

# Bharat Heavy Electricals Limited (A Govt. Of India Undertaking)

Power Sector, Eastern Region
BHEL Bhawan, Plot No. DJ-9/1, Sector- II,
Salt Lake City, Kolkata, WEST BENGAL, INDIA

Phone: 033-23398220, 23211690, FAX: 033-23211960

### **NOTICE INVITING TENDER (NIT)**

OFFERS ARE INVITED FROM REPUTED & EXPERIENCED BIDDERS (MEETING PRE-QUALIFICATION CRITERIA AS MENTIONED) THROUGH E-PROCUREMENT PORTAL <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a> ONLY for THE SUBJECT JOB BY THE UNDERSIGNED ON BEHALF OF BHARAT HEAVY ELECTRICALS LIMITED AS PER THE TENDER DOCUMENT. ISSUE OF TENDER TO ANY BIDDER SHALL NOT CONSTRUE THAT THE BIDDER IS CONSIDERED TO BE QUALIFIED. FOLLOWING POINTS RELEVANT TO THE TENDER MAY PLEASE BE NOTED AND COMPLIED WITH.

#### **Salient Features of NIT**

S. NO	ISSUE	DESCRIPTION	
i	E-TENDER NUMBER	PSER:PUR:MJA-S394:19(ENQ:19:PP:0015:PUR:131)	Date- 28/01/2020
ii	BROAD SCOPE OF JOB	OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), OF AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT AT MEJIA TPS-DVC, WEST BENGAL.	
iii	ISSUE OF TENDER DOCUMENTS	<ul> <li>a) Online through e-procurement platform at <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a>)</li> <li>b) in BHEL website (www.bhel.com, CPP Portal):         For tender view purpose only</li> <li>Start Date – 28/01/2020</li> </ul>	1. Applicable 2. Applicable
iv	DUE DATE & TIME OF OFFER SUBMISSION	Date: 03/02/2020, Time: 15-00 Hrs. (Offer to be submitted online only through e-procurement platform at <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a> )	Applicable
v	TECHNO-COMMERCIAL BID OPENING OF TENDER	Date: 03/02/2020, Time: 16-00 Hrs.  (online only through e-procurement platform at <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a> , participating bidders may witness the same online only)	Applicable
vi	EMD AMOUNT	INR 1,77,660.00 (Indian Rupees One Lakh Seventy Seven Thousand Six Hundred Sixty Only) [To be submitted in the form and manner as mentioned below]	Applicable
vii	COST OF TENDER		Not Applicable
viii	LAST DATE FOR SEEKING CLARIFICATION	Date: 01/02/2020 (UP TO 11:00 Hrs.)	Applicable
ix	SCHEDULE OF Pre Bid Discussion (PBD)	If any, shall be intimated through Tender Change Notice (TCN)	Not Applicable
X	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)		Not Applicable
xi	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 ( <a href="https://www.bhel.com">www.bhel.com</a> →Tender Notifications →View Corrigendums & <a href="https://www.bhel.abcprocure.com">CPP portal</a> →Tender Notice & E-PROCUREMENT PORTAL <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a> ) and not in the newspapers. Bidders to keep themselves updated with all such information.	Shall be intimated to bidder

The offer shall be submitted as per the instructions of tender document. Only One set of tender document (in original, downloaded from website) signed by authorised company representative of bidder and stamped on each page shall be submitted as detailed further, as given below. Bidders to note specifically that all pages of tender document, including these NIT pages etc. appearing in the website for this particular tender shall be submitted by them (after signing/stamping on each page) as a part of their offer. Price shall not be mentioned by them anywhere in the techno-commercial portion of offer. Price shall be mentioned in the relevant price schedule only and to be submitted in e-procurement portal/platform in the form and manner mentioned in tender.

For E-PROCUREMENT ASSISTANCE & TRAINING, M/s E-PROCUREMENT TECHNOLOGIES LIMITED HELPDESK PERSONS AS PER FOLLOWING: -

- a) Mr. Ankur Bhatt, Support Executive, Ph: +91 7968136823, e-mail ID: ankur.bhatt@eptl.in
- b) Ms. Kanika Dani, Support Executive, Ph: +91 7968136872, e-mail ID: kanika.dani@eptl.in
- c) Mr. Nikhil Khallas, Support Executive, Ph: +91 7968136848, e-mail ID: nikhil@eptl.in
- d) Mr. Prashant Rajyaguru, Asst. Manager Implementation & Support, Ph: +91 7968136872, e-mail ID: prashant@eptl.in

or for any difficulty in downloading the tender from internet website, they should contact this office (Dy. Manager, Purchase or AGM, Purchase Phone no. 033-23398222/8226). No alteration/changes by bidders is permitted in the tender/NIT appeared in the website.

- 1. Successful bidder shall have to submit additional set of tender/sign on tender document provided by BHEL, if so decided by BHEL.
- 2. Earnest Money Deposit (EMD) of INR 1,77,660.00 (Indian Rupees One Lakh Seventy Seven Thousand Six Hundred Sixty Only) in the form & manner prescribed in tender, shall be submitted by bidder as mentioned below, failing which the bidder's offer is liable for rejection.

SCAN COPY OF DOCUMENTS IN SUPPORT OF SUBMISSION OF EMD TO BE UPLOADED ALONG WITH TECHNO-COMMERCIAL OFFER IN M/s E-PROCUREMENT TECHNOLOGIES LIMITED E-PROCUREMENT PORTAL/PLATFORM. IN CASE OF EMD SUBMISSION THROUGH BANKER'S CHEQUE/PAY ORDER/DEMAND DRAFT, SAME TO BE SUBMITTED IN SEALED ENVELOPE (SUPERSCRIBING TENDER REFERENCE) TO HEAD-PURCHASE or DY. MANAGER/PURCHASE, BHEL BHAWAN, DJ-9/1, SECTOR-2, KARUNAMOYEE, SALT LAKE CITY, KOLKATA-700091, WEST BENGAL PRIOR TO LATEST DUE DATE OF SUBMISSION OF OFFER.

One time EMD of Rs. 5,00,000/- (Rupees Five Lakh only) for BHEL-PSER, SAS jobs will also be valid for all such PSER-SAS jobs. Parties/bidders who have submitted/submits One Time EMD (OEMD) in this Power Sector Region (i.e. BHEL-PSER) for Service After Sales (SAS) a sum of amount Rs. 5,00,000/- (Rupees Five Lakh only) are exempted from payment of E.M.D. on each such tender in that unit on case to case basis (evidence of deposit must be submitted in scanned copy and to be uploaded along with techno-commercial offer in M/s E-PROCUREMENT TECHNOLOGIES LIMITED portal/platform) will be exempted from submission of EMD with this tender. The followings may be noted:

In case the bidder deposits separate EMD as mentioned above, there will be no change

- a) In existing clauses of this tender.
- b) In case of bidders having one time EMD; one time EMD can not be used for SD purpose.
- c) Security deposit shall be submitted as per provision of tender. Security deposit shall cover the entire duration of work plus the performance guarantee period plus three months notice period prior to release of the same.
- d) The EMD shall be enclosed with the Techno-Commercial Bid in the form and manner as mentioned above.

3. This is an e-tender floated online through our E-Procurement Site <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a>. The bidder should respond by submitting their offer online only in our e-Procurement platform at <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a>. Offers are invited in two-parts only. No Hard copy bid or bids through email/ fax shall be accepted. Bids are invited in two parts & shall be submitted as described below:

OFFER DESCRIPTION	DOCUMENTS TO BE UPLOADED & MODALITY OF UPLOADING
TECHNICAL OFFER	<ol> <li>Scanned copy of Covering letter of offer (To be attached in Attachment section).</li> <li>Scanned copy of Entire tender documents signed &amp; stamped in each page by authorized representative of the bidder except price bid (To be attached in Attachment section).</li> <li>Scanned copy of Techno-Commercial Offer (To be attached in Attachment section).</li> <li>Duly filled all annexures except price &amp; unpriced format (To be attached in Attachment section).</li> <li>Copy of records notes of Pre-Bid Conference, if applicable/ pre-bid MOM. (To be attached in Attachment section).</li> <li>Copy of Tender change notice (TCN), if applicable (To be attached in Attachment section)</li> <li>All supporting documents/ Annexures etc. as applicable (To be attached in Attachment section).</li> <li>No deviation certificate in bidder's letterhead as per format given in Tender (To be attached in Attachment section).</li> </ol>
PRE-QUALIFICATION PART	9. Pre-qualifying documents with all credentials as per tender. (To be attached in PQ <b>Attachment</b> section).
UNPRICED PRICE BID	10. Price schedule –Unpriced but mentioning only quoted / unquoted against each item as per tender. (To be attached in <b>Unpriced bid Attachment</b> section)
PRICE BID	11. Duly filled in Price Schedule as per tender. (To be attached in price bid <b>Attachment</b> section) Any other document uploaded in the price bid, apart from tendered Price schedule, shall not be taken into cognizance for evaluation of offer.

#### **SPECIAL NOTE:**

- A) Offer & documents submitted with the offer shall be signed and stamped in each page by authorised representative of the bidder. No overwriting/correction in tender documents by bidders shall be allowed. However, if correction is unavoidable, the same may be signed by authorized signatory.
- **B)** 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.
- 4.0 No deviation with respect to tender clauses and no additional clauses/suggestions/clarification in Technocommercial bid/Price bid shall normally be considered by BHEL. Bidders are requested to positively comply with the same. Offers with deviation are liable for rejection.
- 5.0 BHEL reserves the right to accept or reject any or all offer without assigning any reasons thereof. BHEL also reserve the right to cancel the tender wholly or partly without assigning any reason thereof. BHEL also reserve the right to split/part award the job. Also, BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).
- 6.0 Since the job shall be executed at site, the bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including Law and Order situation, applicable Wage structure, Wage rules, present condition of machines etc. before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions. No additional claim shall be entertained by BHEL in future, on account of non-acquaintance of site/machine conditions at the time of bidding.
- 7.0 For any clarification on the tender document, you may seek the same in writing or through e-procurement portal/platform as per specified format within the last date of seeking clarification as per tender. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay, and receipt of any query after due date shall not be entertained.
- 8.0 BHEL may decide holding Pre-bid Discussion [PBD] with all intending bidders. On such communication from BHEL, the bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Outcome of PBD (if any) shall also form part of tender.
- 9.0 In case of absence of any queries from bidder(s), their quoted price will be PRESUMED to be final and complete with reference to the tender documents (including Tender change notes (TCNs), clarifications, corrigendum issued by BHEL, if any). Bidders are requested to study the tender documents in detail and

