approved drawing / BHEL Engineer instruction shall prevail over these reference documents.

Specific attention is drawn to the clauses and sub-clauses vide serial numbers 6.00.00 entitled rates and measurements of sub-section-D17.

2.0.1

These specifications include supply of materials for various items of work as per BOQ and drawings. The item rate offered by the contractor shall be in consideration of the above.

2.0.2

With respect to clause no. 6.02.23 sub-section D-17 regarding payment of PTFE bearing it is clarified the payment will be made based on actual quantity in numbers executed and so certified by BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

- **Field Quality Plan**

1. Vendor shall furnish "Field Quality Plan" detailing out the specific Quality Control Procedure covering the following activities:
 - a) Packing marking and dispatch of Material / Equipment.
 - b) Receipt of Materials / Equipment and handling at site.
 - c) Storage and preservation
 - d) Pre erection.
 - e) Erection
 - f) Pre commissioning
 - g) Commissioning
 - h) Post commissioning
2. Relevant Log sheets to be filled at site and check lists for erection and commissioning prepared by Vendors shall be submitted for **BHEL / NTPC's approval**.
3. The submission schedule for Field Quality Plan, Log sheets and check – lists shall be finalized in the vendor drawing / document submission schedule.
4. All requirements in respect of erection and commissioning as specified, and as per other statutory regulations, if any, in addition to the practices followed by vendor, shall be considered while preparing Field quality plan and check lists.
5. All Pre- commissioning tests to be performed at site shall be listed in the Field Quality Plan.
6. Copies of catalogues/drawings/standards/specifications/procedures etc. as mentioned in the field quality plan shall be furnished to BHEL.

General requirements – Common to all work

3.01.

The intent of specification is to provide supply & services according to the most modern and proven techniques and codes. The omission of specific reference to any method, equipment or material necessary for proper and efficient execution of this work shall not relieve the contractor of the responsibility of providing such facilities to complete the work without any extra compensation.

3.0.2

The terminal points decided by BHEL should be final and binding on the contractor for deciding the scope of work and effecting payment for the work done.

3.0.3

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

3.0.4

The work covered under this specification is of highly sophisticated nature, requiring the best quality workmanship, supervision, engineering and construction management. The contractor should ensure proper planning and successful & timely completion of the work to meet the overall project schedule. The contractor must deploy adequate quantity of tools & plants, modern / latest construction aids etc. He must also deploy adequate trained, qualified and experienced supervisory staff and skilled personnel.

3.0.5

Contractor shall supply, erect all the materials / equipment's as per the sequence & methodology prescribed by BHEL depending upon the technical requirements, and availability of materials & fronts etc.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

BHEL engineer's decision regarding correctness of the work and method of working shall be final and binding on the contractor. No claims for extra payment from the contractor will be entertained on the ground of deviation from the methods / sequence adopted in erection of similar sets elsewhere.

3.0.6

All necessary certificates and licenses, permits & clearances required to carry out this work from the respective statutory/ local authorities are to be arranged by the contractor at his cost in time to ensure timely supply & smooth progress of work.

3.0.7

The work shall conform to dimensions and tolerances specified in the various drawings / documents that will be provided during various stages of erection. If any portion of work is found to be defective in workmanship, not conforming to drawings or other stipulations due to contractor's fault, the contractor shall dismantle and re-do the work duly replacing the defective materials at his cost, failing which the work will be got done by BHEL and recoveries will be effected from the contractor's bills towards expenditure incurred including cost of materials and departmental overheads of BHEL.

3.0.8

The contractor shall perform any supply / services, tests etc., which may not be specified but nevertheless, required for the completion of work within quoted rates.

3.0.9

The contractor shall execute the work in the most substantial and workmanlike manner. The stores shall be handled with care and diligence.

3.0.10

BHEL reserves right to recover from the contractor any loss which arises out of undue delay / discrepancy / shortage / damage / theft at project site or any other causes due to contractor's lapse during any stage of work. Any loss to BHEL due to contractor's lapse shall have to be made good by the contractor.

3.0.11

All cranes, transport equipment, handling equipment, tools, tackles, fixtures, equipment, manpower, supervisors/engineers, consumables etc, except otherwise specified as BHEL scope on free issue, required for this scope of work shall be provided by the contractor. All expenditure including taxes & duties and incidentals in this connection will have to be borne by him unless otherwise specified in the relevant clauses. The contractor's quoted rates should be inclusive of all such contingencies.

3.0.12

All works such as cleaning, leveling, aligning, trial assembly, dismantling of certain equipments / components for checking and cleaning, surface preparation, fabrication of structures, tubes and pipes as per general engineering practice and as per BHEL engineer's instructions, cutting, gouging, weld depositing, grinding, straightening, chamfering, filing, chipping, drilling, reaming, scrapping, lapping, fitting up etc as may be applicable in such erection works and which are treated incidental to the erection works and necessary to complete the work satisfactorily, shall be carried out by the contractor as part of the work within the quoted rates.

3.0.13

The contractor shall make all fixtures, temporary supports, steel structures required for jigs & fixtures, anchors for load and guide pulleys required for the work. Contractor shall arrange necessary steel for such usage.

