

TENDER SPECIFICATION

SI No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/KKT-STGOH/1277	Unit #1, 210 MW MSPGCL Khaperkheda

FOR

OH of IP-LP Turbine, Valves, Generator, Replacement of HP Module & RLA Study of Generator U#1

Khaperkheda

VOLUME – I

CONSISTING OF:

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



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

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Tender Specification Issue Details

TENDER SPECIFICATION

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1	BHE/PW/PUR/KKT-STGOH/1277	Unit #1, 210 MW MSPGCL Khaperkheda

FOR

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EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR Refer Notice Inviting Tender

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

M/s.

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PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

Bharat Heavy Electricals Limited

AGM (Purchase)

Place:Nagpur

1277

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



BHEL PSWR
Notice Inviting Tender
Tender Specification No: BHE/PW/PUR/KKT-STGOH/1277

Ref: BHE/PW/PUR/KKT-STGOH/1277

Date: 23.05.2014

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

To

Dear Sir/Madam

Sub : NOTICE INVITING TENDER

Sealed offers in two part bid system are invited from reputed & experienced bidders (meeting PRE QUALIFICATION CRITERIA as mentioned in Annexure-I) for the subject job by the undersigned on the behalf of BHARAT HEAVY ELECTRICALS LIMITED as per the tender document. Following points relevant to the tender may please be noted and complied with.

1.0 Salient Features of NIT

SL NO	ISSUE	DESCRIPTION
i	TENDER NUMBER	BHE/PW/PUR/KKT-STGOH/1277
ii	Broad Scope of job	OH of IP-LP Turbine, Valves, Generator, Replacement of HP Module & RLA Study of Generator U#1 Khaperkheda
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>
e	Volume-II	<i>Price Schedule (Absolute value).</i> <i>Applicable</i>
iv	Issue of Tender Documents	23.05.2014 <i>Applicable/ Not applicable</i>
v	DUE DATE & TIME OF OFFER SUBMISSION	Date : 26.05.2014 , Time : 12:00 Hrs Place : BHEL PS Regional office at :Nagpur Tenders being submitted through representative shall be handed over to any of the following BHEL officials after making entry/registration at the reception: Saravana Kumar/Engineer(Purchase) Nirmal P.G/ Asst.Engineer(Purchase) <i>Applicable</i>

Registered Office : BHEL House, Siri Fort, New Delhi – 110 049, India
Website : www.bhel.com

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vi	OPENING OF TENDER	Date : 26.05.2014 , Time : 12.30 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) Bidder may depute representative to witness the opening of tender	<i>Applicable</i>
vii	EMD AMOUNT	Rs.1,00,000/- (Rupees One Lakh Only)	<i>Applicable</i>
viii	COST OF TENDER	Rs.2000/-	<i>Applicable</i>
ix	LAST DATE FOR SEEKING CLARIFICATION	Atleast 1 day before the due date of offer submission Along with soft version also, addressing to undersigned & to others as per contact address given below	<i>Applicable</i>
x	SCHEDULE OF Pre Bid Discussion (PBD)	Date :	<i>Applicable/Not applicable.</i>
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	-----	<i>Applicable/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 intimated by Fax/E-mail. Bidders to keep themselves updated with all such information	<u>Applicable</u>

- 2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly signed & stamped on each page, as part of offer. **Rates/Price including discounts/rebates, if any, mentioned anywhere/in any form in the techno-commercial offer other than the Price Bid, shall not be entertained.**
- 3.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at Nagpur issuing the Tender, along with techno-commercial offer. Bidder may also choose to deposit the Tender document cost by cash at the Cash Office as stated above against sl no iv of 1, on any working day; and in such case copy of Cash receipt is to be enclosed with the Techno Commercial offer. Sale of tender Documents shall not take place on National Holidays, holidays declared by Central or State Governments and BHEL PS HQ at Nagpur, Sundays and second/ last Saturdays
- 4.0 Unless specifically stated otherwise, bidder shall deposit EMD through Demand Draft/Pay Order in favour of Bharat Heavy Electricals Ltd, payable at Nagpur. For other details and for 'One Time EMD' please refer General Conditions of Contract.
- 5.0 **Procedure for Submission of Tenders:** The Tenderers must submit their Tenders to Officer inviting Tender, as detailed below:

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- PART-I consisting of 'PART-I A (Techno Commercial Bid)' & 'PART-I B (EMD/COST of TENDER)' in two separate sealed and superscribed envelopes (ENVELOPE-I & ENVELOPE-II)
- PART-II (Price Bid) – in sealed and superscribed envelope (ENVELOPE-III)
- One set of tender documents shall be retained by the bidder for their reference

6.0 The contents for ENVELOPES and the superscription for each sealed cover/Envelope are as given below. **(All pages to be signed and stamped)**

Sl no	Description	Remarks
	Part-I A	
	<p>ENVELOPE – I superscribed as : PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p>CONTAINING THE FOLLOWING:-</p>	
i.	Covering letter/Offer forwarding letter of Tenderer.	
ii.	<p>Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.</p> <p>Note:</p> <p>a. In case of any deviation, the same should be submitted separately for technical & commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.</p> <p>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.</p> <p>i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</p> <p>ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</p>	
iii.	<p>Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.</p> <p>It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact ph no, FAX no, etc.</p>	
iv.	All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.	
v.	Integrity Pact Agreement (Duly signed by the authorized signatory)	If applicable
vi.	Duly filled-in annexures, formats etc as required under this Tender Specification/NIT	
vii.	Notice inviting Tender (NIT)	

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 Website : www.bhel.com

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

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

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

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

SPECIAL NOTE : All documents/ annexures submitted with the offer shall be properly annexed and placed in respective places of the offer as per enclosure list mentioned in the covering letter. BHEL shall not be responsible for any missing documents.

- 7.0 Deviation with respect to tender clauses and additional clauses/suggestions in Techno-commercial bid / Price bid shall NOT be considered by BHEL. Bidders are requested to positively comply with the same.
- 8.0 BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the Tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).
- 9.0 Since the job shall be executed at site, bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation, applicable wage structure, wage rules, etc before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions.
- 10.0 Since the job shall be executed at site, bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation, applicable wage structure, wage rules, etc before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions.
- 11.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- 12.0 BHEL may decide holding of pre-bid discussion [PBD] with all intending bidders as per date indicated in the NIT. The bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Bidders shall plan their visit accordingly. The outcome of pre-bid discussion (PBD) shall also form part of tender.

