

E-TENDER SPECIFICATION

Sl No	E-Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/RGEMO- ESP RM U1, U2/2107	3X 200 MW NTPC RAMAGUNDAM ESP R&M-Stage1 (Unit 1 and Unit 2)

Outlet Duct & Support Modification work of Unit 1 and Unit 2 ESP of NTPC Ramagundam 3X200MW – Stage1**VOLUME – I****CONSISTING OF:**

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



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

Notice Inviting Tender

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NIL	Notice Inviting Tender	(Part of <u>Vol-IA-Tech Bid- 2107</u>)
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2107

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



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Date: 17/05/2019

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

Sl No	ISSUE	DESCRIPTION	
i	E-TENDER NUMBER	BHE/PW/PUR/RGEMO- ESP RM U1, U2/2107	
ii	Broad Scope of job	Outlet Duct & Support Modification work of Unit 1 and Unit 2 ESP of NTPC Ramagundam 3X200MW - Stage1	
iii	DETAILS OF TENDER DOCUMENT		
A	Volume-IA	<i>Technical Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc.</i>	<i>Applicable</i>
B	Volume-IB	<i>Special Conditions of Contract (SCC)</i>	<i>Applicable</i>
C	Volume-IC	<i>General Conditions of Contract (GCC)</i>	<i>Applicable</i>
D	Volume-ID	<i>Forms and Procedures</i>	<i>Applicable</i>
F	Volume-II	<i>Price Bid as specified in E-Procurement Portal</i>	<i>Applicable</i>

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Sl No	ISSUE	DESCRIPTION	
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> 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>	Applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	<p>Date: 27/05/2019, 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>	Applicable
vi	OPENING OF TENDER (Techno-Commercial Bid)	<p>Date: 27/05/2019, Time: 15.15 Hrs Notes: (1) In case the due date of opening of tender becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day. (2) 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>	Applicable
vii	EMD AMOUNT	<p>Rs. 66,000/- (Rupees Sixty Six Thousand Only) [To be submitted as described in the NIT 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>	Applicable
viii	COST OF TENDER	<p>Rs 2000/- [To be submitted in the form and manner as mentioned below]</p>	Applicable
ix	LAST DATE FOR SEEKING CLARIFICATION	<p>Date: 22/05/2019 Along with soft version also, addressing to</p>	Applicable

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Sl No	ISSUE	DESCRIPTION	
		<i>undersigned & to others as per contact address given below. Bidders may consider to seek clarifications through email.</i>	
x	SCHEDULE OF Pre Bid Discussion (PBD)	-	<i>Not Applicable</i>
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	-	<i>Not 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 all the documents, 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~~

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~~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 through Demand Draft/Pay Order in favour of Bharat Heavy Electricals Ltd, payable at Nagpur For other details and for 'One Time EMD' please refer General Conditions of Contract. Copy of ~~One Time EMD Certificate~~ or the proof of Demand Draft/Payorder 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.

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	Receipt of Amount Transferred into	Receipt of cash deposited	Scan Copy has to be uploaded	Scan Copy has to be uploaded	Scan Copy of BG has to be uploaded.

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Submission of EMD to BHEL PSWR, Nagpur	BHEL Account	to be submitted at BHEL office	Original DD/ Pay order to be sent through Registered Post	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.
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In addition to the EFT, Cash, DD/Pay order and Bank Guarantee, Fixed Deposit Receipt (FDR) issued by Scheduled banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL) can also be submitted towards EMD.

Further, it is to be noted that, the EMD amount in excess of Rs. 2 Lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The Bank Guarantee in such cases shall be valid for at-least six months. (Proforma of Bank Guarantee for Earnest Money shall be as provided in Vol-ID "FORMS & PROCEDURES".)

~~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.

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

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 BHELii). In case of unacceptable deviations, BHEL reserves the right to	

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SN	Description	Remarks
	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)	
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 – I E: Plot Plan	
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.	1. Earnest Money Deposit (EMD) in the form as indicated in this Tender OR Documentary evidence for 'One Time EMD' with the Power Sector Region of BHEL floating the Tender 2. Cost of Tender (Demand Draft or copy of Cash Receipt as the case may be) Note: Refer Clause No-3 and 4 of NIT for further details	

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

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- 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)~~

~~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~~

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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 'T₁' for which 'Monthly Performance Evaluation' as per relevant formats, should have been done in the 'Period of Assessment' for the corresponding similar package P₁. Similarly T₂ for package P₂, T₃ for package P₃, 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 'S₁' of 'Monthly Performance Evaluation' Scores (S_{1.1}, S_{1.2}, S_{1.3}, S_{1.4}, S_{1.5}, ... S_{1.T1}) for similar package P₁, for the 'period of assessment' 'T₁' (i.e. $S_1 = S_{1.1} + S_{1.2} + S_{1.3} + S_{1.4} + S_{1.5} + \dots + S_{1.T1}$). Similarly, S₂ for package P₂ for period T₂, S₃ for package P₃ for period T₃ etc. for the tendered scope for all Regions. Now calculate cumulative sum 'S_T' of 'Monthly Performance Evaluation' Scores for total similar Packages 'P_T' for all Regions (i.e. $S_T = S_1 + S_2 + S_3 + S_4 + S_5 + \dots + S_N$.)

d) ~~Overall Performance Rating 'R_{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~~

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

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

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

Sl. No.	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
1	Similar Packages for all Regions → (under execution/ executed during period of assessment)	P ₁	P ₂	P ₃	P ₄	P ₅	...	P _N	Total No. of similar packages for all Regions = P _T i.e. Sum (Σ) of columns (iii) to

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Sl. No.	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
(i)	(ii)								(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 _{1-1T} S _{1-2T} S _{1-3T} S _{1-4T} ... S _{1-T1}	S _{2-1T} S _{2-2T} S _{2-3T} S _{2-4T} ... S _{2-T2}	S _{3-1T} S _{3-2T} S _{3-3T} S _{3-4T} ... S _{3-T3}	S _{4-1T} S _{4-2T} S _{4-3T} S _{4-4T} ... S _{4-T4}	S _{5-1T} S _{5-2T} S _{5-3T} S _{5-4T} ... S _{5-T5}	S _{N-1T} S _{N-2T} S _{N-3T} S _{N-4T} ... 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~~

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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
- d) 36 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 $P_{Max} = (R_{BHEL} - 60)$ 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)

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.
- ii). Identified Packages (Unit wise)

Table-1

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Civil	Electrical and C&I	Mechanical
<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> i). Electrical ii). C&I iii). Others (Elect. and C&I) 	<ul style="list-style-type: none"> 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 36 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 36 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:~~

- ~~a) All the bidders having Overall Performance Rating ('RBHEL') ≥ 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~~

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~~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 ('RBHEL') ≥ 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

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& 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

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'in-camera' the 'PRICE BID' of any or all Unsuccessful/Disqualified bidders under intimation to the respective bidders.