3.0.14

Contractor shall plan and transport finished materials from works / factory to erection site and erect them in such a manner and sequence that material accumulation at such locations does not lead to congestion

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

in these areas. Materials shall be stacked neatly, preserved and stored in the contractor's shed and at work areas in an orderly manner. In case it is necessary to shift and re-stack the materials kept at work areas/ site to enable other agencies to carry out their work or for any other reason, same shall be done by contractor most expeditiously. No claim for extra payment for such work will be entertained.

3.0.15

Plant materials should not be used for any temporary supports / scaffolding/ preparing pre-assembly bed etc.

3.0.16

The quantities of various items of work to be executed under this contract is generally as per the rate schedule. These quantities are approximate and meant only to give a general idea to the tenderer about the magnitude of the work involved. Actual quantum and type of equipments will be based on the relevant erection documents / drawings which will be furnished to the contractor in due course of erection and the weight and quantity as per the relevant engineering documents will only be admissible for the billing purpose.

3.0.17

The work shall be carried out strictly in accordance to the "field quality plan" approved by BHEL/client. Contractor, jointly with BHEL, shall prepare all necessary records of measurements/readings/ protocols etc.

4.0.1 **General responsibility of the contractor**

4.0.2

The contractor shall have total responsibility for all equipment and materials (loose, semi-fabricated, fabricated) in his custody at contractor's stores / works/ factory, or erected by him at site. He shall effectively protect the finished works from action of weather and from damages or defacement and shall also cover the finished parts immediately on completion of work as per BHEL engineer's instructions. The machine surfaces/finished surfaces should be greased and covered.

4.0.3 Preservation & protection of components

At all stages of work, equipments/materials in the custody of contractor, including those erected, will have to be preserved as per the instructions of BHEL. The contractor shall provide necessary preservation agents including the primer & paint for the above work.

4.0.4

The contractor shall make suitable security arrangements including employment of security personnel and ensure protection of all materials/ equipment in their custody and installed equipments from theft/fire/pilferage and any other damages and losses.

4.0.5

Contractor shall collect all scrap/ wastage materials periodically from various area of work site, deposit the same at one place earmarked at site or shift the same to a place earmarked in BHEL/ client's stores. In case of failure of contractor in compliance of this requirement, BHEL will make suitable arrangement at contractor's risk and cost.

4.0.6

For any class of work for which no specifications have been laid down in these specifications, work shall be executed as per the instructions of BHEL.

4.0.7

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II Scope of Work

BHEL is operating web based computerized site operation management system (SOMS)/e-store/SCMS that includes, inter-alia, issue of materials, daily progress reporting, contractor's running monthly billing and material reconciliation through a computerized data management system. Contractor shall install necessary hardware to hook-up with the BHEL's system and use the same for his scope of work.

5.0.0 **Material handling at site**

5.0.1

All finished materials unloaded by the contractor shall be stacked, stored above ground level by use of concrete or wooden sleepers / structural beams. No materials shall remain on ground at any time. All concrete or wooden sleepers required for stacking the materials shall be arranged by contractor at his own cost within the quoted rates. All other equipments like winches, d-shackles, slings of various sizes, max puller, pulley blocks, jacks, trucks, trailers etc. required for such handling of material at storage / erection site shall be arranged by contractor within quoted/accepted rates.

5.0.2

Contractor will have to make his own arrangement at his own cost for procurement of any other material as required for the works and of such quality as acceptable to BHEL.

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

Sl. No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
a	Open space for office (as per availability)	Yes		Location will be finalized after joint survey with owner
b	Open space for storage (as per availability)	Yes		For Pre assembly only. Location will be finalized after joint survey with owner.
c	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
d	Bidder's all office equipments, office / store / canteen consumables		Yes	
e	Canteen facilities for the bidder's staff, supervisors and engineers etc		Yes	
f	Fire fighting equipments like buckets, extinguishers etc		Yes	
g	Fencing of storage area, office, canteen etc of the bidder		Yes	
3.1.2	FOR LIVING PURPOSES OF THE BIDDER			
a	Open space for labour colony (as per availability)		Yes	

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

Sl. No	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
b	Labour Colony with internal roads, sanitation, complying with statutory requirements		Yes	
3.2.0	ELECTRICITY			
3.2.1	Electricity For construction purposes only of Voltage 415/440 V			FREE
a	Single point source	Yes		At a distance of 500 M from site (Distance is only estimated, it may vary upto any extent depending on site condition)
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.2	Electricity for the office, stores, canteen etc of the bidder			Free
a	Single point source	yes		At a distance of 500 M from site (Distance is only estimated, it may vary upto an extent depending on site condition)

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

Sl. No	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc			
a	Single point source		Yes	
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.3.0	WATER SUPPLY			
3.3.1	For construction purposes:			
a	Making the water available at single point		Yes	
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.3.2	Water supply for bidder's office, stores, canteen etc.			
a	Making the water available at single point		Yes	

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

Sl. No	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.3.3	<u>Water supply for Living Purpose</u>			
a	Making the water available at single point		Yes	
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.4.0	LIGHTING			
a	For construction work (supply of all the necessary materials) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
b	For construction work (execution of the lighting work/ arrangements) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
c	Providing the necessary consumables like bulbs, switches, etc during the course of project work		Yes	

