

# **TENDER SPECIFICATION**

**NO: BHE/PW/PUR/DHJOI-MMS/879**

THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF ENTIRE PROJECT MATERIAL COMPRISING OF TWO UTILITY BOILER & AUXILIARIES, TWO STEAM TURBINE & AUXILIARIES, TWO TURBO-GENERATOR & AUXILIARIES, FOUR GTG AND HRSG, REINFORCEMENT & STRUCTURAL STEEL, BALANCE OF PLANT, CHIMNEY, CONTROLS AND INSTRUMENTATION PACKAGES, ELECTRICAL PACKAGES, PIPING, REFRACTORY & INSULATION, BHEL'S T&P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER ITEMS AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR 2X220 TPH UTILITY BOILER, 2X30 MW STG, 4X110 TPH HRSG, 4XFr6B GTG, BOP.

FOR

OPAL (ONGC PETRO ADDITIONS LIMITED)  
STEAM AND POWER GENERATION SYSTEM PACKAGE FOR  
DAHEJ PETROCHEMICAL COMPLEX  
AT  
DAHEJ - BHARUCH DISTRICT IN GUJARAT STATE

VOLUME – I

## **CONSISTING OF:**

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



**Bharat Heavy Electricals Limited**

(A Government of India Undertaking)  
Power Sector - Western Region  
345-Kingsway, Nagpur-440001

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## **Tender Specification Issue Details**

**Tender Specification No: BHE/PW/PUR/DHJOI-MMS/879**

THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF ENTIRE PROJECT MATERIAL COMPRISING OF TWO UTILITY BOILER & AUXILIARIES, TWO STEAM TURBINE & AUXILIARIES, TWO TURBO-GENERATOR & AUXILIARIES, FOUR GTG AND HRSG, REINFORCEMENT & STRUCTURAL STEEL, BALANCE OF PLANT, CHIMNEY, CONTROLS AND INSTRUMENTATION PACKAGES, ELECTRICAL PACKAGES, PIPING, REFRACTORY & INSULATION, BHEL'S T&P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER ITEMS AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT

FOR

OPAL (ONGC PETRO ADDITIONS LIMITED)

STEAM AND POWER GENERATION SYSTEM PACKAGE FOR

DAHEJ PETROCHEMICAL COMPLEX

AT

DAHEJ - BHARUCH DISTRICT IN GUJARAT STATE

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR                      Refer Notice Inviting Tender  
TENDER SUBMISSION

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

M/s. ....

.....

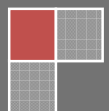
PLEASE NOTE:  
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

AGM (Purchase)  
Place: Nagpur  
Date :

# NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



Ref: BHE/PW/PUR/DHJOI-MMS/879

Date: 29/07/2011

**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	<b><u>BHE/PW/PUR/DHJOI-MMS/879</u></b>
ii	Broad Scope of job	THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF ENTIRE PROJECT MATERIALS OF UTILITY BOILER & AUXILIARIES, STEAM TURBINE & AUXILIARIES, TURBO-GENERATOR & AUXILIARIES, CIVIL REINFORCEMENT & STRUCTURAL STEEL, CHIMNEY, CONTROLS AND INSTRUMENTATION OF BOILER & TG PACKAGES, ELECTRICAL PACKAGES, PIPING, REFRACTORY & INSULATION, BHEL'S T & P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER ITEMS AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR 2X30 MW OPAL (ONGC PETRO ADDITIONS LIMITED) STEAM AND POWER GENERATION SYSTEM PACKAGE FOR DAHEJ PETROCHEMICAL COMPLEX AT DAHEJ - BHARUCH DISTRICT IN GUJARAT STATE
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> <span style="float: right;">Applicable</span>
b	Volume-IB	<i>Special Conditions of Contract (SCC)</i> <span style="float: right;">Applicable</span>
c	Volume-IC	<i>General Conditions of Contract (GCC)</i> <span style="float: right;">Applicable</span>
d	Volume-ID	<i>Forms and Procedures</i> <span style="float: right;">Applicable</span>
e	Volume-II	<i>Price Schedule (Absolute value).</i> <span style="float: right;">Applicable</span>
iv	Issue of Tender Documents	<b>1. <u>Sale from BHEL PS Regional office at :</u></b> <b>Start : 29/07/2011</b> <b>Closes: 17/08/2011 , Time :16.00 Hrs</b> <span style="float: right;">Applicable</span>

		<b>2. From BHEL website (<a href="http://www.bhel.com">www.bhel.com</a>)</b> Tender documents can however be downloaded from website till due date of submission	
v	<b>DUE DATE &amp; TIME OF OFFER SUBMISSION</b>	<b>Date : 18/08/2011 , Time :15.00Hrs</b> <b>Place : BHEL PSWR HQ-NAGPUR</b>	<i>Applicable</i>
vi	<b>OPENING OF TENDER</b>	<b>1 hours after the latest due date and time of Offer submission</b> Notes: (1) In case the due date of opening of tender becomes a non-working day, tenders shall be opened on next working day at the same time. (2) Bidder may depute representative to witness the opening of tender	<i>Applicable</i>
vii	<b>EMD AMOUNT</b>	<b>Rs 2,00,000/- (Rupees Two Lakhs Only)</b>	<i>Applicable</i>
viii	<b>COST OF TENDER</b>	<b>Rs 2000/-.</b>	<i>Applicable</i>
ix	<b>LAST DATE FOR SEEKING CLARIFICATION</b>	Date: Atleast 5 days before the due date of offer submission Along with soft version also, addressing to undersigned & to others as per contact address given below	<i>Applicable</i>
x	<b>SCHEDULE OF Pre Bid Discussion (PBD)</b>	Date: Not applicable.	<i>Not applicable.</i>
xi	<b>INTEGRITY PACT &amp; DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)</b>	Not Applicable	<i>Not Applicable</i>
xii	<b>Latest updates</b>	Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage ( <a href="http://www.bhel.com">www.bhel.com</a> -->Tender Notifications →View Corrigendums) <b><u>and not in the newspapers</u></b> . Bidders to keep themselves updated with all such information	

2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly signed & stamped on each page, as part of offer. **Rates/Price including discounts/rebates, if any, mentioned anywhere/in any form in the techno-commercial offer other than the Price Bid, shall not be entertained.**

3.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at 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)
- 6.0 The contents for ENVELOPES and the superscription for each sealed cover/Envelope are as given below.

**(All pages to be signed and stamped)**

Sl no	Description	Remarks
	<b>Part-I A</b>	
	<b>ENVELOPE – I superscribed as :</b> PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:  <b>CONTAINING THE FOLLOWING:-</b>	
i.	Covering letter/Offer forwarding letter of Tenderer.	
ii.	Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.  <b>Note:</b> <ol style="list-style-type: none"> <li>a. In case of any deviation, the same should be submitted separately for technical &amp; commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.</li> <li>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.               <ol style="list-style-type: none"> <li>i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</li> <li>ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</li> </ol> </li> </ol>	
iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.  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, <b>contact ph no, FAX no, etc.</b>	
iv.	All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.	
v.	Integrity Pact Agreement (Duly signed by the authorized signatory)	not 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	

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/DHJOI-MMS/879**

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	work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc	
ix.	Volume – I B : Special Conditions of Contract (SCC)	
x.	Volume – I C : General Conditions of Contract (GCC)	
xi.	Volume – I D : Forms & Procedures	
xii.	Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item	
xiii.	Any other details preferred by bidder with proper indexing.	

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

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

	<b>OUTER COVER</b>	
	<b>ENVELOPE-IV (MAIN ENVELOPE / OUTER ENVELOPE)</b> superscribed as: TECHNO-COMMERCIAL BID, PRICE BID & EMD TENDER NO: NAME OF WORK: PROJECT: DUE DATE OF SUBMISSION:  <b>CONTAINING THE FOLLOWING:</b>	



i	<ul style="list-style-type: none"> <li>○ Envelopes I</li> <li>○ Envelopes II</li> <li>○ Envelopes III</li> </ul>	
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**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 No Deviation with respect to tender clauses and no additional clauses/ suggestions/ in Techno-commercial bid/ Price bid shall normally 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:**

**10.0 Bidders capacity for executing the job under tender shall be assessed as per the following:**

I. **Assigning Weightages (A) for Similar Jobs Under-Execution:** Weightages shall be worked out and assigned based on the average number of Similar Works under execution including works yet to be commenced by the agency, in the following manner:

i). Number of Similar Jobs

- a) No. of jobs in BHEL, PSER : Say 'J'
- b) No. of jobs in BHEL, PSSR : Say 'K'
- c) No. of jobs in BHEL, PSWR : Say 'L'
- d) No. of jobs in BHEL, PSNR : Say 'M'
- e) No. of jobs with other customers\* : Say 'N' (\*: Other than BHEL PSER, PSSR, PSWR & PSNR)
- f) Average No. of Jobs is 'P' = (J+K+L+M+N) divided by 5

ii). Weightage "A" assigned to bidders based on Average Number of jobs "P":

- a) If 'P' = 0-1, "A" will be equal to '3'
- b) If 'P' = 2-3, "A" will be equal to '2'
- c) If 'P' = 4-5, "A" will be equal to '1'
- d) If 'P' is Above 5, "A" will be equal to '0'

II. **Weightage "B" for Quarterly Performance Reports of Vendors:** This shall be based on the averages of the net weighted score obtained by the bidder for the jobs under execution (excluding works not commenced) for the quarter previous to the last quarter reckoned from the date of latest due date of submission, in all four Regions i.e BHEL PSER, PSSR, PSWR & PSNR, in the following manner.

i). Ratings by Power Sector Region:

- a) PS ER's Rating 'Rer' =  $(X_1 + X_2 + \dots + X_n)$  divided by n
- b) PS WR's Rating 'Rwr' =  $(X_1 + X_2 + \dots + X_n)$  divided by n
- c) PS SR's Rating 'Rsr' =  $(X_1 + X_2 + \dots + X_n)$  divided by n
- d) PS NR's Rating 'Rnr' =  $(X_1 + X_2 + \dots + X_n)$  divided by n
- e) **Over all Power Sector Region Rating 'R<sub>BHEL</sub>' = (Rer+ Rwr+ Rsr+ Rnr) divided by 4**

(where " $X_1, X_2, X_3, \dots, X_n$ " is the net weighted score obtained by the bidder as per the "Evaluation of Contractor Performance (Quarterly)" against the various contracts 'n' under execution in the respective Region).

ii) Weightage "B" assigned to bidders based on Overall Power Sector Rating ( $R_{BHEL}$ ):

- a) If  $R_{BHEL}$  is 80% and above, "B" will be equal to '6'
- b) If  $R_{BHEL}$  is  $> 70\% < 80\%$ , "B" will be equal to '5'
- c) If  $R_{BHEL}$  is  $> 60\% < 70\%$ , "B" will be equal to '4'
- d) If  $R_{BHEL}$  is  $\leq 60\%$ , "B" will be equal to '0'

III. Evaluation of Bidders capacity to execute the job under tender: shall be based on the sum of scores obtained in 'A' and 'B', as below:

- a) 6 or above : Considered 'Qualified' for the job under tender
- b) Less than 6: Considered 'NOT Qualified' for the job under tender

IV. Explanatory note:

- a) Similar work means Boiler or Turbine or Civil or Electrical or CI, etc irrespective of rating of Plant
- b) Quarter shall be as per the quarter defined in the "Evaluation of Contractor performance (Quarterly)". For contracts where annexed Quarterly Evaluation performance was not part of the contract, 'Quarterly Performance Reports' previous to the last quarter reckoned from the date of latest due date of submission, given by the respective project site against the contract will be the basis for evaluation.
- c) Vendors who are not executing any jobs presently in the Region and first timers to the Region, may be considered subject to satisfying all other tender conditions
- d) 'Under execution' shall mean works in progress upto Boiler Steam Blowing (for Boiler and Auxiliaries) or Synchronisation (for all other jobs including Civil) shall be considered.