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- 13.0 In the event of any conflict between requirement of any clause of this specification/ documents/drawings/data sheets etc or requirements of different codes/standards specified, the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error/missing pages/ other clerical errors in the tender documents, noticed must be pointed out before pre-bid meeting/submission of offer, else BHEL's interpretation shall prevail.
- 14.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.
- 15.0 Bidders shall submit Integrity Pact Agreement (Duly signed by authorized signatory who signs in the offer), **if applicable**, along with techno-commercial bid. This pact shall be considered as a preliminary qualification for further participation. **The names and other details of Independent External Monitor (IEM) for the subject tender is as given at point (1) above.**
- 16.0 The Bidder has to satisfy the Pre Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened who will be qualified for the subject job on the basis of satisfying the Pre Qualification Criteria specified in this NIT as per Annexure-I (as applicable), past performance etc. and date of opening of price bids shall be intimated to only such bidders. BHEL reserves the right not to consider offers of parties under HOLD.
- 17.0 In case BHEL decides on a 'Public Opening', the date & time of opening of the sealed PRICE BID shall be intimated to the qualified bidders and in such a case, bidder may depute one authorised representative to witness the price bid opening. BHEL reserves the right to open 'in-camera' the 'PRICE BID' of any or all Unsuccessful/Disqualified bidders under intimation to the respective bidders.
- 18.0 Validity of the offer shall be for **six months** from the latest due date of offer submission (including extension, if any) unless specified otherwise.
- 19.0 BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction process. In such case all qualified bidders will be intimated regarding procedure/ modality for Reverse Auction process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. .
- However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.
- 20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.
- 22.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 23.0 Consortium Bidding (or Technical Tie up) shall be allowed only if specified in Pre Qualifying Requirement (PQR) criteria, and in such a case the following shall be complied with:

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- 23.1 Prime Bidder and Consortium Partner or partners are required to enter into a consortium agreement with a validity period of six months initially. In case the consortium is awarded the contract, then the Consortium Agreement between the Prime Bidder and Consortium Partner or partners shall be extended till contractual completion period including extension periods if any applicable.
- 23.2 'Stand alone' bidder cannot become a **'Prime Bidder' or a 'Consortium bidder' or 'Technical Tie up bidder' in a consortium (or Technical Tie up) bidding**. Prime bidder shall neither be a consortium partner to other prime bidder nor take any other consortium partners. However, consortium partner may enter into consortium agreement with other prime bidders. In case of non compliance, consortium bids of such Prime bidders will be rejected.
- 23.3 Number of partners for a consortium Bidding (or Technical Tie up) shall be as specified in the PQR
- 23.4 Prime Bidder shall be as specified in the Pre Qualification Requirement, else the bidder who has the major share of work
- 23.5 In order to be qualified for the tender, Prime Bidder and Consortium partner or partners shall satisfy (i) the Technical 'Pre Qualifying Requirements' specified for the respective package, (ii) "Assessment of Capacity of Bidder" as specified in clause 9.0
- 23.6 Prime Bidder shall comply with additional 'Technical' criteria of PQR as defined in 'Explanatory Notes for the PQR'
- 23.7 Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified
- 23.8 In case customer approval is required, then Prime Bidder and Consortium Partner or partners shall have to be individually approved by Customer for being considered for the tender.
- 23.9 Prime Bidder shall be responsible for the overall execution of the contract
- 23.10 In case of award of job, Performance shall be evaluated for Prime Bidder and Consortium Partner or partners for their respective scope of work(s) as per prescribed formats
- 23.11 In case the Consortium partner or partners back out, their SDs shall be encashed by BHEL. In such a case, other consortium partner or partners meeting the PQR have to be engaged by the Prime Bidder, and if not, the respective work will be withdrawn and executed on risk and cost basis of the Prime Bidder. The new consortium partner or partners shall submit fresh SDs as applicable.
- 23.12 In case the prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.
- 23.13 After execution of work, the work experience shall be assigned to the Prime Bidder and the consortium partner or partners for their respective scope of work. After successful execution of two similar works with the same consortium partner or partners under direct orders of BHEL, the Prime Bidder shall be eligible for becoming a 'stand alone' bidder for similar works, subject to certification from BHEL about the active involvement of the Prime Bidder for satisfactory execution of the works.
- 23.14 The consortium partner shall submit SD equivalent to 2% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value. In case there are two consortium partners,

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then each partner shall submit SD equivalent to 1% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value.

- 23.15 In case of a Technical Tie up, all the clauses applicable for the Consortium partner shall be applicable for the Technical Tie up partner also
- 24.0 The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self certified and stamped by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.
- 25.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 26.0 Order of Precedence
In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:
- a. Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL
 - b. Notice Inviting Tender (NIT)
 - c. Price Bid
 - d. Technical Conditions of Contract (TCC)—Volume-1A
 - e. Special Conditions of Contract (SCC) —Volume-1B
 - f. General Conditions of Contract (GCC) —Volume-1C
 - g. Forms and Procedures —Volume-1D

It may please be noted that guidelines/rules in respect of suspension of business dealings', 'Vendor evaluation format', 'Quality, Safety & HSE guidelines', etc may undergo change from time to time and the latest one shall be followed

for BHARAT HEAVY ELECTRICALS LTD

AGM Pur

Enclosure

1. Annexure-1: Pre Qualifying criteria.
2. Annexure-2: Check List.
3. Annexure-4: Important Information.
4. Other Tender documents as per this NIT.

PRE QUALIFYING REQUIREMENTS

JOB	OH of IP-LP Turbine, Valves, Generator, Replacement of HP Module & RLA Study of Generator U#1 Khaperkheda		
TENDER NO	BHE/PW/PUR/KKT-STGOH/1277		
SL NO	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Name and Description of qualifying criteria	Page no of supporting document. Bidder must fill up this column as per applicability
A	Submission of Integrity Pact duly signed (if applicable)	NOT APPLICABLE	
B	<p><u>Technical</u></p> <p>Bidder must have executed following works i.e. Bidder must meet {(B.1.1) or (B.1.2) or (B.1.3)} in the last seven (7) years as on latest date of bid submission:-</p> <p>B.1.1) Overhauling of HP Module with either LP/IP Modules of Turbine of rating 200MW or above against single work order.</p> <p style="text-align: center;">OR</p> <p>B.1.2) Overhauling of any One Module of Turbine with Overhauling of Generator of rating 200MW or above against single work order of value Rs. 25 Lakhs or above</p> <p style="text-align: center;">OR</p> <p>B.1.3) Overhauling of Steam Turbine Generator of 200MW or above against single work order of value Rs.31 Lakhs or above.</p>	APPLICABLE	
C-1	<p><u>FINANCIAL</u></p> <p><u>TURNOVER</u></p> <p>Bidders must have achieved an average annual financial turnover (Audited) of Rs.19 Lakhs or more</p>	APPLICABLE	

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	over last three Financial Years (FY) i.e. 2011-12, 2012-13, 2013-14 if 2013-14 is audited or 2010-2011, 2011-2012, 2012-2013 if Annual Accounts for FY 2013-14 are not audited.		
C-2	NETWORTH (only in case of Companies) Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive	APPLICABLE	
C-3	PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three Financial Years defined in 'C-1' above based on latest Audited Accounts.	APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)	NOT APPLICABLE	By BHEL
E	Approval of Customer (if applicable) <u>Note:</u> Names of bidders (including consortium/Technical Tie up partners in case consortium bidding is permitted) who stand qualified after compliance of criteria A to D shall be forwarded to customer for their approval.	NOT APPLICABLE	BY BHEL
F	Price Bid Opening <u>Note:</u> Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E	APPLICABLE	BY BHEL
G	Consortium criteria	NOT APPLICABLE	
<p><u>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</u></p> <ol style="list-style-type: none"> 1. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against C-1 above along with all annexures 2. In case audited Financial statements have not been submitted for all the three years as indicated against C-1 above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e total divided by three. 3. C-2:-NETWORTH : Shall be calculated based on the latest Audited Accounts as furnished for C-1 above. Net worth = Paid up share capital + Reserves. (Net worth is required to be evaluated in case of companies) 4. C-3:- PROFIT : shall be NET profit (PAT + Non cash expenditure viz depreciation) earned during any one of the three financial years as in C-1 above 5. 'Additional' Criteria in respect of 'Technical' criteria of PQR (as in 'B' above) for Civil, Electrical, CI, unless otherwise specified : <ol style="list-style-type: none"> 1. Bidder should have executed similar work of any one of the following: <ol style="list-style-type: none"> a. One (1) work of value not less than Rs XXX <p style="text-align: center;">OR</p> 			