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

Sl. No	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
d	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
3.5.0	COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER			
a	Telephone, fax, internet, intranet, e-mail etc.		Yes	
3.6.0	COMPRESSED AIR wherever required for the work		YES	
3.7.0	Demobilization of all the above facilities		YES	
3.8.0	TRANSPORTATION			
a	For site personnel of the bidder		Yes	
b	For bidder's equipments and consumables (T&P, Consumables etc.)		Yes	

Sl.no	Description Part ii	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	3.9.0 Erection facilities			
3.9.1	Engineering works for construction:			

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

Sl.no	Description Part ii	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	3.9.0 Erection facilities			
A	Providing the erection/fabrication drawings for all the equipments covered under this scope		Yes	In consultation with BHEL
B	Drawings for construction methods		Yes	In consultation with BHEL
C	As-built drawings – where ever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes		Yes	"
D	Shipping lists etc for reference and planning the activities		Yes	"
E	Preparation of site erection schedules and other input requirements		Yes	"
F	Review of performance and revision of site erection schedules in order to achieve the end dates and other commitments	Yes	Yes	"
G	Weekly erection schedules based on SI no. E		Yes	"
H	Daily erection / work plan based on SI no. G		Yes	"

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

Sl.no	Description Part ii	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	3.9.0 Erection facilities			
I	Periodic visit of the senior official of the bidder to site to review the progress so that works are completed as per schedule. It is suggested this review by the senior official of the bidder should be done once in every two months.		Yes	
J	Preparation of preassembly bed		Yes	
K	Arranging the materials required for preassembly		Yes	

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – IV: T&Ps and MMEs to be deployed by Contractor

Sn	Description	Capacity (minimum)	Minimum quantity/remarks
1	Strand Jack Arrangement for bunker shell erection	01 Set	If required as per instruction of BHEL engineer. (Provisional requirement)
2	75 T CRAWLER CRANE	02 no.	As per site requirement.
3	40 T CRAWLER CRANE	01 no.	As per site requirement.
4	8/10 T HYDRA CRANE	04 no.	As per site requirement.
5	3 Phase distribution board with complete set up for withdrawal of construction power	800 amp, 415 volt	As per requirement
6	Electric cable for withdrawal of construction power	As per site requirement	As per site requirement
8	Pick and carry mobile crane (14-18MT)	01	As required
9	Trailer with horse - to handle heavy and long components etc	01	As required
10	Tractor trolley - to handle regular components of bunker etc	01	As required
11	Drilling machines : assorted types and sizes	01	To meet all requirement
12	Grinding machines : assorted types and sizes	04	To meet all requirement
13	Welding Machine	04	As required
15	MIG welding M/c	02	-do-
16	Welding Rectifier	02	Adequate
20	Baking oven and holding oven with thermostat and temperature gauge for baking coated welding electrodes	06	Adequate
21	Portable oven for coated welding electrodes	10	08
22	Pre heating / stress relieving set (heating control panel, cables, heating elements etc.)	02	Adequate
23	Radiography arrangement including the source	Ir 192	Adequate

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – IV: T&Ps and MMEs to be deployed by Contractor

Sn	Description	Capacity (minimum)	Minimum quantity/remarks
24	Arrangement for UT of higher thickness joints with recording facility.	Suitable for application	Adequate
25	Radiography film viewer	Hi intensity	Adequate
27	HSFG bolt torque wrench & calibrator	02	Adequate
28	Electric winches (3-5MT)	05	Adequate
29	Hand winches (1MT)	04	Adequate
30	Hoisting & pulling devices/ pulleys etc	12	Adequate
31	Mechanical & hydraulic jacks	As per requirement	Adequate
32	Theodolite of required accuracy	01	01no.

B: MEASURING AND MONITORING DEVICES (MMD):

As per requirement to be finalized at site including alcometer, shall meet the requirements as per field quality plan and other erection, testing related activities.

Note:

- 1) All the tools and plants required for this scope of work, except the tools & plants provided by BHEL are to be arranged by contractor within the quoted rates. The list is suggestive in nature. Any additional T&P required to be arranged by the contractor.
- 2) If above mentioned t & p are not deployed in specified time BHEL will charge to contractor current market rate + 30 % overheads for non availability T&P or levy a day wise penalty for non deployment or delayed deployment.
- 3) If the works get delayed due to non-availability of T&P, BHEL reserves the right to get the work done at the risk and cost of contractor within prejudice to rights of BHEL as in GCC.

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

Sl.no.	Description & capacity of T & P	Quantity	Remarks
01	Cranes -250 MT	01	On Sharing basis

Note:

1. BHEL cranes on need based for heavy lift and/or high reach in bunker bay structure erection shall be made available. The allocation of these cranes will be decided by BHEL site engineer, based on its availability and other imminent needs, which shall be binding on contractor.
2. Further, use of above cranes may be allowed for any other erection related activity at the discretion & approval of BHEL site in charge.
3. Cranes deployed by BHEL shall be owned or hired by BHEL.
4. Operator and O&M for BHEL owned crane will be arranged by BHEL.
5. Operators and O&M for hired crane will be provided by the hiring agency
6. Contractor shall provide the fuel for BHEL provided cranes (hired/owned) for their use.
4. Contractor shall make necessary arrangements like lying of special sleeper beds and steel plates (all arranged by contractor), assembly and dismantling of heavy lift attachment, boom, jib etc for movement and operation of the crane.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6.1 Time schedule & mobilization

6.1.1 Mobilization

After receipt of fax LOI, contractor shall discuss with project manager / construction manager regarding initial mobilization in line with receipt schedule of finished material at site. The activities for unloading, preassembly, erection & testing etc. shall be started as per direction of BHEL. Contractor shall mobilize further resources as per requirement to commence the work of erection, testing etc. of bunker structure & raw coal bunkers, Transfer points & Galleries etc. progressively augment the resources to match schedule of the project.