- prepare their queries/clarifications accordingly. All such queries / clarifications shall be cleared/replied by BHEL. Such clarification letters, corrigendum and/or Tender change notes (TCNs), if issued by BHEL, shall form part of tender document.
- 10.0 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/contradictions between any two clauses of tender document, the same to be brought to the knowledge of BHEL by bidders in writing for clarification before due date of seeking clarification, otherwise, more stringent requirement as may be interpreted by BHEL shall prevail and shall be binding on you. Any typing error/missing pages/ other clerical errors in the tender documents, noticed by you must be pointed out before submission of offer, or else, BHEL's interpretation shall prevail & binding on you.
- 11.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.
- 12.0 Tender document containing above mentioned volumes shall be signed & stamped in all pages including this covering letter. Price bid shall be furnished in the specified format enclosed with the tender. Any additional copy, if required, may be taken by photocopying from the tender document given in the web.
- 13.0 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 qualify for the subject job on the basis of pre-qualification evaluation & Techno-Commercial bids etc. BHEL reserves the right to reject the bidders with unsatisfactory past performance in the execution of a contract. BHEL's decision in this regard shall be final & binding.
- 14.0 While BHEL reserve the right to open the price bid of the offers in camera, the date & time to open the PRICE BID, tender opening shall be intimated to the bidders in case BHEL decides it to be 'Public opening' and in such a case, one authorised representative of the bidder shall be allowed to attend.
- 15.0 Validity of the offer shall be for Six months from the due date of offer submission (including extension, if any) unless specified otherwise.
- 16.0 Firm prices are to be quoted in whole rupees, in the place meant for price or on the price schedule enclosed as applicable for the full scope of work given in tender. The rates quoted must be in figures and words as well (Prices quoted must be workable too for the job involved). Prices quoted by the bidders should be inclusive of all taxes and duties leviable by any Statutory Authority for this job as on the date of the tender opening (excluding GST & BOCW Cess).
- 17.0 Price Bids shall be evaluated in the manner as prescribed in Price Schedule. However, Unit Rates shall also be furnished if applicable in the Price Schedule.
- 18.0 Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.
- 19.0 Bidders are required to submit their BEST price as per tender Price Schedule format in e-procurement portal/platform in the form & manner as mentioned in tender.
- 20.0 "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.
- 21.0 Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on <a href="https://www.bhel.com">www.bhel.com</a>).
- 22.0 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.
  - In case of enquiry through e-procurement portal/platform, the sealed electronic price bid (e-bid) is to be treated as sealed envelope bid.
- 23.0 If it is found that L1 bidder has quoted higher in online seal 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 <a href="https://www.bhel.com">www.bhel.com</a>).

- 24.0 Reverse Auction is the type of auction typically conducted to buy goods/items over Internet in which the lowest price bidder wins. In case, the bidders are willing to know the details about the methodology, they may please contact **HEAD/PURCHASE OR DY. MANAGER /PURCHASE, BHEL, KOLKATA**.
- 25.0 However, if Reverse Auction process is not adopted or Reverse Auction is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the 'PRICE BID' and price impacts (if any), already submitted in e-procurement portal/platform, submitted by the bidder shall be opened for deciding the successful bidder, as per BHEL's standard practice. BHEL's decision in this regard will be final and binding on bidder.
- 26.0 Bidders are requested to note that the accepted/agreed tender terms (technical, commercial or on Reverse Auction) in their original offer can not be altered / withdrawn by their own during the processing of tender.
- 27.0 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 <a href="http://www.bhel.com">http://www.bhel.com</a> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.
- 28.0 The offers of the bidders who are on the banned list as also the offer of the bidders, who engages the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.
- 29.0 The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self certified and stamped/ digitally signed (as applicable) 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.
- 30.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 31.0 Suspension of Business dealings with Suppliers/ Contractors: BHEL reserves the right to take action against contractors who fail to perform or indulge in malpractices, by suspending business dealings with them as detailed in Annexure-A.
- 32.0 Indian suppliers, falling under the purview of Public procurement (preference to make in India) order 2017 by Govt. of India, vide order no. P-45021/2/2017-B.E.-II dated 15th June-2017, & all subsequent clarifications can avail the intended benefits, as per provisions of the order subject to minimum local content shall be 50%, margin of Purchase preference shall be 20% & modality of preference to Make in India shall be as per aforesaid order.
  - Any Indian Bidder intending to avail the benefits as shall submit the requisite documents as per the aforesaid order.
- 33.0 For this Procurement, Public Procurement (Preference to Make in India) Order 2017dated 15.06.2017, 28.05.2018 and 29/05/2019 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.
- 34.0 "MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) /Udyog Aadhar Memorandum(UAM) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure-B where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender .is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer."

Any Bidder falling under MSME category, shall furnish the following details & submit documentary evidence/Govt. Certificate etc. in support of the same along with their techno-commercial offer: -

Type under MSME	SC/ST owned	Others
Micro		
Small		
Medium		

**Note: -** If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSME category.

- 35.0 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:
  - i) Amendments/Clarifications/Corrigenda/Errata/Tender change notice (TCN) etc. issued in respect of the tender documents by BHEL
  - ii) Notice Inviting Tender (NIT)
  - iii) Price Schedule
  - iv) Scope of work & other details Annexure-I, Annexure-BOCW, Annexure-SAS-I, Annexure-II, Annexure-III, Annexure for HSE & OHSAS and Special note to bidders.
  - iv) SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOBS
  - v) GENERAL & SPECIAL CONDITIONS OF CONTRACT FOR SERVICES JOB

All the bidders are requested to note that all the errata / technical clarifications / corrigendum / extension etc. shall be published THROUGH E-PROCUREMENT PORTAL <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a> and in website, <a href="www.bhel.com">www.bhel.com</a> & <a href="https://eprocure.gov.in">https://eprocure.gov.in</a> . As such, all the bidders are requested to be in continuous touch with these websites.

for BHARAT HEAVY ELECTRICALS LTD.

#### **DEPUTY MANAGER (PURCHASE)**

Agency	Contact deta	ails
	Address	BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR – EASTERN REGION 2ND FLOOR, BLOCK-DJ, PLOT- 9/1, SECTOR-II, SALT LAKE CITY, KOLKATA – 700 091
BHEL, PSER, Kolkata	Phone no.	033-23398222, 23398224, 23398226, 23211690
Konkata	FAX no.	033-23211960
	E-mail ID	abhijitd@bhel.in, avijitpan@bhel.in, subrata.sen@bhel.in
M/s E- PROCUREMENT	LIMITED HE	CUREMENT ASSISTANCE & TRAINING, M/s E-PROCUREMENT TECHNOLOGIES LPDESK PERSONS AS PER FOLLOWING: -  Bhatt, Support Executive, Ph: +91 7968136823, e-mail ID: ankur.bhatt@eptl.in
TECHNOLOGIES LIMITED	2) Ms. Kanik 3) Mr. Nikhil	a Dani, Support Executive, Ph: +91 7968136872, e-mail ID: <a href="mailto:kanika.dani@eptl.in">kanika.dani@eptl.in</a> Khallas, Support Executive, Ph: +91 7968136848, e-mail ID: <a href="mailto:nikhil@eptl.in">nikhil@eptl.in</a> ant Rajyaguru, Asst. Manager – Implementation & Support, Ph: +91 7968136872, e-mail ID:

#### FORMAT FOR NO DEVIATION CERTIFICATE

(To be submitted in the bidder's letter head)

To, BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR – EASTERN REGION, 2ND FLOOR, BLOCK-DJ, PLOT- 9/1, SECTOR-II, SALT LAKE CITY, KOLKATA – 700 091 FAX – 033-2321-1960

JOB: "OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), GENERATOR AND AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT#1, 210 MW (KWU) AT MEJIA TPS-DVC, WEST BENGAL".

E-Tender No.: PSER:PUR:MJA-S394:19(ENQ:19:PP:0015:PUR:131) Date- 28/01/2020.

Dear Sir/Madam,

**With** reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/modified the tender documents as appeared in the website/newspapers and in case of observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT and confirm our acceptance to reverse auctioning process and we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer strictly in accordance with tender instructions.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the contractor)

#### **PRE – QUALIFICATION CRITERIA**

JOB: "OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), GENERATOR AND AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT#1, 210 MW (KWU) AT MEJIA TPS-DVC, WEST BENGAL".

E-Tender No.: PSER:PUR:MJA-S394:19(ENQ:19:PP:0015:PUR:131) Date- 28/01/2020.

SL NO	CRITERIA
Α	PRE-QUALIFICATION CRITERIA
1.0 (a)	BIDDER SHOULD HAVE AVERAGE ANNUAL TURNOVER OF MINIMUM Rs 26.65 LAKH DURING LAST 3 (THREE) FINANCIAL YEARS, ENDING ON 31-03-2019 AND SHOULD HAVE <b>POSITIVE NET WORTH</b> AS ON LATEST AUDITED ACCOUNTS AS SUBMITTED FOR PARA 1(c).
(b)	BIDDER MUST HAVE <b>EARNED PROFIT</b> IN ANY ONE OF THE LAST THREE FINANCIAL YEARS ENDING ON 31-03-2019. AUDITED BALANCE SHEET AND PROFIT & LOSS ACCOUNT OF THE COMPANY FOR LAST 3 (THREE) FINANCIAL YEARS, ENDING ON 31-03-2019 NEED TO BE SUBMITTED IN SUPPORT OF ABOVE.
(c)	IN CASE AUDITED BALANCE SHEET AND PROFIT & LOSS ACCOUNT HAS NOT BEEN SUBMITTED FOR ALL THREE YEARS INDICATED ABOVE (AS PER 1(b) above) THEN APPLICABLE FINANCIAL AUDITED STATEMENTS SUBMITTED BY THE BIDDER AGAINST THE REQUISITE THREE YEARS WILL BE AVERAGED FOR THREE YEARS.
(d)	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.
2.0	BIDDER SHOULD HAVE EXECUTED AT LEAST ONE JOB OF "ERECTION & COMMISSIONING OF TURBINE" OR "OVERHAULING OF TURBINE" OF AN UNIT OF RATING 200 MW OR ABOVE (KWU DESIGN) IN ANY UTILITY/ INDUSTRIAL PROJECT IN LAST 3 (THREE) YEARS, ENDING ON LATEST DUE DATE OF SUBMISSION OF OFFER.
	RELEVANT SUPPORTING DOCUMENTS FROM PURCHASER / END USER SHALL BE SUBMITTED.
NOTE F	OR SL NO 2.0 ABOVE
	WORD EXECUTED MEANS: THE WORK SHALL HAVE BEEN COMPLETED UPTO RONISATION EVEN IF THE CONTRACT HAS NOT BEEN COMPLETED OR CLOSED.
3.0	BIDDER SHOULD HAVE VALID PAN. RELEVANT SUPPORTING DOCUMENTS SHALL BE SUBMITTED.
4.0	NO CONSORTIUM / JV BIDDING IS ALLOWED FOR THIS TENDER.
5.0	CONSIDERATION OF OFFER WILL BE SUBJECT TO CUSTOMER'S APPROVAL OF BIDDER
6.0	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
Note	AFTER SATISFACTORY FULFILLMENT OF ALL THE ABOVE CRITERIA, OFFER SHALL BE CONSIDERED FOR FURTHER EVALUATION AS PER NIT AND ALL OTHER TERMS OF THE TENDER.

#### **GENERAL INFORMATION:**

VENDOR SHOULD FURNISH INFORMATION REGARDING PROJECTS IN HAND, DETAILS OF CURRENT LITIGATION AND ARBITRATION CASES, ORDERS REGARDING EXCLUSION/ EXPULSION OR BLACK LISTING, IF ANY.

CORRIGENDUM/EXTENSION (IF ANY) OF THIS TENDER WILL BE PUBLISHED IN WEBSITES.