- 11.0 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 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. No additional claim shall be entertained by BHEL in future, on account of non-acquaintance of above.
- 12.0 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.
- 13.0 BHEL may decide holding 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.
- 14.0 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.

- 15.0 Unless specifically mentioned otherwise, bidder's quoted price shall be deemed to be in compliance with tender including PBD.
- 16.0 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 (xi) of 1 above.**
- 17.0 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 pre-qualification evaluation/ techno-commercial bids, approval/ acceptance of customer (as applicable), etc. and date of opening of price bids shall be intimated to only such bidders.
- 18.0 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.
- 19.0 Validity of the offer shall be for **six months** from the latest due date of offer submission (including extension, if any) or specified otherwise in SCC of tender.
- 20.0 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.
- 21.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 22.0 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.
- 23.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 24.0 In case Consortium Bidding is allowed as per Pre Qualifying Requirement, then Prime Bidder and Consortium Partner shall enter into Consortium Agreement. Validity period of Consortium Agreement shall be 6 months after which the same can be re validated.
- 'Stand alone' bidder cannot become a '**prime bidder**' or a '**consortium bidder**' in a **consortium 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. .
- 25.0 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.

26.0 The bidder may have to produce original document for verification if so decided by BHEL.

27.0 Order of Precedence

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

- a. Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL
- b. Notice Inviting Tender (NIT)
- c. Price Bid
- d. Technical Conditions of Contract (TCC)—Volume-1A
- e. Special Conditions of Contract (SCC) —Volume-1B
- f. General Conditions of Contract (GCC) —Volume-1C
- g. Forms and Procedures —Volume-1D

For BHARAT HEAVY ELECTRICALS LTD

AGM (PURCHASE)

**Enclosure**

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

**ANNEXURE - 1**

**PRE QUALIFYING CRITERIA**

JOB	THE WORK OF RECEIPT OF MATERIALS, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION AND HANDING OVER OF ENTIRE PROJECT MATERIAL COMPRISING OF TWO UTILITY BOILER & AUXILIARIES, TWO STEAM TURBINE & AUXILIARIES, TWO TURBO-GENERATOR & AUXILIARIES, FOUR GTG AND HRSG, REINFORCEMENT & STRUCTURAL STEEL, BALANCE OF PLANT, CHIMNEY, CONTROLS AND INSTRUMENTATION PACKAGES, ELECTRICAL PACKAGES, PIPING, REFRACTORY & INSULATION, BHEL'S T&P AND COMPONENTS & EQUIPMENTS OF VARIOUS OTHER ITEMS AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT FOR OPAL (ONGC PETRO ADDITIONS LIMITED) DAHEJ PETROCHEMICAL COMPLEX AT DAHEJ - BHARUCH DISTRICT IN GUJARAT STATE.
TENDER NO	<b>BHE/PW/PUR/DHJOI-MMS/879</b>

SL NO	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Name and Description of qualifying criteria	Page no of supporting document
A	Submission of Integrity Pact duly signed	<b>NOT APPLICABLE</b>	
B	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT	<b>Applicable</b>	
C	<p><b><u>Technical</u></b></p> <p>c) Bidder must have, achieved any one of the following:</p> <p style="padding-left: 20px;">C.1) Bidder must have, in last seven years as on <b>30/06/2011</b>, executed any one of the following listed works.</p> <p style="padding-left: 40px;">C.1.1) Material Handling of <b>HRSG/Boiler-TG-Piping-Electrical-CI Package</b> at atleast one Unit of 190 MW or higher rating OR 2 units of 100 MW or higher rating in a single Work Order AND Handling/unloading/stacking of at least one ODC of 70 MT or higher in the same or different Work Order.</p> <p style="text-align: center;">OR</p> <p style="padding-left: 40px;">C.1.2) One job of material handling (*) of 26,800 MT or higher in a single Work Order OR One job of material handling (*) of value of Rs.160.00 Lakhs or higher in a single Work Order in any Industry, Industrial or Infrastructure project.</p> <p style="text-align: center;">AND</p> <p style="padding-left: 40px;">Handling/unloading/stacking of atleast one ODC of 70 MT or higher in the same</p>		

	<p>or different Work Order.</p> <p style="text-align: center;">OR</p> <p>C.1.3) 2 jobs of material handling (*) each of 16,750 MT or higher OR 2 jobs of material handling (*) each of value Rs. of 100 Lakhs or higher in any Industry, Industrial or Infrastructure project.</p> <p style="text-align: center;">AND</p> <p>Handling/unloading/stacking of atleast one ODC of 70 MT or higher in the same or different Work Order.</p> <p style="text-align: center;">OR</p> <p>C.1.4) 3 jobs of material handling (*) each of 13,400 MT or higher OR 3 jobs of material handling (*) each of value Rs. of 80.00 Lakhs or higher in any Industry, Industrial or Infrastructure project.</p> <p style="text-align: center;">AND</p> <p>Handling/unloading/stacking of atleast one ODC of 70 MT or higher in the same or different Work Order.</p> <p style="text-align: center;">OR</p> <p>C.2) Bidder should have been Techno Commercially Qualified for Material Handling of 33,500 MT or higher in a single tender by any Power Sector Region of BHEL, in the last 3(Three) years as on 30/06/2011.</p>		
D 1	<p><b><u>Financial TURNOVER</u></b></p> <p>Bidders must have achieved an average annual financial turnover (Audited) of <b>Rs 60.00 Lakhs</b> or more over last three Financial Years (FY) i.e 2008-09, 2009-2010, 2010-2011 if Annual Accounts for FY 2010-11 are audited or for 2007-2008, 2008-2009 and 2009-2010 if Annual Accounts for FY 2010-11 not audited.</p>		
2	<p><b><u>NETWORTH</u></b></p> <p>Net worth of bidder based on Audited Accounts of 2010-11 (<b>OR</b> 2009-10 incase accounts for FY 10-11 has not been audited) should be higher than 50% of paid up capital in case of companies.</p>		
3	<p><b><u>PROFIT</u></b></p> <p>Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three years defined in 'D1 above above based on latest Audited Accounts.</p>		
E	<p><b><u>Approval of Customer</u></b></p> <p>Note: Names of bidders who stand qualified after</p>	<b>NOT APPLICABLE</b>	

	compliance of criteria A to D shall be forwarded to customer for their approval. Price bid of only those bidders shall be opened who are approved by customer.		
F	Consortium criteria	NOT APPLICABLE	
	<b>Explanatory Notes for QR 'A'</b> 1. <b>(*) - Handling of Cement bags, Sacks and Packages shall not be considered.</b> 2. The word 'executed' means the bidder should have achieved the criteria specified in the QR even if the total contract has not been completed or closed 3. For the purpose of evaluation of QR, one MW shall be considered equivalent to 3.5 TPH wherever rating of HRSG/Boiler is referred/mentioned in MW 4. For C.1.1, the word 'Executed' means (i) the bidder should have handled at-least 80% of the incoming material in the scope of work, OR (ii) the unit should have been synchronized by the cut off date. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as given above along with all annexures		

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.

**ANNEXURE - 2**

**CHECK LIST**

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

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

NOTE : STRIKE OFF 'YES' OR 'NO', AS APPLICABLE

DATE :

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



## **IMPORTANT INFORMATION**

### **1. PRICE VARIATION COMPENSATION**

**Refer Clause 2.17 of Volume I C 'General Conditions of Contract' (Price Variation Compensation): For the purpose of calculating PVC, following 'Commodities shall be reckoned for the respective categories:**

<b>Category</b>	<b>Commodity to be Used for PVC Calculation</b>
Electrode	<b>Welding Rod</b> (Individual Commodity)
High Speed Diesel	<b>High Speed Diesel</b> (Individual Commodity)
Cement	<b>Grey cement</b> (Individual Commodity)
Structural & Reinforcement Steel	<b>a1. Iron &amp; semis</b> (Group Item)
Materials (Other than Cement & Steel)	<b>All Commodities</b> (Group Item)

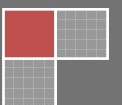
### **2. INTEREST BEARING RECOVERABLE ADVANCE**

**Refer Clause 2.13 of Volume I C 'General Conditions of Contract' (Interest Bearing Recoverable Advance): Following additional points shall be noted:**

- Bank Guarantee towards 'Interest Bearing Advance' shall be atleast 110% of the advance so as to enable recovery of not only principle amount but also the interest portion, if so required.
- 'Interest Bearing Recoverable Advance' shall not be paid in less than two installments. Contractor shall establish the utilization of advance drawn before the release of next installment.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS  
LIMITED



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## CONTENTS

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SI No	DESCRIPTION	Chapter	No. OF PAGES
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2	Scope of Works	Chapter-II	4
3	Facilities in the scope of Contractor/BHEL (Scope Matrix)	Chapter-III	5
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5	Material Handling & Material Management of Material Collections/Dispatches	Chapter-V	2
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# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - I: Project Information

<b>1.0</b>	<b>Project Information</b>
<b>1.1</b>	<p><b>INTROUCTION</b></p> <p><b>ONGC Petro Additions Limited (OPAL)</b> is setting up a Petrochemical Complex at Dahej in the state of Gujarat, India. The complex consist of dual feed Ethylene Cracker of 1100 KTPA capacity.</p> <p>The scope of the present project is to set up a steam and power generation system to primarily meet the process steam requirement and incidentally generate power to partly meet the power requirement for the Petrochemical Complex. The project shall consist of 2X220 TPH Utility Boilers, 2X30 MW STG, 4XFr6B GTG and 4X110 TPH HRSG with associated auxiliary systems and accessories.</p> <p>BHEL has been awarded the EPC package comprising of system design, detailed engineering, manufacturing, procurement, civil works, supply, fabrication, inspection, transportation, storage, installation, insurance, testing, mechanical completion, pre-commissioning, commissioning and performance guarantee test runs of the complete system. The project is to be completed within 30 months from zero date i.e. 15/04/2011.</p> <p><b>Site information</b></p> <p>a) Location : Dahej SEZ near Village Ambhetha at Dahej, District-Bharuch, Gujarat</p> <p>b) Longitude : 21°40'47"N to 21°41'48"N</p> <p>c) Latitude : 72°35'24"E to 72°36'44"E</p> <p>d) Nearest Railway Station : Bharuch – 45 km</p> <p>e) Nearest Town : Bharuch - 45 Km, Vadodara - 140 Km</p> <p>f) Nearest Port : Dahej - 10 Km</p> <p>g) Nearest Air Port : Vadodara - 140 km</p> <p>h) Access Road : Bharuch-Dahej State Highway - SH6 - 1.2 Km</p> <p>i) Height above mean sea level : Mean Sea Level (MSL) = 5.1M w.r.t. Chart datum Finished Grade Level (FGL)=6.6M/ 7.1M/ 7.6M above MSL</p>
<b>1.2</b>	<p><b><u>CLIMATIC CONDITIONS</u></b></p> <p><b>1. <u>Seismic data</u></b></p> <p>a. Zone : III</p> <p><b>2. Air Temperature</b></p>

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - I: Project Information

	a. Air Temperature Max/Min	: 40° C / 13° C
	b. Design dry bulb Temp Max/Min	: 42° C / 29° C
	<b>3. Relative Humidity</b>	: 90%@ 42 °C
	<b>4. Rainfall</b>	
	Annual Rainfall	: 1000 mm
	<b>5. Wind velocity/ direction</b>	
	a. March- October	: 44 km/h/ South west
	b. November- February	: 15KM/Hr/ North west/North/ North East
	<b>6. Climatic Conditions</b>	: Tropical