6.1.3 Commencement of contract period and tentative schedule:-

Erection/placement on its designated foundation / location, of the first major permanent equipment / component / column covered in the scope of these specifications shall be recognized as “start of contract period”. Smaller items like packer plates, shims, anchors, inserts etc. will not be considered as start of contract period.

The contractor has to subsequently augment his resources in such a manner that the entire work is completed to achieve the following tentative schedule:-

01. Readiness of feeder floor for handing over to NTPC for casting by 7 months in a phased manner from start of erection.
02. Readiness of tipper floor for handing over to NTPC for casting by 9 months in a phased manner from start of erection.
03. Readiness of bunker silo by 11 months in a phased manner from start of erection.

6.1.4 CONTRACT PERIOD

THE TOTAL CONTRACT PERIOD FOR COMPLETION OF WORK **SHALL BE 12 (TWELVE) MONTHS** FROM THE START OF CONTRACT PERIOD.

Bunker shall be made ready in all respect to suit **coal firing by Jun'16**.

In order to meet above schedule in general, and any other intermediate targets set, to meet customer/project schedule requirements, contractor shall arrange & augment all necessary resources from time to time on the instructions of BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

Term of payment:-

The progressive payment on accepted price of contract value will be released as per the break up given hereinafter:-

Stages of progressive pro-rata payments

2.1 INTEREST BEARING RECOVERABLE ADVANCES if desired then as per clause No. 2.13 of GCC.

2.2 100% of item rate on pro rata basis against monthly RA bills as per schedule of rate for item no. 201 (a) & (b). for erection can be further break up as follows:-

1. Erection: 80% of quoted rate under item 201 (a) & (b).
2. Alignment & Welding: Balance 20% of quoted rate under item 201 (a) & (b).

2.3 100% of item rate on pro rata basis against monthly RA bills as per schedule of rate for other item numbers in the rate schedule (price bid).

2.4 The items of the rate schedule (price bid) which involves both supply and erection; 60:40 ratios for supply and erection may be adopted for pro rata payment against monthly RA bills.

Note:

1. The RA bill payment shall be made as per cl no 10.0 of chapter – X of SCC and as per cl no : 2.6 of GCC .

GENERAL

MEASUREMENT OF THE WORK COMPLETED

- A) Where payment is to be made on the basis of weight, the weight per unit given in the BHEL document only shall be taken in to consideration. In case such information is not available in BHEL documents, then the latest relevant indian standards in this regard may be applied.
- B) Spares, surplus quantity, erection contingency materials will not be paid for unless the same has been consumed in place of regular item of measurable work as per the rate schedule.
- C) Where the payment is made on the basis of item rate, actual executed quantity measured jointly shall only be paid for.
- D) It is clarified that as far as weight constituted by welding consumables and other consumables supplied by BHEL as well as by the contractor, shall not be considered for payment.
- E) BHEL engineer's decision regarding stage of payment corresponding to progress of work, calculation of weight etc will be final and binding on the contractor.
- F) No separate payment shall be made for providing grout materials and grouting of structures etc specified elsewhere in these specifications.
- G) Weight of packers and shims fabricated at site which become permanent part of equipment, will be paid for based on actual weight.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: TAXES, DUTIES, LEVIES

8.0 TAXES, DUTIES, LEVIES (Consolidated Rev 04 dated 14/05/2015)

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: TAXES, DUTIES, LEVIES

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 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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: TAXES, DUTIES, LEVIES

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.

8.4 BOCW Cess

The quoted rates shall be exclusive of the BOCW Cess which shall be paid extra by BHEL against Documentary evidence. However, the applicability of the BOCW Cess shall be got confirmed from BHEL in writing, before remitting such Cess/tax.

8.5 GST: As and when GST becomes applicable to this contract, the net differential (negative or positive) financial liability of the bidder to the Authorities (as compared to such liability prior to applicability of GST), if any, shall be to the account of BHEL. For this purpose, all available options under the GST shall be explored, and the decision of BHEL in this regard shall be final and binding on the bidder.

TECHNICAL CONDITIONS OF CONTRACT (TCC) Annexure-I Painting Scheme

All primers and paints supply & painting for finish & final finish painting is in the contractor's scope.