INTERESTED BIDDERS MEETING THE ABOVE QUALIFYING REQUIREMENTS MAY DOWNLOAD TENDER DOCUMENTS FROM AFORESAID WEBSITE(S).

i)	DOWNLOAD OF TENDER DOCUMENT STARTS	28/01/2020
ii)	TENDER DOWNLOAD CLOSES ON	03/02/2020 AT 15:00 HRS. IST
iii)	LAST DATE OF SEEKING CLARIFICATIONS	01/02/2020 UP TO 11:00 HRS. IST
iv)	PRE-BID DISCUSSION (IF REQUIRED) ON	N.A.
v)	LAST DATE OF SUBMISSION OF OFFER	03/02/2020UP TO 15:00 HRS. IST
vi)	DATE OF TECHNO-COMMERCIAL BID OPENING	03/02/2020 AT 16:00 HRS. IST

BHEL RESERVE THE RIGHT TO ACCEPT/REJECT ANY OR ALL THE BIDS WITHOUT ASSIGNING ANY REASON THEREOF.

NOTE: PRE-BID DISCUSSION, IF TAKE PLACE, SHALL FORM PART OF THE TENDER DOCUMENT. NO CLARIFICATIONS/QUIERIES FROM THE TENDERERS AFTER 03/02/2020 (UP TO 11:00 HRS. IST) OR AFTER PRE-BID DISCUSSION (IF TAKES PLACE) SHALL BE **ENTERTAINED BY BHEL.** 

- 1. SCOPE OF WORK, TAXES AND DUTIES & OTHER DETAILS: (ANNEXURE-I: 12 PAGES)
- 2. SPECIFIC CLAUSE WITH RESPECT TO BOCW ACT & CESS ACT: (ANNEXURE-BOCW: 01 PAGE)
- 3. ESSENTIAL CONDITIONS TO BE FULFILLED BY SUCCESSFUL BIDDER: (ANNEXURE-SAS-I: 01 PAGE)
- 4. TENTATIVE LIST OF T & P (ANNEXURE-II: 04 PAGES)
- 5. LIST OF CONSUMABLES TO BE ARRANGED BY THE CONTRACTOR IN ADDITION TO THE NORMAL CONSUMABLES. (ANNEXURE-III: 01 PAGE)
- 6. SPECIAL NOTE TO BIDDERS: 02 PAGES
- 7. ANNEXURE FOR HSE & OHSAS: 16 PAGES
- 8. GENERAL & SPECIAL CONDITIONS OF CONTRACT FOR SERVICES JOB (23 PAGES)
- 9. SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOB (14 PAGES)
- 10. NO DEVIATION CERTIFICATE AS PER PRESCRIBED FORMAT (ANNEXURE-IV)
- 11. PRE-QUALIFICATION CRITERIA (ANNEXURE-V)
- 12. DECLARATION OF THE BIDDERS (ANNEXURE-VI)
- 13. PRICE SCHEDULE
- 14. GENERAL TERMS & CONDITIONS OF REVERSE AUCTION (PART D)
- 15. FORMAT FOR BANK GUARANTEE FOR PERFORMANCE SECURITY
- 16. FORMAT FOR PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)
- 17. RTGS FORMAT (REAL TIME GROSS SETTLEMENT)
- 18. SUSPENSION OF BUSINESS DEALING WITH SUPPLIERS/CONTRACTORS ANNEXURE-A
- 19. FORMAT FOR CERTIFICATE BY CHARTERED ACCOUNTANT ON LETTER HEAD ANNEXURE-B
- 20. FORMAT FOR DECLARATION FOR RELATION IN BHEL
- 21. FORMAT FOR SEEKING CLARIFICATION
- 22. FORMAT FOR DETAILS OF BIDDER
- 23. RTGS DETAILS OF BHEL-PSER FOR EFT BY BIDDER/CONTRACTOR

ALL THE PAGES OF NIT SHALL BE DULY SIGNED BY THE BIDDER WHILE SUBMITTING THE OFFER.

#### **PARTICULARS OF THE TENDER**

A) E-TENDER NUMBER : PSER:PUR:MJA-S394:19(ENQ:19:PP:0015:PUR:131) Date-

28/01/2020.

B) WORK : OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), GENERATOR

AND AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT#1, 210

MW (KWU) AT MEJIA TPS-DVC, WEST BENGAL.

C) TENDER SUBMISSION DUE DATE : ON 03/02/2020 UP TO 15:00 HRS. IST

D) TECHNICAL BID OPENING DATE : ON 03/02/2020 AT 16:00 HRS. IST

E ) PRICE BID OPENING : .....

F) VALIDITY OF OFFER : Six months from the due date of offer submission

(Including extension, if any)

G) MOBILIZATION TIME : As per Annexure-I

H) COMPLETION PERIOD : (As per Annexure-I)

I) TARGET COMPLETION DATE : .....

J) The vendors should furnish the following documents for our scrutiny along with papers for prequalification for qualifying for price bid opening.

- 1) Credential / Experience certificates in line with Pre-Q & requirements in line with tender specifications
- 2) PAN NO & Photo Copy of PAN CARD.
- 3) Photo Copy of GSTN Registration Certificate.
- 4) Latest Banker's certificate for financial soundness.
- 5) Balance sheets & P&L Accounts for the preceding three years in line with Pre-Q.
- 6) Organizational chart
- 7) Relevant list of T&P held by the vendor <u>earmarked for the tendered job</u>
- 8) List of concurrent contracts held by the Contractor.

#### Facilities to be provided to contractors as described below:-

All T&P required / recommended for the work against this tender shall have to be mobilized by the contractor fully at their expense within the quoted price.

Any special T&P i.e. T&P made available by the manufacture of the equipment to the customer can be made available to the contractor free of charges subject to availability at site.

Any consumables required / recommended for the work against this tender shall have to be mobilized by the contractor fully at their expenses within the quoted price.

Regarding other facilities for the contractors the following table clarifies adequately. Vendors are expected to quote considering these without any deviations from the provisions of "Notice Inviting Tender".

Deviated offers are liable for rejection of price bid opening

a)	Water	Free of Charges
b)	Power	Free of Charges
c)	Storage Space	Free of Charges
d)	Covered Space	Free of Charges
e)	Uncovered Space	Free of Charges
f)	E.O.T. Crane	Free of Charges
g)	Operators for the above	Cannot be provided
h)	Residential accommodation for subcontractor's personnel	Cannot be provided
i)	Compressed air	Free of Charges
j)	Workshop facilities as available at site	Cannot be provided
k)	i) Mobile Crane/Hydra for heavy materials, if available	Cannot be provided
K)	ii) Operator for K (i)	Cannot be provided
	iii) Fuel charges for K (i)	Cannot be provided
1)	Other material handling equipment	Cannot be provided
m)	Trailor	Cannot be provided
n)	Sleepers	Cannot be provided
o)	Tarpulins	Cannot be provided
p)	Scaffolding materials	Cannot be provided

No advance is payable to the contractors for mobilizing the site. Any payment can be made only against running bills as per payment terms.

> For & on behalf of BHARAT HEAVY ELECTRICALS LIMITED

> > **DEPUTY MANAGER (PURCHASE)**

#### **DECLARATION OF THE BIDDERS**

JOB: "OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), GENERATOR AND AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT#1, 210 MW (KWU) AT MEJIA TPS-DVC, WEST

BEI	NGAL".
01.	I,
02.	I have gone through the tender specifications, scope of work, terms and conditions mentioned in Annexure as well as General and Special conditions of contract and various stipulations in detail and agree to abide by them and comply with the requirements and intent of specifications.
03.	I also certify that there have been no deviations from the tender requirements in the bid submitted against this tender.
04.	I further certify that I am duly authorized representative of the under mentioned tenderer and hold a valid power of attorney to this effect, a copy of which is enclosed.
	Signature:
	Name:
	Date :

Designation:

Seal:

**Tenderers Name and address** 

#### **PART-D**

#### **General Terms & Conditions of Reverse Auction**

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. ONLINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

- 1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 2. 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.
- 3. 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. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 6. Bidders have to fax the Process Compliance form (Annexure-III of Business Rule Document of Reverse Auction shall be shared to bidders along with intimation of RA schedule) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
- 7. 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, GST and loading factors (for non-compliance 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.
- 8. Reverse auction will be conducted on scheduled date & time.
- 9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 10. 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, (as per Annexure-IV of Business Rule Document of Reverse Auction) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
- 15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) will not be allowed to participate in further RA process provided minimum three bidders are left after removal of H1 bidder. In case of tie for H1 bid (identical online sealed bids), 15 minutes' additional time shall be provided and all the participating bidders shall be informed by mail/message on bidding screen to enable bidders submit revised online sealed bids so as to break the tie.
- 16. In case H1 bidder happen to be MSE and was removed from further bidding but is within L1 + 15% band, then this bid shall also be considered and to be processed in line with 'Public Procurement Policy for Micro & Small Enterprises (MSEs) order, 2012'.

Annexure-I

#### **SCOPE OF WORK**

OVERHAULING OF TURBINE (HPT, IPT, LPT MODULE), GENERATOR AND AUXILIARIES, RLA OF TURBINE & GENERATOR ETC. OF UNIT#1, 210 MW (KWU) AT MEJIA TPS - DVC, WEST BENGAL.

JOB DURATION: 40 DAYS (BG OUT TO BG IN)

Mobilisation Time: within 3 days from date of intimation by BHEL

The scope under this specification is not exhaustive but indicative only. However, any activity covered under the normal course of overhauling job shall be deemed to be within the scope. The scope shall also include, manpower assistance during trim balancing as may be required including post overhauling vibration signature analysis. Time is the essence of this contract. Hence contractor must mobilize site with adequate manpower for round the clock 12 hours shifts work during the entire duration. Workmen will not be allowed to work more than 12hrs a day. Also adequate T&P, Consumables and inspection/measuring and monitoring devices are to be mobilized at site for two shift operations to avoid any hold up during execution of the work. Post overhauling and synchronization of the unit, observation for 72 hrs at stable load and attending all works to rectify defects if any, is included within the scope of work. Prior to mobilization of site list of work men shift wise with the concerned work area supervisor shall be finalized in BHEL-PSER, HQ.

In case any part of the job is not required to be carried out, a deduction will be effected as per percentage shown against those items.

#### NOTE:

- 1) INDUCTION HEATING MACHINE ALONG WITH OPERATOR WILL BE ARRANGED BY BHEL FOR HP, IP TURBINE OPENING. MANPOWER ASSISTANCE DURING PARTING PLANE BOLT/STUD OPENING AND CLOSING WILL BE PROVIDED BY VENDOR. VENDOR TO ARRANGE INDUCTION/ GAS HEATING FOR BREECH NUT OPENING AND CLOSING.
- 2) VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT DIGITAL MAPPING (*VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS*) OF TG ROTOR COUPLING FACES, CASING PARTING PLANE MATCHING, CASING OVALITY, PEDESTAL LEVELLING/ CATENARY & HPT INNER TO OUTER CENETERING.
- 3) VENDOR HAS TO ARRANGE PARTY FOR RLA STUDY AMONG ENLISTED PARTIES.
- 4) NECESSARY SCAFFOLDING MATERIAL TO BE ARRANGED BY VENDOR TO MAKE PLATFORMS.