18.0 Validity of the offer shall be for **six months** from the latest due date of offer submission (including extension, if any) unless specified otherwise.

19.0 BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction process. In such case all qualified bidders will be intimated regarding procedure/ modality for Reverse Auction process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. .

However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.

20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.

21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents. 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~~

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~~other consortium partners. However, consortium partner may enter into consortium agreement with other prime bidders. In case of non-compliance, consortium bids of such Prime bidders will be rejected.~~

~~23.3 Number of partners for a consortium Bidding (or Technical Tie up) shall be as specified in the PQR.~~

~~23.4 Prime Bidder shall be as specified in the Pre-Qualification Requirement, else the bidder who has the major share of work.~~

~~23.5 In order to be qualified for the tender, Prime Bidder and Consortium partner or partners shall satisfy (i) the Technical 'Pre Qualifying Requirements' specified for the respective package, (ii) "Assessment of Capacity of Bidder" as specified in clause 9.0.~~

~~23.6 Prime Bidder shall comply with additional "Technical" criteria of PQR as defined in 'Explanatory Notes for the PQR'.~~

~~23.7 Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified.~~

~~23.8 In case customer approval is required, then Prime Bidder and Consortium Partner or partners shall have to be individually approved by Customer for being considered for the tender.~~

~~23.9 Prime Bidder shall be responsible for the overall execution of the contract.~~

~~23.10 In case of award of job, Performance shall be evaluated for Prime Bidder and Consortium Partner or partners for their respective scope of work(s) as per prescribed formats.~~

~~23.11 In case the Consortium partner or partners back out, their SDs shall be encashed by BHEL. In such a case, other consortium partner or partners meeting the PQR have to be engaged by the Prime Bidder, and if not, the respective work will be withdrawn and executed on risk and cost basis of the Prime Bidder. The new consortium partner or partners shall submit fresh SDs as applicable.~~

~~23.12 In case the prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.~~

~~23.13 After execution of work, the work experience shall be assigned to the Prime Bidder and the consortium partner or partners for their respective scope of work.~~

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~~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
- 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.

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ANNEXURE - 1

PRE QUALIFYING CRITERIA

E-Tender Specification Number: BHE/PW/PUR/RGEMO- ESP RM U1, U2/2107			
JOB	Outlet Duct & Support Modification work of Unit 1 and Unit 2 ESP of NTPC Ramagundam 3X200MW – Stage1		
S No	PRE QUALIFICATION CRITERIA	Applicability	Remarks
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><u>TECHNICAL PQR:</u></p> <p><u>B.1: Not Applicable</u></p> <p><u>B.2: Technical Criteria:</u> Bidder should have achieved any one of the following (i.e B.2.1 OR B.2.2 OR B.2.3) in the last seven (7) years as on latest date of offer submission:</p> <p>B.2.1) Bidder must have executed <u>Erection & Commissioning (E & C)</u> or Renovation & Modernization of at least '<u>One Boiler (Consisting of Structure or Duct (of the same unit as standalone Bidder))' / 'ESP' of One Unit of 100 MW or higher rating in the last seven (7) years as on latest date of offer submission.</u></p> <p>OR</p> <p>B.2.2) Bidder must have executed <u>Erection & Commissioning (E & C)</u> or Renovation & Modernization of at-least One <u>STG</u> of 190 MW or higher rating, under direct order of BHEL in the last seven (7) years as on latest date of</p>	APPLICABLE	

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	<p>offer submission.</p> <p>OR</p> <p>B.2.3) Bidder must have successfully executed Erection and Commissioning/ Retrofitting/Revamping/Renovation/Augmentation/ Renovation & Modernization of ESPs or DUCTS or STRUCTURES in any thermal power plants of rating 100 MW or above in the last seven (7) years as on latest date of offer submission as below:</p> <p>B.2.3.1) Executed One similar work of value not less than Rs. 26.4 Lakhs against single work order.</p> <p align="center">OR</p> <p>B. 2.3.2) Executed two similar works of value not less than Rs. 16.5 Lakhs against maximum two work orders.</p> <p align="center">OR</p> <p>B. 2.3.3) Executed Three similar works each of value not less than Rs. 9.9 Lakhs against maximum three work orders.</p>		
C-1	<p><u>Financial TURNOVER</u></p> <p>Bidders must have achieved an average annual financial turnover (audited) of Rs. 9.90 Lakhs or more over last three Financial Years (FY) i.e. 2015-16, 2016-17 & 2017-18.</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	
C-4	<p>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.</p>	APPLICABLE	

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D	<p>Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)</p> <p>The “Assessment of Capacity of Bidders” for this Tender shall be carried out by considering the identified similar package as “ESP”.</p>	NOT APPLICABLE	-
E	<p>Approval of Customer (if applicable)</p> <p>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</p>	NOT APPLICABLE	-
F	<p>Price Bid Opening</p> <p>Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E</p>		BY BHEL
G	<p>Consortium tie-ups</p>	NOT APPLICABLE	

Explanatory Notes for Technical Criteria (B):

1. Void.
2. Unless otherwise specified, for the purpose of ‘Technical’ criteria of PQR (as in ‘B’ above), 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. “HARGING” 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.

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k. "SPINNING" in respect of HTG.

l. "COMPLETION AND HANDING OVER FOR MECHANICAL ERECTION" in respect of STG Deck and Machine/Equipment foundation.