Painting scheme shall be as per approved drawing.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Annexure-II Weight Details of Trichy Supply

CUST. NO	PG	MA	NS	WBS description	Est Wt (MT)
6304	34	010	1	FOUNDATION MATLS FOR BUNKER COLUMNS	30.00
6304	34	111	1	BUNKER BAY COLUMNS - LEFT SET-1	400.00
6304	34	112	1	BUNKER BAY COLUMNS - RIGHT SET-1	400.00
6304	34	151	1	BUNKER BAY COLUMNS - LEFT SET-2	330.00
6304	34	152	1	BUNKER BAY COLUMNS - RIGHT SET-2	330.00
6304	34	201	1	FUEL BUNKER SUPPORT BEAMS- SET-1	107.00
6304	34	205	1	HORIZ. BRACING AT BUNKER SUPPORT LEVEL S	17.50
6304	34	206	1	HORIZ. BRACING AT BUNKER TOP LEVEL-SET-1	17.50
6304	34	251	1	FUEL BUNKER SUPPORT BEAMS- SET-2	89.00
6304	34	255	1	HORIZ. BRACING AT BUNKER SUPPORT LEVEL S	15.00
6304	34	256	1	HORIZ. BRACING AT BUNKER TOP LEVEL-SET-2	15.00
6304	34	301	1	BUNKER FLOORS I LEVEL SET-1	112.00
6304	34	302	1	BUNKER FLOORS II LEVEL SET-1	112.00
6304	34	303	1	BUNKER FLOORS III LEVEL SET-1	112.00
6304	34	351	1	BUNKER FLOORS I LEVEL SET-2	89.00
6304	34	352	1	BUNKER FLOORS II LEVEL SET-2	89.00
6304	34	353	1	BUNKER FLOORS III LEVEL SET-2	89.00
6304	34	390	1	MISCELLANEOUS STRUCTURES-BUNKER BAY	35.00
6304	34	401	1	HORIZONTAL BEAMS LONG. LOWER TIER SET-1	44.00
6304	34	402	1	HORIZONTAL BEAMS LONG.MIDDLE TIER SET-1	44.00
6304	34	403	1	HORIZONTAL BEAMS LONG. UPPER TIER SET-1	32.00
6304	34	406	1	HORIZONTAL BEAMS TRANS. LOWER TIER SET-1	44.00
6304	34	407	1	HORIZONTAL BEAMS TRANS.MIDDLE TIER SET-1	44.00
6304	34	408	1	HORIZONTAL BEAMS TRANS. UPPER TIER SET-1	32.00
6304	34	451	1	HORIZONTAL BEAMS LONG. LOWER TIER SET-2	39.50
6304	34	452	1	HORIZONTAL BEAMS LONG.MIDDLE TIER SET-2	39.50
6304	34	453	1	HORIZONTAL BEAMS LONG. UPPER TIER SET-2	22.00
6304	34	456	1	HORIZONTAL BEAMS TRANS. LOWER TIER SET-2	39.50
6304	34	457	1	HORIZONTAL BEAMS TRANS.MIDDLE TIER SET-2	39.50
6304	34	458	1	HORIZONTAL BEAMS TRANS. UPPER TIER SET-2	22.00
6304	34	501	1	MAIN BRACING LONG. LOWER TIER SET-1	44.00
6304	34	502	1	MAIN BRACING LONG.MIDDLE TIER SET-1	44.00
6304	34	503	1	MAIN BRACING LONG. UPPER TIER SET-1	32.00
6304	34	506	1	MAIN BRACING TRANS. LOWER TIER SET-1	44.00
6304	34	507	1	MAIN BRACING TRANS.MIDDLE TIER SET-1	44.00
6304	34	508	1	MAIN BRACING TRANS.UPPER TIER SET-1	32.00
6304	34	551	1	MAIN BRACING LONG. LOWER TIER SET-2	40.00
6304	34	552	1	MAIN BRACING LONG.MIDDLE TIER SET-2	40.00

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Annexure-II Weight Details of Trichy Supply

6304	34	553	1	MAIN BRACING LONG.UPPER TIER SET-2	22.00
6304	34	556	1	MAIN BRACING TRANS. LOWER TIER SET-2	40.00
6304	34	557	1	MAIN BRACING TRANS.MIDDLE TIER SET-2	40.00
6304	34	558	1	MAIN BRACING TRANS.UPPER TIER SET-2	22.00
6304	34	610	1	BUNKER ROOF SUPPORTING STRUCTURES SET-1	105.00
6304	34	650	1	BUNKER ROOF SUPPORTING STRUCTURES SET-2	90.00
6304	34	701	1	BPS FASTENERS SET-1	18.00
6304	34	751	1	BPS FASTENERS SET-2	9.00
6304	34	911	1	BUNKER COVER AND BEAMS SET-1	27.00
6304	34	951	1	BUNKER COVER AND BEAMS SET-2	22.00
6304	34	993	1	CONSUMABLES & ERECTION MATERIAL FOR ALL	40.00
6304	66	101	1	FUEL BUNKER HOPPER SET-1 WITH SS LINING	382.00
6304	66	102	1	FUEL BUNKER ABOVE HOPPER SET-1	230.50
6304	66	125	1	BUNKER STAINLESS STEEL LINING	4.50
6304	66	151	1	FUEL BUNKER HOPPER SET-2 WITH SS LINING	311.00
6304	66	152	1	FUEL BUNKER ABOVE HOPPER SET-2	192.00
6304	68	010	1	FOUNDATION MATERIAL FOR TPs SET1	44.50
6304	68	011	1	FOUNDATION MATERIAL FOR TPs SET2	44.50
6304	68	050	1	FOUNDATION MATERIAL FOR TRESTLES SET1	22.25
6304	68	060	1	FOUNDATION MATERIAL FOR TRESTLES SET2	22.25
6304	68	101	1	COLUMNS FOR TP SET1-LEFT	178.00
6304	68	102	1	COLUMNS FOR TP SET1-RIGHT	178.00
6304	68	103	1	COLUMNS FOR TP SET1-MIDDLE	142.40
6304	68	104	1	COLUMNS FOR TP SET1-AUXILLARY BAYS	71.20
6304	68	111	1	COLUMNS FOR TP SET2-LEFT	178.00
6304	68	150	1	COLUMNS FOR TRESTLES SET 1	200.25
6304	68	160	1	COLUMNS FOR TRESTLES SET 2	200.25
6304	68	180	1	OVER HEAD PORTAL FRAMES SET 1	53.40
6304	68	190	1	OVER HEAD PORTAL FRAMES SET 2	53.40
6304	68	201	1	VERTICAL BRACING FOR TP SET1-LOWER	267.00
6304	68	202	1	VERTICAL BRACING FOR TP SET1-MIDDLE	267.00
6304	68	203	1	VERTICAL BRACING FOR TP SET1-UPPER	267.00
6304	68	206	1	HORI. BRACING FOR TP SET1-LOWER	53.40
6304	68	207	1	HORI. BRACING FOR TP SET1-MIDDLE	53.40
6304	68	208	1	HORI. BRACING FOR TP SET1-UPPER	53.40
6304	68	211	1	VERTICAL BRACING FOR TP SET2-LOWER	267.00
6304	68	212	1	VERTICAL BRACING FOR TP SET2-MIDDLE	267.00
6304	68	213	1	VERTICAL BRACING FOR TP SET2-UPPER	267.00
6304	68	216	1	HORI. BRACING FOR TP SET2-LOWER	53.40
6304	68	217	1	HORI. BRACING FOR TP SET2-MIDDLE	53.40
6304	68	218	1	HORI. BRACING FOR TP SET2-UPPER	53.40
6304	68	251	1	VERTICAL BRACING FOR TRESTLES LOWER SET	71.20