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	<p>b. Two (2) works of not less than Rs YYY OR</p> <p>c. Three (3) works of not less than Rs ZZZ (Value XXX, YYY, ZZZ shall be as indicated by BHEL)</p> <p>2. 'Similar' work for criteria 5 above means</p> <p>a. Civil or Structures or Civil & Structures or Chimney respectively as applicable to the tendered scope in respect of 'CIVIL' Works</p> <p>b. Electrical works in respect of 'ELECTRICAL'</p> <p>c. CI works in respect of 'CI' Works</p> <p>d. Material Handling and/or Management works in respect of 'MM' works</p> <p>6. Time period for achievement of the 'Technical' criteria of PQR (as in 'B' above) will be the last 7 years ending on the 'latest date' of Bid submission</p> <p>7. 'EXECUTED' means the Vendor should have achieved the criteria specified in the Technical criteria of PQR (as in 'B' above) even if the Contract has not been completed or closed</p> <p>8. Unless otherwise specified, for the purpose of 'Technical' criteria of PQR (as in 'B' above), the word 'EXECUTED' means:</p> <p>1. "BOILER LIGHT UP" in respect of Boiler & Aux and ESP</p> <p>2. "OVERHAULING" Repair/Replacement/Refurbishment work</p> <p>3. "SYNCHRONISATION" in respect of STG/GTG and 'SPINNING' in case of HTG</p> <p>4. "STEAM BLOWING COMPLETION" in respect of at least Main Steam Line of Power Cycle Piping</p> <p>5. "HYDRAULIC TEST" of the system in respect of Structures, Pressure parts/IBR Piping</p> <p>6. "CHARGING" in respect of power Transformers, Bus ducts, HT/LT switchgears</p> <p>7. "Completion of RCC Shell and liner (steel or brick as per tendered scope) up to the HEIGHT specified using slip form" in case of RCC Chimney.</p> <p>8. Achievement of physical Quantities as per respective PQRs in respect of Civil & Structures and Piling Works</p> <p>9. 'Readiness for coal Filling" in respect of Bunker Structure Work.</p> <p>9. Boiler means HRSG or WHRB or any other types of Steam Generator</p> <p>10. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines</p> <p>11. For the purpose of evaluation of the PQR, one MW shall be considered equivalent to 3.5TPH where ever rating of HRSG/BOILER is mentioned in MW. Similarly, where ever rating of Gas Turbine is mentioned in terms of Frame size, ISO rating in terms of MW shall be considered for evaluation.</p> <p>12. In case the experience/PO/WO certificate enclosed by bidders do not have separate break up prices for the E&C portion of Electrical and CI Works, (i.e. the certificates enclosed are for composite order for supply and erection of Electrical & CI and other works if any), then value of Erection and Commissioning for the Electrical & CI portion shall be considered as 15% of the supply & erection of Electrical & CI, unless otherwise specifically indicated in the PQR.</p> <p>13. Scope for capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine unless otherwise specifically indicated in the PQR.</p> <p>14. In case the tendered scope is not a Pulverised Fuel Boiler, experience of Oil/Gas Fired Boilers also can be considered unless otherwise specifically indicated in the PQR:-</p>
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FOR QR: (B.1.1) BIDDER SHALL SUBMIT "WORK ORDER" COPY ALONG WITH RESPECTIVE "BILL OF QUANTITY & SCOPE OF WORK" INCLUDING "RELEVANT DOCUMENT FOR WORK COMPLETION" DOCUMENTS FOR THE RESPECTIVE WORK ORDER IN SUPPORT OF THE TECHNICAL QR.

FOR QR: (B.1.2) & (B.1.3) BIDDER SHALL SUBMIT "WORK ORDER" COPY ALONG WITH RESPECTIVE "BILL OF QUANTITY & SCOPE OF WORK" INCLUDING "RELEVANT DOCUMENT FOR WORK COMPLETION" & "RELEVANT DOCUMENT FOR WORK EXECUTED VALUE" DOCUMENTS FOR THE RESPECTIVE WORK ORDER IN SUPPORT OF THE TECHNICAL QR.

IN ABSENCE OF ABOVE SAID DOCUMENTS, OFFER OF THE BIDDER SHALL NOT BE CONSIDERED FOR EVALUATION.

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

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ANNEXURE - 2

CHECK LIST

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

1	Name and Address of the Tenderer		
2	Details about type of the Firm/Company		
3.a	Details of Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:	
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:	
4	EMD DETAILS	DD No: Date : Bank : Amount: <u>Please tick (√) whichever applicable:-</u> ONE TIME EMD / ONLY FOR THIS TENDER	
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE	
		APPLICABILITY (BY BHEL)	ENCLOSED BY BIDDER
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format	Applicable	YES / NO
7	Audited profit and Loss Account for the last three years	Applicable	YES/NO
8	Copy of PAN Card	Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable	YES/NO
10	Integrity Pact	NOT Applicable	YES/NO
11	Declaration by Authorised Signatory	Applicable	YES/NO
12	No Deviation Certificate	Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions	Applicable	YES/NO

Registered Office : BHEL House, Siri Fort, New Delhi – 110 049, India
Website : www.bhel.com

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14	Declaration for relation in BHEL	Applicable	YES/NO
15	Non Disclosure Certificate	Applicable	YES/NO
16	Bank Account Details for E-Payment	Applicable	YES/NO
17	Capacity Evaluation of Bidder for current Tender	NOT Applicable/	YES/NO
18	Tie Ups/Consortium Agreement are submitted as per format	NOT Applicable	YES/NO
19	Power of Attorney for Submission of Tender	Applicable	YES/NO
20	Analysis of Unit rates	Applicable	YES/NO

NOTE : STRIKE OFF 'YES' OR 'NO', AS APPLICABLE. TENDER NOT ACCOMPANIED BY THE PRESCRIBED ABOVE APPLICABLE DOCUMENTS ARE LIABLE TO BE SUMMARILY REJECTED.

DATE :

AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

ANNEXURE 4: IMPORTANT INFORMATION

1. The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site (www.bhel.com ---> Tender Notification -> List of Banned Firms)
2. All Statutory Requirements as applicable for this project shall be complied with.
3. Please take note of following Revised Tender Clauses:
 - i. Notice Inviting Tender: SI No 9
 - ii. General conditions of Contract: Clause No 1.15.13 (New), Clause No 2.8.3, 2.8.4 and 2.8.5

4. 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 are given in Annexure V of NIT:

- 4.1. Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).
- 4.2. BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids. In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit „online sealed bid“ in the Reverse Auction. Non-submission of „online sealed bid“ by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 4.3. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 4.4. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit 'online sealed bid' in the Reverse Auction. Non-submission of 'online sealed bid' by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 4.5. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
- 4.6. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 4.7. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.