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

4. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass.

5. 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, where ever 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.

6. Scope for Capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine.

7. In case the tendered scope is not a Pulverized Fuel Boiler, experience of Oil/Gas Fired Boilers can also be considered.

Common Explanatory Notes:

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 technical criteria specified in the Technical criteria of PQR (as in 'B' above) 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 , unless otherwise specifically indicated in the PQR.

~~5. Following shall be complied with in case of consortium:~~

~~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~~

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~~agreement on six monthly basis.~~

~~b. Prime Bidder and Consortium partners shall be approved by Customer for being considered for the tender (applicable if customer approval is required).~~

~~c. Number of partners including prime Bidder shall be NOT more than 3 (three).~~

~~d. Prime Bidder alone shall necessarily comply with "B1 Technical Criteria" except for mechanical package where B1 criteria is not applicable.~~

~~e. Prime Bidder and Consortium Partner shall together comply with the 'Pre Qualification Requirements' specified for the respective category of technical requirement as per "B2 technical criteria".~~

~~f. Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified.~~

~~g. All other conditions shall be read in conjunction with clause no 23.0 of NIT.~~

~~h. Prime Bidder shall be the Bidder who has a major share of work.~~

~~i. Prime Bidder shall be responsible for the overall execution of the Contract.~~

~~j. Performance shall be evaluated for Prime Bidder and the Consortium partner for their respective scope of work.~~

~~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.~~

~~l. In case Prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.~~

~~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.~~

~~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.~~

Explanatory Notes for PQR -C (Financial):

1. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against C-1 above along with all annexures.
2. In case audited financial statements have not been submitted for all the three years as indicated against C-1 above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e. total divided

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by three.

3. 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.
4. **C-2:** Net Worth (Only in case of companies) of the bidder should be positive.
Note: Net worth 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)
5. **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.
6. **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.

Annexure A

~~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-~~

$$~~P = R + 0.425 \times R \times (XN - X0) + 0.425 \times R \times (YN - Y0)~~$$

~~X0 = Y0~~

~~Where~~

~~P = Updated value of work~~

~~R = Value of executed work~~

~~XN = 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'2016 shall be considered).~~

~~X0 = All India Avg. Consumer Price index for industrial workers for last month of work execution~~

~~YN = Monthly Whole Sale Price Index for All Commodities 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'2016 shall be considered).~~

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~~Y0 = Monthly Whole Sale Price Index for All Commodities for last month of work execution~~

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.

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ANNEXURE - 2

CHECK LIST

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

1	Name and Address of the Tenderer	
2	Details about type of the Firm/Company	
3.a	Details of Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:
4	EMD DETAILS	DD No: Date : Bank : Amount: <u>Please tick (√) whichever applicable:-</u> ONE TIME EMD / ONLY FOR THIS TENDER
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE
		APPLICABILITY (BY BHEL) ENCLOSED BY BIDDER
6	Whether the format for compliance with 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	Undertaking for QR C-4	Applicable/ Not Applicable YES/NO
9	Copy of PAN Card	Applicable/ Not Applicable YES/NO
10	Whether all pages of the Tender documents including annexures, appendices etc. are read understood and signed	Applicable/ Not Applicable YES/NO
11	Integrity Pact	Applicable/ Not Applicable YES/NO
12	Declaration by Authorized Signatory	Applicable/ Not Applicable YES/NO

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13	No Deviation Certificate	Applicable/ Not Applicable	YES/NO
14	Declaration for Reverse Auction by Bidder	Applicable/ Not Applicable	YES/NO
15	Declaration confirming knowledge about Site Conditions	Applicable/ Not Applicable	YES/NO
16	Declaration for relation in BHEL	Applicable/ Not Applicable	YES/NO
17	Non-Disclosure Certificate	Applicable/ Not Applicable	YES/NO
18	Bank Account Details for E-Payment	Applicable/ Not Applicable	YES/NO
19	Capacity Evaluation of Bidder for current Tender	Applicable/ Not Applicable	YES/NO
20	Tie Ups/Consortium Agreement are submitted as per format	Applicable/ Not Applicable	YES/ NO
21	Power of Attorney for Submission of Tender/Signing Contract Agreement Power of Attorney of Consortium Partner.	Applicable/ Not Applicable	YES/NO
22	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)

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ANNEXURE-3

INTEGRITY PACT

NOT APPLICABLE

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

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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. **Price Variation Compensation Clause no 2.17 of standard GCC shall not be applicable**
8. **Overrun compensation clause no. 2.12 of standard GCC shall not be applicable**
9. **LIQUIDATED DAMAGES/PENALTY: clause no. 2.7.9 of standard GCC is amended as follows:**
If the contractor fails to maintain the required progress of work which results in delay in the completion of the work as per the contractual completion period, BHEL shall have the right to impose Liquidated Damage/Penalty at the rate of **0. 5% of the contract value, per day of delay or part thereof subject to a maximum of 10% of the contract value.** For this purpose, the period of delay shall be the delay attributable to the Contractor for the completion of work as per contract. Contract Value for this purpose, shall be the final executed value exclusive of ORC, Extra Works executed on Manday rate basis, Supplementary/Additional Items and PVC.
10. **Progress Monitoring, Monthly Review and Performance Evaluation of Vol-I BCD is not applicable.**
11. **Interest bearing recoverable advances is not applicable.**

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12. Performance Guarantee of Workmanship for the work done / Defect liability period shall be 06 months commencing from the date of completion of work certified by BHEL .

13. 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).

14. 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.

15. 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."

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

17. 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.
Bank of Baroda
Canara Bank
Citi Bank N.A.
Corporation Bank
Deutsche Bank
HDFC Bank Ltd.
The Hongkong and Shanghai Banking Corporation Ltd
ICICI Bank Ltd.
IDBI Ltd.
Punjab National Bank
Standard Chartered Bank
State Bank of Travancore
State Bank of Hyderabad
Syndicate Bank

b. Any public sector Bank (other than consortium banks) with a clause in the text of Bank Guarantee that “**It is enforceable at Nagpur, Maharashtra**”.

c. Any private sector banks, with a clause in the text of Bank Guarantee that “**It is enforceable by being presented at any branch of the bank**”.