	TOTAL	(100.00%)
A.	SECTION-I	(11.00%)
	HPT MODULE OVERHAULING	
1	Removal of insulation and all connecting pipes of HP module, which will obstruct during lifting of the HP Module. Dismantling of casing thermocouples. Disposal of insulation and scrap material to designated location including arrangement of its transportation.	0.50 %
2	Checking of all the clearances (roll check, bump check, centering check, horn drop check etc.). Initial/final measurement of reference readings of HP module. Coupled run out to be checked.	0.50 %
3	Removal of breech nut (02 nos.) and CRH pipe lines by induction heating/gas heating & other related pipelines. Locking of pipe lines as required.	0.50 %
4	If required, cutting of breech nut as well as MS pipe UT, subsequent welding and SR of MS pipe joint after re-welding according to BHEL specified welding procedure, necessary arrangement of gas is included in vendor scope within quoted price.	1.00 %
5	Locking of turbine shaft with outer casing by locking arrangement. Removal of both bearing no 01 and 02 bottom halves bearings.	0.25 %
6	Lifting of complete HP module from pedestal and placing on fixture.	0.25 %
7	Tilting of complete module and placing in vertical position.	0.25 %
8	Dismantling of both end glands including removal of sealing segments. Locking of rotor with respect to inner casing and outer casing both axially and radially.	0.25 %
9	Loosening of threaded ring from barrel and removal of the same.	0.25 %

10	Removal of rotor with inner casing from barrel with the help of attachment etc. and placing of the same on fixture in horizontal position for inspection as required.	0.25 %
11	Removal of top half of inner casing after loosening of parting plane studs. Inspection of rotor and stator blades, fins, etc. Assistance during loosening of inner casing parting plane nut by Induction heating equipment.	0.25 %
12	Removal of rotor from bottom half. Removal of sealing segments from both half of HP inner casing.	0.25 %
13	Measurement of parting plane stud length and replacement if required. Testing of spring support on sealing segments, sealing strips etc. and replacement as required.	0.25 %
14	Placement of top half casing on bottom half casing and aligning the alignment shaft.	0.25 %
15	Insertion of inner casing in outer barrel and aligning the inner casing in casing inlet section and fitting in with the fitted keys. Replacement of keys as required.	0.25 %
16	Facial and free run-out measurement. Correction of face as required to get desired swing values. Arrangement of annular surface plate (considering spigot) for coupling face correction is in vendor's scope.	0.25 %
17	Thorough inspection of rotor, casing & gland seals. Minor repair of rotor and inner casing blade shifting.	0.25 %
18	Measurement of axial and radial clearances (flow path) and corrections to be made if required.	0.25 %
19	Ovality checking of HP inner casing. Correction of shroud parting plane gap. Assistance during heat tightening by induction heating equipment.	0.25 %
20	Alumina (size 80 grit) cleaning of the rotor and HP inner casing (top and bottom) blades, studs, sealing segments etc. Arrangement of alumina, blasting nozzles/ other arrangements, enclosure including covering by tarpaulins and proper illumination of enclosure is included in vendor's scope of work.	0.75 %
21	Re-finning of rotor gland area & sealing segments, subsequent machining of the same at site, as may be required. Arrangement of machining fixture included in vendor's scope. To and fro transportation of gland box/ segments for machining to BHEL MU as required is also included in vendor's scope. Replacement of new gland ring/ segments as may be required.	1.00 %
22	Measurement of 'U' seal ring compression. Replacement of 'U' seal rings as may be required. To and fro transportation of 'U' seal ring for machining to BHEL MU as required is also included in vendor's scope.	0.50 %
23	Checking of axial and radial clearances for sealing segments after insertion of the same and placement of the rotor. Dressing of fins to be done wherever damaged.	0.25 %
24	Inspection of HPT internals & fasteners and carrying out cleaning, repair, replacement of components etc. and DPT as required.	0.25 %
25	Turbine shaft insertion in bottom half for final assembly and top half to be placed in position. Tightening of the studs with Induction Heating device.	0.25 %
26	Minor dressing/ hand machining of casing & rotor inter stage fins as may be required to maintain design radial clearance.	0.25 %
27	Roll check and bump check of assembled inner casing. Measurement of axial reference.	0.25 %
28	Assistance during slow speed balancing of HP rotor.	0.25 %
29	Locking of inner casing with rotor for inserting in casing. Inner casing to be inserted in the inlet section after fitting of the internals etc.	0.25 %
30	Assembly of front gland sealing segments, glands etc. with new or re-finned ones & subsequent machining of sealing segments. Hand machining of sealing segment to maintain height is included in vendor scope.	0.25 %
31	Assembled module to be put back on the pedestal.	0.25 %
32	Final connections of all pipe lines, breech nuts, welding of gland steam pipe lines and stress relieving, UT, X-ray of joints including steam gland pipes as applicable. Arrangement of welding rods, filler rod is included in vendor's scope.	0.25 %
B.	SECTIION-II	(10.00%)
	IPT MODULE OVERHAULING	0.5000
1	Insulation removal. Disposal of the same to designated location.  Record reference readings, Perform radial and axial clearance checks, roll check, bump check, horn	0.50 %
2	drop test etc.	0.50 %
3	Assistance to loosen heat tightened bolts (casing) with the help of induction heating machine and lift top half case (outer). Before above activities, locking of IP bottom casing.	0.50 %

4	Perform roll check & centering of inner casing. Assistance to loosen heat tightened bolt of inner casing by induction heating device, removal of studs and lift inner top half casing.	0.50 %
5	Measurement of axial and radial clearances (flow path) and corrections to be made if required.	0.50 %
6	Alumina cleaning of rotor, inner casing and gland segments. Arrangement of alumina (80 grit size), blasting nozzles/ other arrangements, enclosure including covering by tarpaulins and proper illumination of enclosure is included in vendor's scope of work.	0.75 %
7	Thorough inspection of rotor, casing & gland seals. Minor repair of rotor and inner casing blade shifting. Inspect the balancing weights of the rotor for any erosion and replace if necessary.	0.50 %
8	Inspect the upper and lower inlet inserts and its angle rings. Replacement as required including locking.	0.50 %
9	Minor dressing/ hand machining of casing & rotor inter stage fins as may be required to maintain design radial clearance.	0.50 %
10	Re-finning of rotor gland area & sealing segments, subsequent machining of the same at site, as may be required. Arrangement of machining fixture included in vendor's scope. To and fro transportation of gland box/ segments for machining to BHEL MU as required is also included in vendor's scope. Replacement of new gland ring/ segments as may be required.	1.00 %
11	Check free and facial run out of IP rotor and lift rotor out and place it on the rotor stand. Correction of face to achieve desired swing value. Arrangement of annular surface plate (considering spigot) for coupling face correction is in vendor's scope.	1.00 %
12	Assistance during slow speed balancing of IP rotor.	0.50 %
13	Removal of bottom half inner casing & replacement of casing thermo couples.	0.50 %
14	Inspect IPT internals and do maintenance work like cleaning, repair, replacement of components etc. as required. Carry out UT / DPT wherever required.	0.50 %
15	Place lower inner casing in position and insert TSE sensors. Check inner casing ovality. Correction of parting plane gap on shrouds.	0.50 %
16	Place IP rotor and align with HP rotor end. Check radial and axial clearance of shaft seals and blades.	0.25 %
17	Assemble IP inner casing top half. Perform radial and axial clearance check.  Final heat tightening of casing parting plane cap nut by induction heating equipment. Roll check and bump check of inner casing.	0.50 %
18	Assemble IP outer casing top half. Perform radial and axial clearance check. Final heat tightening of outer casing parting plane cap nut by induction heating equipment.	0.50 %
C.	SECTION-III	(11.00 %)
1		
-	Losening of L. P. casing parting plane joints holts and removal of L.P. outer shell	0.25 %
	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints	0.25 %
2	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in	0.25 %
3	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.	0.50 % 0.25 %
	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.	0.50 %
3	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.  Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.	0.50 % 0.25 %
3	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.  Inspection of LP turbine internals and record radial and axial clearances of fixed	0.50 % 0.25 % 0.25 %
3 4 5	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.  Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of	0.50 % 0.25 % 0.25 % 0.25 %
3 4 5	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.  Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of alumina.	0.50 %  0.25 %  0.25 %  0.25 %  0.25 %
3 4 5 6	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone.  Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of alumina.  Thorough inspection of rotor and casing. D P test of rotor and casing in the suspected area /zone.  Deformation and gap checking of inner-inner and inner-outer casing parting plane and correction by	0.50 %  0.25 %  0.25 %  0.25 %  0.25 %
3 4 5 6 7 8	Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone. Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of alumina.  Thorough inspection of rotor and casing. D P test of rotor and casing in the suspected area /zone.  Deformation and gap checking of inner-inner and inner-outer casing parting plane and correction by welding as per BHEL WPS & post welding treatment is included in vendor's scope of work.  Replacement / repair of damaged sealing rings of rotor and cylinder. Inspection and replacement of inter-stage fins as possible of LP Rotor, as per requirement.  Free & facial run-out measurement at both end of LP rotor. Correction of face to achieve desired	0.50 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %
3 4 5 6 7 8	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone. Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of alumina.  Thorough inspection of rotor and casing. D P test of rotor and casing in the suspected area /zone.  Deformation and gap checking of inner-inner and inner-outer casing parting plane and correction by welding as per BHEL WPS & post welding treatment is included in vendor's scope of work.  Replacement / repair of damaged sealing rings of rotor and cylinder. Inspection and replacement of inter-stage fins as possible of LP Rotor, as per requirement.  Free & facial run-out measurement at both end of LP rotor. Correction of face to achieve desired swing value. Arrangement of annular surface plate (considering spigot) for coupling face correction is in vendor's scope. Inspection of balancing weight for looseness and replacement if found damaged.	0.50 %  0.25 %  0.25 %  0.25 %  0.25 %  0.50 %
3 4 5 6 7 8	Loosening of L P casing parting plane joints bolts and removal of LP outer shell.  Covering of condenser tubes from inside the condenser and prepare platform of LP casing joints plane. Jacking LP casing and necessary arrangement of platform. Arrangement of pipe & clamp cover is included in vendor's scope of work. Condenser spring locking and unlocking is in vendor scope.  Loosening of joints plane bolts by gas heating and removal of LP inner-outer casing and LP inner-inner casing.  Record all necessary readings, roll check during dismantling of casing. Dismantling of both end cone. Inspection of LP turbine internals and record radial and axial clearances of fixed and moving blades and rotor gland seals. Removing of LP rotor and placing it on rotor support.  Thorough cleaning of bottom and top casing halves and the rotor. Alumina blasting of LP rotor and top inner-inner, inner-outer casing etc including arrangement of alumina.  Thorough inspection of rotor and casing. D P test of rotor and casing in the suspected area /zone.  Deformation and gap checking of inner-inner and inner-outer casing parting plane and correction by welding as per BHEL WPS & post welding treatment is included in vendor's scope of work.  Replacement / repair of damaged sealing rings of rotor and cylinder. Inspection and replacement of inter-stage fins as possible of LP Rotor, as per requirement.  Free & facial run-out measurement at both end of LP rotor. Correction of face to achieve desired swing value. Arrangement of annular surface plate (considering spigot) for coupling face correction is	0.50 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %