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 Works

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### 2.0 SCOPE OF WORK

#### 2.0 BROAD SCOPE OF WORK

THE SCOPE OF WORK OF THIS TENDER SPECIFICATION OF MATERIAL HANDLING AND MATERIALS MANAGEMENT SERVICES FOR OPAL (ONGC PETRO ADDITIONS LIMITED) STEAM AND POWER GENERATION SYSTEM PACKAGE FOR DAHEJ PETROCHEMICAL COMPLEX AT DAHEJ - BHARUCH DISTRICT IN GUJARAT SHALL BE BROADLY AS UNDER:

- RECEIPT AND UNLOADING OF VARIOUS COMPONENTS OF THE POWER PLANT (AS DETAILED LATER IN THIS TENDER SPECIFICATION) **INCLUDING HEAVY AND OVER-DIMENSIONAL CONSIGNMENTS** (E.G. BOILER DRUM, CEILING GIRDERS ETC) DIRECTLY FROM TRAILERS / WAGON BY SUITABLE CRANE OR BY JACK AND SLEEPER METHOD INCLUDING LEVELLING OF THE UNLOADING AREA AND ATTENDANT WORK.
- BHEL WILL DESPATCH THE PLANT MATERIALS BOTH BY **ROAD TRANSPORT** ON DOOR DELIVERY BASIS UPTO THE PROJECT SITE AND BY **RAIL TRANSPORT** UPTO THE NEAREST RAILWAY SIDING. CONTRACTOR SHALL RECEIVE ALL SUCH CONSIGNMENTS AT THE RESPECTIVE LOCATION, UNLOAD, AND CARRY OUT LOCAL TRANSPORTATION UPTO THE STACKING YARD / STORAGE SEDS INSIDE THE PROJECT PREMISES.
- COLLECTION OF MATERIALS (DISPATCHED BY ROAD TRANSPORT ON GO-DOWN DELIVERY BASIS) FROM TRANSPORTERS' GO-DOWNS, LOADING AT TRANSPORTERS GO-DOWN, LOCAL TRANSPORT UP TO BHEL STORES / STORAGE YARD AT PROJECT PREMISES AND UNLOADING THEREOF.
- **PRELIMINARY VERIFICATION** OF ALL MATERIALS AT THE TIME OF UNLOADING FROM TRANSPORT VEHICLE OR WHILE RECEIVING CONSIGNMENTS FROM TRANSPORTERS' GO-DOWN - AS THE CASE MAY BE, REPORTING IMMEDIATELY THE DISCREPANCIES LIKE DAMAGES AND SHORTAGES NOTICED.
- **DETAILED VERIFICATION** OF MATERIALS WITH REFERENCE TO PACKING LIST AND LOADING ADVICE SLIP AFTER UNPACKING OF BOXES & CRATES; REPACKING, WHERE CALLED FOR, AFTER DETAILED VERIFICATION; PREPARATION OF RECEIPT INSPECTION REPORTS.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - II: Scope of Works

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- **STACKING AND STORING** AT BHEL OPEN STORAGE YARD / COVERED STORES / CLOSED & SEMI-CLOSED SHEDS IN PROJECT PREMISES, SUBMISSION OF STACKING / STORING RECORDS.
- **PRESERVATION** OF THE MATERIALS IN ACCORDANCE WITH BHEL'S PRESERVATION MANUAL OR BHEL VENDORS' MANUAL AS APPLICABLE ELSE AS PER BHEL'S INSTRUCTIONS.
- **GENERAL CLEANING, GRASS CUTTING AND UPKEEP OF STORAGE YARD, COVERED AND SEMI-CLOSED STORES SHEDS** WITHIN THE QUOTED RATES FOR UNLOADING, VERIFICATION AND STACKING.
- **PROVIDING MATERIALS MANAGEMENT SERVICES.**
- **RE-HANDLING AND RESTACKING** OF MATERIALS AS AND WHEN CALLED FOR BY BHEL. THIS ALSO INCLUDES EXCESS / REDUNDANT / SCRAP MATERIALS RETURNED TO STORES BY BHEL'S ERECTION CONTRACTORS.
- **HANDLING AND LOADING OF OUTGOING MATERIALS** THOSE ARE TO BE SENT TO OTHER DESTINATIONS.

### 2.1 SYSTEMS AND PACKAGES IN SCOPE OF WORK

#### 2.1.1 MAJOR PACKAGES TO BE HANDLED ARE AS UNDER:

1. UTILITY BOILER'S AND ITS AUXILIARY SYSTEM AND ACCESSORIES, ASSOCIATED PUMPS, FANS, MOTORS ETC.
2. HRSG'S AND ITS AUXILIARY SYSTEM AND ACCESSORIES
3. STEAM TURBINE AND GENERATOR AND ITS AUXILIARY SYSTEM AND ACCESSORIES, PUMPS, FANS, MOTORS ETC
4. GAS TURBINE AND GENERATOR AND ITS AUXILIARY SYSTEM AND ACCESSORIES
5. CONTROLS & INSTRUMENTATION EQUIPMENT – UB/ STG/ HRSG/ GTG INTEGRAL & STATION C& I & AUX AND ACCESSORIES INCLUDING CABLES, TRAYS ETC
6. ELECTRICAL PACKAGE INCLUDING GENERATOR BUS DUCT AND AUXILIARIES PACKAGES
7. GENERATOR TRANSFORMERS, STATION POWER TRANSFORMERS

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - II: Scope of Works

8. 6.6KV SWITCHBOARD WITH ASSOCIATED ACCESSORIES, 66 KV GIS, ELECTRIC MOTORS, PANELS, SWITCHGEARS ETC
9. BALANCE OF PLANT PACKAGES INCLUDING NAPTHA SYSTEM FOR UTILITY BOILERS INCLUDING PUMPS AND TANKS, HSD SYSTEM, DOSING SYSTEM, FEED WATER SYSTEM, MAKE UP WATER SYSTEM, CONDENSATE SYSTEM, FUEL TANKS ETC
10. SURFACE CONDENSER, DEAERATORS AND OTHER HEAT EXCHANGERS
11. HT & LT POWER CABLES, CONTROL & SIGNAL CABLES AND CABLE TRAYS WITH SUPPORT MATERIAL ETC
12. PLANT ILLUMINATION PACKAGE INCLUDING POLES, ELECTRICAL FITTINGS, PLANT EARTHING MATERIALS, SWITCH BOARDS, JUNCTION BOXES, BREAKERS, CABLES ETC
13. POWER CYCLE PIPING, TANKS, VESSELS, VALVES ETC
14. THERMAL INSULATION, REFRACTORY AND LINING
15. CIVIL & STRUCTURAL WORKS LIKE REINFORCEMENT STEEL (TMT BARS), STRUCTURAL STEEL ITEMS (LIKE ISMB BEAMS, CHANNELS, ANGLES, PLATES ETC.)
16. OTHER BHEL SUPPLIED (MANUFACTURED/ BOUGHT OUT ITEMS) PACKAGES
17. OTHER ITEMS SENT BY BHEL SITES/ REGIONS INCLUDING BHEL OWNED T&P'S LIKE CRANES ETC

THE PACKAGES INDICATED ABOVE ARE ONLY THE TENTATIVE INDICATION AND SHOULD IN NO WAY BECOME A BASIS FOR ANY CLAIM ON ACCOUNT OF ANY VARIATION IN PACKAGES.

### 2.1.2 SOME OF THE MAJOR HEAVY CONSIGNMENTS FOR EACH UNIT OF UB, STG, GT, HRSG & BOP ARE:

S.NO	DESCRIPTION	APPROX WT OF SINGLE ASSEMBLY
1	UB BOILER DRUM	- 70 MT
2	HRSG BOILER DRUM	- 58 MT
3	CEILING GIRDER – HEAVIEST PIECE (13.5x0.8x3 m)	- 30 MT
4	ST SKID	- 76 MT
5	STG SKID	- 87 MT
6	GT SKID	- 66 MT
7	GT ACCESSORY SYSTEM SKID	- 35 MT
8	GTG SKID	- 92 MT
9	GENERATOR TRANSFORMER	- 90 MT



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter - II: Scope of Works

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10	STATION TRANSFORMER	-	85 MT
11	CABINS/ CRAWLERS OF BHEL CRANES	-	UPTO 60 MT

**2.1.3** Total Approx. Weight of Main Plant Equipment (2X220 TPH UTILITY BOILER, 2X30 MW STG, 4X110 TPH HRSG, 4XFr6B GTG, BOP) including Structural steel and Reinforcement steel : 32,500.00 MT

**The weight indicated above are only the tentative indication and should in no way become a basis for any claim on account of any variation in actual weight. Work shall be carried out for all the Equipments received from various manufacturing units and their vendors for the project under these specifications.**

### 2.1.4

The intent of specification is to provide Material Handling and Materials Management services according to the most modern and proven Techniques and codes. The omission of specific reference to any method, equipment or materials necessary for proper and efficient unloading, transportation, verification, stacking & preservation etc shall not relieve the contractor of the responsibility of providing such facilities to complete the work without any extra compensation.

### 2.1.5

All the work shall be carried out as per the instructions of BHEL engineer. BHEL engineer's decision regarding correctness of the work and method of working shall be final and binding on the contractor.

### 2.1.6

The contractor shall perform all required services which may not be specified herein but nevertheless required for the completion of work within quoted rates.

### 2.1.7

All necessary certificates and licenses required to carry out this work are to be arranged by the contractor expeditiously.

### 2.1.8

All cranes, transport equipments, handling equipment, tools, tackles, fixtures, equipment, manpower, supervisors/engineers, consumables (excluding those indicated as BHEL scope), etc required for this scope of work shall be provided by the contractor.

### 2.1.9

All expenditure including taxes and incidentals in this connection will have to be borne by the contractor unless otherwise specified in the relevant clauses elsewhere here. The contractor's quoted rates shall include of all such contingencies. In this connection refer relevant clause of general conditions of contract.

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

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Sl.No	Description <b>PART I</b>	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	<b>ESTABLISHMENT</b>			
3.1.1	<b>FOR CONSTRUCTION PURPOSE:</b>			
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	-	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	<b>FOR LIVING PURPOSES OF THE BIDDER</b>			

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

Sl.No	Description <b>PART I</b>	Scope / to be taken care by		Remarks
		BHEL	Bidder	
a	Open space for labour colony	-	Yes	
b	Labour Colony with internal roads, sanitation, complying with statutory requirements	-	Yes	
3.2.0	<b>ELECTRICITY</b>			
3.2.1	Electricity for construction purposes of Voltage 415/440 V	Yes	-	<b>On chargeable basis</b>
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	
3.2.2	<b>Electricity for the office, stores, canteen etc of the bidder</b>			
a	Single point source	Yes	-	<b>On chargeable basis</b>
b	Further distribution including all materials, Energy Meter, Protection devices and its service	-	Yes	

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

Sl.No	Description <b>PART I</b>	Scope / to be taken care by		Remarks
		BHEL	Bidder	
c	Duties and deposits including statutory clearances if applicable	-	Yes	
3.2.3	<b>Electricity for living accommodation of the bidder's staff, engineers, supervisors etc</b>			
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	<b>WATER SUPPLY</b>			
3.3.1	<b>For construction purposes:</b>			
a	Making the water available at single point	-	Yes	Contractor has to arrange construction water at his own expenses.
b	Further distribution as per the requirement of work including supply of materials and execution	-	Yes	
3.3.2	<b><u>Water supply for bidder's office, stores, canteen etc</u></b>			
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 <b>PART I</b>	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	<b><u>Water supply for Living Purpose</u></b>			
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	<b>LIGHTING</b>			
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 <b>PART I</b>	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	<b>COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER</b>			
a	Telephone, fax, internet, intranet, e-mail etc	-	Yes	
3.6.0	<b>COMPRESSED AIR wherever required for the work</b>	-	-	
3.7.0	<b>Demobilization of all the above facilities</b>	-	Yes	
3.8.0	<b>TRANSPORTATION</b>			
a	For site personnel of the bidder	-	Yes	
b	For bidder's equipments and consumables (T&P, Consumables etc)	-	Yes	