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

18. 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

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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 of enquiry through e-procurement the sealed electronic price bid (e-bid) submitted on BHEL e-procurement portal is to be treated as sealed envelope price bid.

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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:

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:

2107

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



BHEL-PSWR

E-TS No: BHE/PW/PUR/RGEMO- ESP RM U1, U2/2107

Technical Conditions of Contract -Volume I A

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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Contents

Sl no	DESCRIPTION	Chapter	
Vol I A	Part-I: Contract specific details		
1	Project Information	Chapter-I	
2	Scope of works	Chapter-II	
3	Facilities to be provided by BHEL/Contractor	Chapter-III	
4	T&Ps and MMEs to be deployed by Contractor	Chapter-IV	
5	T&Ps and MMEs to be provided by BHEL on sharing basis	Chapter-V	
6	Time Schedule	Chapter-VI	
7	Terms of Payment	Chapter-VII	
8	Taxes and Duties	Chapter-VIII	
9	General	Chapter-IX	
10	Erection	Chapter-X	
11	Progress of work	Chapter-XI	
13	Welding	Chapter-XII	
14	Schedule of Rates and Quantities	Chapter-XIII	

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter –I: Project Information

INTRODUCTION

Project Information		
1	Project Name	NTPC Ramagundam STPS
2	Project Stage	3X200MW ESP (Stage-1 Unit 1, 2 & 3)
3	No. of Units x Capacity	3X 210 MW
4	Project setting up by	NTPC
5	Nearest Railway Station	Ramagundam
6	Nearest Major Town & Distance	Ramagundam
7	Nearest Airport & Distance	Hyderabad
8	Nearest Highway & Distance	Hyderabad –Karimnagar-Ramagundam Highway

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

PREAMBLE:

This is a combined tender for Outlet Duct & Support Modification work of **Unit 1 and Unit 2** ESP of NTPC Ramagundam 3X200MW – Stage 1.

The scope of work of subject tender includes modification of duct structure & ducts at Outlet side of **Unit 1 and Unit 2 ESP** at NTPC Ramagundam during Short Shutdown. These existing facilities would foul with the proposed additional field of ESP. Hence, these existing facilities shall have to be relocated or modified so as to enable civil work for additional field. (This civil work for additional field is not part of this tender scope)

SCOPE OF WORK (For each unit) DURING SHUTDOWN

Following is the brief scope of work that is to be carried out during Shutdown at NTPC Ramagundam ESP R&M (Stage -1)

- 1) Dismantling of gate at existing ESP outlet duct – for all 4 ESP passes (4 Passes Each ESP)
- 2) Dismantling of one row of duct supporting structure at existing ESP outlet duct– for all 4 ESP passes
- 3) Erection of Modified ESP outlet duct – 3000 mm (H) X 2000 mm (W) after dismantling portion of outlet duct 3.5 m length from bus duct/Common Duct – for all 4 ESP passes
(Drawings for which shall be provided by BHEL)
- 4) Erection of Bracket at Bus duct/ Common Duct support column (to support modified ESP outlet duct – 3000 mm (H) X 2000 mm (W)) for all 4 ESP passes.
- 5) Erection of Access door & platform for duct
- 6) Insulation & cladding for modified ESP outlet duct
- 7) Erection of Guillotine gate at ESP outlet duct
- 8) Erection of Control damper at ESP outlet duct
- 9) Erection of Platforms and ladders (as required for outlet duct Gate, control damper)
- 10) Cables for Electrical actuator
- 11) Transportation of Scrap/Dismantled material to designated location as per instruction of BHEL site engineer.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

SN.	Brief scope of work during Unit shut down	APPLICABLE PGMA	Weight (In MT) per Unit
A.	Brief scope of work at existing ESP outlet duct side		
1.	Dismantling of gate at existing ESP outlet duct – for all 4 ESP passes	Approx. 30 MT	30
2.	Dismantling of one row of duct supporting structure at existing ESP outlet duct- for all 4 ESP passes	Weight	
3.	Erection of Modified ESP outlet duct – 3000 mm (H) X 2000 mm (W) after dismantling portion of outlet duct 3.5 m length from bus duct/Common Duct – for all 4 ESP passes	77-153- 10.98 MT	10.98
4.	Erection of Bracket at Bus duct/ Common Duct support column (to support modified ESP outlet duct – 3000 mm (H) X 2000 mm (W)) for all 4 ESP passes.		
5.	Erection of Access door & platform for duct	77-186	8.01
6.	Insulation & cladding for modified ESP outlet duct	77-169	3
		77-170	0.650
		89-617	0.680
B.	Gates and dampers		
7.	Erection of Guillotine gate at ESP outlet duct	57-470	25.6
8.	Erection of Control damper at ESP outlet duct	57-473	12.8
9.	Erection of Electrical Actuator (as required for outlet duct Gate, control damper)	57-577	3.4
10.	Erection of Platforms and ladders (as required for	57-466	6.5

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

	outlet duct Gate, control damper)		
11.	Cabling for Electrical actuator	77-160	

C: T&P, cranes, Erection tools etc.

All the tools tackles, **Derrick's arrangements** (Structural material for fabrication of Derik will be provided by BHEL on returnable basis) required for satisfactory and safe execution of work to be arranged by contractor at his cost.

Due to confined space, there may be most of the areas being non-approachable by crane. Agency has to use improvised methods for dismantling and assembly / erection of various equipment components etc. to complete the-work. NO Extra Payment shall be made for using any improvised method for dismantling and assembly.

Bidders are strongly advised to visit the site along with BHEL officials to assess the possibility of using alternate arrangements apart from crane. No separate payment shall be made for any such arrangements used during the execution of the contract. All safety precautions have to be taken for such alternate arrangements and no damage should be caused to the existing equipment, structure, customer property etc.

D: SPECIAL NOTES:

1. Fuel for operation of the BHEL Cranes to be provided by Bidder.
2. Operator for BHEL cranes (owned or hired) will be provided by BHEL.
3. Bidders are strongly advised to visit the site to acquaint themselves with the working conditions and the project requirements for execution of the job.