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- 4.8. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
- 4.9. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for noncompliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
- 4.10. Reverse auction will be conducted on scheduled date & time.
- 4.11. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 4.12. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
- 4.13. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL "s standard practice.
- 4.14. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the "Business Rules of Reverse Auction", which will be communicated before the Reverse Auction.
- 4.15. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
- 4.16. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.

In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process

5. PVC is not applicable
6. Progress Monitoring, Monthly Review and Performance Evaluation of Vol-I BCD is not applicable. Separate Performance evaluation as per SAS format shall be considered for evaluation purpose.
7. Overrun compensation is not applicable
8. Interest bearing recoverable advances is not applicable
9. Quantity variation is not applicable
10. Extra works in man-hours is not applicable
11. Retention amount shall be 1% of the total contract value.
12. Security Deposit shall be released after the Performance Guarantee Period

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TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter - I : PROJECT INFORMATION

1.0	Project Information
	<p>1) Purchaser : M/s MSPGCL Khaperkheda</p> <p>2) Project Title : OH of IP-LP Turbine, Valves, Generator, Replacement of HP Module & RLA Study of Generator U#1 Khaperkheda</p> <p>3) Nearest Railway Station : Nagpur</p> <p>4) Nearest airport : Nagpur</p>

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

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

PRE SHUTDOWN WORK

1. Mobilization of site.
2. Arranging Gate pass & Accommodations to the contract personnel.
3. Shifting of material store and T&Ps.
4. Shifting of special T&Ps to turbine floor.
5. Removal of TG Enclosure Cover if required and erect back after OH if available.
6. Arranging alumina powder for alumina blast cleaning.
7. Arranging Induction Heating Machine.

SCHEDULE -1 : GENERAL OVERHAUL OF TURBINE SET

1. Removal of Bearing covers & bearing No1 to 6.
2. Coupled run out check of all rotors.
3. Decoupling of HP, IP, LP and MOP rotors.
4. Free run-out check on rotors and couplings.
5. Checking of Bearing Clearances, rectification of oil clearances by scraping & matching. Adjustment, repair, replacement of bearings & Generator seal rings as per requirement.
6. Ultrasonic & DP testing of all bearings and Generator Seal rings.
7. Alignment check of all rotors, MOP & corrections.
8. Rolling check of HP, IP and LP Turbines and corrections.
9. Centering of LP gland boxes.
10. Resetting of all bearing oil catchers, pedestal oil guard rings including replacement/ repairs as per requirement. Refitting of all bearings & setting of bearings & setting of pads Yoke keys etc. as per requirement.
11. Bump check of HP and IP rotors and corrections.
12. Horn Drop Test of HP/IP casings & corrections.
13. Overhauling of Thrust Bearing Trip & over speed trip devices & adjustment.
14. Overhauling of complete MOP.
15. Swing Check of HP rotor & adjustment if any to the extent possible.
16. Rotor Float & thrust pad check of thrust bearing, repair & replacement.
17. Final alignment check & adjustment in Keys & packers.
18. Couplings of HP-MOP, HP-IP, IP-LP, LP-GEN, and Gen/slip ring shaft including reaming / honing of couplings if required.
19. Box up of all bearings. (1to 6).
20. Cleaning of thrust Bearing Filters/Basket Strainers during oil flushing & up to 48 Hrs. after synchronization.
21. Assistance during turning gear operation & steam rolling.
22. Assistance during Trim balancing if required.
23. Turbine lubricating oil coolers (2 Nos) cleaning by brushing.
24. Cleaning of Seal oil storage tank, seal oil coolers and SOST.
25. Cleaning of Generator H2 coolers cleaning by brushing and acid cleaning.
26. Generator Hydrogen seal revisioning.
27. Generator End Shields removal and replacement of Rubber Cord.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

SCHEDULE – 2 : COMPLETE HPT MODULE REPLACEMENT

1. Removal of insulation of HP turbine and shifting it to suitable location.
2. Dismantling of all connecting pipelines of HP module.
3. Horn drop test before dismantling the pipes.
4. Opening of steam exhaust line flanges and loosening of breech nuts with proper supporting.
5. Support and radial locking of rotor to casing before lifting the module.
6. Lifting and shifting of complete HP module to unloading bay.
7. Unloading of new HP module from transportation device and placing the same on fixture
8. Inspection and pre checking of new HP module.
9. Recording of free run out and face run out of HP rotor, correction of run out and matching of face to improve coupled run out and swing check value of HPT rotor.
10. Rolling check and Bump check, support rotor in inner casing after measuring relevant clearances.
11. Placing of assembled spare HPT module in position after blue matching of palm.
12. Fixing of radial & axial keys.
13. Drilling/Re-doweling of breech nut holes with spare HPT module. Cutting of inlet inserts at both sides & re-welding for matching the dowel holes if any is as per requirement. (Getting IBR approval and fulfillment of any statutory requirement is in the subcontractors scope).
14. Tightening of breech nuts of casing and exhaust flanges .
15. **Reaming & honing of HP-IP coupling holes according to new coupling bolts.**
16. Welding of all pipelines.
17. Alignment of HPT module by roll, bump check and carry out the centering.
18. Final connection of HP Module with steam inlet, outlet and drain piping.
19. All other relevant tests as per norms and recommendation.
20. Replacement of Gland steam and leak-off piping and bands.
21. Connection of MS inlet, exhaust and gland steam piping.

SCHEDULE – 3: I P TURBINE OVERHAUL

1. Removal of insulation from casing, inlet and exhaust pipe & shifting it to suitable location.
2. Removal of top half of the gland box seals on both sides. (Front and Rear) for checking of the axial and radial clearances both top and bottom seal trips.
3. Loosening of outer casing parting plane bolts by Induction heating method and removal of top half of the casing.
4. Loosening of inner casing parting plane bolts by Induction heating method and removal of top half casing after conducting rolling checks.
5. Recording flow path element clearances.
6. Removal of rotor, cleaning of rotor and upper half of casing with Alumina blasting. Manual cleaning of lower half of casing. Inspection of rotor and casing.
7. Replacement of stationary fins on gland area if required.
8. Ovality check of inner casing with and without heat tightening of parting plane bolts.
9. Placing rotor in casing, recording clearances and final box up inner casing after thorough cleaning. Roll check and bump check of inner casing.
10. Final boxing up of IP outer casing & heat tightening of Parting Plane bolts.
11. Carryout roll check of outer casing and alignment of the casing.
12. Recording of face run out of IP rotor, correction of run out and matching the face with HP coupling to improve the coupled run out and swing check value of HPT rotor.
13. Final Connection of piping etc & fixing of radial & axial keys

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

SCHEDULE – 4: L P TURBINE OVERHAUL

1. Support the LP inner outer casing at bottom.
2. Open parting plane & lift upper half.
3. Open inner parting plane & lift upper half.
4. Record the relevant clearances at parting plane one set.
5. Removal of rotor, cleaning of rotor & upper half with Alumina blasting. Manual cleaning for lower half, Inspection of rotor & casing. .
6. Check Ovality of inner inner casing with & without tightening of parting plane bolts.
7. Place rotor, record clearances & box up inner inner followed by inner outer casing.
8. Carry out roll check of inner outer & align the casing.
9. Inspection/repair/replacement of LP casing extraction bellows as per requirement.
10. Replacing all LPT diaphragms (safety valve) with new ones.