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Annexure-II Weight Details of Trichy Supply

6304	68	253	1	VERTICAL BRACING FOR TRESTLES UPPER SET	71.20
6304	68	256	1	HORI. BRACING FOR TRESTLES SET 1	44.50
6304	68	261	1	VERTICAL BRACING FOR TRESTLES LOWER SET	71.20
6304	68	263	1	VERTICAL BRACING FOR TRESTLES UPPER SET	71.20
6304	68	266	1	HORI. BRACING FOR TRESTLES SET 2	44.50
6304	68	281	1	VERTICAL BRACING FOR GALLERT SET 1	71.20
6304	68	286	1	HORI. BRACING FOR GALLERY LOWER SET 1	35.60
6304	68	287	1	HORI. BRACING FOR GALLERY UPPER SET 1	35.60
6304	68	291	1	VERTICAL BRACING FOR GALLERT SET 2	71.20
6304	68	296	1	HORI. BRACING FOR GALLERY LOWER SET 2	35.60
6304	68	297	1	HORI. BRACING FOR GALLERY UPPER SET 2	35.60
6304	68	301	1	LANDING PLATFORMS FOR TP SET1	66.75
6304	68	306	1	SUPPORTS IN TP SET1	44.50
6304	68	311	1	LANDING PLATFORMS FOR TP SET2	66.75
6304	68	316	1	SUPPORTS IN TP SET2	44.50
6304	68	351	1	LANDING FOR TRESTLES SET 1	26.70
6304	68	356	1	SUPPORTS IN TRESTLES SET 1	22.25
6304	68	361	1	LANDING FOR TRESTLES SET 2	26.70
6304	68	366	1	SUPPORTS IN TRESTLES SET 2	22.25
6304	68	381	1	CROSS OVER LANDINGS FOR GALLERY SET 1	22.00
6304	68	383	1	PLATFORMS FOR ALL GALLERIES	35.60
6304	68	386	1	SUPPORTS IN GALLERY SET 1	53.40
6304	68	391	1	CROSS OVER LANDINGS FOR GALLERY SET 2	22.00
6304	68	396	1	SUPPORTS IN GALLERY SET 2	53.40
6304	68	401	1	MONORAILS IN TP SET1	17.80
6304	68	411	1	MONORAILS IN TP SET2	17.80
6304	68	451	1	MONORAILS IN GALLERIES FOR BELT CHANGE	17.80
6304	68	610	1	ROOF FOR TP SET1	53.40
6304	68	620	1	ROOF FOR TP SET2	53.40
6304	68	630	1	ROOF FOR TRESTLES SET 1	84.55
6304	68	640	1	ROOF FOR TRESTLES SET 2	84.55
6304	68	700	1	HSFG BOLTS FOR TPs	17.80
6304	68	710	1	HSFG BOLTS FOR TRESTLES & GALLERIES	26.70
6304	68	821	1	STAIRS & LADDERS FOR TP SET1	13.35
6304	68	822	1	STAIRS & LADDERS FOR TP SET2	13.35
6304	68	993	1	CONSUMABLES & ERECTION MATERIAL FOR ALL	26.70
				Total	9609.40

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XI WELDING & RADIOGRAPHY

11.0 WELDING, RADIOGRAPHY AND OTHER NON-DESTRUCTIVE TESTING, POST WELD HEAT TREATMENT

11.1 WELDING

11.1.1

INSTALLATION OF EQUIPMENT INVOLVES GOOD QUALITY WELDING, NDE CHECKS, POST WELD HEAT TREATMENT ETC. CONTRACTOR'S PERSONNEL ENGAGED SHOULD HAVE ADEQUATE QUALIFICATION ON THE ABOVE WORKS.