E: Co-operation with other Contractors:-

Contractor shall agree to co-operate with the other contractor for associated Equipment as during their work it may happen that other work contractor is also working nearby or parallel to his work and all the work to be completed in stipulated time only.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER – III FACILITIES TO BE PROVIDED BY BHEL/CONTRACTOR

(SCOPE MATRIX)

Sl.No	Description	Scope to be taken care by		Remarks
		BHEL	Bidder	
3.1.	PART I ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
A	Open space for office	Yes		
B	Open space for storage	Yes		
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		Yes	
B	Living accommodation		Yes	
3. 2.	ELECTRICITY			
3.2.1	Electricity For construction purposes will be chargeable.	No		

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER – III FACILITIES TO BE PROVIDED BY BHEL/CONTRACTOR

3..2.2	Single point source	Yes		
3. 2.3	Further distribution for the work to be done which include supply of materials and execution		Yes	
3. 2.3	Electricity for the office, stores, canteen etc of the bidder which include:		Yes	
3. 2.4	Distribution from single point including supply of materials and service		Yes	
3. 2.5	Supply, installation and connection of material of energy meter including operation and maintenance		Yes	
3. 2.6	Duties and deposits including statutory clearances for the above		Yes	
3..2.7	Living facilities for office use including charges		Yes	
3.2.8	Demobilization of the facilities after completion of works		Yes	
3. 2.9	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc on the above lines.(in case BHEL provides this facility, the scope should be given without ambiguity)		Yes	
3. 3	WATER SUPPLY			
3.3.1	For construction purposes:			
3.3.1.1	Making the water available at single point	YES		
3.3.1.2	Further distribution as per the requirement of work including supply of materials and execution		Yes	

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER – III FACILITIES TO BE PROVIDED BY BHEL/CONTRACTOR

3.3.2	Water supply for bidder's office, stores, canteen etc			
3.3.2.1	Making the water available at single point		Yes	
3.3.2.2	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.4	LIGHTING			
3.4.1	For construction work (supply of all the necessary materials) At office storage area At the preassembly area At the construction site /area		Yes	
3.4.2	For construction work (Execution of the lighting work / arrangements) At office storage area At the preassembly area At the construction site /area		Yes	
3.5	COMMUNICATION FACILITIES for site operations of the bidder	-		
3.5.1	Telephone, Fax, internet, intranet, email etc		Yes	
3.6	COMPRESSED AIR SUPPLY			
3.6.1	Supply of Compressor and all other equipments required for compressor & compressed air system including pipes, valves, storage systems etc	Yes		
3.6.2	Installation of above system and operation & maintenance of the same	-		
3.6.3	Supply of the all the consumables for the above system during the contract period			

**TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER – III FACILITIES TO BE PROVIDED BY
BHEL/CONTRACTOR**

Sl.No	Description	Scope to be taken care by		Remarks
		BHEL	Bidder	
3.7	ERECTION FACILITIES			
3.7.1	Engineering works for construction			
3.7.1.1	Providing the erection drawings for all the equipments covered under this scope	Yes		
3.7.1.2	Drawings for construction methods		Yes	In consultation with BHEL
3.7.1.3	As-built drawings – wherever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes	Yes	Yes	In consultation with BHEL
3.7.1.4	Shipping lists etc for reference and planning the activities	Yes		In consultation with BHEL
3.7.1.5	Preparation of site erection schedules and other input requirements		Yes	In consultation with BHEL
3.7.1.6	Periodic visit of the senior official of the bidder to site to review the progress so that works are completed as per schedule. It is suggested this review by the senior official of the bidder should be done once in every two months.		Yes	

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

T&PS and MMEs TO BE DEPLOYED BY CONTRACTOR

The following minimum major Tools & Plants shall be deployed by the contractor:

Sl. No	DESCRIPTION OF EQUIPMENT	CAPACITY	MINIMUM QUANTITY	REMARKS
01	PICK AND CARRY CRANE	14 T	01	TO BE DEPLOYED FROM BEGINNING FOR START OF ERECTION TILL COMPLETION
02	3 PH DISTRIBUTION BOARD WITH COMPLETE SET UP FOR DRAWING CONSTRUCTION POWER, FITTED WITH ENERGY METER	AS Required	As required	AS REQUIRED AND AS PER INSTRUCTION OF BHEL ENGINEER
03	WELDING GENERATOR (ELECTRIC & DIESEL)	300 AMPS	AS REQUIRED	TO BE DEPLOYED PROGRESSIVELY AS PER INSTRUCTION OF BHEL ENGINEER
04	ELECTRIC WINCH	1 TON / 2 TON / 3 Tons / 5TON	As per Requirement	TO BE DEPLOYED PROGRESSIVELY AS PER INSTRUCTION OF BHEL ENGINEER
05	ELECTRIC CABLE FOR DRAWAL & DISTRIBUTION OF CONSTRUCTION POWER	AS REQUIRED	AS REQUIRED	TO BE DEPLOYED FROM BEGINNING OF START OF MATERIAL HANDLING TILL COMPLETION
06	BAKING OVEN AND HOLDING OVEN WITH THERMOSTAT AND TEMPERATURE GAUGE FOR BAKING COATED WELDING ELECTRODES	AS REQUIRED	01 SET EACH	TO BE DEPLOYED AT APPROPRIATE STAGE OF WORK AS PER INSTRUCTION OF BHEL ENGINEER
07	PORTABLE OVEN FOR COATED WELDING ELECTRODES	AS REQUIRED	05 SET	TO BE DEPLOYED PROGRESSIVELY AS PER INSTRUCTION OF BHEL ENGINEER
08	TRAILER WITH PRIME MOVER	ADEQUATE CAPACITY	1	WHILE FURNISHING THE DEPLOYMENT PLANS FOR THESE ITEMS, THE NEED FOR TRANSPORT OF MATERIAL RECD ON GODOWN DELIVERY BASIS

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

				IS TO BE KEPT IN VIEW. VEHICLES DEPLOYED SHOULD HAVE VALID STATUTORY DOCUMENTS AT ALL TIMES
09	TRUCK	9 MT	1 NO	
10	SLINGS, 'D'-SHACKLES, HYDRAULIC JACKS, ETC.	AS REQUIRED	AS REQUIRED	WITH TEST REPORTS

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

T&Ps AND MMEs TO BE DEPLOYED BY BHEL ON SHARING BASIS

List of T&P's to be made available by BHEL to contractor free of hire charges on sharable basis.

