

e- TENDER SPECIFICATION

No. BHE/PW/PUR/ RGMTFGD-MM/2281

THE WORK RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION, HANDLING AND HANDING OVER OF COMPONENTS OF FLUE GAS DESULPHURIZATION SYSTEM (FGD) WITH AUXILIARIES; PUMPS, ROTATING MACHINES, TANKS & VESSELS, PIPE & FITTINGS, BOROSILICATE LINING, RUBBER LINING, GLASS FLAKE, COMPLETE ELECTRICAL, CONTROLS AND INSTRUMENTATION EQUIPMENTS, PANELS, CABLES / CABLE TRAYS, AND OTHER RELATED ITEMS INCLUDING ITEMS OF BOP'S PACKAGES; BHEL T&P & OTHER MATERIALS; COMPONENTS & EQUIPMENT OF VARIOUS OTHER SYSTEMS, STRUCTURAL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT.

AT
NTPC RAMAGUNDAM STAGE-I (3X200MW) & STAGE- II
(3X500MW) FGD SYSTEM

TECHNICAL BID- VOLUME- I

TENDER SPECIFICATIONS CONSISTS 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

Registered Office: BHEL House, Siri Fort, New Delhi – 110 049, India

Website: www.bhel.com

CONTENTS		
Volume No	Description	Hosted in website bhel.com (Briefly) and detailed in BHEL e-Procurement Portal as files titled
NIL	Tender Specification Issue Details	(Part of <u>Vol-IA-2281</u>)
NIL	Notice Inviting Tender	(Part of <u>Vol-IA-2281</u>)
I-A	Technical Conditions of Contract	Vol-I-A-2281
I-B	Special Conditions of Contract	Vol-I-BCD-2281
I-C	General Conditions of Contract	(Part of Vol-I-BCD-2281)
I-D	Forms & Procedures	(Part of Vol-I-BCD-2281)
II	Price Bid as specified in E-Procurement Portal	Volume-II-2281

e-Tender Specification Issue Details

NO: BHE/PW/PUR/ RGMTFGD-MM/2281

THE WORK RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION, HANDLING AND HANDING OVER OF COMPONENTS OF FLUE GAS DESULPHURIZATION SYSTEM (FGD) WITH AUXILIARIES; PUMPS, ROTATING MACHINES, TANKS & VESSELS, PIPE & FITTINGS, BOROSILICATE LINING, RUBBER LINING, GLASS FLAKE, COMPLETE ELECTRICAL, CONTROLS AND INSTRUMENTATION EQUIPMENTS, PANELS, CABLES / CABLE TRAYS, AND OTHER RELATED ITEMS INCLUDING ITEMS OF BOP'S PACKAGES; BHEL T&P & OTHER MATERIALS; COMPONENTS & EQUIPMENT OF VARIOUS OTHER SYSTEMS, STRUCTURAL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT.

AT
NTPC RAMAGUNDAM STAGE-I (3X200MW) & STAGE- II (3X500MW)
FGD SYSTEM

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:

2281

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



E-Tender Spec No: BHE/PW/PUR/ RGMTFGD-MM/2281

Date: 30/04/2020

NOTICE INVITING E-TENDER (NIT)

**NOTE: BIDDER MAY DOWNLOAD/ UPLOAD THE TENDER/ OFFER FROM/ON
BHEL E-PROCUREMENT PORTAL → <https://bhel.abcprocure.com>**

To,

Dear Sir/Madam,

Sub : NOTICE INVITING E-TENDER

Offers are invited in two part bid system from reputed & experienced bidders (meeting [PRE QUALIFICATION CRITERIA](#) as mentioned in Annexure-I) through **E-procurement portal→<https://bhel.abcprocure.com>** only for the subject job by the undersigned on behalf of BHARAT HEAVY ELECTRICALS LIMITED as per the tender documents. Following points relevant to the tender may please be noted and complied with:

Note: *The bidder should respond by submitting their offer online only in our e-Procurement platform at <https://bhel.abcprocure.com>. No Hard copy bid/ bids through email/ fax shall be accepted.*

1.0 Salient Features of NIT

S No.	ISSUE	DESCRIPTION
i	E-TENDER NUMBER	BHE/PW/PUR/ RGMTFGD-MM/2281
ii	Broad Scope of job	THE WORK RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION, HANDLING AND HANDING OVER OF COMPONENTS OF FLUE GAS DESULPHURIZATION SYSTEM (FGD) WITH AUXILIARIES; PUMPS, ROTATING MACHINES, TANKS & VESSELS, PIPE & FITTINGS, BOROSILICATE LINING, RUBBER LINING, GLASS FLAKE, COMPLETE ELECTRICAL, CONTROLS AND INSTRUMENTATION EQUIPMENTS, PANELS, CABLES / CABLE TRAYS, AND OTHER RELATED ITEMS INCLUDING ITEMS OF BOP'S PACKAGES; BHEL T&P & OTHER MATERIALS; COMPONENTS & EQUIPMENT OF VARIOUS OTHER SYSTEMS, STRUCTURAL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT. AT NTPC RAMAGUNDAM STAGE-I (3X200MW) & STAGE- II (3X500MW) FGD SYSTEM
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>
B	Volume-IB	<i>Special Conditions of Contract (SCC)</i>
C	Volume-IC	<i>General Conditions of Contract (GCC)</i>
D	Volume-ID	<i>Forms and Procedures</i>

S No.	ISSUE	DESCRIPTION	
E	Volume IE	<i>Technical Specification</i>	<i>Applicable</i>
F	Volume-II	<i>Price Bid as specified in E-Procurement Portal</i>	<i>Applicable</i>
iv	Issue of Tender Documents	<p>From https://bhel.abcprocure.com <i>(Tender documents will be available for downloading from BHEL e-Procurement website till due date of submission)</i></p> <p>Brief information of the tender shall also be available at Central Public Procurement portal (https://eprocure.gov.in) and BHEL website (www.bhel.com).</p>	<i>Applicable</i>
v	DUE DATE & TIME OF OFFER SUBMISSION	<p>Date: 21/05/2020, Time: 15.00 Hrs Place: on E-Tender Portal https://bhel.abcprocure.com</p> <p>• Offer to be submitted online only through e-procurement Portal</p>	<i>Applicable</i>
vi	OPENING OF TENDER (Techno-Commercial Bid)	<p>Date: 21/05/2020, Time: 16.00 Hrs Notes:</p> <p>(1) <i>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.</i></p> <p>(2) This tender being an e-tender, it shall be opened online only through the E-Procurement Portal. Participating bidders may witness the Opening online only.</p>	<i>Applicable</i>
vii	EMD AMOUNT	<p>Rs. 3,72,000/- (Rupees Three Lakhs Seventy Two Thousand Only) [To be submitted in the form and manner as mentioned below]</p> <p>Important Note: Bidders kindly to take note that EMD (Earnest Money Deposit) shall be furnished by MSE bidders as well, as per the amount and procedure indicated in the NIT/GCC.</p>	<i>Applicable</i>
viii	COST OF TENDER	<p>Rs 2000/- [To be submitted in the form and manner as mentioned below]</p>	<i>Applicable</i>
ix	LAST DATE FOR SEEKING CLARIFICATION	<i>Three 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>	<i>Applicable</i>
x	SCHEDULE OF Pre	On Date 14/05/2020, 11 Hrs at BHEL PSWR HQ Nagpur	<i>Applicable</i>

S No.	ISSUE	DESCRIPTION	
	Bid Discussion (PBD)		
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	Not Applicable	<i>Applicable</i>
xii	Latest updates	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 Corrigendum), Central Public Procurement portal (https://eprocure.gov.in) & on e-tender portal https://bhel.abcprocure.com and not in the newspapers. 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 **digitally** signed 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. Copy of Cash receipt or the proof of Demand Draft duly **digitally** signed is to be uploaded with the Techno Commercial offer on e-tender portal <https://bhel.abcprocure.com>. However Original Demand Draft shall be sent to the officer inviting tender within a reasonable time failing which the offer is liable to be rejected. Sale of tender Documents shall not take place on National Holidays, holidays declared by Central or State Governments and BHEL PS HQ at _____ Sundays and second/ last Saturdays.~~

4.0 Unless specifically stated otherwise, bidder shall deposit EMD as per the provisions in General Conditions of Contract Clause no. 1.9.1. In case of remittance of EMD through **Demand Draft/Pay Order**, same shall be in favour of **Bharat Heavy Electricals Ltd**, payable at Nagpur. **In case of remittance of EMD through Bank Guarantee (for the balance EMD amount in excess of Rs 2 Lakhs) OR through FDR**, refer General Conditions of Contract Clause no. 1.9.1(iv). Proforma of Bank Guarantee for Earnest Money shall be as provided in Vol-ID "FORMS & PROCEDURES". For other details and for 'One Time EMD' please refer General Conditions of Contract.

In case of remittance of EMD through Electronic Fund Transfer, Bank account details of BHEL PSWR to be used is as below: -

NAME OF THE COMPANY	BHARAT HEAVY ELECTRICALS LTD
ADDRESS OF THE COMPANY	SHREE MOHINI COMPLEX 345, KINGSWAY, NAGPUR
NAME OF BANK	STATE BANK OF INDIA

NAME OF BANK BRANCH AND BRANCH CODE	SBI,KINGSWAYBRANCH,BRANCH CODE-00432
CITY	NAGPUR
ACCOUNT NUMBER	31380025872
ACCOUNT TYPE	CURRENT A/C
IFSC CODE OF THE BANK BRANCH	SBIN0000432
MICR CODE OF THE BANK BRANCH	440002002

Above bank account, details can be used for remittance of Security Deposit as well by the successful tenderer.

Procedure for Earnest Money Deposit					
Description/ Mode of Submission	EFT	Cash	DD/Pay Order	FDR (Refer GCC clause no 1.9.1(iv) for FDR)	Bank Guarantee (Refer GCC clause no 1.9.1(iv) for Acceptable Portion of EMD in the Form of BG)
Proof of EMD along with the offer		Scan Copy has to be uploaded	Scan Copy has to be uploaded	Scan Copy of BG has to be uploaded.	
Submission of EMD to BHEL PSWR, Nagpur	Receipt of Amount Transferred into BHEL Account	Receipt of cash deposit at BHEL office	Original DD/ Pay order to be sent through Courier/Post to BHEL PSWR Nagpur.	The Original FDR to be sent through Courier/Post to BHEL PSWR Nagpur.	The Original Bank Guarantee/any extensions /amendments shall be sent directly by the Bank to BHEL under Registered Post (Acknowledgement Due), addressed to the Purchase Department, BHEL PSWR, Nagpur.

~~Copy of One Time EMD Certificate or The proof of Demand Draft/ Payorder/FDR or BG or receipt of Electronic Fund Transfer duly **digitally** signed is to be uploaded with the Techno Commercial offer on 'e-tender portal'→ <https://bhel.abcprocure.com>. In case of Demand Draft/ Payorder/FDR/BG, Original Demand Draft/ Payorder/FDR/BG shall be sent to the officer inviting tender within a reasonable time failing which the offer is liable to be rejected.~~

5.0 Procedure for Submission of Tenders:

Procedure for Submission of Tender is available in the "[Bidder Manual for BHEL Bidders](#)" at E-tender portal <https://bhel.abcprocure.com> . Terms and conditions mentioned therein shall form integral part of the NIT and bidders shall abide by the same.

a) Hardware and Software requirements for participating in e-tender:

- ❖ Please refer the website for the minimum system requirements and setting document for Bidders under the link: <https://bhel.abcprocure.com>

b) Digital Signature

- ❖ To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website www.bhel.com → Tender Notifications → Sample Checklist.

c) M/s E-Procurement Technologies Limited Helpdesk Contacts:

BHEL PSWR
Notice Inviting Tender
e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 9 of 81

During normal business hours, helpline maintained by the service provider e-Procurement Technologies Limited is available for clarifying any doubts of supplier/s. The helpline numbers are provided in the e-procurement website.