11.1.2

THE METHOD OF WELDING WILL BE INDICATED IN THE DETAILED DRAWING/DOCUMENTS. BHEL ENGINEER WILL HAVE THE OPTION OF CHANGING THE METHOD OF WELDING AS PER SITE REQUIREMENT.

11.1.3

BEFORE ANY WELDER IS ENGAGED ON WORK, HE SHALL BE TESTED AND QUALIFIED BY BHEL/CUSTOMER, THOUGH THEY MAY POSSESS THE PREVIOUS CERTIFICATE. BHEL RESERVES THE RIGHT TO REJECT ANY WELDER WITHOUT ASSIGNING ANY REASON. ALL THE EXPENDITURE IN TESTING/QUALIFICATION OF THE CONTRACTOR'S WELDER SHALL BE BORNE BY CONTRACTOR.

11.1.4

UNSATISFACTORY AND CONTINUOUS POOR PERFORMANCE MAY RESULT IN DISCONTINUATION OF CONCERNED WELDER.

11.1.5

THE WELDED SURFACE SHALL BE CLEANED OF SLAG AND PAINTED WITH PRIMER PAINT TO PREVENT RUSTING, CORROSION. FOR THESE CONSUMABLES LIKE PAINT /PRIMER ETC WILL BE IN THE CONTRACTOR'S SCOPE.

11.1.6

WELDING ELECTRODES HAVE TO BE STORED IN ENCLOSURES HAVING TEMPERATURE AND HUMIDITY CONTROL ARRANGEMENTS. THIS ENCLOSURE SHALL MEET BHEL SPECIFICATIONS.

11.1.7

WELDING ELECTRODES, PRIOR TO THEIR USE, CALL FOR BAKING FOR SPECIFIED PERIOD AND WILL HAVE TO BE HELD AT SPECIFIED TEMPERATURE FOR SPECIFIED PERIOD. ALSO, DURING EXECUTION, THE WELDING ELECTRODES HAVE TO BE CARRIED IN PORTABLE OVENS.

11.2 NON DESTRUCTIVE EXAMINATION:

11.2.1

CONTRACTOR SHALL PROVIDE ALL RESOURCES AND MAKE ALL ARRANGEMENTS FOR THE RADIOGRAPHIC EXAMINATION OF WELDS FOR THIS WORK. FOR REASONS OF SAFETY, INVARIABLY THE RADIOGRAPHY WORK WILL BE CARRIED OUT AFTER THE NORMAL WORKING HOURS AND CLOSE OF OTHER SITE ACTIVITIES ONLY. IN THIS REGARD, THE CONTRACTOR HAS TO ADHERE TO THE SAFETY RULES / REGULATIONS LAID BY BARC AUTHORITIES FROM TIME TO TIME.

11.2.2

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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RADIOGRAPHY INSPECTION OF WELDS SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS AND RECOMMENDATION OF BHEL ENGINEER. THE MINIMUM QUANTUM OF RADIOGRAPHIC INSPECTION SHALL BE AS PER PROVISION OF BHEL'S ERECTION DOCUMENTS. THEY MAY, HOWEVER BE INCREASED DEPENDING UPON THE PERFORMANCE OF THE INDIVIDUAL WELDER AT THE DISCRETION OF BHEL ENGINEER/BOILER INSPECTING AUTHORITY. BIDDER SHALL ALSO ARRANGE THE UT EQUIPMENT WITH RECORDING FACILITY AT HIS OWN COST. UT SHALL BE DONE AS PER REQUIREMENT OF BHEL / CLIENT. RECORDS OF UT SHALL BE PRODUCED & SUBMITTED TO AS PER SITE REQUIREMENT.

11.2.3

ALL X-RAY / GAMMA RAY FILMS OF WELD JOINTS SHALL BE PRESERVED PROPERLY AND BE HANDED OVER TO BHEL.

11.2.4

THE FIELD WELDED JOINTS SHALL BE SUBJECT TO DYE-PENETRANT/MPT/RT/ OTHER NON-DESTRUCTIVE EXAMINATION AS SPECIFIED IN THE RESPECTIVE ENGINEERING DOCUMENTS/ AS INSTRUCTED BY BHEL.

11.2.5

WHERE REQUIRED, SURFACE PREPARATION, LIKE SMOOTH GRINDING OF WELDED AREA, PRIOR TO RADIOGRAPHY SHALL BE DONE. IT MAY ALSO BECOME NECESSARY TO ADOPT INTER-LAYER RADIOGRAPHY/MPT/UT DEPENDING UPON THE SITE/ TECHNICAL REQUIREMENT NECESSITATING INTERRUPTIONS IN CONTINUITY OF THE WORK AND MAKING NECESSARY ARRANGEMENTS FOR CARRYING OUT THE ABOVE WORK. THE CONTRACTOR SHALL TAKE ALL THIS INTO ACCOUNT IN HIS OFFER. THE REQUIRED NDT METHOD/PROCEDURE WILL BE DECIDED BY BHEL ENGINEER AT SITE.

11.2.6

FOR CARRYING OUT ULTRASONIC TESTING OF WELDING JOINTS OF LARGE SIZE, IT WILL BE NECESSARY TO PREPARE SURFACE BY GRINDING AND BUFFING A SMOOTH FINISH AND CONTOUR AS NECESSARY. THE CONTRACTOR'S SCOPE OF WORK INCLUDES SUCH PREPARATION AS INCIDENTAL TO WORK.