- 1) 100 MT Crawler Crane

Note:

1. Fuel for operation of the BHEL Cranes to be provided by Bidder.
2. Operator for BHEL cranes (owned or hired) will be provided by BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

TIME SCHEDULE & MOBILIZATION

6.1 INITIAL MOBILIZATION

After receipt of fax LOI, Contractor shall discuss with Project Manager / Construction Manager regarding initial mobilization. Contractor shall reach site, make his site establishment and be ready to commence the erection work within 7 days from the date of issue of Letter of Intent or as per the directions of Construction Manager/ Project Manager of BHEL. Such resources shall be progressively augmented to match the schedule of milestones and commissioning.

6.2 COMMENCEMENT OF CONTRACT PERIOD AND TENTATIVE SCHEDULE

- 6.2.1 Date of Handing over of Unit to Contractor by BHEL shall be recognized as “start of contract period”.**
- 6.2.2 The contract period for completion of entire work under scope shall be **25 days (twenty five days) Unit 2 and 25 (twenty five) days unit 1** from the “START OF CONTRACT PERIOD” as specified in Cl 6.2.1 for completion of the entire work.
- 6.2.3 The tentative date for shutdown of unit 2 is from 01.07.2019 and for unit 1 is from 01.09.2019**
- 6.2.4 The entire work of relocation of facilities as per tender has to completed within 25 days (from the date of Handing over of Unit to Contractor by BHEL).
- 6.2.5 However Contractor is advised to mobilize the site before shutdown for carrying out the prefabrication and initial preparatory works, gate passes arrangement for workmen etc.
- 6.2.6 During the total period of contract, the contractor has to carry out the activities in a phased manner as required by BHEL.
- 6.2.7 The erection work shall be commenced on the mutually agreed date between the bidder and BHEL engineer and shall be deemed as completed in all respect only when the unit is in operation. The decision of BHEL in this regard shall be final and binding of the contractor. The scope of work under this contract is deemed to be completed only when so certified by the site Engineer.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6.2.8 It is expected that shutdown for Unit#1 & Unit#2 will be given separately & work shall be carried out during different periods for both the units. In such case following may be noted:

6.2.9.1 This may require contractor to mobilize & demobilize the site twice. In such case after completion of the work for one unit, contractor shall complete all contractual obligations viz. material reconciliation, HR clearances, Labor clearances, other statutory clearance & submit the final bill etc., w.r.t. the completed unit.

6.2.9.2 Both the Units shall be reckoned as separate contracts during operation of the contracts (i.e. 2 sub-sets of 1 main contract of 2 units) with separate work completion period (25 days each), separate start dates, and separate contract value.

6.2.9.3 All the records under the subject contract shall be maintained for the both the units separately.

6.2.9.4 Accordingly various clauses of GCC viz LD, Time Extension, retention amount, guarantee period, etc. shall be applicable separately for individual units.

6.2.9.5 However, it may so happen that shutdown for both units are available at a time. In such case, contractor shall mobilize parallelly for both units & carry out the work within schedule completion period of 25 Days from start of work as specified above.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

7.1 Payment Terms (For each Unit):-

Payment shall be made Unit wise as per the following payment breakup:

- 1.0 90 % on completion of work as per scope mentioned in tender. **Documents like Insurance & Labour License to be submitted along with first bill.**
- 2.0 10% on payment of all dues and submission of all the documents like No Dues certificate from Customer, EPF challan, Insurance, Labour License, Labour Payment sheets, proof of payment of GST, **Indemnity Bond to be submitted along with final bill** etc.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER VIII TAXES and 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 leviable & 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC) CHAPTER VIII TAXES and DUTIES

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 / leviable 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 / leviable on BHEL.
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.

TECHNICAL CONDITIONS OF CONTRACT (TCC) CHAPTER VIII TAXES and DUTIES

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
8	Orissa	21AAACB4146P1ZR
9	Telangana	36AAACB4146P1ZG

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER VIII TAXES and DUTIES

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.

TECHNICAL CONDITIONS OF CONTRACT (TCC) CHAPTER VIII TAXES and DUTIES

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 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

TECHNICAL CONDITIONS OF CONTRACT (TCC) CHAPTER VIII TAXES and DUTIES

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 scope of the work will comprise of but not limited to the following:

- 9.1.1 The work shall conform to dimensions and tolerances given in various drawings and quality manuals provided by BHEL. If any portion of work is found to be defective in workmanship not conforming to drawings or other stipulations, the contractor shall dismantle and redo the work duly replacing the defective materials at his cost, failing which the job will be carried out by BHEL by engaging other agencies and recoveries will be effected from contractor's bill towards expenditure incurred including BHEL's overhead charges.
- 9.1.2 Contractor shall execute the work as per sequence and procedure prescribed by BHEL at site. The applicable erection manuals which are available with BHEL site office are to be referred for compliance and guidance before taking up the work. Any rework on this failure to comply with will be to account contractor only. BHEL engineer, depending upon the availability of materials, fronts etc, will decide the sequence of erection and methodology. No claims for extra payment from the contractor will be entertained on the grounds of deviation from the method of erection adopted in erection of similar jobs or for any reason whatsoever.
- 9.1.3 Contractor has to work in close co-ordination with other erection agency at site. BHEL engineer will co-ordinate area clearance. In a project of such magnitude, it is possible that the area clearance may be less/more at a particular given time. Activities and erection program have to be planned in such a way that the milestones are achieved as per schedule/ plans. Contractor shall arrange & augment the resources accordingly.
- 9.1.4 The contractor is strictly prohibited from using BHEL's regular components like angles, channels, beams, plates, pipe/tubes, and handrails etc for any temporary supporting or scaffolding works. Contractor shall arrange himself all such materials. In case of such misuse of BHEL materials, a sum as determined by BHEL engineer will be recovered from the contractor's bill. The decision of BHEL engineer is final and binding on the contractor.
- 9.1.5 The contractor will be responsible for the safe custody and proper accounting of all materials in connection with the work. If the contractor has drawn materials in excess of design requirements, recoveries will be affected for such excess draws at the rate prescribed by manufacturing units.
- 9.1.6 No member of the already erected structure/ platform, pipes, grills, platform, other component and auxiliaries should be cut without specific approval of BHEL engineer.
- 9.1.7 Contractors shall ensure that all their Staff/Employees are exposed to periodical training program conducted by qualified agencies/ personnel on ISO 9001 – 2000 Standards.
- 9.1.8 For other agencies, such as piping, cabling, instrumentation, insulation etc., to commence their work from/on the equipments coming under this scope, Contractor has to clear the front, expeditiously and promptly as instructed by BHEL Engineer. Some time it may be required to re-schedule the activities to enable other agencies to commence/continue the work so as to keep the overall project schedule
- 9.1.9 The terminal points decided by BHEL are final and binding on the contractor for deciding the scope of work and effecting the payment for the work done up to the terminals.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER IX GENERAL