- ❖ Mr. Swapnil Hamilton, Support Executive, Ph: +91 7940270549, e-mail ID: swapnil.h@eptl.in
- ❖ Mr. Hardik Oza, Support Executive, Ph: +91 7940270560, e-mail ID: hardik.oza@eptl.in
- ❖ Mr. Ankur Bhatt, Support Executive, Ph: +91 7940270590, e-mail ID: ankur.bhatt@eptl.in
- ❖ Mr. Prashant, Asst. Manager – Implementation & Support, Ph: +91 7940270545, e-mail ID: prashant@eptl.in

Note

- i. **Offers/tenders submitted in the E-tender portal shall only be considered for further evaluation. Offers sent by FAX / E-mail / any mode other than E-tender would not be entertained.**

The Tenderers must submit their Tenders, as detailed below:

- PART-I consisting of 'PART-I A (Techno Commercial Bid)' & 'PART-I B (EMD/COST of TENDER)'
- PART-II (Price Bid)

The contents of the offer/tender are as given below. **(All Documents to be digitally signed and uploaded in E-tender Portal)**

SN	Description	Remarks
Part-I A		
i.	Covering letter/Offer forwarding letter of Tenderer (in the techno commercial compliance sheet provided)	
ii.	Duly filled-in 'No Deviation Certificate' as per prescribed format. Note: <ul style="list-style-type: none"> a. In case of any deviation, the same should be submitted separately, indicating respective clauses of tender against which deviation is taken by bidder. It shall be specifically noted that deviation recorded elsewhere shall not be entertained. b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding. <ul style="list-style-type: none"> i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender 	
iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria. It shall be specifically noted that a credential certificates issued by clients shall distinctly bear the name of organization, contact phone 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)	

SN	Description	Remarks
viii.	Volume – I A : Technical 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 – IE: Technical Specification	
xiii.	Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item	
xiv.	Any other details preferred by bidder with proper indexing.	

PART-I B	
i.	<p>1. Earnest Money Deposit (EMD) in the form as indicated in this Tender OR <u>Documentary evidence for 'One Time EMD' with the Power Sector Region of BHEL floating the Tender</u></p> <p><u>2. Cost of Tender (Demand Draft or copy of Cash Receipt as the case may be)</u></p> <p>Note: Refer Clause No-3 and 4 of NIT for further details</p>

PART-II	
Ii	Volume II – PRICE BID (Duly Filled in Schedule of Rates – rate/price to be entered in words as well as figures)

- **SPECIAL NOTE: All documents/ annexures to be submitted should be uploaded in respective places in the E-Tender portal as per the list mentioned given in this NIT. BHEL shall not be responsible for in-complete documents.**

6.0 Void

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:

Bidder's 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 cut off month for reckoning 'Load' shall be the 3rd Month preceding the month corresponding to the 'latest date of bid submission', in the following manner -
(Note: For example, if latest bid submission is in Jan 2017, then the 'load' shall be calculated up to and inclusive of Oct 2016)

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 11 of 81

Total number of Packages in hand = Load (P)

Where 'P' is the sum of all unit wise identified packages (refer table-1) under execution with BHEL Regions as on the cut off month defined above, including packages yet to be commenced, excepting packages which are on Long Hold.

II. PERFORMANCE: Here 'Monthly Performance' of the bidder for all the packages (under execution/ executed during the 'Period of Assessment' in all 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 and including the cut off month. The cut off month for reckoning 'Period of Assessment' shall be the 3rd Month preceding the month corresponding to 'latest date of bid submission', in the following manner:

(Note): For example, if 'latest date of bid submission' is in Jan 2017, then the 'performance' shall be assessed for a 6 months' period up to and inclusive of Oct 2016 (i.e. from May 2016 to Oct 2016), 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 of BHEL) **SIMILAR** to the packages covered under the tendered scope, excepting packages not commenced. Total number of similar packages for all Regions = P_T (i.e. $P_T = P_1 + P_2 + P_3 + P_4 + \dots + P_N$)
- 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 ($S_{1-1}, S_{1-2}, S_{1-3}, S_{1-4}, S_{1-5}, \dots, S_{1-T_1}$) for similar package P_1 , for the 'period of assessment' ' T_1 ' (i.e. $S_1 = S_{1-1} + S_{1-2} + S_{1-3} + S_{1-4} + S_{1-5} + \dots + S_{1-T_1}$). 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. ' $S_T = S_1 + S_2 + S_3 + S_4 + \dots + S_N$ ')
- d) **Overall Performance Rating ' R_{BHEL} ' 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 packages for which performance should have been evaluated in all the Regions

S_T
= -----
 T_T

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 12 of 81

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

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

Sl. No.	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
(i)	(ii)								(x)
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 i.e. 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 Packages (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 scores for the corresponding period (as in Row 2)	S ₁₋₁ , S ₁₋₂ , S ₁₋₃ , S ₁₋₄ , ... S _{1-T1}	S ₂₋₁ , S ₂₋₂ , S ₂₋₃ , S ₂₋₄ , ... S _{2-T2}	S ₃₋₁ , S ₃₋₂ , S ₃₋₃ , S ₃₋₄ , ... S _{3-T3}	S ₄₋₁ , S ₄₋₂ , S ₄₋₃ , S ₄₋₄ , ... S _{4-T4}	S ₅₋₁ , S ₅₋₂ , S ₅₋₃ , S ₅₋₄ , ... S _{5-T5}	...	S _{N-1} , S _{N-2} , 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 at least 6 evaluation scores for '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' i.e. 6 months preceding and including the cut-off month
- b) 12 months preceding and including the cut-off month
- c) 24 months preceding and including the cut-off month

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

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

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

III. 'Assessment of Capacity of Bidder':

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

Max number of packages $P_{Max} = (R_{BHEL} - 60) / L$ 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 $R_{BHEL} \geq 80$, there will be no upper limit on P_{Max}

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

Note: For the transition period of 1 year (i.e. for all the NITs floated between 11th May 2019 to 10th May 2020), in addition to above, 'Assessment of Capacity of Bidder' shall also be calculated considering 'performance scores' till 36 months as per Sl. no II ii).

Higher of the results obtained out of both shall be considered for 'Assessment of Capacity of Bidder'.

IV. Explanatory note:

- i). Similar package means Boiler or ESP or Piping or Turbine or Civil or Structure or Electrical or C&I 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, C&I, 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 (i.e. Boiler, ESP and Power Cycle Piping) and finally the Bidder's capacity to execute the tendered scope is assessed in line with III above.

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 14 of 81

ii). Identified Packages (Unit wise)

Table-1

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

iii). Bidders who have not been evaluated for at least six package months in the last 24 months preceding and including the Cut-off month in the online BHEL system for contractor performance evaluation in BHEL PS Regions, 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 completion of all the contracts against which vendor has been tagged as First Timer or availability of 6 evaluation scores within last 24 months preceding and including the Cut-off month in the online BHEL system for contractor performance evaluation in BHEL PS Regions.

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 'Assessment of Capacity of Bidders'.

iv). Consequent upon applying the criteria of 'Assessment of Capacity of Bidders' detailed above on all the bidders qualified against Technical and Financial Qualification criteria, if the number of qualified bidders reduces to less than four, then for further processing of the Tender, BHEL at its discretion reserves the right to also consider the bidders who are "not qualified" as per criteria of 'Assessment of Capacity of Bidders' and for this, procedure described in following three options shall be followed:

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 15 of 81

- a) All the bidders having Overall Performance Rating ('R_{BHEL}') ≥ 60 shall be considered qualified against criteria of 'Assessment of Capacity of Bidders'.
- b) If even after using option "a", the number of qualified bidders remains less than four, then in addition to bidders considered as per option "a", "First timer" bidders having average of available performance scores ≥ 60 upto and including the Cut Off month shall also be considered qualified against criteria of 'Assessment of Capacity of Bidders'.
- c) If even after using option "a" and "b", the number of qualified bidders remains less than four, then in addition to bidders considered as per option "a" and "b", "First timer" bidders for whom no performance score is available in the system upto and including the Cut Off month, shall also be considered qualified against criteria of 'Assessment of Capacity of Bidders'.

Note:- In case, the number of bidders qualified against Technical and Financial Qualification criteria itself is less than four, then all bidders (a)- having Overall Performance Rating ('R_{BHEL}') ≥ 60 , (b)- "First timer" bidders having average of available performance scores ≥ 60 upto and including the Cut Off month, (c)- "First timer" bidders for whom no performance score is available in the system upto and including the Cut Off month, shall be considered qualified against criteria of 'Assessment of Capacity of Bidders' for further processing of tender.

- v). 'Under execution' shall mean works in progress as per the following:
 - a. Up to execution of 90% of anticipated Contract Value in case of Civil, MM, Structural and Turbo Blower Packages
 - b. Up to Steam Blowing in case of Boiler/ESP/Piping Packages
 - c. Up to Synchronization in all Balance Packages

Note: BHEL at its discretion can extend (or reduce in exceptional cases in line with Contract conditions) the period defined against (a), (b) and (c) above, depending upon the balance scope of work to be completed.

- vi). Contractor shall provide the latest contact details i.e. mail-ID and Correspondence Address to SCT Department, so that same can be entered in the Contractor Performance Evaluation System, and in case of any change/discrepancy same shall be informed immediately. Login Details for viewing scores in Contractor Performance Evaluation System shall be provided to the Contractor by SCT Department.
- vii). Performance Evaluation for Activity Month shall be completed in Evaluation Month (i.e. month next to Activity Month) or in rare cases in Post Evaluation Month (i.e. month next to Evaluation Month) after approval from Competent Authority. In case scores are not acceptable, Contractor can submit Review Request to GM Site/ GM Project latest by 25th of Evaluation Month or 3 days after approval of score, whichever is later. However, acceptance/rejection of 'Review Request' solely depends on the discretion of GM Site/GM Project. After acceptance of Review Request, evaluation score shall be reviewed at site and the score after completion of review process shall be acceptable and binding on the contractor.
- viii). Project on Hold due to reasons not attributable to bidder -
 - a. **Short hold:** Evaluation shall not be applicable for this period, however Loading will be considered.
 - b. **Long hold:** Short hold for continuous six months and beyond or hold on account of Force Majeure shall be considered as Long Hold. Evaluation as well as Loading shall not be considered for this period.

ix). Performance evaluation in CL 9 above is applicable to Prime bidder and Consortium partner (or Technical tie up partner) for their respective scope of work.

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

11.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail or **through E-tender Portal**, 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 **Digitally** 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 authorized 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.

BHEL PSWR
Notice Inviting Tender
e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 17 of 81

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. For the tenders requiring services of Original supplier of equipment/services, offer is preferred from the OEM/Principal. However, if the OEM/Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/supplier in the same tender. Moreover, either the agent could bid on behalf of manufacturer / supplier or manufacturer / supplier could bid directly but not both. In case bids are received from both manufacturer / supplier and the agent, bid from agent shall be ignored.

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 'Standalone' 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.~~

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 18 of 81

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 'standalone' 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 1% 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 0.5% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value. The 100% SD value to be submitted by the consortium partner/(s) shall be remitted before start of work. All the terms & conditions of the SD clause in Vol IC GCC shall be applicable for this SD except clauses no 1.10.1, 1.10.4 & 1.10.6 of Vol IC GCC. For "**modes of deposit**" of this SD, clause no 1.10.3 of Vol IC GCC shall be applicable.

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/upload documents in support of possession of 'Qualifying Requirements' duly self-certified and stamped by the authorized signatory (**through Digital Signature**), as per 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-Volume-II
- d. Technical Conditions of Contract (TCC)—Volume-1A
- e. Special Conditions of Contract (SCC) —Volume-1B
- f. General Conditions of Contract (GCC) —Volume-1C

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 19 of 81

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

(Addl. General Manager - Purchase)

Enclosure

01. Annexure-1: Pre Qualifying criteria.
02. Annexure-2: Check List.
03. Annexure-3: Integrity Pact
04. Annexure-4: Important Information.
05. Annexure-5: Declaration for Reverse Auction.
06. Annexure-6: Declaration for not being under Bankruptcy Code Proceedings.