SCHEDULE – 5: OVERHAULING OF HYDRAULICALLY OPERATED TURBINE VALVES AND SERVOMOTORS

List of valves –

a.	HP By pass valve (ARS - 100)	2 Nos.
b.	HP By pass Spray valves (BPE1/2 & BD)	3 Nos.
c.	HP stop valve	2 Nos.
d.	HP control valves	2 Nos.
e.	IP stop valves	2 Nos
f.	IP Control valves	2 Nos
g.	LP Bypass Stop valves	2 Nos.
h.	LP Bypass control valves	2 Nos.
i.	LP bypass spray valves	4 Nos.
j.	CRH NRVs	2 Nos.
k.	Extraction NRV	4 nos.

Schedule of Work:

1. Decoupling & removal of servomotors / actuators as may be required.
2. Dismantling of valves.
3. Cleaning, checking & DP test as per requirement. Repair/replacement of components if any.
4. Complete Lapping of seats & discs as per requirement to. (Full extent possible and seat cutting if necessary).
5. Assembly of valves.
6. Dismantling of servomotors, cleaning of components as per requirement, repair/replacement of various part as per requirement
7. Assembly of servomotor, placement & coupling with valves.
8. Assistance during Commissioning all valves.

SCHEDULE – 6: OVERHAULING OF MS AND HRH STEAM STRAINERS

1. Overhauling of MS and HRH steam strainers – 04 Nos.

Work involved:

1. Dismantling of strainers.
2. Cleaning and thorough inspection with DP Test of welds joints and repair if necessary.
3. Assembly with new seal rings.
4. Hot Tightening.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

SCHEDULE – 7: PROVISION OF EOT CRANE OPERATOR:

Arranging of two nos. of EOT Crane Operators to work in all shifts for round the clock working.

SCHEDULE – 8: CHECKING & SETTING OF HANGERS/ SUPPORTS OF CRITICAL PIPING IN TG AREA.

Arranging Expert for Checking, repairing & setting of cold valves of hangers and supports of critical piping in TG area.

SCHEDULE – 9 : OVERHAULING OF GENERATOR:

1. Dismantling of slip ring cable, rocker arm assembly etc. and reassembly after completion of slip ring works including centering, offsetting and staggering of brush gear and providing dowel pins to brush gear mounting pads DPT of lugs of excitation cables.
2. Removal of four hydrogen coolers, cleaning of the tubes, conducting Hydraulic test and cleaning of cooler spare. Re-assembling of rubber loop seals to put in proper place to ensure no leak of high pressure hot zone gas to cold gas zone.
3. Removal of seal oil and Lube oil pipelines and pedestal 4, 5 & 6 Top half cover.
4. CRO Readings to be taken. Decoupling of LP Gen. and taking alignment reading for reference, checking of FRO.
5. Checking of pedestal insulation of bearing no.6.
6. Air gap and Magnetic Center Measurement and centering of rotor and adjustment of the same if required. Shifting of stator after loosening of trunion plate bolts if necessary.
7. Removal of bearing no.6 pedestal after giving support to the rotor.
8. Threading out Generator rotor and placing it on the stand.
9. Cleaning of stator, thorough inspection of stator, stator core, stator cooling gas circuit and hydrogen cooler water pipes, stator overhang bracket bolts, core bar bolts and other fasteners inside the stator core to be inspected for tightening and proper locking of nuts and bolts.
10. Inspection of stator core, including its back, overhang & jumper support and slot wedge, checking for tighten and tightening of loose wedges by de-wedging and re-wedging by using suitable packers below the wedges, tightness mapping chart to be prepared before and after carrying out actual wedge tightening work. Checking of looseness of braiding in overhang portion. Assistance during Replacement of RTD if required.
11. Hydraulic testing of stator winding as per BHEL protocol and attending any leakages thereby in Teflon tubes or copper pipes. In case of it requires removal of putty boxes, re-assembly of the boxes to be done.
12. Assistance during Heating the stator suitably, glue injector in the winding overhang portions if needed. Arrangement of lighting for heating is in the S/c scope.
13. Varnishing of stator & Rotor after completion of work and drying out of varnish.
14. Blue matching of Bearing no.6 pedestal with foundation.
15. Blue matching of Bearing no.6 with pedestal and then with shaft journal.
16. Pedestal insulation checking and rectification if found less.
17. Adjustment of oil catcher and deflector plate as per BHEL protocol and replacement of fins of oil catcher if necessary.
18. Assistance during Air tightness test of Rotor as per BHEL Protocol and if leakage is there assistance during rectification of the same by opening CC bolts (inner & outer).
19. Replacement of all gaskets of all phase, neutral & water side bushings and apply the silicon putty as per requirement.
20. Replacement of manhole gasket, if required and inspection and cleaning inside.
21. Threading in of Generator rotor.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORK

22. All Gaskets, O rings and rubber cords to be replaced with new ones.
23. Assistance during Gas Tightness checks and inspection of Phase and Neutral Bushing and Attending any leakage thereby.
24. Assistance during Generator air tightness checking as per BHEL Protocol and attending leakages if any.
25. Assistance during Inspection and measurement of slip ring. Replacement & Supervision of slip ring cutting & matching of slip ring if required.
26. Assistance during Generator RLA. (Manpower & power supply arrangement etc.)

SCHEDULE – 10 : RLA STUDY OF GENERATOR:

The Following Tests are to be carried out during RLA. Bidder has to arrange reputed agency with consultation BHEL for the subject job.

S. NO.	DESCRIPTION
I	GENERATOR STATOR
01	VISUAL INSPECTION OF ROTOR CORE AND STATOR WINDING WITH FIBROSCOPE/VIDEOSCOPE WITH VIDEO RECORDING FACILITY. MAGNIFYING GLASS, FLAT MIRRORS
02	IR & PI TEST WITH 5 k V MICROPROCESSOR MEGGER
03	DC WINDING RESISTANCE MEASUREMENT
04	DC LEAKAGE CURRENT / STEP VOLTAGE TEST
05	PARTIAL DISCHARGE PROBE TEST OR OFFLINE PARTIAL DISCHARGE MEASUREMENTS BY USING PDA ANALYSER, CAPACITIVE COUPLER, TERMINATION BOX WITH 3D GRAPH ANALYSIS
06	TEN DELTA / POWER FACTOR & CAPACITANCE MEASUREMENT
07	SCANNING OF COIL TEETH AREA BY ELCID (COMPUTERISED DIGITAL ELCID TEST)
08	CORE FLUX TEST OF STATOR CORE
09	STATOR SLOTWEDGING SYSTEM CHECK (WEDGE TIGHTNESS MAPPING) BY WEDGE DEFLECTION TEST BY SPECIAL HYDRAULIC FIXTURE IF THW RIPPLE SPRING ARE INSTALLED
10	RTD ELEMENT CHECK
11	NATURAL FREQUENCY TEST ON END WINDING
II	GENERATOR ROTOR
01	VISUAL INSPECTION OF COMPLETE ROTOR
02	IR & PI
03	DC WINDING RESISTANCE MEASUREMENT
04	AC IMPEDANCE MEASUREMENT
05	DIGITAL RSO TEST