11.2.7

NO SEPARATE PAYMENT FOR ANY NDE ACTIVITIES IS ENVISAGED. ACCORDINGLY THE OFFERED RATE SHALL BE INCLUSIVE OF COST OF ALL NDE.

11.3 HEAT TREATMENT:

11.3.1

FOR THE PURPOSE OF TEMPERATURE RECORDING OF STRESS RELIEVING PROCESS, THERMOCOUPLES HAVE TO BE ATTACHED TO THE WELD JOINT. THE NUMBER OF TEMPERATURE MEASURING POINTS AND LOCATIONS SHALL BE AS PER THE STANDARDS OF BHEL. THERMOCOUPLES HAVE TO BE ATTACHED USING CAPACITOR DISCHARGE TYPE PORTABLE THERMOCOUPLE ATTACHMENT UNIT. CONTRACTOR SHALL ARRANGE SUFFICIENT NUMBER OF THERMOCOUPLE ATTACHMENT UNITS.

11.3.2

CONTRACTOR SHOULD PROVIDE TEMPERATURE INDICATOR / TEMPERATURE RECORDER FOR MEASURING TEMPERATURE DURING PRE-HEATING FOR WELDING OR FOR CONTROLLING

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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TEMPERATURE OF METAL FOR HOT CORRECTION ETC. THE TEMPERATURE RECORDERS SHOULD BE PREFERABLY OF SOLID STATE TYPE.

11.3.3

HEAT TREATMENT MAY REQUIRE TO BE CARRIED OUT AT ANY TIME (DAY OR NIGHT) TO ENSURE THE CONTINUITY OF THE PROCESS. THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS INCLUDING LABOURER REQUIRED FOR THE SAME AS PER DIRECTIONS OF BHEL.

11.3.4

IN CERTAIN CASES ONLY THE PRE-HEATING OF WELD JOINTS MAY BE CALLED FOR.

11.3.5

FOR WELD JOINTS OF HEAVY STRUCTURAL SECTIONS, IF HEAT TREATMENT IS REQUIRED, THE SAME SHALL BE CARRIED OUT AS PART OF THE WORK.

11.3.6

CHECKING EFFECTIVENESS OF STRESS RELIEVING BY HARDNESS TESTS (BY DIGITAL HARDNESS TESTER OR OTHER APPROVED TEST METHODS AS PER BHEL ENGINEER'S INSTRUCTION) INCLUDING NECESSARY TESTING EQUIPMENTS IS WITHIN THE SCOPE OF THE WORK / SPECIFICATION.

11.3.7

PREHEATING, INTER-PASS HEATING, POST WELD HEATING AND STRESS RELIEVING AFTER WELDING ARE PART OF ERECTION WORK AND SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH BHEL ENGINEER'S INSTRUCTIONS. WHERE THE ELECTRIC RESISTANCE HEATING METHOD IS ADOPTED CONTRACTOR SHALL MAKE ALL ARRANGEMENT INCLUDING HEATING EQUIPMENT WITH AUTOMATIC RECORDING DEVICES, ALL HEATING ELEMENTS, THERMOCOUPLES AND ATTACHMENT UNITS, GRAPH SHEETS, THERMAL CHALKS, & INSULATING MATERIALS LIKE MINERAL WOOL, ASBESTOS CLOTH, CERAMIC BEADS, ASBESTOS ROPES ETC, REQUIRED FOR ALL HEATING AND STRESS RELIEVING WORKS.

11.3.8

ALL THE RECORDED GRAPHS FOR HEAT TREATMENT SHALL BE HANDED OVER TO BHEL/ IBR AUTHORITIES AND DUE CLEARANCES OBTAINED.

11.3.9

RESULTS OF THESE PROCESSES SHALL BE VERIFIED/ VALIDATED AS PER REQUIREMENTS OF BHEL / CLIENT.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XII PRESERVATION & PROTECTION OF COMPONENTS

12.0 Preservation & Protection of Components

At all stages of work, equipments/materials in the custody of contractor, including those erected, will have to be preserved as per the instructions of BHEL. Necessary preservation agents including the primer & paint, for the above work shall be provided by the contractor.

12.1

The contractor shall make suitable security arrangements including employment of security personnel and ensure protection of all materials/ equipment in their custody and installed equipments from theft/fire/pilferage and any other damages and losses.

12.2

Contractor shall collect all scrap materials periodically from various area of work site, deposit the same at one place earmarked at work site or shift the same to a place earmarked in BHEL/ client's stores. In case of failure of contractor in compliance of this requirement, BHEL will make suitable arrangement at contractor's risk and cost.

12.3

The entire surplus, damaged, unused materials, packaging materials / containers, special transporting frames, gunny bags, etc shall be returned to BHEL stores by the contractor.

12.4

The contractor shall not waste any materials issued to him. In case it is observed at any stage that the wastage/excess utilization of materials is not within the permissible limits, recovery for the excess quantity used or wasted will be effected with departmental charges from the contractor. Decision of BHEL on this will be final and binding on the contractor.

12.5

For any class of work for which no specifications have been laid down in these specifications, work shall be executed as per the instructions of BHEL.