ANNEXURE - 1

PRE QUALIFYING CRITERIA

E-Tender Spec No: BHE/PW/PUR/ RGMTFGD-MM/2281	
JOB	THE WORK RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION, HANDLING AND HANDING OVER OF COMPONENTS OF FLUE GAS DESULPHURIZATION SYSTEM (FGD) WITH AUXILIARIES; PUMPS, ROTATING MACHINES, TANKS & VESSELS, PIPE & FITTINGS, BOROSILICATE LINING, RUBBER LINING, GLASS FLAKE, COMPLETE ELECTRICAL, CONTROLS AND INSTRUMENTATION EQUIPMENTS, PANELS, CABLES / CABLE TRAYS, AND OTHER RELATED ITEMS INCLUDING ITEMS OF BOP'S PACKAGES; BHEL T&P & OTHER MATERIALS; COMPONENTS & EQUIPMENT OF VARIOUS OTHER SYSTEMS, STRUCTURAL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT. AT NTPC RAMAGUNDAM STAGE-I (3X200MW) & STAGE- II (3X500MW) FGD SYSTEM

S No	PRE QUALIFICATION CRITERIA	<i>Bidders claim in respect of fulfilling the PQR Criteria</i>	
		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)	NOT APPLICABLE	
B	<p>B.1) Not Applicable</p> <p>B.2) Bidder must have, achieved/Executed any one of the following (i.e. B.2.1 OR B.2.2 OR B.2.3 OR B.2.4 OR B.2.5) in last seven years as on the latest date of offer Submission:</p> <p>B.2.1) Material* unloading for 2X190 MW or above rating / 1 unit of 400 MW or higher rating Thermal Power Project (Consisting of min. 40,000 MT) in a single work order.</p> <p style="text-align: center;">OR</p> <p>B.2.2) "One job of Material* unloading of 37793 MT or higher in a single Work Order" OR "One job of Material* unloading of value of Rs.148.80 Lakhs or higher in a single Work Order in any Industry, Industrial or Infrastructure project or Thermal Power Project.</p> <p style="text-align: center;">OR</p> <p>B.2.3) "Two jobs of Material* unloading each of 23620 MT or higher" OR</p>	APPLICABLE	

S No	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Applicability	
	<p>Two jobs of Material* unloading each of value Rs.93 Lakhs or higher in any Industry, Industrial or Infrastructure project or Thermal Power Project.</p> <p style="text-align: center;">OR</p> <p>B.2.4) "Three jobs of Material* unloading each of 18896 MT or higher" OR Three jobs of Material* unloading each of value Rs.74.40 Lakhs or higher in any Industry, Industrial or Infrastructure project or Thermal Power Project.</p> <p style="text-align: center;">OR</p> <p>B.2.5) Bidder must have Executed Erection & Commissioning of At least One Boiler (Consisting of "Pressure Parts" and "Structure" of the same unit as standalone Bidder (i.e. without any consortium)) of a Unit of rating ≥ 400 MW.</p> <p>(*Material:</p> <ul style="list-style-type: none"> i) 'Material' shall mean Plant Materials ('Power Plant' / 'Industrial' Equipment/components) AND/OR Reinforcement Steel/ Structural Steel ii) <i>Handling of Cement bags, Sacks, Packages, Coal, sand and all kind of minerals shall not be considered.</i> iii) Work Order containing only Reinforcement Steel/ Structural Steel / Cement bags/ Sacks/ Packages/ Coal/ sand/ all kind of minerals/any combinations of the above shall not be considered). 		
C-1	<p><u>Financial TURNOVER</u></p> <p>Bidders must have achieved an average annual financial turnover (audited) of Rs. 55.80 Lakhs or more over last three Financial Years (FY) i.e. 2016-17 , 2017-18 , 2018-19.</p>	APPLICABLE	
C-2	<p><u>NETWORTH</u> (only in case of Companies)</p> <p>Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive.</p>	APPLICABLE	
C-3	<p><u>PROFIT</u></p> <p>Bidder must have earned profit in any one of the three Financial Years as applicable in the last three Financial Years as furnished for 'C-1' above.</p>	APPLICABLE	

S No	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Applicability	
C-4	Bidder must not be under Bankruptcy Code Proceedings (IBC) by NCLT or under Liquidation / BIFR, which will render him ineligible for participation in this tender, and shall submit undertaking to this effect.	APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable) The "Assessment of Capacity of Bidders" for this Tender shall be carried out by considering the identified as "Material Management".	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
G	Consortium tie-ups	NOT APPLICABLE	

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

Explanatory Notes for PQR B.1 (Technical)

1. For the criteria (B.1), actual executed value shall be considered.
2. Value of work is to be updated with indices for "All India Avg. Consumer Price index for industrial workers" and "Monthly Whole Sale Price Index for All Commodities" with base month as per last month of work execution and indexed up to three (3) months prior to the month of latest due date of bid submission as per following formula-

$$P = R + \left\{ \frac{0.425 \times R \times (X_N - X_0)}{X_0} \right\} + \left\{ \frac{0.425 \times R \times (Y_N - Y_0)}{Y_0} \right\}$$

Where

P = Updated value of work

R = Value of executed work

X_N = All India Avg. Consumer Price index for industrial workers for three months prior to the month of latest due date of bid submission (e.g. If latest bid submission date is 02-Mar-17, then bid submission month shall be reckoned as March'17 and index for Dec'16 shall be considered).

S No	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria
		Applicability

X_0 = All India Avg. Consumer Price index for industrial workers for last month of work execution.

Y_{N-3} = Monthly Whole Sale Price Index for All Commodities for the month, three months prior to the month of latest due date of bid submission (e.g. If latest bid submission date is 02 Mar '17, then bid submission month shall be reckoned as March '17 and index for Dec '16 shall be considered).

Y_0 = Monthly Whole Sale Price Index for All Commodities for last month of work execution.

Explanatory Notes for PQR B.2 (Technical):

3. Unless otherwise specified, for the purpose of "**B.2 Technical Criteria**", the word '**EXECUTED**' means achievement of milestones as defined below –
 - a) "ACHIEVEMENT OF PHYSICAL QUANTITIES" as per PQRs.
 - b) "READINESS FOR COAL FILLING" in respect of Mill Bunker.
 - c) "CHARGING" in respect of Power Transformers / Bus Ducts / "HT/LT Switchgears" / "HT / LT Cabling".
 - d) For C&I works: "SYNCHRONISATION" in case of power project and "WORK COMPLETION of the value as defined in PQR" in case of industry.
 - e) "BOILER LIGHT UP" in respect of Boiler / CFBC / ESP.
 - f) "GAS IN" in respect of HRSG.
 - g) "STEAM BLOWING COMPLETION" in respect of Power Cycle Piping.
 - h) "HYDRAULIC TEST" of the system in respect of Pressure parts / LP Piping / CW Piping.
 - i) "FULL LOAD OPERATION OF THE UNIT" in respect of Insulation work.
 - j) "SYNCHRONISATION" in respect of STG / GTG.
 - k) "SPINNING" in respect of HTG.
 - l) "COMPLETION AND HANDING OVER FOR MECHANICAL ERECTION" in respect of STG Deck and Machine/Equipment foundation.
4. Boiler means HRSG or WHRB or any other types of Steam Generator.
5. Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass.
6. For the purpose of evaluation of the PQR, one MW shall be considered equivalent to 3.5 TPH where ever rating of HRSG/BOILER is mentioned in MW. Similarly, wherever rating of Gas Turbine is mentioned in terms of Frame size, ISO rating of the same in terms of MW shall be considered for evaluation.
7. Scope for Capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine.
8. In case the tendered scope is not a Pulverized Fuel Boiler, experience of Oil/Gas Fired Boilers can also be considered.
9. In case of lower rated units in Cogen, Combined Cycle of Industrial projects (especially Refinery projects), the packaging philosophy should be a composite package consisting of GTGs/STGs/Boilers

S No	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria
		Applicability
		etc. for tendering purpose with a PQR of a 500 MW Boiler with consortium provision for STG.
<u>Explanatory Notes for PQR -C (Financial):</u>		
<p>10. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against C-1 above.</p> <p>11. 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.</p> <p>12. If financial statements are not required to be audited statutorily, then instead of audited financial statements, financial statements are required to be certified by Chartered Accountant.</p> <p>13. 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. (*: Share Capital OR Partnership Capital OR Proprietor Capital as the case may be)</p> <p>14. C-3: Bidder must have earned profit in any one of the three financial years as applicable in the last three financial years as furnished for 'C-1' above. Note: PROFIT shall be PBT earned during any one year of last three financial years as in 'C-1' above.</p>		
<u>Common Explanatory Notes:</u>		
<ol style="list-style-type: none"> 1. For evaluation of PQR, the credentials of the Bidder alone, and not that of the Group Company shall be considered. 2. Completion date for achievement of the technical criteria specified in the Common QR should be in the last 7 years ending on the 'latest date of Bid Submission' of Tender irrespective of date of the start of work. 3. "Executed" means the bidder should have achieved the criteria specified in the Common QR even if the Contract has not been completed or closed. 4. In case the Experience/PO/WO certificate enclosed by bidders do not have separate break up of prices for the E&C portion for Electrical and C&I works (i.e. the certificates enclosed are for composite order for supply and erection of Electrical and C&I and other works if any), then value of Erection & Commissioning for the Electrical and C&I portion shall be considered as 15% of the price for supply & erection of Electrical and C&I. 5. Following shall be complied with in case of consortium: <ol style="list-style-type: none"> a. The Prime Bidder and Consortium Partner(s) are required to enter in to a consortium agreement with a validity period of "six months" initially. Thereafter, the Prime Bidder and Consortium Partner(s) shall certify to BHEL regarding existence and validity of their consortium agreement on six monthly basis. b. Prime Bidder and Consortium partners shall be approved by Customer for being considered for 		

S No	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria
		Applicability
	<p>the tender (applicable if customer approval is required).</p> <p>c. Number of partners including prime Bidder shall be NOT more than <u>2 (Two)</u>.</p> <p>d. Prime Bidder alone shall necessarily comply with “B1 Technical Criteria” except for mechanical package where B1 criteria is not applicable.</p> <p>e. Prime Bidder and Consortium Partner shall together comply with the ‘Pre-Qualification Requirements’ specified for the respective category of technical requirement as per “technical criteria”.</p> <p>f. Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified.</p> <p>g. All other conditions shall be read in conjunction with clause no 23.0 of NIT.</p> <p>h. Prime Bidder shall be the Bidder who has a major share of work.</p> <p>i. Prime Bidder shall be responsible for the overall execution of the Contract.</p> <p>j. Performance shall be evaluated for Prime Bidder and the Consortium partner for their respective scope of work.</p> <p>k. In case the Consortium partner backs out, another consortium partner meeting the QRs, has to be engaged by Prime Bidder and if not, the respective work will be withdrawn and executed on risk and cost basis of the prime bidder.</p> <p>l. In case Prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.</p> <p>m. After successful execution of one work with a consortium partner under direct orders of BHEL, the Prime Bidder shall be eligible for becoming a ‘standalone’ bidder for works similar to that for which consortium partner was engaged, for subsequent tenders.</p> <p>n. The Consortium 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.</p>	

BIDDER SHALL SUBMIT CREDENTIALS (DETAILED WORK ORDER, BOQ, Milestone/COMPLETION CERTIFICATE, TDS CERTIFICATES AND FINANCIAL DOCUMENTS ETC) BASED ON WHICH BIDDER IS CLAIMING TO SATISFY THE PQ CRITERIAS.

Note: Credentials submitted by the bidder against “PRE QUALIFYING CRITERIAS” shall be verified for its authenticity. In case, any credential (s) is/are found unauthentic, offer of the bidder is liable to the rejection. BHEL reserves the right to initiate any further action as per its internal guidelines.

ANNEXURE - 2

CHECK LIST

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

1	Name and Address of the Tenderer			
2	Details about type of the Firm/Company			
3.a	Details of Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:		
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:		
4	EMD DETAILS	DD No:	Date :	Bank : Amount: <u>Please tick (√) whichever applicable:-</u> <u>ONE TIME EMD / ONLY FOR THIS TENDER</u>
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE		
			APPLICABILITY (BY BHEL)	ENCLOSED BY BIDDER
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format		Applicable/ Not Applicable	YES / NO
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 Authorized Signatory		Applicable/ Not Applicable	YES/NO

BHEL PSWR
Notice Inviting Tender
e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 27 of 81

12	No Deviation Certificate	Applicable/ Not Applicable	YES/NO
13	Declaration for Reverse Auction by Bidder	Applicable/ Not Applicable	YES/NO
14	Declaration confirming knowledge about Site Conditions	Applicable/ Not Applicable	YES/NO
15	Declaration for relation in BHEL	Applicable/ Not Applicable	YES/NO
16	Non-Disclosure Certificate	Applicable/ Not Applicable	YES/NO
17	Bank Account Details for E-Payment	Applicable/ Not Applicable	YES/NO
18	Capacity Evaluation of Bidder for current Tender	Applicable/ Not Applicable	YES/NO
19	Tie Ups/Consortium Agreement are submitted as per format	Applicable/ Not Applicable	YES/ NO
20	Power of Attorney for Submission of Tender/Signing Contract Agreement Power of Attorney of Consortium Partner.	Applicable/ Not Applicable	YES/NO
21	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

NOT APPLICABLE

ANNEXURE-4

IMPORTANT INFORMATION

E -Tender for this work is invited by BHEL PSWR NAGPUR and offer shall be submitted through BHEL e-procurement portal only. All correspondences regarding this tender shall be through E-procurement portal.