12		
12	Repair/ replacement of inlet/ extractions/ expansion bellows up to 2 numbers as per requirement including arrangement of filler, welding rods and high pressure welders. Necessary	1.00 %
	Compensator protection pipes shall be removed by party for Compensator Inspection.	
13	Ovality checking of LP inner-inner and inner outer casing, correction by grinding as per requirement	0.50 %
14	Placement of LP rotor inside bottom casing.	0.25 %
15	Boxing-up of LP inner- inner and inner- outer casing. Tightening by gas heating.	0.25 %
16	Roll check of LPC. Correction of internal radial and axial clearances.	0.25 %
17	Boxing- up of LP outer cover.	0.25 %
17	Setting of gland boxes as per recommended clearances. Removal and replacement of gland	0.23 70
18	segments and springs, re-fining and hand machining of gland seal segments as required.  Cleaning of LP front and rear seal segments by alumina blasting. Checking and setting of clearances of jack bolts after 24 hours of synchronization.	0.50 %
19	Inspection of safety diaphragms and replacement as required.	0.25%
20	The balancing weights are to be inspected. Hot-well cleaning after box-up of LPC. Opening and	
20	closing of Hot-well manhole.	0.50 %
21	Removal of LP last two stage blades (3L & 3R, 2L&2R as per tech cir. No X-68), cleaning of blades at root, assistance during NFT, matching as required to get improved NFT values, assembly of blade with technological pieces, removal of blades, final assembly of blades with clamping pieces and locking the blades etc. Replacement of defective blade, if required including its transportation from store.	1.00 %
22	Arrangement of NFT team along with operator, technological pieces, for measurement and rectification work for improvement of NFT value. Expert for blade root matching to be arranged by vendor.	1.25%
23	MPI of all dismantled blades and rotor grooves, Arrangement of MPI kits (coil method) including operator is included in the vendor's scope Consumables for MPI (preferably made by MAGNAFLUX) as required are to be supplied by successful bidder.	1.25 %
24	Checking of LPBP spray nozzle. Checking and inspection of exhaust spray nozzles.	0.25 %
D.	SECTION-IV	(12.00%)
	GENERAL ACTIVITIES OF TURBINE	
1	Dismantling and re assembly of TG enclosure.	0.05.04
		0.25 %
2	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for	0.25 % 0.25 %
	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.	0.25 %
3	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.	0.25 % 0.25 %
3 4	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.	0.25 % 0.25 % 0.25 %
3	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections	0.25 % 0.25 %
3 4	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of	0.25 % 0.25 % 0.25 %
3 4 5	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of	0.25 % 0.25 % 0.25 % 0.25 %
3 4 5 6	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.	0.25 % 0.25 % 0.25 % 0.25 % 0.25 %
3 4 5 6	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of	0.25 % 0.25 % 0.25 % 0.25 % 0.25 %
3 4 5 6	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.  Coupling of LP/IP, IP/HP, and HP/ MOP. Reaming and honing of coupling holes and replacement	0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 %
3 4 5 6 7 8	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.  Coupling of LP/IP, IP/HP, and HP/ MOP. Reaming and honing of coupling holes and replacement of coupling bolts including machining of coupling bolts outside plant if required.  Adjustment of bearing clearances and thrust float, boxing-up of all bearings, resetting of bearing yoke keys, pads and oil guard rings after repair / replacement, if any.  Inspection of the clearance between the rotor and the oil guard ring is to be done. If it has exceeded the limit then the fins /sealing strips are to be replaced and machining (if required, outside power plant) to get the designed value. To & fro transportation of the items for machining	0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.75 %
3 4 5 6 7 8	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.  Coupling of LP/IP, IP/HP, and HP/ MOP. Reaming and honing of coupling holes and replacement of coupling bolts including machining of coupling bolts outside plant if required.  Adjustment of bearing clearances and thrust float, boxing-up of all bearings, resetting of bearing yoke keys, pads and oil guard rings after repair / replacement, if any.  Inspection of the clearance between the rotor and the oil guard ring is to be done. If it has exceeded the limit then the fins /sealing strips are to be replaced and machining (if required, outside power plant) to get the designed value. To & fro transportation of the items for machining outside the power plant is also included in vendor's scope.  Adjustment of thrust bearing trip device, over speed trip device, barring gear nozzle etc as applicable.	0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 %
3 4 5 6 7 8 9	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.  Coupling of LP/IP, IP/HP, and HP/ MOP. Reaming and honing of coupling holes and replacement of coupling bolts including machining of coupling bolts outside plant if required.  Adjustment of bearing clearances and thrust float, boxing-up of all bearings, resetting of bearing yoke keys, pads and oil guard rings after repair / replacement, if any.  Inspection of the clearance between the rotor and the oil guard ring is to be done. If it has exceeded the limit then the fins /sealing strips are to be replaced and machining (if required, outside power plant) to get the designed value. To & fro transportation of the items for machining outside the power plant is also included in vendor's scope.	0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.25 % 0.75 %
3 4 5 6 7 8 9	Opening of bearing pedestal covers and removal of bearings (Brg 1 to Brg 4) for inspection. Recording of rotor and casing control dimensions.  Coupled run out and float of rotor system to be checked and recorded.  De-coupling of LP rotor, IP rotor, HP rotor and MOP.  Alignment check of turbine rotors and corrections  DP test and ultrasonic test of turbine bearings, thrust pads. for cracks metal bonding. UT & DPT of new bearings if replacement is required.  Blue matching of torus piece with base plate if required to the extent possible at site. Replacement of bearings if found not acceptable.  Coupling of LP/IP, IP/HP, and HP/ MOP. Reaming and honing of coupling holes and replacement of coupling bolts including machining of coupling bolts outside plant if required.  Adjustment of bearing clearances and thrust float, boxing-up of all bearings, resetting of bearing yoke keys, pads and oil guard rings after repair / replacement, if any.  Inspection of the clearance between the rotor and the oil guard ring is to be done. If it has exceeded the limit then the fins /sealing strips are to be replaced and machining (if required, outside power plant) to get the designed value. To & fro transportation of the items for machining outside the power plant is also included in vendor's scope.  Adjustment of thrust bearing trip device, over speed trip device, barring gear nozzle etc as applicable. Servicing of over speed trip bolts, inspection of turning gear overrun clutch as applicable.  Centering check, rolling check, axial bump check, swing check and Horn drop test of HP, IP & LP cylinder, Fixing and Lubrication of all sliding keys and packers of the cylinders etc. maintaining proper	0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.25 %  0.75 %  0.25 %  0.75 %

by vendor. Proper scaffolding to be carried out by vendor.  Oil flushing of turbine bearings, resetting of throttles including periodic cleaning of bearing filter, basket filter of MOT, thrust bearings duplex filters. Setting of JOP header pressure and checking of individual lift. Bearings normalization after oil flushing.  Putting the machine on barring gear with proper adjustment of jacking oil and Lube oil pressure at bearings. Assistance during barring gear.  Carrying out hanger setting & adjustment of turbine area hangers in MS, CRH & HRH, PRDS & BP line in turbine area piping etc. as given below. Hanger cold & hot readings are to be recorded. Scaffolding has to be made by the vendor as per requirement.  a. Checking of Freeness of hangers.  b. Checking of fouling of hanger with the structure/wall  c. Removal of welding of hanger support with surrounding structure for the purpose of temporary supports if any.  d. Checking for any visual deviation of hanger elevation noticeable or looseness of hangers.  e. Adjustment of necessary hangers & supports as per requirement.  f. Any modification / rectification for the above job as required to be done by the vendor. Arrangement of hanger experts duly vetted by BHEL Site-In-Charge to be arranged by Vendor. Scaffolding as reguired.  Arrangement of FOUR crane operators duly vetted by customer and BHEL sit-in-charge for round the clock basis during entire duration of work.  Painting of ENCLOSURE, LP outer casing, pedestals, GEN & Exciter, governing and LPBP rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. (supply of paints included in vendor's scope).  Machining of ENCLOSURE, LP outer casing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included in vendor's scope).  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 25 TON	
16 basket filter of MOT, thrust bearings, resetting of throttles: including periodic cleaning of bearing filter, basket filter of MOT, thrust bearing duplex filters. Setting of JOP header pressure and checking of individual lift. Bearings normalization after oil flushing.  17 Putting the machine on barring gear with proper adjustment of jacking oil and Lube oil pressure at bearings. Assistance during barring gear.  18 Carrying out hanger setting & adjustment of turbine area hangers in MS, CRH & HRH, PRDS & BP line in turbine area piping etc. as given below. Hanger cold & hot readings are to be recorded. Scaffolding has to be made by the vendor as per requirement.  2 Checking of Freeness of hangers.  3 Checking of foreness of hangers.  4 Checking of foreness of hangers.  5 Checking of foreness of hangers.  6 Chapter of hanger support with surrounding structure for the purpose of temporary supports if any.  7 Checking for any visual deviation of hanger elevation noticeable or looseness of hangers.  8 c. Adjustment of necessary hangers & supports as per requirement.  1 Any modification / rectification for the above job as required to be done by the vendor. Arrangement of hanger experts duly vetted by BHEL Site-in-Charge to be arranged by Vendor. Scaffolding as required.  19 Arrangement of FOUR crane operators duly vetted by customer and BHEL sit-in-charge for round the clock basis during entire duration of work.  Painting of ENCLOSURE, LP outer casing, pedestals, GEN & Exciter, governing and LPBP rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. Supply of paints included in vendor's scope).  10 Maching of casing and bearing voke keys etc.  11 To and fro transportation of stow speed balancing machine from Kolaghat TPS/ WBPDCL to MELJA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is with	0.75 %
Dearings. Assistance during barring gear.  Carrying out hanger setting & adjustment of turbine area hangers in MS, CRH & HRH, PRDS & BP line in turbine area piping etc. as given below. Hanger cold & hot readings are to be recorded. Scaffolding has to be made by the vendor as per requirement.  a. Checking of Froeness of hangers. b. Checking of Froeness of hangers. c. Removal of welding of hanger with the structure/wall c. Removal of welding of hanger with the structure/wall c. Removal of welding of hanger support with surrounding structure for the purpose of temporary supports if any. d. Checking for any visual deviation of hanger elevation noticeable or looseness of hangers. e. Adjustment of necessary hangers & supports as per requirement. f. Any modification / rectification for the above job as required to be done by the vendor. Arrangement of FoUR crane operators duly vetted by BHEL Site-In-Charge to be arranged by Vendor. Scaffolding as required.  Parinting of ENCLOSURE, LP outer casing, pedestals, GEN & Exciter, governing and LPBP rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. (supply of paints included in vendor's scope).  Machining of casing and bearing yoke keys etc. To and fro transportation of slow speed balancing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 23 25 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS.  DIGITAL PROFILE MAPPING  1. HP stop and control valve with servomotors - 4 Sets  III. IP stop and control valve	0.25 %
Carrying out hanger setting & adjustment of turbine area hangers in MS, CRH & HRH, PRDS & BP line in turbine area piping etc. as given below. Hanger cold & hot readings are to be recorded. Scaffolding has to be made by the vendor as per requirement.  a. Checking of Freeness of hangers. b. Checking of fouling of hanger with the structure/wall c. Removal of welding of hanger support with surrounding structure for the purpose of temporary supports if any. d. Checking for any visual deviation of hanger elevation noticeable or looseness of hangers. e. Adjustment of necessary hangers & supports as per requirement. f. Any modification / rectification for the above job as required to be done by the vendor. Arrangement of hanger experts duly vetted by BHEL Site-In-Charge to be arranged by Vendor. Scaffolding as required.  Arrangement of FOUR crane operators duly vetted by customer and BHEL sit-in-charge for round the clock basis during entire duration of work.  Painting of ENCLOSURE, LP outer casing, pedestals, GEN & Exciter, governing and LPBP rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. (supply of paints included in vendor's scope).  Machining of casing and bearing yoke keys etc. To and fro transportation of slows speed balancing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES. 4 NOS. OF 25 TONNES. 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24. Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS. DIGITAL PROFILE MAPPING TO TON TONES HYDRAULING  1. THE STOP OF COUPLING FACE RUN OUT CHECKING 2. TURBINE CASIN	0.25 %
Painting of ENCLOSURE, LP outer casing, pedestals, GEN & Exciter, governing and LPBP rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. (supply of paints included in vendor's scope).  21 Machining of casing and bearing yoke keys etc.  To and fro transportation of slow speed balancing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 23 25 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24 Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING CATENARY 5. HPT INNER CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets  III. LP bypass stop and control valve with servomotors - 4 Sets  IV. CRH NRV with servomotors - 2 Set  V. Extraction NRV - Full set  VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	0.75 %
20 rack with standard color code, Servomotors of HP, IP, HPBP & LPBP stop and control valves. (supply of paints included in vendor's scope).  21 Machining of casing and bearing yoke keys etc.  To and fro transportation of slow speed balancing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 52 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24 Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL PROFILE MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets  II. IP stop and control valve with servomotors - 4 Sets  III. LP bypass stop and control valve with servomotors - 2 Set  V. Extraction NRV - Full set  VI. CRH NRV with servomotors - 4 Sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	1.00 %
21 Machining of casing and bearing yoke keys etc.  To and fro transportation of slow speed balancing machine from Kolaghat TPS/ WBPDCL to MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 23 25 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24 Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING PARTING PLANE MATCHING 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets  II. IP stop and control valve with servomotors - 4 Sets  III. LP bypass stop and control valve with servomotors - 2 set  V. Extraction NRV - Full set  VI. CRH NRV with servomotors - 4 Sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	1.50 %
MEJIA TPS/ DVC Site including arrangement of necessary trailer (32 feet). Transportation of stub shaft also included from same place. Fabrication of fixture for adaptor shaft for HP and IP rotors slow speed balancing by welding/machining etc. is within the vendor scope.  ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 23 25 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24 Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  I. HP stop and control valve with servomotors - 4 Sets III. IP stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	0.50 %
ARRANGEMENT OF SURFACE PLATE-0.01 MM ACCURACY, 4NOS. OF 50 TONNES, 4 NOS. OF 25 TONNES & 4 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.  24 Assistance during trim balancing of machine.  E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets III. IP stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	1.50 %
E. SECTION-V  DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  I. HP stop and control valve with servomotors - 4 Sets III. IP stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	0.75 %
DIGITAL PROFILE MAPPING  VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  I. HP stop and control valve with servomotors - 4 Sets III. IP stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	0.25 %
VENDOR HAS TO ARRANGE SPECIFIC REPUTED PARTY TO CARRY OUT FOLLOWING WORKS BY DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets II. IP stop and control valve with servomotors - 4 Sets III. LP bypass stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	(10.00%)
DIGITAL PROFILE MAPPING TECHNIQUE. VENDOR SHOULD HAVE CREDENTIAL OF SUCH WORKS.  DIGITAL MAPPING TO BE APPLIED ON FOLLOWING WORKS:  1. TG ROTOR COUPLING FACE RUN OUT CHECKING 2. TURBINE CASING PARTING PLANE MATCHING 3. TURBINE CASING OVALITY MEASUREMENT 4. TG PEDESTAL LEVELLING/ CATENARY 5. HPT INNER CASING CENTERING WITH OUTER CASING  F. SECTION-VI  TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  1. HP stop and control valve with servomotors - 4 Sets II. IP stop and control valve with servomotors - 4 Sets III. LP bypass stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	
TURBINE VALVES & LP BYPASS SYSTEM OVERHAULING  I. HP stop and control valve with servomotors - 4 Sets II. IP stop and control valve with servomotors - 4 Sets III. LP bypass stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	
I. HP stop and control valve with servomotors - 4 Sets II. IP stop and control valve with servomotors - 4 Sets III. LP bypass stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	(2.50%)
II. IP stop and control valve with servomotors - 4 Sets III. LP bypass stop and control valve with servomotors - 4 Sets IV. CRH NRV with servomotors - 2 set V. Extraction NRV - Full set VI. LPBP Water injection Valves - 4 sets  WORK TO BE DONE AS UNDER FOR TURBINE VALVES: -	
purposes b) Draining of insulation as required, preparation of platform 7 scanfording for execution purposes b) Draining of oil from valve servomotors housing. Disconnection of oil pipelines and steam leak off lines.	