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – V: T&Ps and MMEs to be deployed by BHEL on sharing basis

### LIST OF TOOL & PLANTS TO BE DEPLOYED BY THE CONTRACTOR -

SN	DESCRIPTION	CAPACITY (MINIMUM)	MINIMUM QUANTITY	REMARKS
1	CRAWLER/MOBILE CRANE (WITH TELESCOPIC BOOM, HYDRAULICALLY OPERATED WITH TURRET FUNCTION)	40-50 Ton	2	1 <sup>st</sup> CRANE: TO BE AVAILABLE FROM THE START OF CONTRACT PERIOD.  2 <sup>nd</sup> CRANE: TO BE AVAILABLE BY 3 <sup>rd</sup> MONTH FROM START OF WORK
2	HYDRA CRANE	12/10 Ton	1	TO BE AVAILABLE FROM THE START OF CONTRACT PERIOD.
3	FORK LIFT	3 Ton	1	TO BE AVAILABLE FROM THE START OF CONTRACT PERIOD.
4	TRAILER WITH PRIME MOVER	ADEQUATE CAPACITY	AS REQUIRED	<p>WHILE FURNISHING THE DEPLOYMENT PLANS FOR THESE ITEMS, THE NEED FOR TRANSPORT OF MATERIAL RECEIVED ON GODOWN DELIVERY BASIS IS TO BE KEPT IN VIEW.</p> <p>VEHICLES DEPLOYED SHOULD HAVE VALID STATUTORY DOCUMENTS AT ALL TIMES</p>
5	TRACTOR TRAILER	ADEQUATE CAPACITY	AS REQUIRED	
6	TRUCK	9 MT	1 NO	
7	CONCRETE SLEEPERS	Assorted sizes 3 FT length, 6 Inch width and 6 Inch height	5500 Nos	<p>DEPLOYMENT SCHEDULE FROM START OF WORK: BY THE END OF 1<sup>ST</sup> MONTH- CUMULATIVE - 2000 NOS,</p> <p>BY THE END OF 2<sup>ND</sup> MONTH CUMULATIVE 3500 NOS CUM,</p> <p>BY THE END OF 3<sup>RD</sup> MONTH CUMULATIVE -5500 NOS</p> <p>TO CONTINUE TILL COMPLETION OF WORK. CONTRACTOR SHALL TAKE OUT ALL SUCH SLEEPERS AT THE END OF CONTRACT AND LEAVE THE PROJECT PREMISES CLEAN.</p>
8	WOODEN SLEEPERS	Assorted sizes 6 FT length, 6 Inch width and 6 Inch	500 Nos	BY THE END OF SECOND MONTH FROM START OF WORK

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – V: T&Ps and MMEs to be deployed by BHEL on sharing basis

SN	DESCRIPTION	CAPACITY (MINIMUM)	MINIMUM QUANTITY	REMARKS
		height		
9	SLINGS, 'D'-SHACKLES, HYDRAULIC JACKS, ETC.	AS REQUIRED	AS REQUIRED	WITH TEST REPORTS

The Manufacturing year of all major T&Ps deployed by the contractor (40-50 MT Mobile Crane, and 12/10 Ton Hydra Crane) should not be more than 10 years as on the date of deployment. If at any moment of time during the execution of work, any crane is found to be not in a good working condition and non performing at desired minimum capacity, as certified by BHEL Engineer, the contractor shall deploy another crane in good working condition with minimum desired capacity. If Contractor fails to deploy the same within 10 days, BHEL will recover non-refundable penalty per day of delay in the following manner:

- |  |                 |
|--|-----------------|
| 1. IN RESPECT OF PER 40-50 MT MOBILE CRANES: | @ RS. 5,000 / - |
| 2. IN RESPECT OF PER 12/10 HYDRA CRANES:     | @ RS. 1,000 / - |
| 3. IN RESPECT OF FORK LIFTER:                | @ RS. 300/-     |
| 4. IN RESPECT OF PER CONCRETE SLEEPERS:      | @ RS. 5 / -     |
| 5. IN RESPECT OF PER WOODEN SLEEPERS:        | @ RS. 10 / -    |

**B: MEASURING AND MONITORING DEVICES (MMD):**

AS PER REQUIREMENT TO BE FINALISED AT SITE, SHALL MEET THE REQUIREMENTS AS PER FIELD QUALITY PLAN AND OTHER ERECTION, TESTING RELATED ACTIVITIES.

**NOTE:**

- THIS ABOVE LIST IS ONLY INDICATIVE AND NEITHER EXHAUSTIVE NOR LIMITING. QUANTITIES INDICATED ABOVE ARE ONLY THE MINIMUM REQUIRED. CONTRACTOR SHALL DEPLOY ALL NECESSARY T&P TO MEET THE SCHEDULES & AS PRESCRIBED BY BHEL ENGINEER AND REQUIRED FOR COMPLETION OF WORK.
- IF ABOVE MENTIONED T&P ARE NOT DEPLOYED IN SPECIFIED TIME BHEL WILL CHARGE TO CONTRACTOR CURRENT MARKET RATE PLUS (+) 30 % OVERHEADS FOR NON AVAILABILITY OF T&P OR LEVY A DAY WISE PENALTY FOR NON DEPLOYMENT FOR DELAYED DEPLOYMENT.
- IF WORK GETS DELAYED DUE TO NON AVAILABILITY OF T&P, BHEL RESERVES THE RIGHT TO GET THE WORK DONE AT THE RISK AND COST OF CONTRACTOR WITHOUT PREJUDICE TO RIGHTS OF BHEL AS IN GCC.
- IN ADDITION TO ABOVE CONTRACTOR SHALL PROVIDE ALL NECESSARY ARRANGEMENTS INCLUDING ADDITIONAL CRANES / ALTERNATE ARRANGEMENT, T&P ETC. FOR UNLOADING



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – V: T&Ps and MMEs to be deployed by BHEL on sharing basis

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AND HANDLING OF HEAVY AND VOLUMINOUS EQUIPMENTS / ITEMS AS A SCOPE OF WORK WITHIN THE AGREED CONTRACT PRICE WHICH ARE REQUIRED FOR THE PROJECT AND ARE BEYOND THE CAPACITY & REACH OF CONTRACTOR'S 40-50 MT CRANE AND OTHER CRANES.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – V: T&Ps and MMEs to be deployed by BHEL on sharing basis

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

SN	DESCRIPTION	CAPACITY (MINIMUM)	MINIMUM QUANTITY	REMARKS
1	MOBILE CRANE (HYDRAULICALLY OPERATED WITH TURRET FUNCTION)	25 Ton	1	On sharing basis for erection as per absolute decision of BHEL Engineer I/C at site subject to its availability / spareability, approachability, accessibility and capacity.
2	MOBILE CRANE (HYDRAULICALLY OPERATED WITH TURRET FUNCTION)	18 Ton	1	On sharing basis for erection as per absolute decision of BHEL Engineer I/C at site subject to its availability / spareability, approachability, accessibility and capacity.
3	HYDRA CRANE	11 Ton	1	On sharing basis for erection as per absolute decision of BHEL Engineer I/C at site subject to its availability / spareability, approachability, accessibility and capacity.

Note:

1. CONTRACTOR SHALL PROVIDE THE FUEL FOR BHEL PROVIDED CRANES FOR HIS USE.
2. CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS LIKE LYING OF SPECIAL SLEEPER BEDS AND STEEL PLATES ETC FOR MOVEMENT OF THE CRANE (ALL ARRANGED BY CONTRACTOR), CONTRACTOR SHALL ARRANGE MANPOWER FOR LENGTHENING AND SHORTING OF THE CRANE BOOM.
3. OPERATION AND MAINTENANCE IN BHEL SCOPE.
4. CRANES PROVIDED BY BHEL WILL BE ON SHARING BASIS WITH OTHER AGENCIES / CONTRACTORS OF BHEL. THE ALLOCATION OF CRANES SHALL BE THE DISCRETION OF BHEL ENGINEER, WHICH SHALL BE BINDING ON THE CONTRACTOR. CRANES WILL BE DEPLOYED AT APPROPRIATE TIME AS DECIDED BY BHEL FOR SUITABLE DURATION AND INTENDED PURPOSE.



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter – VI: Time Schedule

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### 6.1 INITIAL MOBILIZATION

AFTER RECEIPT OF FAX LOI, CONTRACTOR SHALL DISCUSS WITH PROJECT MANAGER / CONSTRUCTION MANAGER REGARDING INITIAL MOBILISATION. CONTRACTOR SHALL MOBILIZE NECESSARY RESOURCES WITHIN 2 WEEKS OF ISSUE OF FAX LETTER OF INTENT OR AS PER THE DIRECTIVE OF PROJECT MANAGER / CONSTRUCTION MANAGER. SUCH RESOURCES SHALL BE PROGRESSIVELY AUGMENTED TO MATCH THE SCHEDULE OF MILESTONES AND COMMISSIONING.

### 6.2 AUGMENTATION OF MOBILISATION

CONTRACTOR SHALL SUBSEQUENTLY AUGMENT HIS RESOURCES IN SUCH A MANNER THAT DAILY ERRANDS/ACTIVITIES SHALL BE COMPLETED ON DAILY BASIS AND THE ENTIRE WORK IS COMPLETED WITHIN THE TIME SCHEDULE/CONTRACT PERIOD. MOBILIZATION OF CONTRACTOR'S RESOURCES SHALL BE MADE AND AUGMENTED FROM TIME TO TIME IN SUCH A MANNER THAT THE WORK IN SCOPE IS CARRIED OUT IN AN UNINTERRUPTED MANNER.

### 6.3 CONTRACT PERIOD

THE CONTRACT PERIOD FOR COMPLETION OF ENTIRE WORK UNDER SCOPE SHALL BE **26 (TWENTY SIX) MONTHS** FROM START OF CONTRACT PERIOD.