Postal Address:

AGM /Purchase BHEL PSWR,
SRIMOHINI COMPLEX, 345 KINGSWAY, NAGPUR 440001, INDIA

Following are the concerned BHEL officials to whom bidders can contact in case of any difficulty:

AGM Purchase, Email: prchiwarkar@bhel.in, Ph: +91 - 712 - 3048 - 633

Sr Engineer Purchase, Email: shubh@bhel.in, Ph: +91 - 712 - 3048 - 742

Sr Engineer Purchase, Email: svm@bhel.in, Ph: +91 - 712 - 3048 - 715

- 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_guidelines_adbridged.pdf**
- 3. The offers of the bidders who are under suspension as also the offers 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.**

3.0 Integrity commitment, performance of the contract and punitive action thereof:

3.1. Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

3.2. Commitment by Bidder/ Supplier/ Contractor:

3.2.1. The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

3.2.2. The bidder/ supplier/ contractor 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

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 30 of 81

in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

3.2.3. The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www.bhel.com and/or under applicable legal provisions".

4. All Statutory Requirements as applicable for this project shall be complied with.

5. BHEL Fraud Prevention Policy: "The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice."

6. Following clause shall form part of the HSE documents issued under Chapter IX of Volume IB 'Special Conditions of Contract'

"In case of any financial deduction made by Customer for lapses of safety other than what is provided elsewhere in the contract, the same shall be charged on back-to-back basis on the defaulting contractor without prejudice to any other right spelt anywhere in the tender /contract"

7. Please take note of following Revised Tender Clauses:

- Notice Inviting Tender: Sl No 4 and corresponding Changes in GCC Clause No 1.9 regarding EMD
- General conditions of Contract: Clause 1.10, 2.13, 1.15.11, Clause No. 2.7.2, Clause No. 2.7.3, Clause No 2.7.10 (New), Clause No 2.28.5 (New), Clause No 2.21.

9. 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.

10. Delay in 1st submission of SDBG/ PBBG: SDBG/ PBG is to be furnished by the vendor before start of work. No payment will be released till SDBG/PBG is submitted by the vendor.

However if requested by the vendor, cash recovery equivalent to SDBG/ PBG value to be made from the running bills submitted by the vendor. In such case, recovery of interest calculated @SBI PLR +2% on amount equivalent to SDBG/ PBG value to be made for the gap period (difference between date of start of work and date of submission of BG/ cash recovery).

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 31 of 81

11. **Compensation in case of Death/ Permanent Incapacitation of Person:** BHEL shall recover the amount of compensation paid to victim (s) by BHEL towards loss of life/ permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employee as detailed below:

- a) Victim: Any person who suffers permanent disablement or dies in an accident as defined below.
- b) Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/ operation and works incidental thereto at BHEL factories/ offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/ during working at BHEL Units/ Offices/ townships and premises/ Project sites.
- c) Compensation in respect of each of the victims:
 - (i) In the event of death or **permanent disability** resulting from **Loss of both limbs**: Rs 10,00,000/- (**Rs Ten Lakh**)
 - (ii) In the event of **other permanent disability**: Rs 7,00,000/- (**Rs Seven Lakh**)
- d) Permanent Disablement: A disablement that is classified as a permanent total disablement under the proviso to Section 2(I) of the Employee's Compensation Act, 1923.

12. **OVER RUN COMPENSATION** Clause no. 2.12 of Vol I C GCC: Not applicable for Section B (cranes) and Section C (Menial and Secretarial Services) of Chapter-XIV SCHEDULE OF RATES & QUANTITIES

13. **PRICE VARIATION COMPENSATION** Clause no. 2.17 of Vol I C GCC: Not applicable for section B (cranes) and Section C (Menial and Secretarial Services) of Chapter-XIV SCHEDULE OF RATES & QUANTITIES

14. **Clause no. 2.24 of GCC PERFORMANCE GUARANTEE FOR WORKMANSHIP:** Not applicable

15. **RETENTION AMOUNT (Clause no 2.22 of GCC):** Applicable as per Amended Retention Amount Clause 2.22 of GCC is as per below:

- a. RETENTION AMOUNT
 - i. **Retention Amount shall be 5% of executed contract value and shall be recovered at the rate of 5% from each Running Bill admitted, including PVC Bills.**
 - ii. **Refund of Retention Amount: 100% of retention amount along with 'Final Bill'**

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

Clause No. 1.10.3 (iii) 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.

BHEL PSWR
Notice Inviting Tender

e-Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

Page 32 of 81

Bank of Baroda
Canara Bank
Citi Bank N.A.
Corporation Bank
Deutsche Bank
HDFC Bank Ltd.
The Hongkond 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".

17. 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 for which Declaration Proforma by bidder has been given in Annexure - 5 of NIT:

BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. **The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained.** The

bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

As a reminder to the bidders, system will flash following message (in RED color) during the course of 'online sealed bid':

"Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL"

Note:- In case the tender is an e-tender and bids are submitted on e-procurement portal of BHEL → <https://bhel.abcprocure.com>, the term 'envelope sealed bid' to be read as "price bid in e-procurement portal".

18. **MSE Vendors:** MSE bidders kindly to take note that EMD (Earnest Money Deposit) shall be furnished by MSE bidders as well, as per the amount and procedure indicated in the NIT/GCC.

19. PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) CLAUSE:

"For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/ PO/ WO against this NIT.

In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable."

ANNEXURE-5

Declaration for Reverse Auction

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration for Participation in Reverse Auction (RA)
Ref: NIT/Tender Specification No: BHE/PW/PUR/ RGMTFGD-MM/2281

We declare that we will participate in Reverse Auction (RA) if BHEL decides for that instead of opening the sealed envelope/ E-Procurement Portal Price Bid, submitted by us. We have read all the guidelines of reverse auction available in tender enquiry as well as on www.bhel.com portal. We also declare that during reverse auction:

- ❖ We will submit online sealed bid less than or equal to of our envelope sealed/ E-Procurement Portal price bid already submitted to BHEL along with the offer.

We also declare to submit the "Process Compliance Form" (to the designated service provider) as well as "Online Sealed Bid" in the Reverse Auction, in case BHEL decides to go for that.

Yours Faithfully,

(Signature, Date & Seal of Authorized
Representative of the Bidder)

Date:

ANNEXURE-6

UNDERTAKING

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration for not being under Bankruptcy Code Proceedings (IBC) by NCLT or under Liquidation / BIFR

Ref: NIT/Tender Specification No: **BHE/PW/PUR/ RGMTFGD-MM/2281**

We, _____ declare that we are not under Bankruptcy Code Proceedings (IBC) by NCLT or under Liquidation / BIFR, which will render us ineligible for participation in this tender.

Yours Faithfully,

(Signature, Date & Seal of Authorized Representative of the Bidder)

Date:

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

Sl No	DESCRIPTION	Chapter
Volume-IA	Contract specific details & Technical Specifications	
1.	Project Information	Chapter-I
2.	Scope of Works	Chapter-II
3.	Facilities in the scope of Contractor/BHEL (Scope Matrix)	Chapter-III
4.	T&Ps and MMEs to be deployed by Contractor	Chapter-IV
5.	T&Ps and MMEs to be deployed by BHEL on sharing basis	Chapter-V
6.	Time Schedule	Chapter-VI
7.	Terms of Payment	Chapter-VII
8.	Taxes and other Duties	Chapter-VIII
9.	General	Chapter-IX
10.	Material Handling & Material Management of Material Received by Road	Chapter-X
11.	Material Handling & Material Management of Material Received by Rail	Chapter-XI
12.	Re-shifting & Restacking	Chapter-XII
13.	Material Handling & Material Management of Material Collections/Dispatches	Chapter-XIII
14.	Schedule of rates & quantities	Chapter-XIV

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-I: Project Information

Project Information		
1.0	Project Title	
1.1	Project Name	NTPC Ramagundam Stage-I (3X200MW) & Stage- II (3X500MW) FGD System
1.2	Rating/Plant Capacity	Stage-I (3X200MW) and Stage-II (3X500MW)
1.3	Owner	National Thermal Power Corporation (NTPC)
2.0	Location and approaches	
2.1	Nearest Town/City	Ramagundam
2.2	State Capitol	Hyderabad
2.3	Nearest Railway Station	Ramagundam
2.4	Nearest Airport	Hyderabad
2.5	Nearest Road Access	SH-1 is connected with Hyderabad-Karimnagar-Peddapalli-Ramagundam Highway.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II: Scope of Works

SCOPE OF WORK

2.0 The Scope of work of this tender specification of Materials Handling & Material Management services for NTPC Ramagundam Stage-I (3X200MW) & Stage- II (3X500MW) FGD System station, shall broadly as under:

1. The Work Receipt, Unloading, Verifying, Shifting, Stacking, Preservation, Handling And Handing Over Of Components Of Flue Gas Desulphurization System (FGD) With Auxiliaries; Pumps, Rotating Machines, Tanks & Vessels, Pipe & Fittings, **Borosilicate lining, Rubber Lining, Glass Flake**, Complete Electrical, Controls And Instrumentation Equipments, Panels, Cables / Cable Trays, And Other Related Items Including Items Of BOP's Packages; BHEL T&P & Other Materials; Components & Equipment Of Various Other Systems, Structural & Reinforcement Steel And Providing Services For Materials Management.
2. Scope of work includes Material Handling and Management (Incl. Issue, verification, stacking, shifting and record keeping etc.) of materials receipt at BHEL Site/ store from various units of BHEL or from any other source of BHEL. Tentative quantities of all such materials expected to be received at site are given in the tender Document.
3. Unloading of all types of heavy consignments and/or over-dimensional consignments directly from trailers by suitable crane/s or by jack & sleeper method as per instruction of BHEL Engineer.
4. The required jack & sleeper are to be arranged by the contractor.
5. Receipt of materials dispatched by road transport on door delivery basis at the BHEL stores and unloading thereof.
6. Collection of materials dispatched by road transport on godown delivery basis from transporters' godown, loading at transporters godown, local transport up to BHEL stores / storage yard and unloading thereof.
7. **Preliminary verification** of all materials at the time of unloading from transport vehicle or while receiving consignments from transporters' Godown, as the case may be, reporting immediately the discrepancies like damages and shortages noticed.
8. **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.
9. **Stacking and storing** at BHEL open storage yard / covered stores / closed & semi-closed sheds, and submission of stacking / storing records.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II: Scope of Works

10. **Preservation of the materials** in accordance with BHEL preservation manual and as per BHEL instructions.
11. General cleaning, grass cutting and upkeep of storage yard, covered and semi-closed stores sheds within the quoted rates for unloading, verification and stacking.
12. Providing Materials Management Services.
13. **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 erection contractors.
14. Handling and loading of outgoing materials those are to be sent to other destinations.

SCOPE OF WORK IS FURTHER DETAILED IN VARIOUS CLAUSES HEREAFTER.

2.1 MAJOR PACKAGES TO BE HANDLED ARE AS UNDER:

Components of the following major systems are to be handled under this contract:

1. Structural & Reinforcement Steel
2. Limestone grinding and slurry preparation system.
3. Absorber System
4. Gypsum dewatering system
5. Auxiliary absorbent tank
6. Primary Hydro cyclone Tank and Accessories
7. Belt filter washing tank
8. Filtrate Water Tank
9. Secondary Hydro cyclone Tank and Accessories
10. Waste Water Tank
11. Neutralization Tank
12. Mill Separator Tank
13. Lime stone Slurry Storage Tank
14. Auxiliary absorbent tank
15. Process Water tank
16. Clarified Water Tank (cake washing)
17. **Rubber lining of tanks and absorber** (Storage and Preservation as per manual or BHEL's Engineer Instruction)

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II: Scope of Works

18. Glass flake lining of ducts (absorber outlet to wet stack chimney portion)
19. Slurry Recirculation Pump System
20. Mist Eliminator & Accessories
21. Air Oxidation System
22. Slurry Pumps & Accessories
23. Agitators
24. Limestone Mill
25. Gypsum Belt Filter And Accessories
26. Thermal insulation & cladding.
27. Other BHEL supplied (manufactured/bought out items).
28. BOP Package items
29. Misc. Cranes & hoist.
30. Cable & cable trays etc.
31. Structural steel items, Reinforcement
32. Cement (received in bags or bulkers).
33. Construction equipments of BHEL sent in dismantled condition and other items received from other sites/locations.
34. Materials and consumables required for erection & commissioning of plant.