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – II: SCOPE OF WORK

06	ROTOR PURGE TEST
III	BEARING AND SHAFT SEALS
01	VISUAL EXAMINATION OF BEARING AND SHAFT SEALS
02	IR MEASUREMENT OF BEARING AND SHAFT SEALS
03	DP AND ULTRASONIC TESTING OF TURBINE BEARING
IV	TERMINAL BUSHING
01	VISUAL EXAMINATION AND CHECKING FOR LEAKAGES VISUALLY BEFORE OPENING OF MACHINE
V	GAS COOLERS
01	VISUAL EXAMINATION OF COOLER TUBES FOR ANY FOULING, BLOCKING ETC
VI	RETAINING RING
01	DP/ ULTRASONIC TESTING OF RETAINING RING, ROTOR SHAFT AND DP ON FANS
02	MICROSTRUCTURE OF RETAINING RING, ROTOR SHAFT
VII	FINAL LIFE ASSESSMENT EVALUATION & SUBMISSION OF REPORT

**Bidder shall engage reputed service providers to carry out the RLA.*

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: SPECIAL TERMS AND CONDITIONS

3.1 SPECIAL TERMS AND CONDITIONS:

1. Subcontractor should assure that the repair of the equipment covered in the scope of this offer will be conducted with the best of skills and know how available with Subcontractor and in conformance with the clearances and adjustments set forth in manufacture's drawing instruments and other information's furnished to Subcontractor.
2. All welding electrode (special type also) required for the welding will be bidder's scope.
3. The various setting, clearances, adjustments and benchmarks will be restored to the extent possible during rectification to the condition as per the erection and commissioning log sheets available with customer. If however we are not able to produce erection / commissioning log sheets, efforts will be made to attend the best possible parameter or the conditions as observed at the time of dismantling of the equipment in consultation with us.
4. Subcontractor must prepare PERT CHART/BAR CHART. Daily monitoring will be done jointly and log sheets of important activities should be noted down and signed jointly.
5. All the works shall be carried out as per the instructions and to the satisfaction of the Engineer In-charge.
6. The contractor will attend contributory to faulty and poor workmanship during commissioning and trial run of the equipment.
7. Round the clock working under expert supervision shall be ensured by the contractor deploying two equal parallel strength of groups in 12 hrs. Shift with equal T&P for all the jobs so as to complete the work in stipulated period or earlier.
8. It is the responsibility of contractor to keep the plant, equipment, machinery and surrounding area clean.
9. The names of working persons like Site in-charge, supervisors, foreman, main fitters to be deployed during the job with full details has to be submitted stating their area of work and experience and specialization of the work to site in-charge before the start of work. BHEL may ask to change/delete the person not found suitable for the work at any point of time during execution of job. For any addition and deletion of the working person prior permission from BHEL shall be taken.
10. Subcontractor has to ensure that all the key persons must continue till completion of job i.e. machine comes on load. Subcontractor manpower should remain at site for a period of **three days** after machine comes on full load.
11. Mobilization of full strength shall be done three days before Shutdown of unit.
12. Work distribution sheet for all the workers/supervisors deployed shall be submitted to BHEL one day in advance on daily basis.
13. Subcontractor should mobilize additional resources such as plant, equipments, material as may be required by site in-charge to improve the progress of the work if the progress of the work is not satisfactory.
14. Subcontractor should get registered under relevant sales tax and or work contract Act (VAT) where the jobs are executed.
15. Party has to quote lump sum rate for all activities mentioned in the price bid as the actual quantities may vary during overhauling of the unit for which the contractor is not permitted to raise any dispute or claims.

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Items mentioned as optional will be taken up depending on condition, availability of spares and requirement.

16. Radiography and stress relieving, wherever mentioned are in the scope of the contractor.
17. Scrap & insulation etc. is to be shifted to scrap disposal area as indicated by the Engineer-in-charge.
18. One administrative personnel to control the resources and attendance of the workers to be ensured.
19. Contractor shall arrange certified HP welder for welding job whose welding test will be conducted.
20. Argon, Oxy- Acetylene gas shall be arranged by the contractor with cutting/welding set / argon welding set and other welding appliances.
21. Enerpack make close height Hydraulic jacks of 50T and 100T capacity - 4 nos. each shall be arranged by the contractor in 100 % working conditions.
22. If the duration of work continues beyond stipulated period due to any reason, no claim for compensation will be entertained.
23. The work details are brief & for Subcontractor knowledge only. Subcontractor will have to do all the related works as per requirement.
24. The contractor will be responsible to pay the damages to the property of Board or individual caused by his worker during the course of contract. If the contractor fails to pay the same it will be recovered from his bill.
25. No compensation claimed for idle labor for any reason will be entertained by BHEL.
26. All general tools and plants for execution of the work will have to be arranged/ maintained by the contractor at his own cost & risk.
27. In normal course, the interpretation of the under signed on any matter or decision given by him on any disputable points will be final and binding on the contractor.
28. Successful bidder is to obtain labor license before the start of the work.
29. Successful bidder is to obtain necessary "No Dues" certificate before de-mobilization from site.
30. Successful bidder has to arrange 10 copies of overhauling reports which will include various protocols with necessary data/ MOMs / important correspondences / log sheets
31. etc. and the book shall be spiral bound with thick acetate papers in front and back along with BHEL logo printed suitably on thick art paper at the front.
32. Successful bidder has to arrange Site mobile recharge till the site closing.
33. Completion of all the activities listed in the scope within a tight schedule of 20 days barring Gear to Barring Gear is the essence of the contract.
34. Sufficiently adequate man power T&P and other resources should be mobilized by the contractor to operate round the clock work progress with standby technicians to be deployed immediately if need arises. Offer should be submitted considering these requirements.
35. Accommodation for the sub-contractor's manpower will be provided if made available by the customer as per the applicable charges.
36. Magnetic base drilling machine along with drill/reamer is required for dowelling of cylindrical support of bearing in case of their replacement.
37. Taper reamer along with drill is to be arranged for dowelling of MOP if required.

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38. Scaffolding pipes and 40 mm thick wooden planks are to be arranged by Sub-contractor for various platforms and locking of deck spring.
39. Adequate numbers of tarpaulin are to be arranged by the sub-contractor for covering of various equipments during insulation removal / application
40. Wherever cleaning of rotor or casing is required should be done by Alumina Blasting.
41. All Casing and Valves fasteners should be loosen / tighten by Induction Heating Method.
42. Contractor to depute one Ex BHEL Expert each in the areas of Turbine, Generator, valves& strainers and for electrical tests during entire overhaul period.
43. Contractor to depute One Safety and One quality personnel during entire overhaul period.
44. The bidder has to quote Lump Sum price (as mentioned in Price Bid) for total works (Sl. No.: 1 to 20) and based on this value, evaluation for L1 shall be decided. The lump sum prices for each part shall calculated on the percentage price mentioned keeping quoted price as 100%
45. At least Three Experts to be deputed by the contractor for Turbine and Generator.

3.2. LAISION WITH ALL STATUTORY AUTHORITIES:

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

3.3 PAYMENT TO WORKERS:

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

3.4 SUBMISSION OF DOCUMENTS:

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

1. Test certificates of Pulling and Lifting machines and appliances.
2. Details of workers to be deployed with name, address, category.
3. Details of supervisory staff to be deployed.