THE DATE OF RECEIPT / UNLOADING THE VERY FIRST CONSIGNMENT BY THE CONTRACTOR AS DEFINED IN SCOPE OF THIS CONTRACT SHALL BE RECKONED AS THE START OF THE CONTRACT PERIOD.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VII: Terms of Payment

SL NO	Description of Activity	% of payment
<b>7.1.0</b>	<b>UNLOADING FROM TRUCKS/TRAILERS (For item nos A &amp; D of Rate Schedule)</b>	
7.1.1	UNLOADING, SHIFTING TO OPEN/ COVERED STORES	30%
7.1.2	UPDATION OF RECEIPT DETAILS, IN STORE MATERIAL REGISTERS/BHEL MM PACKAGE SYSTEM	15%
7.1.3	STACKING AND VERIFICATION	15%
7.1.4	UPDATION OF VERIFICATION DETAILS IN MATERIAL STOCK REGISTERS, SUBMISSION OF REPORTS AS PER SPECIFIED FORMATS FOR SHORTAGE/OPEN DELIVERY, LODGING OF POLICE REPORTS IF REQUIRED, DOCUMENTS FOR INSURANCE CLAIMS ETC, AND PREPARATION OF MATERIAL RECEIPT CERTIFICATES IN PRESCRIBED FORMATS WHERE EVER APPLICABLE	25%
7.1.5	IDENTIFICATION OF MATERIAL IN READY TO LIFT POSITION FOR ISSUE TO BHEL/ERECTION AGENCY, AND UPDATION OF ISSUE DETAILS IN STORES RECORDS	12%
7.1.6	COMPLETION OF CONTRACTUAL OBLIGATIONS	3%
	Total	100%
<b>7.2.0</b>	<b>UNLOADING FROM RAILWAY WAGONS AND COLLECTION FROM TRANSPORTER GODOWN (For item B &amp; C of Rate Schedule)</b>	
7.2.1	UNLOADING FROM RAILWAY WAGONS OR COLLECTION FROM TRANSPORTER GODOWNS, RE-LOADING, TRANSPORTATION TO SITE AND UNLOADING	30%
7.2.2	UPDATION OF RECEIPT DETAILS, IN STORE MATERIAL REGISTERS/BHEL MM PACKAGE SYSTEM	15%
7.2.3	STACKING AND VERIFICATION	15%
7.2.4	UPDATION OF VERIFICATION DETAILS IN MATERIAL STOCK REGISTERS, SUBMISSION OF REPORTS AS PER SPECIFIED FORMATS FOR SHORTAGE/OPEN DELIVERY, LODGING OF POLICE REPORT IF REQUIRED, DOCUMENTS FOR INSURANCE CLAIMS ETC, AND PREPARATION OF MATERIAL RECEIPT CERTIFICATES IN PRESCRIBED FORMATS WHERE EVER APPLICABLE	25%
7.2.5	IDENTIFICATION OF MATERIAL IN READY TO LIFT POSITION FOR ISSUE TO BHEL/ERECTION AGENCY, AND UPDATION OF ISSUE DETAILS IN STORES RECORDS	12%
7.2.6	COMPLETION OF CONTRACTUAL OBLIGATIONS	3%
	Total	100%
<b>7.3</b>	<b>MATERIAL RE-SHIFTING/RE STACKING WITHIN THE PROJECT PREMISE (For item E of Rate Schedule)</b>	
7.3.1	MATERIAL RE-SHIFTING/RE STACKING	85%

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# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VII: Terms of Payment

7.3.2	UPDATION OF STORE MATERIAL REGISTERS/BHEL MM PACKAGE SYSTEM	12%
7.3.3	COMPLETION OF CONTRACTUAL OBLIGATIONS	3%
	Total	100%
7.4	<b>OUTGOING MATERIALS ( For item F of rate Schedule)</b>	
7.4.1	IDENTIFICATION OF MATERIALS, TAGGING, PACKING IF REQUIRED, PREPARATION OF GATE PASSES ETC	40%
7.4.2	LOADING OF MATERIALS, INCLUDING T&P OF BHEL, INTO TRUCKS/CARRIERS AT SITE STORES/ERECTION SITE FOR ONWARD TRANSPORTATION TO OTHER DESTINATIONS (TRANSPORTATION BY OTHER AGENCIES.)	45%
7.4.3	UPDATION OF STORE DOCUMENTS/BHEL MM PACKAGE SYSTEM	12%
7.4.4	COMPLETION OF CONTRACTUAL OBLIGATIONS	3%
	Total	100%
7.5	<b>OTHERS</b>	
	<b>% from every RA Bill to be paid only after satisfactory completion otherwise forfeited</b>	
1	REMOVAL OF GRASS/WEEDS AND OTHER PLANT GROWTH IN THE STORE AREA	1%
2	PRESERVATION planned for the month	1%
3	Safe working & availability of adequate illumination at the place of work	1%

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII: TAXES DUTIES, LEVIES

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### TAXES, DUTIES, LEVIES

#### 8.1.0 TAXES, DUTIES, LEVIES

##### 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

**OPAL DAHEZ Project falls under SEZ "Special Economic Zone" as such Service Tax is exempted for this project.**

**Contractor should ensure as flows.**

- a) Invoices raised by contractor should state the wording that " Services provided Within the SEZ"**
- b) Invoices should also bear the name of customer i.e. "OPAL Dahej"**

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

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

##### 8.1.4 Modalities of Tax Incidence on BHEL

Wherever the relevant tax laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL will have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII: TAXES DUTIES, LEVIES

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assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.

### **8.1.5 New Taxes/Levies**

In case the Government imposes any new levy/tax on the output service/ goods/work after award of the contract, the same shall be reimbursed by BHEL at actual.

In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same **before opening of Price Bid**. Claim for any such impact after opening the Price Bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.

No reimbursement/recovery on account of increase/reduction in the rate of taxes, levies, duties etc. on input goods/services/work shall be made. Such impact shall be taken care of by the Price Variation/Adjustment Clause (PVC) if any. In case PVC is not applicable for the contract, Bidder has to make his own assessment of the impact of future variation if any, in rates of taxes/duties/ levies etc. in his price bid.



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-I General

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9.1

THE INTENT OF SPECIFICATION IS TO PROVIDE MATERIAL HANDLING AND MATERIALS MANAGEMENT SERVICES ACCORDING TO THE MOST MODERN AND PROVEN TECHNIQUES AND CODES. THE OMISSION OF SPECIFIC REFERENCE TO ANY METHOD, EQUIPMENT OR MATERIALS NECESSARY FOR PROPER AND EFFICIENT UNLOADING, TRANSPORTATION, VERIFICATION, STACKING & PRESERVATION ETC SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING SUCH FACILITIES TO COMPLETE THE WORK WITHOUT ANY EXTRA COMPENSATION.

9.2

THE WORK SHALL BE EXECUTED UNDER USUAL CONDITIONS AFFECTING MAJOR THERMAL POWER PROJECTS IN AN EXISTING POWER PLANT AND IN CONJUNCTION WITH NUMEROUS OTHER OPERATIONS AT SITE. THE CONTRACTOR AND HIS PERSONNEL SHALL COOPERATE WITH PERSONNEL OF CUSTOMER'S CONTRACTORS, COORDINATING HIS WORK WITH OTHERS AND PROCEED IN A MANNER THAT SHALL NOT DELAY OR HINDER THE PROGRESS OF WORK AS A WHOLE.

9.3

ALL THE WORK SHALL BE CARRIED OUT AS PER THE INSTRUCTIONS OF BHEL ENGINEER. BHEL ENGINEER'S DECISION REGARDING CORRECTNESS OF THE WORK AND METHOD OF WORKING SHALL BE FINAL AND BINDING ON THE CONTRACTOR.

9.4

THE CONTRACTOR SHALL PERFORM ALL REQUIRED SERVICES WHICH MAY NOT BE SPECIFIED HEREIN BUT NEVERTHELESS REQUIRED FOR THE COMPLETION OF WORK WITHIN QUOTED RATES.

9.5

ALL NECESSARY CERTIFICATES AND LICENSES REQUIRED TO CARRY OUT THIS WORK ARE TO BE ARRANGED BY THE CONTRACTOR EXPEDITIOUSLY.

9.6

ALL CRANES, TRANSPORT EQUIPMENTS, HANDLING EQUIPMENT, TOOLS, TACKLES, FIXTURES, EQUIPMENT, MANPOWER, SUPERVISORS/ENGINEERS, CONSUMABLES ETC REQUIRED FOR THIS SCOPE OF WORK SHALL BE PROVIDED BY THE CONTRACTOR.

9.7

ALL EXPENDITURE INCLUDING TAXES AND INCIDENTALS IN THIS CONNECTION WILL HAVE TO BE BORNE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE RELEVANT CLAUSES ELSEWHERE IN THESE SPECIFICATIONS. THE CONTRACTOR'S QUOTED RATES SHALL INCLUDE ALL SUCH CONTINGENCIES. IN THIS CONNECTION REFER RELEVANT CLAUSE OF GENERAL CONDITIONS OF CONTRACT.

9.8

THE CONTRACTOR SHALL PERFORM ALL REQUIRED SERVICES WHICH MAY NOT BE SPECIFIED HEREIN BUT NEVERTHELESS REQUIRED FOR THE COMPLETION OF WORK WITHIN QUOTED RATES.

9.9

THE DISTANCES INDICATED IN THESE SPECIFICATIONS ARE ONLY APPROXIMATE. HOWEVER, THE TENDERERS SHOULD ASSESS THE VARIOUS DISTANCES AND SITE CONDITIONS BY VISITING SITE BEFORE SUBMITTING THEIR OFFER. NO ADDITIONAL/EXTRA CLAIMS FOR ANY VARIATION IN THIS REGARD WILL BE ENTERTAINED.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-I General

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9.10

CONTRACTOR SHALL ARRANGE FOR CUTTING AND REMOVAL OF VEGETATION GROWTH/GRASS ETC IN THE STORAGE YARD AS AND WHEN CALLED FOR BY BHEL AS INCIDENTAL TO WORK. BHEL WILL TAKE APPROPRIATE ACTION AT THE RISK & COST OF THE CONTRACTOR IN CASE OF FAILURE IN THIS REGARD.

9.11

IF THE CONTRACTOR OR HIS WORKMEN OR EMPLOYEES BREAK, DEFACE, INJURE OR DESTROY ANY PART OF A BUILDING, ROAD, KERBS, FENCE, ENCLOSURES, WATER PIPES, CABLES, DRAINS, ELECTRIC OR TELEPHONE POSTS OR WIRES, TREES OR ANY OTHER PROPERTY OR TO ANY PART OF ERECTED EQUIPMENTS, STORED COMPONENTS ETC WITHIN THE PROJECT PREMISES OR OUTSIDE THE CONTRACTOR SHALL MAKE THE SAME GOOD AT HIS OWN EXPENSES, ELSE BHEL SHALL LEVY/RECOVER NECESSARY COMPENSATION FROM CONTRACTOR'S BILL PAYMENT.

9.12 Submission of Periodical Reports

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

- 1) Consumption of construction power
- 2) Manpower reports
- 3) Daily and Monthly Progress reports
- 4) Field calibration reports

BHEL will provide formats for these reports.

**9.13** It is the responsibility of the contractor to arrange gate pass for all his employees, T&P etc. Necessary coordination with customer officials is the responsibility of the contractor. Contractor to follow all the procedures laid down by the customer for making gate passes. Where permitted, by customer/ BHEL, to work beyond normal working hours, the contractor shall arrange necessary work permit for working beyond normal working hours

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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### 10.1

MAJORITY OF CONSIGNMENTS SHALL REACH SITE DIRECTLY FOR DELIVERY. HOWEVER A GOOD NUMBER OF CONSIGNMENTS SHALL BE BOOKED ON GODOWN DELIVERY BASIS OR DOOR DELIVERY AGAINST CONSIGNEE COPY BASIS, THE PROCEDURE OF MATERIAL COLLECTION SHALL BE ADOPTED AS DETAILED IN RELEVANT CHAPTER

### 10.2

IT WILL BE RESPONSIBILITY OF THE CONTRACTOR TO KEEP IN TOUCH WITH OFFICIALS OF BHEL REGARDING ADVANCE INFORMATION ABOUT ARRIVAL OF CONSIGNMENTS. THE CONTRACTOR SHALL COLLECT LORRY WAY BILLS OR OTHER SUCH DESPATCH DOCUMENTS.

### 10.3

THE CONTRACTOR SHALL REMAIN IN REGULAR CONTACT WITH THE CONCERNED TRANSPORTERS OR BASED ON THE DESPATCH DETAILS OBTAINED AS STATED ABOVE AND MAKE ALL NECESSARY ARRANGEMENTS FOR COLLECTION / RECEIPT OF THE CONSIGNMENT AS APPLICABLE. CONTRACTOR SHALL TAKE ADVANCE ACTION TO DEPLOY ALL NECESSARY RESOURCES FOR LOCAL TRANSPORTATION, HANDLING AND UNLOADING OF THE ANTICIPATED CONSIGNMENTS SO AS TO ENSURE NO LOSS OF TIME UPON ARRIVAL OF THE CONSIGNMENTS.