The above list is not exhaustive; it only includes most common major packages. It should in no way a basis for any claim/dispute on account of any variation. The intent of specification is to provide the complete material handling and material management services. All the work shall be carried out as per the instructions of BHEL engineer which shall be final and binding on the contractor.

2.2

BILL OF QUANTITY

Summary of Weight of BOQ under the Scope:-

2.2.1 GENERAL IDEA OF WEIGHTS TO BE HANDLED FOR MM WORKS

S.no.	Unit	Description of Supplies	Tonnage (MT)
1	Ranipet	FGD System (Mechanical & Electrical components)	25673
2	EDN	Control and Instrumentation /Panels	284
3	PC, Chennai	Piping System	207

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II: Scope of Works

4	PEM	Mechanical BOIs and Electrical BOIs	521
5	Rudarapur	Busduct	21
6	EPD	LV switchgear	214
7	Bhopal		750
8	ISG	DG Set	45
9	PESD	Fire Protection System	98.45
10	Jhansi	Transformers	450
11	PSWR	Structural steel	1805
12	PSWR	Pre-fabricated Structural steel	9400
13	PSWR	Reinforcement steel (TMT)	7772
14	PSWR	Cement in bags	1000

Approximate Weight to be handled **48240 MT**

General idea of some major components (Single Piece) to be handled under this package.

S.No.	Item Description	Approx. Gross Wt./Piece (MT)
1	Empty Ball mill	30
2.	Booster Fan rotor	16.5
3.	Vibratory Screener	12
4.	Hydrocyclones	7.5
5	Booster Fan motor	19
6	DG- Set	15 MT (Size: L x W: 40 Feet x 8 Feet) Weight of DG set with complete accessories: 40 MT Note: Accessories will come in loose / packed condition

Notes:

1.	The product list and the manufacturing units mentioned above are indicative for estimation purpose only. The weight mentioned above is approximate and liable to vary as per design consideration of the manufacturing unit.
2.	The payment will be made at the quoted / accepted rates for the tonnage actually handled.

Total Approx. Weight to be received (including cement supplied in bulkers):
77896 MT

Total Approx. Weight to be received of Structural steel & TMT: **9577 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 Equipment's received from various manufacturing units and their vendors for the project under this specifications and drawings.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-II: Scope of Works

2.3

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.

2.4

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.

2.5

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

2.6

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

2.7

All cranes, transport equipment's, 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.

2.8

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

Sl. No	Description PART I	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		Location will be finalized after joint survey with owner Note: There can be more than one location of open storage yard, Closed shed/ Semi Closed shed. Bidder shall make his establishment accordingly for material handling and MM services.
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	
B	Labour Colony with internal roads, sanitation, complying with statutory requirements		Yes	
3.2.0	ELECTRICITY			
3.2.1	Electricity For construction purposes			
A	Single point source (415 V, A.C., 3 Phase , 50 Hz)	Yes		Chargeable. The charges for the actual energy consumed by the Contractor shall be Recovered by BHEL based on the prevalent rate of DISCOM.

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	
3.2.2	Electricity for the office, stores, canteen etc of the bidder			
A	Single point source	Yes		Chargeable. The charges for the actual energy consumed by the Contractor shall be Recovered by BHEL based on the prevalent rate of DISCOM.
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		YES	
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	No	yes	Contractor shall make all arrangements himself for supply of construction water as well as potable water for labour and other personnel at the work site/ colony. However, drawl of construction/potable water from bore-well shall be permitted if found suitable. Any statutory clearance required shall be obtained by the contractor.

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	
3.3.2	<u>Water supply for bidder's office, stores, canteen etc.</u>			
A	Making the water available at single point	No	Yes	Contractor shall make all arrangements himself for supply of construction water as well as potable water for labour and other personnel at the work site/ colony. However, drawl of construction/potable water from bore-well shall be permitted if found suitable. Any statutory clearance required shall be obtained by the contractor.
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			Note: The area lightning of BHEL's Material store/ yard and premises shall be in the scope of BHEL.
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	

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	
C	Providing the necessary consumables like bulbs, switches, etc during the course of project work		Yes	
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, wi-fi, e-mail services 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	

Note: There can be more than one location of open storage yard, Closed shed/ Semi Closed shed. Bidder shall make his establishment accordingly for material handling and MM services.

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

LIST OF TOOL & PLANTS TO BE DEPLOYED BY THE CONTRACTOR –

SN	DESCRIPTION OF EQUIPMENTS	CAPACITY (MINIMUM)	MINIMUM QUANTITY	REMARKS
1	Tyre Mounted / Mobile Crane	40MT	01	To be deployed as per requirement and as per instruction of BHEL Engineer.
2.1	New generation Pick & carry type tyre mounted mobile crane. (Farana). Note: Hydra is not allowed.	18 MT	01	To be deployed as per requirement and as per instruction of BHEL Engineer.
2.2	New generation Pick & carry type tyre mounted mobile crane. (Farana). Note: Hydra is not allowed.	14 MT	01	To be deployed within 15 days from the start of contract.
3	Trailer With Prime Mover	Adequate Capacity	As Required	To be deployed as per instruction of BHEL Engineer.
4	Tractor trailer	15/20MT	As Required	To be deployed as per instruction of BHEL Engineer.
5	Truck	Adequate Capacity	As Required	To be deployed as per instruction of BHEL Engineer.
6	Wooden sleepers(*)	Assorted Sizes (3' Ft X 6" X 6")	500 Nos	From the date of start of contract
7	Slings, 'd'-shackles, max puller.	01 MT To 10MT	As Required	To be deployed as per instruction of BHEL Engineer.
8	Slings, 'd'-shackles, max puller, pulley blocks, hydraulic jacks, etc above 10 MT.	As Required	As Required	To be deployed as per instruction of BHEL Engineer, WITH TEST REPORTS
9	Spanner sets ring/d	Up To 56 mm	As Required	To be deployed as per instruction of BHEL Engineer.

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

SN	DESCRIPTION OF EQUIPMENTS	CAPACITY (MINIMUM)	MINIMUM QUANTITY	REMARKS
10	Tarpaulin (**)	Assorted Size	75No.	Size to be decided at Site in consultation with BHEL Engineer

NO SEPARATE PAYMENT WILL BE MADE FOR SUPPLY OF TARPAULINS. CONTRACTOR HAS TO PROVIDE REQUIRED NUMBER OF TARPAULINS WITHIN QUOTED RATES.

NOTE:

1. FOR Tyre Mounted / Mobile Crane (40MT):

For Tyre Mounted / Mobile Crane (40MT), the contractor shall be paid at Rs. 35000/- per day (Including Operator, consumable and Fuel) with the ceiling of Rs. 2, 10,000/- per Months (If crane is hired for work for more than 06 Days)

- a. Requirement of 40MT Crane shall be informed by BHEL through a formal communication vide Letter or e-mail. The requirement shall be informed at least 07 days before the actual requirement of crane through letter or e-mail.
- b. The letter should clearly specify the expected arrival dates of material and no. of days for which crane will be required based on the dispatch details arranged from BHEL Units.
- c. There may be a case when Crane is required to be hired for more than one occasion during period of 30 days (Where actual crane requirement exceeds 6 Days during period of 30 Days) in such cases , based on the information given by BHEL , Bidder shall hire crane for period of one month. Such requirement shall be clearly specified in the letter.
- d. The date of mobilization shall be considered as the date of mobilization intimated in BHEL letter or actual usage date (whichever is earlier).
- e. Crane should be de-mobilized immediately after material is unloaded or upon completion of requirement given by BHEL in mail/letter (Whichever is later).
- f. Crane Charges are inclusive of Hiring Charges, Fuel, Consumable, and Operator. No Overtime is envisaged for the crane.

MEASURING AND MONITORING DEVISES (MMD):

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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

NOTE:

1. The age of the contractor deployed cranes up to SN No 1, 2.1 & 2.2 above should be within 15 years as on date of deployment. Contractor has to provide documentary evidence/ proof for age of the crane at the time of deployment to BHEL Engineer.
2. Considering operational safety, the use of material handling equipment "HYDRA" is banned, agencies have to deploy the New generation Pick & carry tyre mounted mobile crane (Farana of required capacity).
3. THIS ABOVE LIST IS ONLY INDICATIVE AND NEITHER EXHAUSTIVE NOR LIMITING. CONTRACTOR SHALL DEPLOY ALL NECESSARY T&P (CALIBRATED) TO MEET THE SCHEDULES & AS PRESCRIBED BY BHEL ENGINEER AND REQUIRED FOR COMPLETION OF WORK. QUANTITIES (AS REQUIRED) MAY BE MUTUALLY AGREED UPON AND MINUTES OF MEETING DULY SIGNED FOR DEPLOYMENT..
4. Regular maintenance period of one day per month shall be permitted and Preventive maintenance period of six days per year with each spell not exceeding three days shall be permitted for the T&Ps.
5. **If work gets delayed due to non-availability of Crane, BHEL reserves the right to get the work done at the risk and cost of contractor without prejudice to rights of BHEL as in general conditions of contract. Overheads will be charged on differential amount.**

5.1 Case-I: If risk and Cost is invoked

In addition to risk and cost, BHEL reserves the right to levy penalty at the rate of 50% X daily rate for delay in deployment of T&P calculated as below

Number of days eligible for penalty = (Date when notice is served to deploy T&P at Risk and Cost of Contractor) – (minus) (Date when T&P was required to be deployed)

Daily Rate= Monthly hire Charge/30.

5.2) Case-II: If risk and Cost is not invoked

Penalty shall be levied at the rate of 50% X daily rate

Number of days eligible for Penalty = Actual Deployment Date - (Minus) Date when T&P was required to be deployed

Daily Rate= Monthly hire Charge/30.

6. IN CASE OF NON COMPLIANCE IF ANY AS LISTED BELOW IN SL. NO. 6.1, THE CHARGES AS MENTIONED BELOW SHALL BE DEDUCTED IN THE RUNNING BILLS OF THE RESPECTIVE MONTHS.
- 6.1. LIST OF NON COMPLIANCE:
 - NOT WORKING CONDITION OF THE PARTICULAR CRANE CUMULATIVELY FOR MORE THAN THREE DAYS IN THE CALENDAR MONTH DURING THE PERIOD MENTIONED IN THE DEPLOYMENT PLAN.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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

- NOT WORKING CONDITION OF THE PARTICULAR CRANE FOR MORE THAN THREE CONSECUTIVE WORKING DAYS IN THE MONTH DURING THE PERIOD MENTIONED IN THE DEPLOYMENT PLAN.

THE DEDUCTION SHALL BE AS GIVEN BELOW:

DEDUCTION FOR THE MONTH = OUTAGE BEYOND THREE DAYS X (MONTHLY CRANE CHARGES/30)

NOTE: I) FOR CALCULATION NO. OF DAYS IN A CALENDAR MONTH IS TAKEN AS 30.

II) MONTHLY CRANE CHARGES AS DERIVED IN THE "Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES".