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4. Authorization for receipt of materials and for signing of Measurement Books etc,
5. Labour license specific to the contract.
6. List of T&P brought into plant premises along with their serial numbers and dates/years of purchase.
7. All the Staff/Workers deputed for the Job should have Insurance Cover and document in this regard should be submitted along with 1st RA Bill.
8. List of consumables brought into plant premises along with their serial numbers and dates/years of purchase, along with test certificates wherever applicable.
9. Insurance policy for the workers to be deployed in this contract.
10. Safety undertaking.
11. Copy of ESI certificate to be furnished.
12. Proof of Payment of Service Tax.

The contractor shall submit following documents in report form within 15 days from commissioning of unit after the overhaul/shut down work is completed (except Sl.No.11 to 12 which are required before final bill is processed):

- Details of work executed.
- Measurements against different schedules in compiled form.
- Material issue details.
- Material consumption details.
- Material returns details.
- Details of retrenchment benefits given to workmen.
- Details of issue of PF slip to workmen.
- Details of settlement of accident benefits if any to workmen
- Copies of pay sheets to workmen.
- Details and proof of remittance of PF to workmen (before final bill).
- No dues clearance from different stores of customer
- Valid labour license

3.5 Statutory Inspection

Please refer General and Special Conditions of Contract. In addition to it the scope includes getting the approvals from the statutory authorities (like IBR, smoke nuisance inspector, anti-pollution authorities, labour officials). This includes arranging for inspection visits of such authorities periodically as per requirement, submitting documents etc. and payment of fees connected with it.

3.6 Safety:

Strict Safety measures have to be followed at Site.

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Contractor shall also adhere to all the safety provisions of our customer. In case violation of any provision at site fine of Rs.500/- to Rs.2000/- at the discretion of our site in-charge shall be imposed for each of such occasion and shall be recoverable from the contractor's bill.

3.7 Security Deposit

Please refer our "General and special conditions of contracts".

3.8 Other terms and conditions

- 1.0 Successful bidder has to extend manpower assistance for minor cleaning/scrapping, etc. for carrying vibration measurement and putting balance weights during Trim Balancing at site
- 2.0 A copy of tender document with each page duly signed and stamped shall be submitted along with your offer as a token of your unconditional acceptance to this tender condition. Also any deviation to the tender conditions shall be submitted in a separate paper duly signed by the bidder, any overwriting / correction by the bidder on the tender will not be recognized and the offer may be rejected on this ground.
- 3.0 General and special conditions of contract' enclosed herewith will be fully applicable, except otherwise stated in this enquiry. In case of any conflict, the conditions specified in this enquiry letter will prevail over that of the 'General and special conditions of contract'

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BY CONTRACTOR

4.0 LIST OF MANPOWER REQUIRED

Sl. No.	Description	Category	Numbers
1.	Site-in charge	Site-in charge	1
2.	Foreman	Graduate	6
3.	Supervisor	Graduate	8
4.	Store Keeper	Non-Graduate	3
5.	HP Welder	IBR	2
6.	Welder (Non-IBR)	Skilled	2
7.	Gas cutter	Skilled	2
8.	Millwright Fitter	Skilled	14
9.	Sarang	Skilled	4
10.	Fitter	Skilled	14
11.	Electrician	Semi-Skilled	2
12.	Jr. Fitter	Semi-Skilled	26
13.	Insn.Lagger/ Carpenter	Semi-Skilled	2
14.	Grinder Man	Semi-Skilled	3
15.	Rigger	Semi-Skilled	20
16.	Helper	Un-Skilled	80
17.	Special manpower (Turbine, Generator & valves)	Experts	3

This is an indicative list; the sub-contractor shall deploy adequate manpower to carry out the work round the clock and as per requirement of the site during execution of the Job.

Note: Site in-charge should be qualified Engineer, B.E. (Mechanical) and all the supervisors should have diploma in engineering.

4.1 Man power & T&P:

1. Adequate manpower along with T&P should be deployed at site. All the T&P required for the work shall be arranged by the contractor and all T&P should reach the site 3 days before the shutdown of the unit. All the measuring instruments shall be duly tested / calibrated and valid certificate to that effect should be submitted to our Site In-charge before start of the work.

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Chapter – IV: MANPOWER, T&P AND CONSUMABLES TO BE DEPLOYED BY CONTRACTOR

2. A deployment plan along with experience and name of the Site In-charge, Engineers, Supervisors, Foreman and main technicians to be submitted on per shift basis.
3. LAP-TOP with latest configuration, DVD/CD writer, its peripherals including printer-scanner and one USB Modem for Internet connectivity to be provided for BHEL site office.
4. One office boy in each shift is to be provided for BHEL site office.
5. An Engineer with more than 25 years of experience in erection of similar machine in Turbine & Generator and Hangers & support setting area to be engaged during entire overhauling period in consultation with BHEL.

4.2 LIST OF TOOLS AND PLANTS TO BE ARRANGED BY CONTRACTOR

01. Taper gauge, slip gauge set, depth gauge and depth micrometer.
02. Feeler gauge sets, feeler strips of 0.03 to 0.10 mm size.
03. One set of 2 meter long feeler gauge strips (0.05 to 1.0 mm).
04. Dial indicators with magnetic bases (at least 2 dials of diameter 40 mm travel – 5 mm).
05. Micrometers (inside and outside up to 300 mm, 450mm, 600mm & 1000mm).
06. Telescopic gauge (2 sets). Bevel protractor and combination sets.
07. Try square.
08. Set of parallel blocks/ V blocks.
09. Vernier calipers, (150 and 300 mm), measuring steel tapes and 5 meters steel rulers.
10. Precision spirit level (with micro head).
11. 2 sets of D.E. and Ring spanners (6-36mm).
12. 2 sets of ox spanners (6 to 20mm and 22-50mm).
13. Allen keys of various sizes (from 2mm. onwards).
14. D.P. Test Kit (with consumables).
15. Crowbars tin cutters, pliers (cutting plier, nose plier grip plier circlip-outside and inside).
16. Screw drivers and sledge hammers – 10 lbs – 1 lbs.
17. Adjustable wrenches, pipe wrenches and heck saws.
18. Single ended spanners (36 Mm and above).
19. Flat, half round, triangular bearing scrappers-8”, to 12”.
20. Files flat round, half round and square, rough and smooth (sizes 6”, 9” and 12”).
21. Bench Grinders, straight grinders GQ4 and GQ6, Angle grinders.
22. Reamers upto 30 mm. Taper reamers.
23. Drilling machine with magnetic stand upto –30 mm with drill bits.
24. Flexible grinders with grinding stones and cutters of different Shapes and sizes, Angles Grinders and Sander machine.
25. Number punch, letter punch, centre punch and hole punches etc.
26. Steel wire brushes, wire brush wheels, nylon wire brushes and Painting bushes.
27. Reamers and honing tools with proper jigs and fixtures for carrying out coupling hole