### 10.4

DETENTION CHARGES/DEMURRAGE/WHARFAGE ETC., WHICH RESULT DUE TO CONTRACTOR'S FAULT, SHALL BE RECOVERED FROM THE BILL PAYMENT DUE TO THE CONTRACTOR.

### 10.5

IT WOULD BE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE PACKAGES, CONSIGNMENTS ETC. IMMEDIATELY ON ARRIVAL AND BRING TO THE NOTICE OF BHEL AUTHORITIES REGARDING LOSS/DAMAGE/SHORTAGE/DISCREPANCY, IF ANY, OBSERVED IN THE CONSIGNMENTS BEFORE TAKING DELIVERY OF THE SAME.

### 10.6

ANY DISCREPANCY/SHORTAGE/DAMAGE FOUND IN THE CONSIGNMENT AFTER TAKING CLEAN DELIVERY FROM THE CARRIERS SHALL BE THE RESPONSIBILITY OF CONTRACTOR AND THE RESULTANT LOSS TO BHEL ON SUCH ACCOUNT SHALL BE RECOVERABLE FROM THE CONTRACTOR.

### 10.7

CONSIGNMENTS ARE EXPECTED TO ARRIVE DURING ANY TIME OF THE DAY, AND COUNT DOWN FOR DETENTION/DEMURRAGE/WHARFAGE CHARGES IS LIABLE TO START IMMEDIATELY. UNLOADING OF SUCH CONSIGNMENTS MAY BE NECESSITATED EVEN IN THE NIGHT OR ROUND THE CLOCK. CONTRACTOR SHALL ARRANGE TO DEPLOY HIS RESOURCES IMMEDIATELY AND CONTINUE ROUND THE CLOCK ON SUCH OCCASIONS WITHOUT ANY ADDITIONAL COST TO BHEL. CONTRACTOR SHALL ARRANGE ALL NECESSARY RESOURCES INCLUDING SPOT LIGHTING FOR WORKING AT NIGHT. THE CONTRACTOR SHALL SIMILARLY UNLOAD CONSIGNMENTS ARRIVING ON WEEKLY OFF DAYS AND HOLIDAYS.

### 10.8

UNLOADING AT STORAGE AREA/WORK SITE, STACKING AND RESTACKING IF NECESSITY ARISES, OF ALL MATERIALS INCLUDING HEAVY/SOPHISTICATED EQUIPMENTS LIKE TUBED WALL PANELS OF BOILER, HEAVY MOTORS, HEAVY BEARING PEDESTALS, ELECTRICAL PANELS AND TG EQUIPMENT LIKE

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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HEAVY TURBINE COMPONENTS, PUMPS, PANELS, ETC. SHALL BE DONE AS PER STORAGE AND PRESERVATION MANUAL OF RELEVANT EQUIPMENT/COMPONENTS OF BHEL AND/OR AS PER DIRECTIONS OF BHEL ENGINEER.

10.9

THE CONTRACTOR SHALL VERIFY THE CONSIGNMENTS IN DETAIL **WITHIN 12 DAYS OF RECEIPT AND REPORT THE DISCREPANCIES IN PRESCRIBED FORMATS NOT LATER THAN 14<sup>TH</sup> DAY.** ANY LOSS ON ACCOUNT OF DELAYED REPORTING SHALL BE RECOVERABLE FROM CONTRACTORS BILL/ANY PAYMENT DUE. CONTRACTOR SHALL ARRANGE ALL FACILITIES TO OPEN PACKAGES - WHERE REQUIRED IN THE PRESENCE OF BHEL ENGINEER, VERIFY THE CONTENTS, REPACK WHEREVER AND WHENEVER CALLED FOR AND PROPERLY STACK THEM AS PER STORAGE MANUAL OR/AND AS MAY BE DIRECTED BY BHEL.

10.10

THE MATERIAL SHALL BE SO STACKED THAT IT SHOULD FACILITATE EASY IDENTIFICATION, RETRIEVAL AND HANDLING FOR ISSUE AS AND WHEN NEED ARISES.

10.11

PRE-DEFINED IDENTIFICATION SYSTEM OF THE LOCATIONS OF OPEN STORAGE YARD, SEMI-CLOSED SHED, COVERED STORES AS WELL AS STORAGE RACKS HAS TO BE DESIGNED BY THE CONTRACTOR WITH THE APPROVAL OF BHEL. CONTRACTOR SHALL PUT UP PROMINENT IDENTIFICATION BOARDS OF SEGMENTAL LOCATIONS (FOR OPEN AND SEMI-CLOSED STORES) OR INSCRIPTION (ON THE STORAGE RACKS) WITH CLEAR VISIBILITY FROM A DISTANCE. CONTRACTOR SHALL ALSO ARRANGE TO DISPLAY PLOT PLAN AT REGULAR INTERVALS IN THE COVERED/SEMI-CLOSED/OPEN STORAGE. THE CONTRACTOR SHALL ARRANGE PROPER DISPLAYS/SIGNS FOR VARIOUS REQUIREMENTS AS PER INSTRUCTIONS OF BHEL.

10.12

THE CONTRACTOR SHALL EXECUTE THE WORK IN A PROFESSIONAL MANNER. THE STORES SHALL BE HANDLED WITH DUE CARE AND DILIGENCE. THE CONTRACTOR AT HIS RISK AND COST SHALL MAKE GOOD ANY LOSS TO BHEL DUE TO CONTRACTOR'S LAPSE.

10.13

FOR ALL CONSIGNMENTS, OBSERVATIONS REGARDING LOSS/DAMAGE/SHORTAGE/ DISCREPANCY IS TO BE RECORDED IN APPROPRIATE DOCUMENT AND INFORMED TO BHEL. IN CASE IT BECOMES NECESSARY TO TAKE '**OPEN DELIVERY**' FROM THE AUTHORITIES, CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR TAKING OPEN DELIVERIES. ALL EXPENSES CONNECTED THEREWITH SHALL BE TO THE ACCOUNT OF CONTRACTOR. ANY LOSS THAT ACCRUES TO BHEL ON ACCOUNT OF SUCH FAILURES SHALL BE DEBITED TO THE CONTRACTOR AND RECOVERY EFFECTED FROM HIS RUNNING BILLS.

### **10.14 HANDLING HEAVIER CONSIGNMENTS:**

#### **10.14.1 BOILER DRUM**

BOILER DRUM WILL BE ARRIVING IN ITS SPECIAL TRAILER INSIDE THE PROJECT PREMISES. CONTRACTOR SHALL ARRANGE JACK & SLEEPER OR SUITABLE CRANES AND UNLOAD THE BOILER DRUM FROM THE SPECIAL VEHICLE AND SHIFT TO THE LOCATION AS DECIDED BY BHEL ENGINEER AT

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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SITE. CONTRACTOR SHALL ALSO CARRY OUT THE NECESSARY LEVELLING & CONSOLIDATION OF THE UNLOADING AREA AND ATTENDANT WORK.

### 10.14.2

CONTRACTOR SHALL SUBMIT PROCEDURE WITH SKETCHES OF HANDLING OF ALL SUCH HEAVY COMPONENTS TO BHEL WELL IN ADVANCE AND OBTAIN PRIOR APPROVAL BEFORE UNLOADING AND STACKING.

### 10.15

SINCE THIS CONTRACT IS INTENDED TO BE A COMPLETE PACKAGE FROM MATERIAL RECEIPT THROUGH ISSUE/TRANSACTIONS RIGHT UPTO MATERIAL RECONCILIATION, FULL RESPONSIBILITY W.R.T THE PROPER UPKEEP OF FACILITIES E.G. COMPUTERS, STATIONARY ITEMS; ENSURING BEFITTING DISCIPLINE AMONG THE STORE ASSISTANTS/STAFF UNDER ITS CONTROL AND ACCOUNTING OF MATERIALS ON STOCK SHALL REST WITH THE CONTRACTOR AT ALL TIMES.

IN THE REMOTE POSSIBILITY OF ANY UNTRACEABLE MATERIAL, CUSTOMARILY BHEL HAS TO PROCESS THE INSURANCE CLAIM. TO KICK OFF SUCH CLAIM, THE CONTRACTOR SHALL RENDER ALL NECESSARY ASSISTANCE INCLUDING AUGMENTATION OF DOCUMENTS (FIR ETC) WITHIN THE QUOTED PRICE AS MAY BE REQUIRED FOR REALIZATION OF THE INSURANCE CLAIM.

### 10.16

THE CONTRACTOR UNDER THIS CONTRACT SHALL COMPLETE INDUCTION OF FOLLOWING CATEGORIES OF RESOURCES WITHIN THE QUOTED ITEM RATES, TO ENSURE ESTABLISHMENT OF PROPER **MATERIALS MANAGEMENT** AT THE PROJECT SITE.

1. COMPUTERS WITH LATEST UP-GRADATION, MEMORY AND COMPATIBLE WITH BHEL COMPUTERS/LAN EQUIPMENT TO BE INSTALLED/USED WITHIN BHEL SITE OFFICE- 04 SETS
2. ITEM RATE IN THE RATE SCHEDULE HAS SPECIFIC MENTION OF "MATERIALS MANAGEMENT" WITH SOLE PURPOSE TO EMPHASIZE THE REQUIREMENT OF SUFFICIENT NO. OF ADEQUATELY QUALIFIED MANPOWER TO ENSURE BEST OBTAINABLE QUALITY OF WORK. ACCORDINGLY, SUPERVISORS/MANPOWER (APART FROM WORKMEN ON CRANES AND MATERIAL HANDLING PURPOSE) AS INDICATED AGAINST EACH ACTIVITY IN THE TABLE BELOW, NORMALLY TO WORK AT (BUT NOT LIMITED TO) BHEL SITE OFFICE

## **RESPONSIBILITIES OF THE CONTRACTOR -**

### **(1) RECEIPT & ISSUE**

SCOPE INCLUDES EXECUTION OF VARIOUS ACTIVITIES AS FOLLOWS:

- (I) RECEIPT, UNLOADING, CARRYING OUT RECEIPT INSPECTION, DETAILED VERIFICATION, STACKING AND REGULAR STOCK VERIFICATION OF PROJECT MATERIALS AT SITE.
- (II) PREPARING VARIOUS REPORTS AT APPROPRIATE STAGES AND REPORTING DAMAGE/LOSS DURING RECEIPT AS WELL AS STORAGE AND ANY OTHER ASSOCIATED RESPONSIBILITY AS ASSIGNED BY BHEL FROM TIME TO TIME. RESPONSIBILITY SHALL INCLUDE THE FOLLOWING ACTIVITIES:
  - a. EXAMINATION OF INCOMING CONSIGNMENTS TO DETECT ANY LOSS OR SHORTAGE OR OUTWARD DAMAGE AND RECORDING IT ON THE LR/LWB BEFORE MAKING ACKNOWLEDGEMENT

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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OF IT'S RECEIPT FROM THE TRANSPORTER AND SIMULTANEOUSLY OBTAINING ENDORSEMENT OF THE VEHICLE DRIVER ON THE SAME.

b. REPORTING SUCH DISCREPANCY TO BHEL IMMEDIATELY ON RECEIPT OF CONSIGNMENT.

c. ASSISTING BHEL IN LODGING INSURANCE CLAIMS IN RESPECT OF LOSS/DAMAGE AS STATED ABOVE.

- (III) ISSUE OF MATERIALS TO BHEL'S ERECTION CONTRACTORS, PRESERVATION OF STACKED MATERIALS, RE-STACKING/RE-HANDLING AS NECESSARY, PROGRESSIVE AND FINAL RECONCILIATION WITH BHEL'S ERECTION AGENCIES AND PREPARATION OF NECESSARY DOCUMENT/ RECORD IN RESPECT OF THESE ACTIVITIES.
- (IV) RETURN OF EXCESS/DEFECTIVE MATERIALS BY VARIOUS ERECTION CONTRACTORS OF BHEL.
- (V) LOADING AND DISPATCH OF OUTGOING MATERIALS.