7. ALL THE T&PS DEPLOYED BY THE BIDDERS SHALL HAVE VALID TEST CERTIFICATES. THE DOCUMENTARY PROOF SHALL BE SUBMITTED TO BHEL ENGINEER ALONG WITH APPLICABLE VALID CERTIFICATES.
8. CRANE LOG SHEET FOR EACH OF THE CRANE ON DAILY BASIS IS TO BE CERTIFIED BY THE BHEL ENGINEER. CONTRACTOR SHALL SUBMIT THE MONTHLY RUNNING ACCOUNT BILLS ALONG WITH DULY CERTIFIED LOG SHEETS.
9. ANY OR PART OR ALL OF THE T & Ps OF THE CONTRACTOR IDENTIFIED FOR THE TENDERED PACKAGE SHALL NOT BE ENGAGED FOR ANY WORKS OTHER THAN THAT OF THE WORKS INTENDED IN THIS TENDER. HOWEVER, BHEL RESERVES THE RIGHTS TO ENGAGE THOSE T&Ps FOR WHICH SEPARATE MONTHLY RATES ARE BEING PAID AS PER **"Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES"** FOR ITS OWN WORKS OTHER THAN THAT OF THE WORKS INTENDED IN THIS TENDER DURING THE PERIOD OF CONTRACT. IN SUCH CASES FUEL WILL BE PROVIDED BY BHEL. HOWEVER, OPERATOR FOR THE SAME SHALL BE PROVIDED BY CONTRACTOR.
10. DURING THE EXTENDED PERIOD OF CONTRACT, SERVICES OF T&PS SHALL BE PROVIDED BY THE CONTRACTOR AS PER THE INSTRUCTION OF BHEL ENGINEER. THE MONTHLY CHARGES TOWARDS DEPLOYMENT OF THE PARTICULAR CRANE SHALL BE PAID AT THE RATE OF 90 % OF MONTHLY AWARDED RATES FOR A PERIOD BEYOND AFTER COMPLETION OF CONTRACT PERIOD.
11. THE WOODEN SLEEPERS SHALL BE TAKEN BACK BY THE CONTRACTOR ON AS IS WHERE BASIS IS. NO CLAIM ON ACCOUNT OF DAMAGE /LOSS SHALL BE PAYABLE BY BHEL.
12. THE REQUIRED CONCRETE SLEEPERS, WHEREVER DEEMED NECESSARY, WILL BE ARRANGED BY BHEL FREE OF COST ON RETURNABLE BASIS. HOWEVER, THE WOODEN SLEEPERS SHALL BE PROVIDED BY THE CONTRACTOR.
13. (*) 100% Wooden slippers shall be mobilized from the date of start of contract. in case of non-mobilization of 100% wooden slippers, 20% amount of each RA bill (monthly) shall be withheld till mobilization of the same.
14. (**) THE FIRST RA BILL WILL BE RELEASED ONLY AFTER RECEIPT OF 50% OF TARPAULINS (38 NOS) AT SITE. BALANCE TARPAULINS SHALL BE SUPPLIED AS PER REQUIREMENT/AS DIRECTED BY BHEL ENGINEER.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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

15. DURATION FOR DEPLOYMENT OF MAJOR T & P FOR WHICH SEPARATE MONTHLY HIRING RATES ARE BEING PAID (Sr. no B.1 and B.2) AS PER "**Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES**" IS TENTATIVE AND MAY CHANGE AS PER REQUIREMENT.
16. MOBILISATION AND DEMOBILISATION OF ALL T&Ps SHALL STRICTLY BE DONE AS PER THE INSTRUCTIONS FROM BHEL. BHEL ALSO RESERVES THE RIGHT TO DIRECT THE CONTRACTOR TO DIS-CONTINUE/ DE-MOBILISE ANY/ALL OF THESE CRANES WITHIN THE CONTRACT PERIOD/EXTENDED CONTRACT PERIOD WITH 60 DAYS ADVANCE WRITTEN NOTICE WITHOUT ASSIGNING ANY REASON. NO PAYMENT WILL BE MADE FOR THE PERIOD AFTER THE DATE OF DEMOBILIZATION/DISCONTINUANCE NOTIFIED BY BHEL.
17. The commencement date of deployment period for each crane may be mutually agreed upon and duly signed minutes of meeting. However total duration of deployment shall be accommodated within original contract period.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – V: T&Ps & 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	QUANTITY	REMARKS
1	MOBILE CRANE ABOVE 40 MT CAPACITY.	01	ALL CRANES (EXCEPT FROM CONTRACTORS SCOPE REQUIRED FOR THE MENTIONED WORK WILL BE ARRANGED BY THE BHEL AS PER REQUIREMENTS

Note:

1. The cranes may be BHEL owned or may be obtained on hiring basis including operating and maintenance crew.
2. Operator and O&M for BHEL owned crane will be provided by BHEL.
3. Operator and O&M for hired crane will be provided by the hiring agency.
4. Contractor shall provide the fuel for BHEL provided cranes (Hired/owned) for his use.
5. Contractor shall provide necessary manpower assistance for initial and final assembly & dismantling and for subsequent operations of boom extension and reduction during execution of work. Contractor shall also make necessary arrangements like laying of special sleeper beds and steel pates (all arranged by contractor) for movement and operation of the crane.
6. Above crane will be provided by BHEL for unloading of only major ODC consignment where contractor's crane or combination of cranes are not capable of doing the mentioned scope of work.
7. 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. Augmentation of BHEL T & P under special circumstances shall be discretion of BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6.1 INITIAL MOBILIZATION

AFTER RECEIPT OF FAX/MAIL LOI, CONTRACTOR SHALL DISCUSS WITH PROJECT MANAGER / CONSTRUCTION MANAGER REGARDING INITIAL MOBILISATION. CONTRACTOR SHALL MOBILIZE NECESSARY RESOURCES **WITHIN ONE WEEK** 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 ACTIVITIES AS INTIMATED BY PROJECT MANAGER/SITE ENGINEER.

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 32 MONTHS (THIRTY TWO) FROM THE "START OF CONTRACT PERIOD".

THE DATE OF RECEIPT / UNLOADING THE VERY FIRST CONSIGNMENT BY THE CONTRACTOR AS DEFINED IN SCOPE OF THIS CONTRACT, AS CERTIFIED BY BHEL ENGINEER, SHALL BE RECKONED AS THE START OF THE CONTRACT PERIOD. IN CASE OF DISCREPANCY, THE DECISION OF BHEL ENGINEER IS FINAL.

IF WORK IS NOT COMPLETED WITHIN CONTRACT PERIOD THE SAME MAY BE EXTENDED FOR 18 MONTHS OR LESS DEPENDING UPON REQUIREMENT AT THE DISCRETION OF BHEL. FURTHER EXTENSION SHALL BE GIVEN UPON MUTUAL AGREEMENT BETWEEN BHEL AND CONTRACTOR AT THE EXISTING TERMS AND CONDITIONS.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

7.1 Terms of Payment

THE WORK RECEIPT, UNLOADING, VERIFYING, SHIFTING, STACKING, PRESERVATION, HANDLING AND HANDING OVER OF COMPONENTS OF FLUE GAS DESULPHURIZATION SYSTEM (FGD) WITH AUXILIARIES; PUMPS, ROTATING MACHINES, TANKS & VESSELS, PIPE & FITTINGS, BOROSILICATE LINING, RUBBER LINING, GLASS FLAKE, COMPLETE ELECTRICAL, CONTROLS AND INSTRUMENTATION EQUIPMENTS, PANELS, CABLES / CABLE TRAYS, AND OTHER RELATED ITEMS INCLUDING ITEMS OF BOP'S PACKAGES; BHEL T&P & OTHER MATERIALS; COMPONENTS & EQUIPMENT OF VARIOUS OTHER SYSTEMS, STRUCTURAL & REINFORCEMENT STEEL AND PROVIDING SERVICES FOR MATERIALS MANAGEMENT

AT

NTPC RAMAGUNDAM STAGE-I (3X200MW) & STAGE- II (3X500MW) FGD SYSTEM

ITEM NO	DESCRIPTION OF ACTIVITY	UNIT	% BREAK UP
Section A1			
A.1.1	<u>Material Handling and Material Management for Materials received through Trucks/Trailers at Project Site</u>		100%
1	Unloading, Shifting to Open/Covered Stores	MT	30%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	15%
3	Stacking and Verification	MT	15%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurance claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%
5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)		3%
A.1.2	<u>Material Handling and Material Management for Materials received through Railway Wagons at Railway Siding/Station/Godown</u>		100%
1	Unloading from Railway wagons or collection from godowns, Re-loading, transportation to site and unloading	MT	30%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	15%
3	Stacking and Verification	MT	15%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurance claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)		3%
A.1.3	Material Handling and Material Management for Materials received at Transporters Godowns within a radius of 50 KM from Project Site		100%
1	Unloading from Railway wagons or collection from godowns, Re-loading, transportation to site and unloading	MT	30%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	15%
3	Stacking and Verification	MT	15%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurance claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%
5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)		3%
A.1.4	Material Handling and Material Management for Structural steel and Reinforcement steel received through trucks/trailers at project Site		100%
1	Unloading, Shifting to Open/Covered Stores	MT	30%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	15%
3	Stacking and Verification	MT	15%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurance claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%
5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%
A.1.5	Material reshifting and re stacking within project premises		100%
1	Material Re-shifting Stacking	MT	85%
2	Updation of store material register / BHEL MM package system	MT	12%
3	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

A.1.6	Despatch/Outgoing materials		100%
1	Identification of Material, Tagging, Packing if required, Preparation of Gate passes etc.	MT	40%
2	Loading of materials, including T&P of BHEL, into trucks/Carriers at site stores/ erection site for onwrd transportation to other destinations (Transportation by other agencies)	MT	45%
3	Updation of store material register / BHEL MM package system	MT	12%
4	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%

Section A2

A.2.1	Material Handling and Material Management for Cement received through Bulker at project Site		100%
1	Unloading, Shifting to Open/Covered Stores	MT	0%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	30%
3	Stacking and Verification	MT	30%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurane claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%
5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%
A.2.1(a)	Material Handling and Material Management for Cement received in bags at project Site		100%
1	Unloading, Shifting to Open/Covered Stores	MT	30%
2	Updation of Receipt details, in store Material Registers/BHEL MM Package system	MT	15%
3	Stacking and Verification	MT	15%
4	Updation of Verification details in Material stock registers, Submission of reports as per specified formats for shortage/open delivery, loading of police reports if required, documents for insurane claims Etc, and preparation of material receipt certificates in prescribed formats where ever applicable	MT	25%
5	Identification of material in ready to lift position for issue to BHEL/ Erection agency, and updation of issue details in stores Records	MT	12%
6	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

A.2.2	Material re-shifting and re-stacking for Cement within project premises		100%
1	Material Re-shifting Stacking	MT	85%
2	Updation of store material register / BHEL MM package system	MT	12%
3	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%
A.2.3	Despatch/Outgoing materials for cement materials		100%
1	Identification of Material, Tagging, Packing if required, Preparation of Gate passes etc.	MT	40%
2	Loading of materials, including T&P of BHEL, into trucks/Carriers at site stores/ erection site for onwrd transportation to other destinations (Transportation by other agencies)	MT	45%
3	Updation of store material register / BHEL MM package system	MT	12%
4	Completion of contractual obligations as Serial No. 7.5 (7.5.1, 7.5.2, 7.5.3, 7.5.4 and 7.5.5)	MT	3%

Section-B

SN	Crane description	Qty	Total crane months
B.1	New generation Pick & carry type tyre mounted mobile crane. (Farana)- 14 MT	1	32(Each)
B.2	New generation Pick & carry type tyre mounted mobile crane. (Farana)-18 MT	1	

Section-C

SN	Description	Qty (Man months)	Total Man months
C.1	Menial Services	50	100
C.2	Secretarial Services	50	

Note: The quantities mentioned above are tentative in nature and may vary to any extent.

7.2 VOID

7.3 VOID

7.4 VOID

7.5 Other payment terms & condition

7.5	OTHER payment terms & condition	
	% from every RA Bill to be paid only after satisfactory completion otherwise forfeited	
7.5.1	REMOVAL OF GRASS/WEEDS AND OTHER PLANT GROWTH IN THE STORE AREA	0.5%

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

7.5.2	HOUSEKEEPING & CLEANING OF ALL CLOSED SHEDS	0.5%
7.5.3	PRESERVATION planned for the month	0.5%
7.5.4	Safe working & availability of adequate illumination at the place of work	0.5%
7.5.5	Implementation of E-stores for records/data	1%

7.6 Cranes (For Section B)

Payment for Cranes shall be made on monthly basis as per the awarded monthly rate against each crane. No other payment shall be paid for the other / additional T & Ps deployed for carrying out the work as per the scope of this tender.

7.7 Menial and Secretarial Services: (For Section C)

Payment for Menial and Secretarial Services shall be made on monthly basis as per the awarded monthly rate against each head.

Payment for the same shall be made as per the service-month rate fixed in item no C.1 & C.2 of rate schedule Section -C Terms of Payment, on pro-rata basis as at actuals.

The actual requirement of manpower shall be discussed and finalized with engineer in charge before start of the works.

However rates fixed are on the basis of total minimum wages for NTPC Ramagundam plant circular at the time of NIT and the same shall be revised at times when it is changed by the government.

Therefore price variation compensation and overrun compensation will not be applicable for items in Sec-C.

Payment against items in Section C of Chapter-XIV Schedule of Rates and Quantities shall be calculated & paid in following manner;

- Per service month rate= $1.41 \times$ minimum wages per month (rounded to next higher fifty value)

Minimum wages per month

Minimum wages per month = (basic wages + special allowance) or min. Wage per day (rounded value) $\times 30$.