Decoupling of valve and servomotors stem. Removal of actuator and valve cover with valve cone. Arrangement of gas/ induction heating for opening valve casing studs. Dismantling of servomotors and valves. Cleaning of all components, replacement of damaged parts of valves of operation. Modification of valve bush and cone clearances, if found necessary. Assembly of valve and actuator as per the designed clearances. Blue matching of all valve seat with seating. Lapping to be done with fabrication of lapping devices as per requirement Placement of valve and servomotors and coupling etc. Dismantling and assembly of C&I probes along with limit switch. Calibration and setting of the strokes. Reconnection of oil and steam lines. i) Dismantling and fixing of position transmitter. j) Setting of valve characteristics. Replacement of valve seats, minor repair/ welding/ machining of spindle/ stems/ seats etc as required (if required machining outside plant including transportation) Assistance (manpower and consumable) during Seat cutting of valves as required. Erection of scaffolding, as required. SECTION-VII G. (1.00%)HP BYPASS SYSTEM, STEAM AND SPRAY VALVES WITH ACTUATORS HP bypass main valves with actuator -02 sets II. Spray valves (BPE and BD) with actuators -03 nos WORK TO BE DONE AS UNDER: -Changing of oil in tank, changing of filters, servicing of oil unit and its oil flushing. b) Checking of nitrogen pressure and filling as necessary. Nitrogen will be arranged by BHEL/ customer. Oil pressure setting and adjustment as necessary. Servicing of servomotors of BP, BPE and BD valves etc. Dismantling of valves, lapping and blue matching etc. Assistance during seat cutting of valves. Final assembly of valve and actuators etc. f) Dismantling of HP bypass main valves with actuator (02 sets). Replacement of any damaged/worn out components. Dismantling/assembly of spray valve with actuators (03 nos.). Replacement of any damaged/worn out components including valve seat. Replacement of valve seats, as required. Assistance (manpower and consumable) during Seat cutting of valves as required. Erection of scaffolding, as required. j) Dismantling/assembly/calibration of valve strokes, C&I system and limit switches. Arrangement of one expert duly vetted by BHEL Site Engineer in charge for servicing of HPBP along with hydraulic servomotors/ actuators and calibration. H. **SECTION-VIII** (0.50%)MAIN GOVERNING RACK / LPBP RACKS OVERHAULING WORK TO BE DONE AS UNDER: -Overhauling of governing rack including EHG. Recalibration and resetting of HPSV's and CV's, IPSV's and CV's, LPBP SV's and CV's, CRH NRV and EXT. NRV's along with checking of test valves (if required) etc. Assistance during checking of governing characteristics and recalibration as per protocols / standard curves supplied by BHEL. Complete overhauling of LP bypass rack elements and assistance during recalibration of rack & LPBP SV & CVs. Servicing of LPBP water injection valves (04 nos) including servomotors. Overhauling of Pilot valves of LPBP stop and control valve. Servicing of over speed trip device, thrust bearing trip device and assistance while setting. **SECTION-IX** (1.00%)MS & HRH STRAINER REMOVAL, INSPECTION, CORRECTION AND RE-INSTALLATION (MS & HRH Steam strainers - 2 nos. each) WORK TO BE DONE AS UNDER: a) Removal of steam strainers from the strainer housing after removing the insulation and cutting of the pipelines as required. Arrangement of gas for dismantling. Checking the inner space of the strainer housing, Inspection, DPT etc of the steam strainers and other components. Welding between strainer and disc, If required.

	c) Re-assembling of steam strainers into the strainer housing as per the standard procedure and re-welding of all pipelines as per the drawing. This includes cutting of the drain pipe, IBR welding, stress relieving, radiography etc & providing required consumables & equipments also. Re insulation of the pipe lines, strainer body, as required. Supply of welding rods is included in bidder's scope.			
J.	SECTION-X	(4.00%)		
	LIFTING OF IP OUTER BOTTOM CASING TO ATTEND STEAM LEAKAGE FROM HRH BOTTOM INLET FLANGE			
	WORK TO BE DONE AS UNDER: -  a) Locking of all IP extraction bellow, extraction pipe & cross around pipe. b) Cutting of all extraction pipe, cross around pipes. c) Removal of radial & axial key and axial block. d) Lifting of casing & place on suitable position. e) Covering of all open pipelines. f) Attending Steam leakage from bottom inlet flange. Necessary correction in flange faces. g) Placement of IPT bottom outer casing in position & Fitting of radial & axial keys and welding inlet and extraction bellows. h) Replacement of bellows if required. i) Removal of all locking as was required during lifting of casing j) DPT/UT/Radiography of all the joints as applicable along with stress relieving.			
K.	SECTION-XI	(10.00%)		
	RLA TESTS			
	VENDOR HAS TO ARRANGE ONE PARTY (AMONG BELOW LISTED PARTIES) FOR COMPLETE TURBINE & VALVES RLA STUDY. TESTS TO BE DONE STRICTLY AS PER BHEL/ HARDWAR RLA SCHEDULE LOCATIONS.  Major Components:  1. HPT module components including blades of casing & rotor 2. IPT module components including blades of casing & rotor 3. LPT casing, components including blades of casing & rotor 4. Valve & Strainer components, Chests & fasteners etc.  Number of locations (+/- 20 %) on which different tests to be carried out: 1. MPI: around 500 locations 2. UT: around 115 locations 3. Hardness: around 200 locations 4. Replica: around 100 locations 5. DPT: around 125 locations 5. DPT: around 125 locations 6. LIST OF PARTIES: 1. M/s BEQUEREL INDUSTRIES PVT.LTD, PLOT 33, RUSHIKESH, INGOLE NAGAR, MODERN COOP. HOUSING SOCIETY, WARDHA ROAD, NAGPUR, MAHARASHTRA STATE- 440 005 Phone: 0712-2284352, FAX: 0712-2286665, Mobile: 09822565879 Email:Becquerel-ndt@rediffmail.com, Becquerel-ndt@gmail.com, www.info.apliedndt.com			
	<ol> <li>POWERTEST ASIA PVT. LTD., (An ISO 9001 Certified Company) 26, Vikaspuri   S.R.Nagar (post)   Hyderabad - 500 038   INDIA tel +91 40 2371 3343 / 2371 7752   mobile +91 970 4567 252   For all Technical / General / Coordination related queries: info@powertestasia.comFor all service Quotations: office@powertestasia.comFor all Sales: marketing@powertestasia.com</li> <li>TURBO METALLURGICAL SERVICES An ISO 9001 Certified small scale industry GST: PRC_36ANMPN2708H1ZV Specialist in Residual Life Assessment study, Nondestructive Testing &amp; Failure analysis Reg. No. 0737/ 11, B–38/A, BHEL, AIE, R.C.Puram, Hyderabad-32 Contact: Mr Kondala Rao, Metallurgist, CEO; Mobile 09490165792, 09441828440, Ph. 08455-241825, WWW.turbondtrla.com, kkraokatta @yahoo.co.in,</li> </ol>			
	4. SSVS Metallurgical & NDT Services 302, Sreenivasa Nilayam, 63, Methodis Colony, Begumpet, Hyderabad – 5000 016 Land Line: 0091-40-23401813, Cell: +91-9849485646, email: pv_shastry@yahoo.com			