- 9.1.10 For the purpose of planning, contractor shall furnish the estimated requirement of power (month wise) for execution of work in terms of maximum KW demand.
- 9.1.11 On Completion of work, all the temporary buildings, structures, pipe lines, cable etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, the expenditure towards clearance of the same will be recovered from the contractor. The decision of BHEL Engineer in this regard is final.
- 9.1.12 All the necessary certificates and licenses required to carry out this scope of work are to be arranged by the contractor then and there at no extra cost.
- 9.1.13 The contractor must obtain the signature and permission of the security personnel of the customer for bringing any of their materials inside the sit premises. Without the Entry Gate Pass these materials will not be allowed to be taken outside.
- 9.1.14 Crane operators deployed by the contractor shall be tested by BHEL before he is allowed to operate the cranes.
- 9.1.15 All the necessary certificates and licenses required to carry out this scope of work are to be arranged by the contractor then and there at no extra cost.

9.2 SITE INSPECTION

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

9.3 Safety

9.3.1 Adherences to safety are upper most during execution of work. 100% safety norms to be strictly followed .Tenderer should appoint qualified safety officer to implement safety. He should interact with BHEL and customer for day to day activities. As the work is to be executed in the running plant, all work force to undergo for a safety classes and obtain the certificate from customer. No person will be allowed without safety training.

9.3.2 Trained and certified safety supervisors to be appointed for every 50 work men. The safety officer, supervisors are not allowed to assigning any work other than safety. Heavy penalty will be levied if any un-safe practices are found during execution of work.

9.4 Insurance

Insurance shall be in such a form to protect the Contractor against all claims for injuries ,disability , disease and death to members of public including the Owner's men and damage to the property of others arising from the use of motor vehicles during on or off the site operations, irrespective of the ownership of such vehicles.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER IX GENERAL

9.5 Quality

Qualified and certified quality engineer to be posted at site for quality assurance. The quality person should maintain all records and reports to be generated as per BHEL quality standards. He should interact with customer and BHEL and all the stage wise protocols to be prepared after joint inspection and get is signed by BHEL and customer. All the record to be maintained and he is responsible for quality audit carried out by BHEL and customer.

9.6 All the works mentioned hereunder shall be carried out within the quoted and accepted rate:

1. The contractor shall carry out all the required tests on the equipments erected kerosene leak test using contractor's own consumables, labor and scaffoldings.
2. In case, any rework is required because of contractor's faulty erection, which is noticed during pre-commissioning and commissioning/starting of plant, the same has to be rectified by the contractor at his cost. If any equipment / part are required to be inspected during commissioning/Start of plant , the contractor will dismantle / open up the equipment / part and reassemble / redo the work without any extra claim.
3. Contractor may have to replace old/damaged gaskets / packing etc. in the erected equipments and the same shall be carried out by contractor as per requirement. Materials will be given by BHEL.
4. In case any erection defect is detected during various tests / operations trial runs, such as loose components undue noises or vibration strain on connected equipment steam or oil or water leakage etc. the contractor shall immediately attend these defects and take necessary corrective measures. The parts to be replaced shall be provided by BHEL free of cost. If the insulation is to be removed to attend any of the defects the cost of removal and reapplication of insulation should be borne by the contractor.
5. Contractor shall lay all necessary electric cables and switches etc. required for the tests and maintain the system till the tests are completed satisfactorily.
Necessary scaffolding and approaches for work execution shall also be within the scope of the contract

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER X ERECTION

ERECTION

The scope of the work will comprise of but not limited to the following:

- 1.** Ducts / expansion pieces are dispatched to site in loose walls / plates and these are to be assembled at site before erection.
- 2** All the dampers, valves, lifting equipments, power cylinders, etc., shall be serviced and lubricated to the satisfaction of BHEL engineer before erecting the same and also during pre-commissioning. The bearings of dampers shall be properly cleaned, serviced and lubricated before commissioning at no extra cost. Even after commissioning in the equipments, if there are problems in the operation they have to be attended by the contractor during the tenure of the contract.
- 3** In the case of structural members / ducts in certain cases, the raw material will be supplied in random lengths and the contractor will have to make up the length / prepare the edges to suit the matching profiles, weld / bolt connect the joints at no extra cost.
- 4** Any other systems / Components which are integral to ESP & auxiliaries, supplied by BHEL manufacturing units are also to be erected and commissioned by the contractor within the quoted / accepted tonnage rate / lump sum value.
- 5** All welded joints should be painted with anti-corrosive paint, once NDE works are over.
- 6** It shall be the responsibility of the contractor to provide ladders on column for initial works till such time stairways are completed. For this the ladder should not be welded on the column and should be pre-fabricated clamping type ladders. No temporary welding on any structural member is permitted except under special circumstances with the approval of BHEL.
- 7** Work such as minor rectification of foundation bolts, reaming of holes, drilling of dowels, matching of bolts and nuts, making new dowel pin, etc. are covered in the scope of work.
- 8.** Certain extra lengths of various fabricated ducts are provided as erection allowance and the same have to be cut/adjusted to suit the site conditions and layouts or certain small lengths may have to be added for adjustments to suit the site conditions. For any mismatch while matching the joints in tubes, the cutting, adjusting, re welding, addition spool pieces should be done by the contractor to match site conditions without any extra payment.
- 9.** All hangers, supports and anchors (including welding) shall be installed as per drawing to obtain are reliable and complete installation as per instructions of BHEL Engineer. Normally supports are issued in running meters. Any additional supports as called for by BHEL Engineer

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER X ERECTION

shall be fabricated by the contractor and provided at no extra cost. However, the raw material required for fabrication of such supports shall be supplied by BHEL free of cost. (Any machining or threading is involved will only be done by BHEL).