During the extended period of contract, supervision and secretarial services, menial services for BHEL office and stores, site offices, etc. Shall be provided by the contractor as per the instruction of BHEL site-in-charge. Rates during extended period shall be followed as above.

Note: BHEL at its sole discretion reserves the right to re-shuffle the work allocation of the personnel deployed.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

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 @ Rs500 per service-day

B. Menial services for BHEL office and stores etc. @ Rs 300 per service-day

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes & Other Duties

8.0 TAXES, DUTIES, LEVIES (Rev 13 dated 05/11/2018)

- 1) All taxes excluding GST, GST Cess & BOCW Cess **but including, Royalties, fees, license, deposits, commission, any State or Central Levy and other charges whatsoever, if any, shall be borne by you and shall not be payable extra.**
- 2) Any increase of the taxes excluding GST, GST Cess & BOCW Cess, at any stage during execution including extension of the contract shall have to be borne by the contractor. Quoted/ accepted rates/ price shall be inclusive of all such requirements. Please note that since GST on output will be paid by BHEL separately as enumerated below, your quoted rates/ price should be after considering the Input Credit under GST law at your end.
- 3) **GST :**
The successful bidder shall furnish proof of GST registration .GST along with Cess (as applicable) legally leivable & payable by the successful bidder as per GST Law, shall be paid by BHEL. Hence Bidder shall not include GST along with Cess (as applicable) in their quoted price.
- 4) GST charged in the Tax Invoice/Debit note by the contractor shall be released separately to the contractor only after contractor files the outward supply details in GSTR-1 on GSTN portal and input tax credit of such invoice is matched with corresponding details of outward supply of the contractor and has paid the GST at the time of filing the monthly return
- 5) Bidder shall note that the GST Tax Invoice complying with GST Invoice Rules (Section 31 of GST Act & Rules referred there under) wherein the 'Bill To' details will as below :-
BHEL GSTN – As per **Annexure -1**
NAME -- Bharat Heavy Electricals Limited
ADDRESS – Site address
- 6) Bidder to immediately intimate on the day of removal of Goods (in case of any supply of goods) to BHEL along with all relevant details and a scanned copy of Tax Invoice to below email ids to enable BHEL to meet its GST related compliances :-
Email id ---- to be intimated later on.

In case of delay in submission of the abovementioned documents on the date of dispatch, BHEL may incur penalty /interest for not adhering to Invoicing Rules under GST Law. The same will be liable to be recovered from the successful bidder, if such delay is not attributable to BHEL.

- 7) In case of raising any Supplementary Tax Invoice (Debit / Credit Note) Bidder shall issue the same containing all the details as referred to in Section 34 read with Rule 53.
- 8) Bidder shall note that in case GST credit is delayed/ denied to BHEL due to delayed / non receipt of goods and /or tax invoice or expiry of the timeline prescribed in GST Law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from the vendor along with interest levied / leivable on BHEL, as the case may be.
- 9) Bidder shall upload the Invoices raised on BHEL in GSTR-1 within the prescribed time as given in the GST Act. Bidder shall note that in case of delay in declaring such invoice in your return and GST credit availed by BHEL is denied or reversed subsequently as per GST Law , GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from the bidder along with interest levied / leivable on BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes & Other Duties

10) Way Bill: Successful Bidder to arrange for way bill / e-waybill for any transfer of goods for the execution of the contract.

The Bidder has to make their own arrangement at their cost for completing the formalities, if required, with Issuing Authorities, for bringing materials, plants & machinery at site for execution of the works under this contract, Road Permit/ Way Bill, if required, shall be arranged by the contractor and BHEL will not supply any Road Permit/ Way Bill for this purpose.

11) **New taxes and duties**:-Any New taxes & duties, if imposed subsequent to due date of offer submission as per NIT & TCN, by statutory authority during contract period including extension, if the same is not attributable to you, shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL. However, you shall obtain prior approval from BHEL before depositing new taxes and duties.

Benefits and/or abolition of all existing taxes must be passed on to BHEL against new Taxes, if any, proposed to be introduced at a later date.

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

12) For transportation work, bidder shall declare in his quotation whether he is registered under GST, if yes, whether he intends to claim GST on forward charge basis. In absence of this declaration, BHEL will proceed further with the assumption that bidder intends not to claim GST on forward charge basis. However, in case of GST registered transporter, the amount to the extent of goods and service tax will be retained till BHEL avails the credit of GST. Further, transporter shall issue tax invoice which inter alia includes gross weight of the consignment, name of the consigner and the consignee, registration number of vehicle in which the goods are transported, details of goods transported, details of place of origin and destination, GSTIN of the person liable for paying tax whether as consigner, consignee or goods transport agency, and also containing other information as mentioned under rule 46.

13) **TDS under Income Tax shall be deducted at prevailing rates on gross invoice value from the running bills unless exemption certificate from the appropriate authority/ authorities is furnished.**

14) **TDS under GST shall be deducted at prevailing rates on applicable value from the running bills.**

15) Refer Annexure – 2 for BOCW Act & Cess Act.

ANNEXURE-1

State wise GSTIN no.s of BHEL

Sl. No	Projects under state	GSTIN
1	Andhra Pradesh	37AAACB4146P7Z8
2	Bihar	10AAACB4146P1ZU
3	Chhattisgarh	22AAACB4146P1ZP
4	Gujarat	24AAACB4146P1ZL
5	Jharkhand	20AAACB4146P5ZP
6	Madhya Pradesh	23AAACB4146P1ZN
7	Maharashtra	27AAACB4146P1ZF

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes & Other Duties

8	Orissa	21AAACB4146P1ZR
9	Telangana	36AAACB4146P1ZG

ANNEXURE-2 BOCW Act & Cess Act

Bidder may please note that the sub-contractor/bidder of BHEL engaging building or construction worker in connection with building or other construction work, are required to follow the procedures enumerated below:

1. It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.
2. It shall be sole responsibility of the contractor engaging Building Workers in connection with the building or other construction works in the capacity of employer to apply and obtain registration certificate specifying the scope of work under the relevant provisions of the Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 from the appropriate Authorities.
3. It shall be responsibility of the contractor to furnish a copy of such Registration Certificate within a period of one month from the date of commencement of Work.
4. It is responsibility of the contractor to register under the Building and other Construction Workers' Welfare Cess Act, 1996 and deposit the required Cess for the purposes of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 at such rate as the Central Government may, by notification in the Official Gazette, from time to time specify. However, before registering and deposit of Cess under the Building and other Construction Workers' Welfare Cess Act, 1996, the contractor will seek written prior approval from the Construction Manager.
5. It shall be sole responsibility of the contractor as employer to get registered every Building Worker, who is between the age of 18 to 60 years of age and who has been engaged in any building or other construction work for not less than ninety days during the preceding twelve months as Beneficiary under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996.
6. It shall be sole responsibility of the contractor as employer to maintain all the registers, records, notices and submit returns under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.
7. It shall be sole responsibility of the contractor as employer to provide notice of poisoning or occupation notifiable diseases, to report of accident and dangerous occurrences to the concerned authorities under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the rules made thereunder and to make payment of all statutory payments & compensation under the Employees' Compensation Act, 1923.
8. It shall be the responsibility of the sub-contractor as employer to make payment/deposit of applicable cess amount on the extent of work involving building or construction workers engaged by

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes & Other Duties

the sub-contractor within a period of one month from the receipt of payment. It shall also be responsibility of the Contractor to furnish BHEL on monthly basis, Receipts/ Challans towards Deposit of the Cess under the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder along with following statistics :

- (i) Number of Building Workers employed during preceding one month.
- (ii) Number of Building workers registered as Beneficiary during preceding one month.
- (iii) Disbursement of Wages made to the Building Workers for preceding wage month.
- (iv) Remittance of Contribution of Beneficiaries made during the preceding month

9. BHEL shall reimburse the contractor the Cess amount deposited for the purposes of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 under the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder. However, BHEL shall not reimburse the Fee paid towards the registration of establishment, fees paid towards registration of Beneficiaries and Contribution of Beneficiaries remitted.

10. It shall be responsibility of the Building Worker engaged by the Contractor and registered as a beneficiary under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 to contribute to the Fund at such rate per mensem as may be specified by the State government by notification in the Official Gazette. Where such beneficiary authorizes the contractor being his employer to deduct his contribution from his monthly wages and to remit the same, the contractor shall remit such contribution to the Building and other construction Workers' Welfare Board in such manner as may be directed by the Board , within the fifteen days from such deduction.

11. Bidders may please note that though the quoted price is exclusive of BOCW (which will be reimbursed by BHEL as per sub-clause 9 above) , however, If at any point of time during the contract period, non-compliance of the provisions of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder is observed, BHEL reserves the right to deduct the applicable cess (1%) on the contract value and penalty (if any, imposed by Cess Authorities) from the payables on account of non-compliance.

12. The contractor shall declare to undertake any liability or claim arising out of employment of building workers and shall indemnify BHEL from all consequences / liabilities / penalties in case of non-compliance of the provisions of the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 and the Building and other Construction Workers' Welfare Cess Act, 1996 and the rules made thereunder.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- IX : General

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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- IX : General

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.

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. CONTRACTOR SHALL USE LATEST AVAILABLE METHODOLOGY TO ENSURE REMOVAL OF VEGETATION.

9.11 VOID

9.12

WOODEN SLEEPERS WILL BE TAKEN BACK BY CONTRACTOR AFTER THE COMPLETION OF CONTRACT PERIOD ON AS IS WHERE IS BASIS.

9.13

HOUSEKEEPING OF CLOSED SHEDS ARE ALSO INCLUDED IN THE SCOPE OF WORK. CONTRACTOR SHALL CARRY OUT THE HOUSEKEEPING WORKS ON REGULAR INTERVALS (ONCE A WEEK).

9.14

VOID

9.15

THE TOOLS AND TACKES RECEIVED FROM VARIOUS BHEL UNITS ARE TO BE HANDED OVER TO CUSTOMER AFTER COMPLETION OF WORK AT SITE. IT SHALL BE THE RESPONSIBILITY OF CONTRACTOR TO HANDOVER TOOLS AND TACKES TO CUSTOMER NTPC THROUGH BHEL AND MAKE NECESSARY HANDING OVER PROTOCOLS.

9.16

If the contractor or his workmen break, deface, injures or destroy any part of building, road, kerbs, fence enclosures, water pipes, drains, electric/ telephone poles or wires, trees or any other property or damage any part of erected stores, stored components etc. the contractor shall make the same good at his own expenses (of which BHEL site engineer's decision shall be final) failing which the site engineer shall get the same rectified by other agencies at the risk and cost of the contractor and the same shall be deducted from the sums that may be due then or at any time thereafter become due to the contractor or even from his security deposit.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-X MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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 RELAVENT 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

PAYMENT OF DEMURRAGE/ WHARFAGE ETC., WHICH RESULT DUE TO CONTRACTOR'S FAULT, SHALL BE THE RESPONSIBILITY OF CONTRACTOR AND TO HIS ACCOUNT. IF BHEL HAS TO MAKE PAYMENT OF SUCH DEMURRAGE/ WHARFAGE TOGETHER WITH FREIGHT (PAYMENT OF FREIGHT ALONE IS IN BHEL SCOPE), THE AMOUNTS SO PAID AS DEMURRAGE/WHARFAGE FOR THE REASONS STATED ABOVE SHALL BE PAID TO BHEL BY THE CONTRACTOR FORTHWITH OR SHALL BE RECOVERED FROM THE BILL PAYMENTS 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/DEMMURAGE/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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-X MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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 HEAVY MOTORS, HEAVY BEARING PEDESTALS, ELECTRICAL PANELS AND 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 14TH 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 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.

THE DISPLAY BOARDS SHALL BE MADE WITH STRUCTURAL STEEL & M.S. PLATES AND SHALL BE PAINTED WITH SYNTHETIC ENAMEL PAINT. CONTRACTOR SHALL HAVE TO PERIODICALLY REPEAT SUCH EXERCISE AS THE ORIGINAL DISPLAYS MAY GET LOST / DAMAGED / DETERIORATE WITH TIME. ALL MATERIALS AND CONSUMABLES FOR THIS PURPOSE SHALL BE ARRANGED BY THE CONTRACTOR. CONTRACTOR SHALL HAVE TO MAKE HIS OWN ARRANGEMENTS INCLUDING SUPPLY OF MATERIALS FOR DISPLAYING THE PROPER IDENTIFICATION TAGS, BOARDS, MARKING, INSCRIPTION ETC. AS SCOPE OF WORK.