### EXPECTED MINIMUM QUALITY OF SERVICE

CONTRACTOR SHALL RENDER THE SERVICES BY ENSURING DEPLOYMENT OF REQUISITE PERSONNEL WITH ADEQUATE EDUCATIONAL QUALIFICATION OF ENGINEERING/TECHNICAL BACKGROUND, HAVING THOROUGH EXPERIENCE IN RELATED FIELD TO ENABLE UNDERSTANDING THE INTRICACIES OF AND SPECIAL REQUIREMENTS INVOLVED IN HANDLING OF PROJECT MATERIALS, INCONSISTENCIES AND UNCERTAINTIES ASSOCIATED WITH IN/OUT FLOW OF MATERIALS, PROJECT ACTIVITIES AT ODD HOURS & HOLIDAYS AND IRREGULAR WORKING HOURS. CONTRACTOR SHALL ENSURE PROMPT AND TIMELY AVAILABILITY OF SUCH SERVICES.

### **(2) PRESERVATION OF COMPONENTS -**

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

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

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

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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### 5) HT MOTORS

FOR PRESERVATION OF HT MOTORS, SPACE HEATERS HAVE TO BE KEPT ENERGIZED TO AVOID INGRESS OF MOISTURE. INSULATION RESISTANCE HAS TO BE MEASURED AND RECORDED AT SPECIFIED INTERVALS TILL THESE ARE ISSUED FOR ERECTION. BHEL WILL PROVIDE NECESSARY CABLES, SWITCHES ETC. FOR THIS, HOWEVER CONTRACTOR SHALL INSTALL, OPERATE AND MAINTAIN THE SAME.

BHEL WILL PROVIDE FREE OF COST ALL PRESERVATIVES LIKE PRESERVATIVE OIL, LUBRICANTS, CHEMICALS, INHIBITORS, CAPS ETC EXCEPT PRIMERS & PAINTS. CONTRACTOR SHALL PROVIDE RED OXIDE ZINC CHROMATE (ROZC) PRIMER CONFORMING TO IS:2074 OF REPUTED MANUFACTURES (E.G. ASIAN PAINTS, BERGER, JENSON & NICHOLSON, BOMBAY PAINTS, SHALIMAR OR ANY OTHER BHEL APPROVED MANUFACTURER) REQUIRED FOR PRESERVATION SHALL BE PROVIDED BY THE CONTRACTOR AND USED FOR THIS PURPOSE.

IN THE PROCESS THE IDENTIFICATION MARKS, COMPONENT/MATERIAL CODES, MATCH MARKS MAY HAVE TO BE REPAINTED. THIS WORK AFTER PRESERVATION COMPONENTS ARE TO BE STACKED PROPERLY, PERIODICAL REPORTS ON THE PRESERVATION CARRIED OUT SHOULD BE SUBMITTED TO BHEL IN THE PRESCRIBED FORMATS.

### **(3) RECORD KEEPING –**

CONTRACTOR SHALL PREPARE, MAINTAIN AND UPDATE VARIOUS MM RECORDS, ASSOCIATED WITH MATERIALS MANAGEMENT OPERATION OF BHEL AT PROJECT SITE. TWO SYSTEMS OF RECORD KEEPING/CAPTURING INFORMATION & DATA AT VARIOUS STAGES ARE IN VOGUE VIZ.

- i. MANUAL LEDGERS & RECORDS.
- ii. COMPUTERIZED DATABASE APPLICATION: BHEL HAS DEVELOPED A SOFTWARE APPLICATION NAMED SITE OPERATIONS MANAGEMENT SYSTEM (SOMS) THAT CAPTURES ALL THE DATA IN THE ENTIRE CHAIN OF TRANSACTIONS STARTING WITH MASTER LIST OF PROJECT MATERIALS, RECORDS OF DISPATCH, RECEIPT, INSPECTION, ISSUE, RETURN, CONSUMPTION ETC.

SOME OF THESE RECORDS ARE MASTER SHIPPING/PACKING LIST, LR/RR REGISTER, DAYBOOK REGISTER, STOCK REGISTER, RECORDS OF ISSUES TO & RETURN OF MATERIALS IN RESPECT OF VARIOUS ERECTION SUBCONTRACTORS, INSURANCE CLAIM RECORDS, PERIODICAL STATUS REPORTS IN VARIOUS FORMATS COVERING DESIRED ASPECTS AND OUTPUT INFORMATION AS PER BHEL/CLIENT'S REQUIREMENT.

CONTRACTOR WILL PROVIDE NECESSARY HARDWARE, SOFTWARE & STATIONARY ETC. AND SHALL TAKE UTMOST CARE TO ENSURE THAT THESE PROPERTIES AND RECORDS ARE PROTECTED FROM ANY DAMAGE OR LOSS. BHEL WILL RECOVER THE COST OF SUCH PROPERTY / EXPENSES OF RESTORATION FROM THE CONTRACTOR WITH 30% OVERHEAD CHARGES IN CASE OF ANY LOSS/DAMAGE ATTRIBUTABLE TO NEGLIGENCE/FAILURE ON CONTRACTOR'S PART.



**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-II MATERIAL HANDLING AND MATERIAL MANAGEMENT**  
**OF MATERIALS RECEIVED BY ROAD**

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

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

**IN CASE THE CONTRACTOR DOES NOT DEPLOY OR DELAYS DEPLOYMENT OF ABOVE SAID MANPOWER WITH REFERENCE TO SPECIFIC INSTRUCTIONS FROM BHEL, BHEL WILL RECOVER NON-REFUNDABLE PENALTY PER MAN- DAY @ Rs 500**

**10.17**

PAYMENT FOR ALL MATERIALS INCLUDING OD AND HEAVIER COMPONENTS SHALL BE REGULATED ON THE ACCEPTED UNIT **RATE AS PER SL NO A OF RATE SCHEDULE.**



# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-III MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIPT BY RAIL

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### 11.1

PRESENTLY THERE IS NO RAILWAY SIDING IN THE PROJECT PREMISES. HOWEVER, IT MAY BE MADE AVAILABLE AT A LATER DATE. ALL THE CONSIGNMENTS REACHING THE PROJECT SITE BY RAIL SHALL BE UNLOADED AT THE RAILWAY SIDING, FOLLOWED BY LOADING ON TRUCK/TRAILER, LOCAL TRANSPORTATION FROM RAILWAY SIDING TO THE STORAGE YARD/STORES, UNLOADING, VERIFICATION AND STACKING AND PRESERVATION AS APPLICABLE TO THE CONSIGNMENTS ARRIVING BY ROAD. THE APPROXIMATE DISTANCE FROM MAIN STORAGE YARD TO RAILWAY SIDING WILL BE 6-7 KM.

### 11.2

IT WILL BE RESPONSIBILITY OF THE CONTRACTOR TO KEEP IN TOUCH WITH OFFICIALS OF BHEL AND RAILWAYS REGARDING ADVANCE INFORMATION ABOUT ARRIVAL OF CONSIGNMENTS. THE CONTRACTOR SHALL COLLECT RAILWAY RECEIPTS OR OTHER SUCH DESPATCH DOCUMENTS.

### 11.3

CONTRACTOR SHALL DEPLOY HIS CRANE, TRAILERS/TRUCKS AND ALL OTHER T & P INCLUDING ADDITIONAL T & P AND MANPOWER ETC FOR HANDLING OF MATERIALS AT SUCH UNLOADING BAY/ LOCATION AND TRANSPORT TO STORES/ STORAGE YARD.

### 11.4

CONTRACTOR SHALL IN HIS OWN INTEREST ARRANGE TO RELEASE THE RAILWAY WAGONS/RACKS WITH UTMOST ALACRITY TO AVOID ANY DEMURRAGE CHARGES. DEMURRAGE/ WHARFAGE ETC., WHICH RESULT DUE TO CONTRACTOR'S FAULT, SHALL BE RECOVERED FROM THE BILL PAYMENT DUE TO THE CONTRACTOR.

### 11.5

CONTRACTOR SHALL PROVIDE AREA LIGHTING AT RAILWAY SIDING FOR HANDLING OF MATERIALS DURING EVENING/ NIGHT.

### 11.6

ALL THE RESPONSIBILITIES SPECIFIED IN THE CONTRACTOR'S SCOPE FOR THE MATERIALS RECEIVED BY ROAD SHALL ALSO BE APPLICABLE MUTATIS-MUTANDIS FOR ALL THE CONSIGNMENTS RECEIVED BY RAIL AT RAILWAY SIDING.

### 11.7

FOR THE CONSIGNMENTS RECEIVED BY RAIL THE PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON THE **ACCEPTED UNIT RATE AS PER SL NO B OF RATE SCHEDULE**. THE ABOVE ALSO INCLUDES ALL COSTS TOWARDS UNLOADING FROM THE WAGON AT THE UNLOADING SIDING IN THE PLANT AND LOADING ON THE TRANSPROT AND THE COST TOWARDS INTERNAL TRANSPORTATION TO STORAGE YARD/ STORES SHED OF BHEL/ CLIENT.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IV RESHIFTING AND RESTACKING

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### 12.1 RE-SHIFTING AND RE-STACKING

OWING TO SEVERAL PROJECT REQUIREMENTS, MANY COMPONENTS MAY HAVE TO BE SHIFTED FROM ORIGINALLY STACKED LOCATIONS TO ELSEWHERE WITHIN THE PROJECT PREMISES FOR THE LEAD DISTANCE NOT EXCEEDING 2.5 KMS. THIS MAY INVOLVE LOADING OF SUCH MATERIAL ONTO A VEHICLE MOVING TO A NEW LOCATION AND UNLOADING/STACKING INCLUDING PROPER INSCRIPTION OF IDENTIFICATION MARKS IF NEEDED. LIST OF ITEMS DULY CERTIFIED BY BHEL OFFICIAL, SHIFTED, UPDATED STOCK RECORDS ABOUT CHANGE IN LOCATION ETC SHALL BE PREPARED/SUBMITTED ALONG WITH THE MONTHLY BILLS

SEPARATE ITEM RATE SHALL BE QUOTED FOR RESHIFTING AND RE-STACKING OF STACKED MATERIALS AND THE PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON THE ACCEPTED UNIT **RATE AS PER SL NO E OF RATE SCHEDULE**

### 12.2 RE-STACKING/RE-ARRANGING

OVER A PERIOD OF TIME, RESTACKING/REARRANGING OF THE MATERIALS STACKED EARLIER MAY ARISES DUE TO VARIOUS REASONS. THE HANDLING OF SUCH ITEMS WILL ALSO BE IN THE SCOPE OF THIS CONTRACT. THE RESTACKING/ RE-HANDLING MAY BE NECESSITATED FOR ANY EQUIPMENT/ MATERIALS COVERED WITHIN THIS WORK SPECIFICATION. CONTRACTOR SHALL DEPLOY NECESSARY RESOURCES LIKE MANPOWER, T&P, EQUIPMENTS ETC TO CARRY OUT THIS EXERCISE INCLUDING PROPER INSCRIPTION OF IDENTIFICATION MARKS IF NEEDED. LIST OF ITEMS DULY CERTIFIED BY BHEL OFFICIAL, RESTACKED, UPDATED STOCK RECORDS ABOUT CHANGE IN LOCATION ETC SHALL BE PREPARED/SUBMITTED ALONG WITH THE MONTHLY BILLS

RESTACKING AND REARRANGING SHALL BE APPLICABLE FOR MATERIALS RETURNED BY BHEL'S ERECTION CONTRACTORS ALSO.