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- Reaming /honing.
28. Lifting devices eye bolts, D-shackles, slings of various sizes Guide rods etc.
 29. Chain pulley blocks upto 5 tons, 2 tons pull/lift.
 30. Copper/Brass rods dia. ½” to 1 ½”X450 mm.
 31. Tap and die sets 6 to 36 mm.
 32. Surface plate 450 X 450 mm.
 33. Torch light/hand lamps with cables, 230/24 V transformer.
 34. Torque wrench and torque multiplier.
 35. Wooden mallet, Nylon Mallet.
 36. Hand glover-asbestos, Manila rope, asbestos cloth leather and Rubber gloves.
 37. Set of needle files.
 38. Air blower – electric.
 39. Electric drills – ¼”, ½”, and 5/8”.
 40. Ball pen hammer of various sizes.
 41. Gas cutting and heating set with torches regulators, hoses and cylinder minimum two sets).
 42. Arc welding generator/rectifiers with regulator, cables, Electrode holders and shields, TIG welding holders.
 43. Pneumatic – grinders.
 44. Hose pipes for compressed air.
 45. Bench vices.
 46. Hydraulic jacks 5, 10, 25, 50 & 150 tons capacity and screw jacks- 5 to 10 tons.
 47. Hydraulic pump for testing coolers
 48. 500 V Megger.
 49. Electric switchboards and flood light arrangements with fuse boxes and isolating switches, Plugs and sockets.
 50. In addition to above T and P contractor will be required to fabricate fixtures such as pullers etc. for removal of any other equipments related to the scope of work.
 51. Pedestal fans/air coolers.
 52. Wooden sleepers.
 53. Wooden Planks.
 54. Magnifying glass.
 55. Plastic helmets, Fiber helmet.
 56. Gas cutting/welding goggles, grinding goggles.
 57. Bearing pullers.
 58. Tarpaulin.
 59. Insulation testers and Meggers 500 V and 1000 V at least 1 No. each.
 60. Any other T and P as per requirement and as per our General and special conditions of Contracts.

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61. Digital Multimeter
62. Analogue multimeter of Motwane make
63. Scaffolding materials

NOTE:

1. The above list is only indicative and not exhaustive. Arrangement for any other T and P required for completion of the job shall be the responsibility of the contractor and shall be arranged by him.
2. All the tools and tackles/measuring instruments shall be duly tested/calibrated and valid certificate to that effect should be submitted to our site in-charge before the start of work.

4.3 CONSUMABLES TO BE ARRANGED BY CONTRACTOR

(The list is indicative only and not exhaustive)

01. Kerosene oil.
02. Rustolene.
03. Petrol/white Petrol/Benzene/CRC.
04. Grease/Graphite Grease.
05. Hacksaw Blades.
06. Waste cloth/Cotton.
07. Marking/lint free cloth/Muslin.
08. Asbestos cloth/Asbestos cord.
09. Prussian blue.
10. Graphite (flaked) powder/Molykote/Mosil.
11. Cardiom compound.
12. Holdtite/shellac/Gasket sealing compound.
13. Lead wire 1.0 m/1.5 mm/0.5 mm.
14. Liquid soap.
15. Carborandum grinding paste coarse/fine/Diamond lapping paste.
16. Emery papers/Rolls.
17. Cutoff wheels.
18. Grinding wheels.
19. Oil stones, Mounted wheels, rotary cutters.
20. D. P. test chemicals.
21. Gas Cylinders for cutting/welding.
22. Chalk pieces, marking pens, thermo chalks upto 400c
23. Insulation tape, Johnson Tapes.
24. Sander discs and wheels.
25. Polyethylene sheets.

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26. Araldite, M. Seal, Instabond, Dendrite.
27. CRC 2-26, white spirit.
28. Electric fuse wire, cables for the connections
29. 2.5 mm² Cu cable (flexible) of 200 mtr. length.
30. Ortho phosphoric acid
31. CRC Lectra-clean.

NOTE:

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

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Chapter – V: QUALITY REQUIREMENT

QUALITY REQUIREMENT

- 1.0 Various inspection/ quality control / quality assurance procedure/ methods at various stages will be as per BHEL/ customer quality control procedure/ codes/ IBR and other statutory provisions and as per BHEL Engineer's instructions.
- 2.0 Preparation of quality assurance log sheets and protocols with customer's engineers, welding logs, other quality control and quality assurance documentation as per BHEL Engineer's instructions, is within the scope of work/ specification.
- 3.0 A daily log book should be maintained by Area In-charge of contractor on the job incorporating erection / alignment / welding clearance /radiography / progress of work etc. and the same shall be submitted to BHEL. Also, daily reports shall be submitted to BHEL.
- 4.0 All the important measurements like pre-assembly checking of alignment leveling/ centering work etc. shall be recorded in the daily log book with sketches based on BHEL drawings indicating readings/ measurements actually taken and signed by BHEL/ Customer/ Contractor representatives.
- 5.0 The inspection/measuring and testing equipments should be of brand, quality and accuracy, as specified by BHEL engineer and should have valid calibration certificates traceable to national/international standards.
- 6.0 Total quality is the watchword of the work and contractor shall strive to achieve the quality standards, procedures laid down by BHEL. He will follow the instructions as per BHEL drawings and quality standards.
- 7.0 The welder's performance will be reviewed from time to time as per the BHEL/ IBR standards and any welder not performing to the standards set by BHEL/ IBR standards will be removed from working, Contractor shall arrange for the alternate welders immediately.
- 8.0 **STAGE INSPECTION BY BHEL / CUSTOMERS ENGINEERS**
Apart from day-to-day inspection/ stage inspection of equipments by BHEL engineers, the equipments may be checked at various stages by customer's engineers and quality assurance teams. Contractor shall arrange all labour, tools/tackles etc. for such inspections free of cost.

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Chapter – VI: Time Schedule

6.1 TIME SCHEDULE & MOBILIZATION

6.1.1 INITIAL MOBILIZATION

After receipt of fax LOI, Contractor shall discuss with Project Manager / Construction Manager/BHEL In charge regarding initial mobilization. A small team of manpower consisting of riggers, welders, fitters, helpers along with T & P has to be mobilized 3 days in advance before shutdown of the unit for making necessary arrangements for installation & testing of winches, chain pulley blocks etc. Full-fledged team shall be mobilized one week before shutdown of the unit

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

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

The entire work of overhauling shall be completed within a period of **25 days** (stopping of barring gear to putting the machine on barring gear after completion of overhaul).

The tentative outage schedule of the TG set as informed by MSPGCL Khaperkheda shall be in the First week of June'2014.

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Chapter-VII: Terms of Payment

7.1 Payment will be released on completion of activities as below:

1. 50% after the Mobilization, Dismantling of Machine & submission of Insurance & Labour License (5% for T & P and consumables, 5% for Deployment of manpower). Penalty of 1% per day of the total contract value will be levied for improper mobilization of man power and 1% per day for T & P and consumables separately subject to maximum 10% of the contract value shall be deducted from your bill
2. 40% after completion of assembly work and Barring Gear of Machine.
3. Final 10% on successful commissioning / full load operation / completion of all works and also 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 service tax etc).

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

Note:

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

7.2 Retention money: Retention amount as indicated in Clause 2.22.1 of Vol. I C 'General Conditions of Contract' shall be read as 1% of the total contract value.

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

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

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Chapter-VIII TAXES & DUTIES

8.0 TAXES, DUTIES, LEVIES (Consolidated Rev 03 dated 09/04/2013)

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

8.1.1

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

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

8.1.2 Service Tax & Cess on Service Tax

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

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

1. The name, address and the registration number of the contractor,
2. The name and address of the party receiving taxable service,
3. Description, classification and value of taxable service provided and,
4. The service tax payable thereon.

All the Four conditions shall be fulfilled in the invoice before release of service tax payment.

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

8.1.3 VAT (Sales Tax /WCT)

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

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII TAXES & DUTIES

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

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

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

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

8.2 'Enabling Works'

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

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

8.3 New Taxes/Levies

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

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

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