L	SECTION – XII	(23.00%)
	GENERATOR	
1	Assistance for Generator air tightness test to identify leakage areas if any when the machine is in barring gear up to the filling station including seal oil pipelines and system too. Rectification of all leakages.	0.20%
2	Dismantling of brush gear assembly and removal of excitation cables. Removal and disconnection of links with bus ducts. Disconnection of excitation cables	0.10%
3	Removal of Bearing No 5, 6, pedestal covers and bearing liner top halves after checking all clearances.	0.20%
4	Checking of coupled run out and free run out.	0.10%
5	Decoupling of LP/GENERATOR, removal of jammed coupling bolts if any, checking of initial alignment and free run-out of rotor coupling and journals (for bearing no 5,6).	0.20%
6	Measurement of air gap and magnetic offset and IR values of rotor and stator winding.	0.10%
7	Necessary arrangement for Rotor Thread out by attachment of special fixtures. Threading out of rotor. Necessary care to be taken during rotor thread out to avoid ingress of any foreign materials inside the rotor and generator stator. Dismantling of rotor fan blades.	0.20%
8	Dismantling of seal body, seal ring, and oil catchers after recording all requisite clearances and IR values.	0.20%
9	ROTOR THREAD OUT	0.50%
10	Rotor purge test. Successful bidder has to arrange for the transportation of the kit from BHEL HQ and back.	0.50%
11	Initial hydraulic test of stator winding after removing water header spool piece. Repair/replacement of rubber grommets, Teflon pipes, joints and insulation covers etc.	0.10%
12	Dismantling of stator terminal and water header bushing for inspection of porcelain insulators, inspection/replacement of all rubber items and re assembly including filling of silicon putty and re insulating the bushing.	0.10%
13	Thorough cleaning of stator internals with acetone (acetone of laboratory grade is to be used for the cleaning,), removing of oil, any foreign particles, mud accumulation from the overhang portion.	0.25%
14	Removal of Bearing. No 5, 6 including pedestal no 5&6 after taking necessary IR values.	0.20%
15	Removal, dismantling, chemical cleaning (by nylon brushes and soap solution). Painting of water boxes including supply of the paints. Hydraulic test, reassembly and fitting back to its original position of all hydrogen coolers including replacement of all rubber items. Chemical cleaning of cooler if required will be carried out.	0.50%
16	Inspection of looseness of stator slot wedges and re wedging if required	0.50%
17	Checking of stator winding, spacers, bracing cords, support brackets, fasteners etc and correction of defects as per requirement.	0.50%
18	Checking of stator core bars for absence of technological bolts and removal of the same.	0.50%
19	Opening of generator manhole and cleaning of casing from inside.	0.20%
20	Checking of all the RTDs of generator and bearings. Replacement of RTDs to be done as per the requirement	0.50%
21	Improving stator winding IR/PI value by puffing hot dry compressed air through water headers and filament lamp heating simultaneously. 20 nos. of halogen lamps of 1000 watts each are to be arranged by the vendor within the quoted price. Fire proof tarpaulin for stator and rotor heating are to be arranged.	0.50%
23	Air tightness test of rotor at 4 kg/cm2 for 6 hrs with nitogen. Replacement of CC bolts and sealing washers of both inner and outer CC bolts. Removal of fan hub and re mounting it after servicing of CC bolts.	0.50%
24	DPT of bearing the following  1. Bearing babbit,	1.00%

	2. Roots of fan blades,	
	3. Seal babbit (both old and new),	
	4. Coupling bolts	
	and UT of the following	
	Bearing babbit,     Sool babbit (both old and now)	
	<ol> <li>Seal babbit (both old and new),</li> <li>Rotor Retaining rings</li> </ol>	
	3 3	
25	Arrangement of test kit along with operator within vendor scope.  Cleaning and parting plane matching of bearings, oil guards, oil-catchers, sealing covers	
23	and seal bodies.	0.20%
26	Replacement of oil catcher's / guard fins as per requirement and setting of	
20	clearance with rotor. Measurement and inspection of existing hydrogen seal ring and	0.40%
	replacement of hydrogen seal rings.	0.4070
27	Checking for matching of bearing with respective housing and rotor journals. Requisite	
	clearances/ interference and dimensional measurements are to be maintained.	0.50%
28	Cleaning and varnishing of rotor and stator with dry oxygen. Becktol red and thinner 234	0.500/
	will be provided by the customer.	0.50%
29	Final hydraulic test of the stator winding	0.20%
30	Improving stator winding IR/PI value by continuous puffing and hot air blowing as well as	
	lamp heating.	0.20%
31	Carrying out OD machining of slip ring and groove cutting, polishing at barring gear in-situ condition	
	to achieve the run-out within design value and to remove any ovality/taper of slip ring. All necessary	1.50%
	arrangement for machining within vendor scope.	
32	After dimensional measurement of slip ring if required then replacement of slip ring with new one	
	with ID machining of new slip ring.	
	Arrangement of Heating oven for slip ring replacement within customer scope but to and fro	2.00%
	transport of heating oven from Kolaghat TPS (WB) / Bokaro TPS (Jharkhand) is within	
00	vendor scope.	4.000/
33	ROTOR THREAD IN and placement on the bearings.	1.00%
34	Alignment of LP/GENERATOR.	0.50%
35	Measurement of air gap, magnetic offset after alignment.	0.20%
36	Reassembly of generator which includes fixing of rotor fan blades, end shields, fan shields,	
	oil catchers, shaft seals, oil and water pipelines etc after ensuring proper IR values. Within	0.75%
	the quoted price, machining of all oil catchers along with their to and fro transportation is	0.7070
	within the scope of successful bidder.	
37	Clearance between fan blades and fan shields to be corrected to avoid fouling.	0.20%
38	Reassembly of generator which includes oil catchers, shaft seals, oil and water pipelines	0.50%
	etc after ensuring proper IR values.	
39	Box up of bearing no 5 & 6. Replacement of bearings if required.	0.50%
40	Coupling of LP/Generator including stretching of coupling bolts. Reaming and honing of	0.50%
	coupling as required.	
41	Checking of lifting of rotor at bearing no 5 & 6 by charging JOP lines.	0.20%
42	Placement of the bearing pedestal no. 6 and box up of bearing as per the	0.50%
1.5	specification after ensuring the required IR value of the pedestal.	
43	Cleaning of brush gear, adjustment of the brushes and re assembly of the brush gear.	0.20%
44	Air tightness test of Generator in barring gear and arrest the leakages if any up to gas filling	0.50%
45	station.	
45	Assistance during Oil flushing of bearings with filters, normalization of lube Oil system and	0.20%
A /	normalization of seal oil system.	-
46	Assistance during CO2/Hydrogen filling in to the generator and arresting leakages if any in	0.20%
	the system.	
47	Deputation of expert for CC bolts servicing along with necessary T&Ps for a period of 5	0.50%

	days is to be done by the vendor within the quoted price.	
48	Deputation of one expert winder duly acceptable to BHEL site Engineer for a period of 10	
	days is to be arranged by successful vendor within the quoted price.	1.00%
49	Modification of gas trap lines and hydrogen coolers' vent lines including replacement of valves if required.	0.25%
50	Assistance during re-commissioning of seal oil system & adjustment/replacement of DPR if	
	required and re-commissioning of seal oil system in barring gear as well as 3000 rpm.	0.20%
51	Assistance during following electrical tests and all RLA test of generator.  1. STATOR: - i. IR and PI ii. DC Winding Resistance iii. Digital ELCID test. iv. Wedge Deflection Test v. Core Flux Test (including cable laying). vi. Tan Delta & Partial Discharge.  2. ROTOR: - i. RSO ii. Winding Resistance iii. AC Impedance iv. Voltage Balance v. IR measurement.	0.25%
52	The successful bidder has to arrange test kit along with the operator for carrying out the following tests on generator for RLA study and reports to be handed over to BHEL for preparation and analysis of RLA reports.  i. DC high voltage test in step voltage of generator stator, ii. Microstructure of retaining rings and rotor journal, iii. Rotor magnetization test and de magnetization if required iv. Surge comparison test	1.50%
53	Assistance during NFT of the stator overhang portion.	
М	Assistance during NFT of the stator overhang portion.  SECTION-XIII  (	
	C&I SCOPE: (Vendor has to depute o1 (one) no C&I expert and 01 (one) no helper having expertise on following jobs for entire duration of overhauling).	
1	Dismantling, cleaning, checking and replacement of faulty items (if any), and refitting of the following:  Temperature sensors (THERMOCOUPLES) from TG body, all TG bearings and TG Valves of HP, IP & LP turbine including related TSE instruments/sensors.	0.20%
2	Removal, checking & installation of IP Turbine Inner casing metal temperature thermocouples.	0.20%
3	Dismantling, Calibration and refitting of control valves position feedback transmitters for HPCV (L&R), IPCV (L&R) and LPBP CV (L&R) etc.	0.20%
4	Dismantling, cleaning, checking, replacement of faulty items (if any), and refitting of all the metal/steam temperature thermocouples/TSE sensors of Stop valves and control valves and their respective cables upto JBs related to turbine.	0.20%
5	Dismantling, Checking and refitting of turbine speed sensors.	0.20%
6	Dismantling, cleaning, checking, servicing, replacement of faulty items (if any), and refitting of all the limit switches on turbine body and turbine valves like HPSV (L&R), IPSV (L&R), LPBP SV (L&R), LPBP water injection valves, CRH NRV (L&R), HPCV (L&R), IPCV (L&R) and LPBP CV (L&R).	0.20%
7	Dismantling, cleaning, calibration, checking, servicing, replacement of faulty items (if any), and refitting of all turbine related (along with governing rack and LPBP rack) pressure gauges, temperature gauges, pressure switches, limit switches and solenoid valves. Checking of generator RTDs/TCs and replacement of faulty items.	0.20%
8	Checking and calibration of turbine governing rack and LPBP governing rack mounted instruments.  Dismantling, checking, refitting and replacement of faulty RTDs of exciter.	0.20%

9	Total dismantling, calibration assistance and refitting of all turbovisory, VMS and related instruments.	0.40%
N	SECTION-XIV	(2.00%)
	ASSISTANCE DURING COMMISSIONING/SYNCHRONIZATION OF THE UNIT AND	
	OBSERVATION FOR 72 HRS AFTER SYNCRONIZATION OF MACHINE	

#### REQUIRED FROM SUCCESSFUL BIDDER

- 01. 4NOS. OF 50 TONNES, 2 NOS. OF 25 TONNES & 2 NOS. OF 100 TONNES HYDRAULIC JACKS WITH PUMPING UNITS IN GOOD WORKING CONDITIONS.
- 02. GRANITE SURFACE PLATE OF 0.01 MM ACCURACY OF 1 X 1 METER2 SIZE.
- 03. T & P AND IMTES FOR PERFORMING THE SUBJECT JOB
- 04. SPECIAL TOOLS REQUIRED FOR C& I JOBS:

Digital Multimeter (4 ½)
 Walkie-Talkie/ Telephone set
 Screw driver set
 Combination plier
 Soldering Iron & acc.
 Crimping tool
 O2 nos
 O1 set
 O3 nos
 O3nos
 O1 no.