10. The temporary structures/items welded to permanent members/pipes are to be cut and removed without any damage. Any damage so to be made good by the contractor at his cost.

11. Before lifting the heavy components, soft materials like gunny bags to be used while lashing the rope to avoid dents, rubbing marks etc. The capacity, number of sheave pulleys, size of the rope, guide pulley locations are to be decided at site with respect to the capacity and positioning of the winch. The end caps provided at shop for various stubs are to be removed during final fit up only.

12. Prior to erection of any components inspection to be done for any foreign materials and damages and they are to be removed/attended as per BHEL engineer. Fixing, welding of necessary instrumentation tapping points, to be provided on auxiliaries covered within the scope of this specification will also be the responsibility of the contractor and will be done as per the instructions of BHEL Engineer. The fixing / welding of all the above items will be contractor's responsibility even if the

- i) Product groups under which these items are not specifically indicated in the Tender Specification.
- ii) Items are supplied by an agency other than BHEL

13. Wherever equipment's are supplied in pre-fabricated assembled packages, there may be necessity to make minor changes, including strengthening by additional welds. This shall be treated as part of the contractor's scope.

14. Additional platforms of permanent nature for approaching different equipments, as per site requirement which may not be indicated in drawings shall be fabricated and installed by the contractor. However the contractor will be paid for this work on accepted tonnage rate for erection. The material required for platform will be supplied by BHEL free of cost.

15. Welding of all thermo wells, draft, pressure and temperature instrumentation points and all other instrumentation points on piping and auxiliaries and welding of thermocouple pads are in the scope of work.

16. Wherever hanger and support materials are not received from manufacturing unit in time to suit the erection schedule, contractor shall erect the system on temporary supports to ensure the progress of work. The required structural steel materials will be issued on free of charges by

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER X ERECTION

BHEL, either from scrap/spare materials. The same shall be removed and returned to BHEL store after erection of permanent supports.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

CHAPTER XI PROGRESS OF WORK

PROGRESS OF WORK

The scope of the work will comprise of but not limited to the following:

1. Contractor is required to draw mutually agreed erection programs in consultation with BHEL well in advance. Contractor shall ensure achievement of agreed program and shall also timely arrange additional resources considered necessary at no extra cost to BHEL.
2. Progress review meetings will be held at site during which actual progress during the week vis-a-vis scheduled program shall be discussed for actions to be taken for achieving targets. Contractor shall also present the program for subsequent week. The contractor shall constantly update / revise his work program to meet the overall requirement. All quality problems shall also be discussed during above review meetings. Necessary preventive and corrective action shall be discussed and decided upon in such review meetings and shall be implemented by the contractor in time bound manner so as to eliminate the cause of nonconformities.
3. The manpower reports shall clearly indicate the manpower deployed, category wise specifying also the activities in which they are engaged.
4. During the course of erection, if the progress is found unsatisfactory, or if the target dates fixed from time to time for every milestone are to be advanced, or in the opinion of BHEL, if it is found that the skilled workmen like fitters, operators, technicians employed are not sufficient BHEL will induct required additional workmen to improve the progress and recover all charges incurred on this account including all expenses together with BHEL overheads from contractor's bills.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter- XII: WELDING

WELDING

The scope of the work will comprise of but not limited to the following:

1. All welders including tack welders, structural and high pressure welder shall be tested and approved by BHEL Engineer before they are actually engaged on work even though they may possess a valid certificate. BHEL reserves the right to reject any welder if the welder's performance is not found to be satisfactory. The contractor shall maintain the records of qualification AND performance of welders. BHEL Engineer will issue all the welders qualified for the work, an identity card. The welder will keep the same with him at work place at all times. He may be stopped from work if he is not found in possession of the same.
2. Engineer may stop any welder from the work if his performance is unsatisfactory for any technical reason or if there is a high percentage of rejection in the joints welded by him. The welders having passed qualification tests does not absolve the contractor of contractual obligation to continuously check the welder's performance.
3. Faulty welds caused by the poor workmanship shall be cut and re-welded at the contractor's expense. The Engineer prior to any repair being made shall approve the procedure for the repair of defective welds. After the repair has been carried out, the compliance shall be submitted to the quality engineer.
4. All expenses for testing of contractor's welders including destructive and Non- destructive tests conducted by BHEL at site or at laboratory shall have to be borne by the contractor only. Limited quantity of tube and pipe material required for making test pieces will be supplied by BHEL free of cost.
5. Only BHEL approved electrodes and filler wire will be used. All electrodes shall be baked and dried in the electric electrode-drying oven to the required temperature for the period specified by the Engineer before these are used in erection work. All welders shall have electrodes drying portable oven at the work spot. Arrangement of electrodes shall be in contractors scope.
6. The contractor shall also be equipped for carrying out other NDT like LPI /MPIas required as per welding schedules / drawings within the finally accepted price / rates.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-XIII Schedule of Rates and Quantities

Sl no.	Description of Work	Unit	Qty	Percentage of Total Price
A	Total Price For entire scope of work of Outlet Duct & Support Modification work of Unit 1 ESP of NTPC Ramagundam 3X200MW – Stage1 as per tender	LS (Lumpsum)	1	50%
B	Total Price For entire scope of work of Outlet Duct & Support Modification work of Unit 2 ESP of NTPC Ramagundam 3X200MW – Stage1 as per tender	LS (Lumpsum)	1	50%
Total Price For entire scope of work as per tender (A+B)				100%