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-X MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

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

CONTRACTOR SHALL SUBMIT PROCEDURE WITH SKETCHES OF HANDLING OF ALL 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 AND PRINTERS WITH LATEST UP-GRADATION, MEMORY AND COMPATIBLE WITH BHEL COMPUTERS/LAN EQUIPMENT TO BE INSTALLED/USED WITHIN BHEL SITE OFFICE – COMPUTER - 06 SETS AND PRINTER - 02 SETS.**
COMPUTERS AND PRINTERS ARE ENVISAGED FOR VARIOUS MATERIAL MANAGEMENT ACTIVITIES SUCH AS RECORD KEEPING/DATA ENTRY DONE BY BIDDER'S STAFF.
- 2. ITEM RATE OBTAINED IN THE “Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES” 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.**

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

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 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 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-X MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

(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.
- 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-X MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIVED BY ROAD

(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) E-STORE 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 OVERHEAD CHARGES IN CASE OF ANY LOSS/DAMAGE ATTRIBUTABLE TO NEGLIGENCE/FAILURE ON CONTRACTOR'S PART.

SL NO	ACTIVITY/DESCRIPTION	MINIMUM NO. OF PERSONS	REMARKS
1	MATERIAL RECEIPT/UNLOADING, COLLECTION/BOOKINGS/PRESERVATION	2	To be deployed from the start of contract OR as per instruction of BHEL Engineer
2	DETAILED VERIFICATION	2	
3	MATERIAL ISSUE (BOILER, TG, ELEC, C&I, STEEL & CEMENT AND T&Ps)	2	
4	RECORD KEEPING (BOILER, TG, ELEC, C&I, STEEL & CEMENT AND T&Ps)	1	
5	RECORD KEEPING (MRC, ASSISTANCE IN INSURANCE CLAIMS, PURCHASE ETC)	0	
6	COMPUTER OPERATOR FOR BHEL OWNED WEIGHBRIDGE FOR OPERATION & RECORD KEEPING.	0	

NOTE: THE CONTRACTOR SHALL DEPLOY SKILLED PEOPLE (PREFERABLY DIPLOMA HOLDERS) FOR CARRYING OUT FUNCTIONS/OPERATIONS STATED ABOVE. NO. OF PERSONS INDICATED ABOVE IS TENTATIVE AND ACTUAL DEPLOYMENT MAY VARY BASED ON WORK LOAD AND SITE REQUIREMENT. **THE MANPOWER REQUIREMENT SHALL BE FINALISED IN THE BEGINNING OF THE CONTRACT PERIOD WITH ENGINEER INCHARGE.** THIS DOES NOT ABSOLVE THE

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

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

VOID

10.18

VOID

10.19

THE UNLOADING/HANDLING OF CEMENT RECEIVED THROUGH BULKER FACILITY IS NOT IN THE SCOPE OF WORK. HOWEVER, THE RECEIPT AND ISSUE RECORDS OF CEMENT RECEIVED THROUGH BULKER FACILITY SHALL BE MAINTAINED BY CONTRACTOR AS PER THE INSTRUCTION OF BHEL ENGINEER. PAYMENT FOR RECEIPT AND ISSUE OF CEMENT RECEIVED THROUGH BULKER SHALL BE MADE AS PER THE INSTRUCTION OF BHEL ENGINEER.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XI MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIPT BY RAIL

11.1

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 FORM MAIN STORAGE YARD TO RAILWAY SIDING WILL BE 4-5 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 RATES AS PER SL NO A.1.2 OF "**Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES**". 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.

11.8

QUANTUM OF WORK: ONE RAKE WILL CONTAIN APPROXIMATELY 1000 MTS IN 45 WAGONS (APPORX.).

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XI MATERIAL HANDLING AND MATERIAL MANAGEMENT OF MATERIALS RECEIPT BY RAIL

11.9

ADEQUATE NUMBER OF VEHICLES / HANDLING EQUIPMENT: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEPLOY ADEQUATE NUMBER OF 40 FEET TRAILERS ALONG WITH SUITABLE NUMBER OF CREW MEMBERS TO CATER TO THE TONNAGE RECEIVED. FOR THIS PURPOSE, THE CONTRACTOR HAS TO WORK CONTINUOUSLY AFTER RECEIPT OF WAGONS AT THE SIDING WITHOUT ANY BREAK, SO AS TO COMPLETE THE WORK WITHIN THE FREE TIME ALLOWED BY RAILWAY WITHOUT DEMURRAGE AND WHARFAGE. THE CONTRACTOR HAS TO DEPLOY ADEQUATE NUMBER OF CRANES AND TRAILERS. ANY DEMURRAGE AND WHARFAGE LEVIED BY RAILWAYS WILL BE TO CONTRACTOR'S ACCOUNT.

11.10

VOID

11.11

PRIOR NOTICE TIME: SHIPPING DEPT OF BHEL UNITS WILL INTIMATE THE CONTRACTOR WELL IN ADVANCE (ATLEAST4 DAYS IN ADVANCE) REGARDING THE ARRIVAL OF CONSIGNMENT AT THE RAILWAY SIDING TO ENABLE THE CONTRACTOR FOR MOBILIZING THE CRANES & VEHICLES AND WORKING CREW. IT IS SUGGESTED THAT THE CONTRACTOR HAS TO TRACE THE ACTUAL LOCATION OF RAKE THROUGH ONLINE SERVICES TO AVOID LAST MINUTE RUSH.

11.12

RAILWAY RECEIPT AND PREPARATION LR/GC WHILE INTERCARTING

11.12.1

BHEL PERSONNEL WILL BE DEPUTED TO WITNESS/ASSIST FOR THE RECEIPT OF MATERIALS REFERRED IN RR AND MAKING APPROPRIATE DISPATCH DOCUMENTS LIKE LR / GC NOTE OF THE CONTRACTORS TO ACCOMPANY CONSIGNMENTS UPTO NTPC RAMAGUNDAM STORAGE YARD. THE DOCUMENT PRESCRIBED BY BHEL HAS TO BE MAINTAINED BY THE CONTRACTOR FOR VERIFICATION AT ANY POINT OF TIME FOR RECEIPT, STORAGE AND INTER-CARTED CONSIGNMENTS.

11.12.2

AT ANY COST, THE CONTRACTOR WILL NOT BE ALLOWED TO UNLOAD THE MATERIAL AT SITE AT THEIR OWN. DUE TO ANY REASON, IF BHEL SITE UNLOADING CONTRACTOR IS NOT ABLE TO UNLOAD THE MATERIAL, THE INTERCARTING CONTRACTOR CAN UNLOAD AND GET CERTIFIED FROM BHEL SITE OFFICIALS AND PAYMENT WILL BE MADE AS PER SITE UNLOADING RATE.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XII RESHIFTING AND RESTACKING

12.1 RE-SHIFTING AND RE-STACKING

OWING TO SEVERAL PROJECT REQUIREMENTS, MANY COMPONENETS 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 IS THERE 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 A1.5 AND A2.2 of "Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES"

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 PER UNIT RATE CALCULATED FOR ITEM NO A1.5 AND A 2.2 OF "Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES".

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-XIII Material Handling & Material Management of Material
Collections/Dispatches

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 LRs/RRs/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

PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON THE ACCEPTED UNIT RATE AS PER SL NO A1.3 "Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES". 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-XIII Material Handling & Material Management of Material
Collections/Dispatches

13.2 OUTGOING MATERIALS/DISPATCHES

13.2.1

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

PAYMENT WILL BE REGULATED ON PRO-RATA BASIS ON **THE ACCEPTED UNIT RATE AS PER SECTION A1.6 AND A.2.3 of "Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES".**

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 A1.6 OF **"Table for Weightages/ Factors and BOQ of Chapter XIV SCHEDULE OF RATES & QUANTITIES"**

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-XIV SCHEDULE OF RATES & QUANTITIES

Table for Weightages/ Factors and BOQ

Section A: Material Handling and Management			
SN	DESCRIPTION OF WORK	BOQ(MT) (A)	Factors/Weightage for 'Total for Calculation purpose only' w.r.t total lumpsum price quoted by bidder
Section A1			
A1.1	<i>Material Handling and Material Management for Materials received through Trucks/Trailers at Project Site</i>	37664	0.40554978307711200
A1.2	<i>Material Handling and Material Management for Materials received through Railway Wagons at Railway Siding/Station/Godown</i>	50	0.00106771314382953
A1.3	<i>Material Handling and Material Management for Materials received at Transporters Godowns within a radius of 50 KM from Project Site</i>	50	0.00121550948736567
A1.4	<i>Material Handling and Material Management for Structural steel and Reinforcement steel received through trucks/trailers at project Site</i>	9577	0.08146504168159540
A1.5	<i>Material reshifting and re stacking within project premises</i>	2000	0.01756173226080390
A1.6	<i>Despatch/Outgoing materials</i>	1000	0.00849081146292184
Section A2			
A2.1	<i>Material Handling and Material Management of Cement received through bulker at Project Site</i>	39232	0.182518688035719000
A2.1(a)	<i>Material Handling and Material Management of Cement received through truck/trailer in bags at Project Site</i>	1000	0.006646130273964360
A2.2	<i>Material Re-Shifting and Re-Stacking for cement within Project Premises</i>	50	0.000302071945274197
A2.3	<i>Despatch/Outgoing materials</i>	50	0.000301906393942243
Section B: Crane and Pick and Carry Crane			
B.1	<i>New generation Pick & carry type tyre mounted mobile crane (Farana) 18 MT (Months)</i>	32	0.159140442313635
B.2	<i>New generation Pick & carry type tyre mounted mobile crane (Farana) 14 MT (In Months)</i>	32	0.135740169923837

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XIV SCHEDULE OF RATES & QUANTITIES

Section C: Menial and Secretarial Services (Unit Rate Fixed as per NTPC Ramagundam Min. Wage Ref Clause 7.7 of Chapter VII- Payment Terms))				
Sl no.	Description	Man-months	Unit Rate	Total amount (in Rs)
1	Menial Services	50	14773.98	738699
2	Secretarial Services	50	17303.52	865176
Total Section C				1603875

NOTE: 1. The quantity indicated in the BOQ is approximate only and is liable for variation. Payment will be as per actual quantity executed as certified by BHEL Engineer considering above Unit rate of individual items of BOQ.

Instructions to the bidders regarding Price Bid (Schedule of Rates & Quantities) and its Calculations:

1. Schedule of Rates and Quantities consist of the followings:
 - a. Section-A Material Handling and Management: Section-A1, Section-A2
 - b. Section-B: Crane and Pick and Carry Crane
 - c. Section-C: Menial and Secretarial Services (Prices Fixed by BHEL)
2. **Bidder has to quote Total Lump-sum price for Section-A and Section-B in VOL II PRICE BID at BHEL E-procurement Portal.**
3. Prices for Section-C: Menial and Secretarial Services are already fixed by BHEL.
4. Offer evaluation (L-1, L-2 status) of the bidders shall be done based on the Total Lumpsum Price of **Section-A** (consisting of Section A1+ Section A2) + **Section-B** as quoted in the Volume II Price Bid.
5. Final awarded price shall be based on Total summation of prices of **Section A + Section B + Section C**
6. BHEL has pre-fixed Weightage Factors for 'Total for Calculation purpose only' of individual items of/falling under Section A1, Section A2, Section B. 'Total for Calculation purpose only' for each item falling under these sections are derived by Multiplying Weightage Factors and Grand total amount quoted by the bidder. Further to calculate Item Rate, 'Total for Calculation purpose only' shall be divided by respective quantities, rounding down to two decimal places.
7. These item wise Weightage Factors and Quantities allocations are as detailed in above Table.
8. Actual Total amount for individual items shall be obtained by multiplying Unit rate of each item as derived in sl no. 6 above to the respective quantities.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-XIV SCHEDULE OF RATES & QUANTITIES

9. Grand Total of Section-A and Section-B shall be derived by summing up the actual total amount individual items thus derived for (as per SI No 8 above), i.e. Section-A + Section-B rounding off to zero decimal places.
10. Total Section A + Section B + Section C shall be considered for award of the work.
11. For the convenience of bidders, BHEL has issued an excel sheet '**Excel sheet for calculation purpose only- 2281**' with all requisite formulae as detailed above. **However, this excel sheet shall not form part of contract document.**