BIDDER SHALL NOT QUOTE ANY SEPARATE RATE FOR RE-STACKING/RE-ARRANGING OF MATERIAL. **THE RATE SHALL BE DERIVED AS 40% OF UNIT RATE QUOTED FOR ITEM NO E OF RATE SCHEDULE.**

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-V MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIAL COLLECTION/ DISPATCHES

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### 13.1 INCOMING MATERIALS (SMALLS ETC)

#### 13.1.1

EVEN THOUGH MAJORITY OF CONSIGNMENTS SHALL REACH SITE DIRECTLY FOR DELIVERY. A GOOD NUMBER OF CONSIGNMENTS SHALL BE BOOKED ON GOWDOWNS DELIVERY/ DOOR DELIVERY BASIS AGAINST ORIGINAL CONSIGNEE COPY BASIS, THE PROCEDURE OF MATERIAL COLLECTION SHALL BE ADOPTED AS DETAILED HERE BELOW:

#### 13.1.2

CONTRACTOR SHALL KEEP IN TOUCH WITH OFFICIALS OF BHEL REGARDING ADVANCE INFORMATION ABOUT ARRIVAL OF CONSIGNMENTS. THE CONTRACTOR SHALL COLLECT ORIGINAL LR<sub>s</sub>/RR<sub>s</sub>/LORRY WAY BILLS OR OTHER SUCH DISPATCH DOCUMENTS

#### 13.1.3

THE CONTRACTOR SHALL REMAIN IN REGULAR CONTACT WITH THE CONCERNED TRANSPORTERS OR RAILWAYS BASED ON THE DISPATCH DOCUMENTS OBTAINED AS STATED ABOVE AND MAKE ALL NECESSARY ARRANGEMENTS FOR COLLECTION / RECEIPT OF THE CONSIGNMENT AS APPLICABLE. CONTRACTOR SHALL TAKE ADVANCE ACTION TO DEPLOY ALL NECESSARY RESOURCES FOR LOCAL TRANSPORTATION, HANDLING AND UNLOADING OF THE ANTICIPATED CONSIGNMENTS SO AS TO ENSURE NO LOSS OF TIME UPON ARRIVAL OF THE CONSIGNMENTS. LOADING AT TRANSPORTERS GODOWN, LOCAL TRANSPORT UP TO BHEL/ CLIENT'S STORES/ SITE AND UNLOADING AT STORES/STORAGE YARD/SITE, VERIFICATION AND STACKING SHALL ALSO BE IN THE SCOPE OF CONTRACT.

#### 13.1.4

DETENTION CHARGES/ DEMURRAGE/ WHARFAGE ETC., WHICH RESULT DUE TO CONTRACTOR'S FAULT, SHALL BE RECOVERED FROM THE BILL PAYMENT DUE TO THE CONTRACTOR.

#### 13.1.5

SEPARATE ITEM RATE SHALL BE QUOTED FOR MATERIAL HANDLING AND MATERIAL MANAGEMENT OF INCOMING MATERIALS (SMALLS/FULL TRUCK LOADS) FROM TRANSPORTERS GODOWNS AND THE PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON THE **ACCEPTED UNIT RATE AS PER SL NO C OF RATE SCHEDULE**. NO OTHER PAYMENT SUCH AS MINIMUM CHARGES FOR CARRIER ETC WILL BE MADE. ALL ARRANGEMENTS INCLUDING TRANSPORT, LABOUR AND OTHER T&P ETC IS IN CONTRACTOR'S SCOPE. THESE GODOWNS ARE EXPECTED TO BE LOCATED WITHIN A RADIUS OF 50 KM APPROX FROM THE PROJECT SITE.

#### 13.1.6

ALL THE RESPONSIBILITIES SPECIFIED IN THE CONTRACTOR'S SCOPE FOR THE MATERIALS RECEIVED BY ROAD SHALL ALSO BE APPLICABLE MUTATIS-MUTANDIS FOR ALL THE CONSIGNMENTS (INCOMING SMALLS) RECEIVED FROM TRANSPORTERS GODOWN/S.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-V MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIAL COLLECTION/ DISPATCHES

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### 13.2 OUTGOING MATERIALS/DISPATCHES

#### 13.2.1

FOR VARYING REASONS MANY A TIMES, PROJECT MATERIALS / BHEL ASSETS ARE TO BE DISPATCHED TO OTHER SITES/LOCATIONS.

#### 13.2.2

CONTRACTOR SHALL IDENTIFY, TAG, PACK AND PREPARE GATE PASSES FOR THE MATERIALS TO BE DISPATCHED. MATERIALS SHALL BE LOADED ONTO THE OUTGOING VEHICLES WITH DUE CARE AND HANDED OVER TO THE TRANSPORTER WITH CLEAR GOODS RECEIPT WHICH SHALL BE SUBMITTED WITH BHEL PROMPTLY. BHEL SHALL MAKE ARRANGEMENT FOR THE TRANSPORT VEHICLES AT ITS OWN COST.

SEPARATE ITEM RATE SHALL BE QUOTED FOR MATERIAL HANDLING AND MATERIAL MANAGEMENT OF DISPATCH/OUTGOING MATERIALS AND THE PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON **THE ACCEPTED UNIT RATE AS PER SL NO F OF RATE SCHEDULE.**

#### 13.2.3

SUCH MATERIALS WHICH NEED TO BE BROUGHT TO TRANSPORTER'S/RAILWAY GODOWN FOR BOOKING, ARRANGEMENTS SHALL BE ADOPTED AS MENTIONED BELOW:

CONTRACTOR SHALL ARRANGE SUITABLE VEHICLE FOR TRANSPORTATION OF MATERIALS /SMALLS FROM STORES/STORAGE YARD/SITE TO TRANSPORTERS GODOWNS, IDENTIFY, TAG, PACK AND PREPARE GATE PASSES FOR THE MATERIALS TO BE DISPATCHED. MATERIALS SHALL BE LOADED ONTO THE OUTGOING VEHICLE WITH DUE CARE AND HANDED OVER TO THE TRANSPORTER WITH CLEAR GOODS RECEIPT WHICH SHALL BE SUBMITTED WITH BHEL PROMPTLY WITHIN THE QUOTED RATES AS PER SL NO C OF RATE SCHEDULE

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VI Material Management Services

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### 14.1

THE CONTRACTOR UNDER THIS CONTRACT SHALL PROVIDE FOLLOWING CATEGORIES OF SERVICES AT THE PROJECT SITE. THE RESOURCES DEPLOYED FOR MM SERVICES BY THE CONTRACTOR SHALL BE AT THE EXCLUSIVE DISPOSAL OF BHEL ON A FULL TIME BASIS. THESE SHALL NOT BE USED FOR ANY ACTIVITIES ASSOCIATED WITH THE NORMAL RESPONSIBILITIES ENVISAGED UNDER THIS CONTRACT OF MATERIAL HANDLING AND MATERIAL MANAGEMENT:

#### **A. SUPERVISION/SECRETARIAL SERVICES**

WORKING LEVEL SUPERVISION OF EACH WORK SPOT SHALL BE IN THE SCOPE OF CONTRACTOR UNDER REGULAR MATERIAL HANDLING WORK. ON THE OTHER HAND, SUPERVISORY SERVICES UNDER MM SERVICES SHALL BE AT ONE LEVEL HIGHER THAN WORKING LEVEL SUPERVISION BEING DONE AS CONTRACTOR'S RESPONSIBILITY TOWARDS MATERIAL HANDLING WORK. BHEL REQUIRES THAT THESE SERVICES SHALL BE TO OVERSEE AND MONITOR THE VARIOUS OPERATIONS/ACTIVITIES OF MATERIAL HANDLING PROCESS. MM SUPERVISORY SERVICES SHALL ENSURE SETTING BROAD GUIDELINES TO THE WORKING LEVEL SUPERVISORS, MONITORING PROGRESS OF OVERALL PLAN VIS-À-VIS IMPLEMENTATION, PROPER AND PROMPT TRACEABILITY OF STOCK IN THE STORES, IDENTIFICATION OF CORRECTIVE & PREVENTIVE ACTIONS IN MATERIAL HANDLING & STORAGE WORK AND IMPLEMENTATION OF A SYSTEMATIC PROCESS TO FINALLY ENSURE ACHIEVEMENT OF THE PROJECT SCHEDULE.

THESE SHALL ALSO INCLUDE SERVICES OF PERSONAL ASSISTANCE IN THE OFFICIAL WORK OF BHEL'S CONSTRUCTION MANAGER, SECRETARIAL SERVICES FOR CORRESPONDENCES AND DOCUMENTATION OF VARIOUS DEPARTMENTS OF BHEL SITE (ERECTION, COMMISSIONING, FINANCE & ACCOUNTS, STORES/MATERIAL MANAGEMENT ETC).

CONTRACTOR SHALL RENDER THE SERVICES BY ENSURING DEPLOYMENT OF REQUISITE PERSONNEL WITH ADEQUATE (MINIMUM DIPLOMA IN ENGINEERING FOR MM SUPERVISION, GRADUATION FOR SECRETARIAL SERVICES) EDUCATIONAL QUALIFICATION, HAVING THOROUGH EXPERIENCE IN RELATED FIELD TO ENABLE UNDERSTANDING THE INTRICACIES OF AND SPECIAL REQUIREMENTS INVOLVED IN HANDLING OF PROJECT MATERIALS, INCONSISTENCIES AND UNCERTAINTIES ASSOCIATED WITH IN/OUT FLOW OF MATERIALS, PROJECT ACTIVITIES AT ODD HOURS & HOLIDAYS AND IRREGULAR WORKING HOURS. CONTRACTOR SHALL ENSURE PROMPT AND TIMELY AVAILABILITY OF SUCH SERVICES.

**APPROXIMATELY 180 SERVICE-MONTHS**, SPREAD ACROSS VARIOUS NATURE OF SERVICES SHALL BE DEPLOYED PROMPTLY AS PER THE INSTRUCTION OF BHEL.

THE UNIT OF MEASUREMENT OF SUCH SERVICES RENDERED SATISFACTORILY BY ONE PERSON DURING ONE MONTH SHALL BE TERMED AS ONE '**SERVICE MONTH**'.

PAYMENT FOR THE SAME SHALL BE MADE AS PER THE MAN-MONTH RATE QUOTED BY THE BIDDER IN **ITEM NO H OF RATE SCHEDULE**.

#### **B. MENIAL SERVICES FOR BHEL OFFICE AND STORES ETC**

SCOPE SHALL INCLUDE SERVICES OF OFFICE BOY/ MESSENGER/PEON AT BHEL OFFICE AND STORES, FOR HANDLING CORRESPONDENCES (DAK, DOCUMENTS, DRAWINGS ETC), AND OTHER SERVICES E.G. GARDENING, CLEANING ETC. **APPROXIMATELY SERVICE-MONTHS**, SPREAD ACROSS VARIOUS NATURE OF SERVICES SHALL BE DEPLOYED PROMPTLY AS PER THE INSTRUCTION OF BHEL.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VI Material Management Services

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PAYMENT FOR THE SAME SHALL BE MADE AS PER THE SERVICE-MONTH RATE QUOTED BY THE BIDDER IN **ITEM NO I OF RATE SCHEDULE.**

**IN CASE THE CONTRACTOR DOES NOT DEPLOY OR DELAYS DEPLOYMENT OF ABOVE SAID MANPOWER WITH REFERENCE TO SPECIFIC INSTRUCTIONS FROM BHEL, BHEL WILL RECOVER NON-REFUNDABLE PENALTY PER DAY OF DELAY IN THE FOLLOWING MANNER:**

**A. SUPERVISION/SECRETARIAL SERVICES @ Rs 500 PER MAN-DAY**

**B. MENIAL SERVICES FOR BHEL OFFICE AND STORES ETC @ Rs 300 PER MAN-DAY**