7. Apart from above list, T&P's used for mechanical job are also required viz. Dial gauge, feeler

#### General scope of work and terms:

- 01. Transportation of spares from CUSTOMER store to site and return to store if not used.
- 02. Transportation of special T& Ps, lifting tackles etc from CUSTOMER store to site and return to store after job completion.
- 03. Issuing and returning of materials from CUSTOMER store and returning back & material reconciliation.
- 04. General illumination is available but for carrying out overhauling job any illumination is required is to be arranged.
- 05. After completion of work, the area shall be cleared up to the satisfaction of BHEL Site Engineer in charge/CUSTOMER. Disposal of scrap/ waste/ insulation / debris generated while overhauling work to be disposed off at predetermined place as indicated by CUSTOMER by the bidder including transportation of the waste.
- O6. The contractor shall have to bear for the loss of any damage to the items belonging to CUSTOMER due to Improper handling / storing or improper fitting etc. and necessary recoveries will be made from the Contractor.
- 07. The contractor shall erect approach platform as per requirement and dismantle the same. Scaffolding material shall be brought by the contractor.
- 08. The contractor shall be fully responsible for maintenance of records of his employees.
- 09. Contractor shall engage his personnel round the clock and shall submit detailed work plan, bar chart, manpower deployment plan (in nos. and skill level only) round the clock and work progress and these shall be discussed and agreed prior to award of contract.
- 10. Housekeeping: Maintaining proper cleanliness around the work area is the contractor's responsibility. The contractor has to depute separately identified persons exclusively for area cleaning.
- 11. Safety Requirements: All persons working shall strictly follow the CUSTOMER safety norms. Contractor shall be solely responsible for ensuring the safety of his all worker / employees.
- 12. Contractor shall provide and ensure the proper use of all safety gadgets to / by his all employees / workers engaged for this work. Contractor shall provide following safety gadgets confirming to the IS norms: safety helmets, safety goggles, safety shoes, hand gloves, & safety belts. Failing to the issue or use of the safety gadgets based on the requirement (abiding to the safety norms) a penalty of Rs. 2000/-shall be imposed.
- 13. The contractor shall ensure that safety related awareness training has been given to his all workers / employees at the time of start of contract and it is mandatory to obtain identity card for the same from CUSTOMER safety department.
- 14. Qualified safety supervisor(s) must be engaged by the contractor to take care of safety exclusively of his workers / employees engaged for the subject work. Contractor shall also ensure that there shall not be any safety hazard to the persons / machines in the vicinity due to his activities.
- 15. All lifting tools and tackles to be used shall be having the valid test certificate (with proper identification mark on the tools) from government approved agency and the same shall be produced to Engineer before start of work.
- 16. Other Requirements: Contractor shall ensure that environmental related awareness training has been given to his workers / employees at the time of start of contract.
- 17. Agency has to arrange their own incoming / outgoing Road permit for the T&Ps, materials, consumables etc required for the work.
- 18. Deployment of one Safety Officer (round the clock) having qualification of Diploma in Safety for entire duration of the job.

For all the above cases arrangement of, Trolley-Tractor, Hydra Crane & other Material handling equipment (if required) will be in vendor's scope

#### TAXES & DUTIES

ITAKES	& DUTIES
1.1	All taxes excluding GST with applicable cess &BOCW Cess (mentioned elsewhere in the Tender)but including, Charges, Royalties, , any State or Central Levy and other Taxes for materials if any obtained for the work and for the execution of the contract shall be borne by the bidder and shall not be payable extra by BHEL.
1.2	Any increase in the above at any stage during execution including extension of the contract, if any, shall have to be borne by the contractor. Quoted/ accepted rates/ price shall be inclusive of all such requirements.
1.3	GST with applicable Cess, legally leviable & payable by the successful bidder as per GST Law, shall be paid extra by BHEL. Hence, Bidder shall not include GST with applicable Cess in their quoted price.
1.4	The successful bidder shall furnish proof of GST registration with GSTN Portal covering the services under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by the successful bidder on BHEL for this project/ work.
1.5	Since GST on output will be paid by BHEL separately as enumerated above, bidder's quoted rates/ price should be after considering the Input Credit under GST law at their end.
1.6	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.
1.7	TDS under GST shall be deducted at applicable rates on gross invoice value from the running bills.
1.8	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 shall be as per following.  BHEL GSTN – 19AAACB4146P1ZC  NAME: Bharat Heavy Electricals Limited
	ADDRESS: BHEL-PSER, SAS Site Office, DVC-MEJIA TPS, PO: MTPS, BANKURA, WB - 722183, India
1.9	Bidder to intimate immediately 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 through following communication mode for enabling BHEL to meet its GST related compliances  Portal Address – Shall be intimated later And Email Address – Shall be intimated later.
	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 attributable to the bidder.
1.10	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 Section 31 of GST Act & Rules referred there under.
1.11	Bidder shall Comply with the Time limit prescribed under the GST Law and rules thereof for raising of the tax invoice. If any supply of goods is applicable, Bidder shall also ensure prompt delivery of Goods after dispatch.
1.12	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 attributable to the bidder, GST amount shall be recoverable from the bidder along with interest levied / leviable on BHEL, as the case may be.
1.13	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.
1.14	Way Bill: Successful Bidder shall arrange 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.
1.15	Any new taxes & duties, if imposed subsequent to the due date of offer submission as per NIT & TCN, by statutory authority during contract period (including extensions for which delay is not attributable to the bidder), shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL. However, bidder shall obtain prior approval from BHEL before depositing any such new taxes and duties.
	Benefits and/or abolition of all existing taxes must be passed on to BHEL against new taxes, if any, introduced at a later date.

#### ANNEXURE - BOCW

## Specific clause wrt BOCW Act & Cess Act

- 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.
- 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. In case where the contractor has been accorded written approval by the Construction Manager and the contractor is required to furnish information in Form I and deposit the Cess under the Building and other Construction Workers' Welfare Cess Act, 1996, fails to do so, BHEL reserves right to impose penalty at the rate of 30% of Cess Amount.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. It shall 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
- 10. 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.
- 11. It shall be responsibility of the Building Worker engaged by the Contractor and registered as a beneficiary under the Building and other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 to contribute to the Fund at such rate per mensem as may be specified by the State government by notification in the Official Gazette. Where such beneficiary authorizes the contractor being his employer to deduct his contribution from his monthly wages and to remit the same, the contractor shall remit such contribution to the Building and other construction Workers' Welfare Board in such manner as may be directed by the Board, within the fifteen days from such deduction.
- 12. If 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 withhold a reasonable amount from the payables to discharge any obligations on behalf of Contractors. The reasonable amount shall be decided by the Construction Manager in consultation with Resident Accounts Officer & Head HR and shall be final.
- 13. 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.

#### ANNEXURE – SAS-I

#### ESSENTIAL CONDITIONS TO BE FULFILLED BY SUCCESSFUL BIDDER

- 01. Successful bidder has to arrange 6 copies of overhauling reports which will include various protocols with necessary data / MOMs / important correspondences / log sheets/ colour photographs etc. and the books 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.
- 02. Bidder has to arrange to provide PC with internet connection, with colour printer and Xerox paper as required for taking print out compatible with WINDOW vista version or, latest version loaded with necessary software, during entire period of execution of job at site, for preparing /maintaining / up keeping of various correspondences/ protocols/log shts. etc. . PC shall be operated by PC operator conversant with AUTOCAD and other softwares to be arranged by the successful bidder within the scope. All data thus stored during the execution of job shall be handed over to Resident Manager at site after the Overhauling for submission to Customer. In case vendor fails to provide the PC operator, Rs 8000/- per month shall be deducted from vendor's bill.
- 03. Successful bidder is to render services for proper up-keepment of BHEL site office as required. Full time office boy is required to be provided by the successful bidder at site for up keepment of site office.
- 04. After dismantling and during execution of the job, successful bidder has to suitably tag the components and sub-assemblies for trace ability and store properly before final assembly. This is as per Doc. Nos. PSER:PMX:002:94 & PSER:PMX:001:94.
- 05. Process control of Special Processes like Welding and Heat Treatment shall be carried by successful bidder as per Doc. Nos. PSER:QLY:001:99, PSER:QLY:001:94 (3 VOL) and PSER:QLY:003:99.
- 06. Proper segregation, identification, tagging and up-keep of all dismantled items at work site during job execution have to be done by successful bidder.
- 07. Successful bidder is to obtain necessary "No Dues" certificates before de-mobilisation from site.
- 08. Successful bidder is to comply with all the statutory and regulatory norms, rules and practices as applicable for the job/site.
- O9. Successful bidder shall provide valid calibration certificates for IMTEs, fitness certificates for T&Ps and Construction Equipment (e.g. wire ropes, hand operated chain pulley blocks, pulling and lifting machines, electric welding generators, arc welding transformers etc.). Calibration of IMTEs is to be arranged from the accredited agencies. Calibration certificates should have the traceability as per national/international standards. At work site the IMTEs, T&Ps and Construction Equipment shall be checked/tested/inspected by BHEL engineers. The procedure for fitness testing and storage preservation and maintenance of Construction Equipment and T&Ps shall be as per Doc. Nos. PSER:FEX:001:94, PSER:SAS(CAL):016:95 and PSER:FEX:002:94 available with BHEL site engineers.
- 10. Successful bidder should follow all safety norms at work site. The Doc. No.PSER:PMX: 004:94 in this regard is available with BHEL engineer at site.
- 11. Any NDT within the scope shall be as per Non-Destructive Examination manual (Doc. No. PSER: QLY:002:99 available with BHEL site engineer.
- 12. Provision of packaged drinking water facility at BHEL site office.
- 13. The successful bidder is to arrange a full set of First Aid kit for attending to manpower deployed by him at site as per requirement.
- 14. The successful bidder is to arrange extra illumination at work site to augment the existing site illumination if required to enable round-the-clock safe working.
- 15. Within the quoted price, the bidder has to arrange new set of utensils (cooking & serving), stoves, gas cylinders / gas oven, electric heaters, chairs, tables etc. including cooks / helpers for preparation of food for 6 to 8 nos. BHEL persons. The successful bidder will also be responsible for taking over and vacate the BHEL mess quarter. Bidder has to provide foods for the cook and helper.
- 16. Vendor shall submit shall submit daily job plan & progress report to the concerned BHEL engineer, review the programme from time to time.

#### ANNEXURE-II

#### TENTATIVE LIST OF T & P

The list of T & P are provided hereunder to be mobilized by the contractor as per mobilization time mentioned in Annexure-I. These will be physically verified by BHEL site Engineer. BHEL has the authority to penalize the contractor suitably including termination of contract if the required T&P's are not mobilized timely. However, it may be noted that the T&P list is only a guide for bidding and any other T&P as may be required for the job has to be mobilized by the successful bidder.

omer 1	of as may be required for the job has to be mobilized by t	ne successiui bid	uei.
Sl. No.	MEASURING TOOLS		Quantity
1.01	Dial Indicator with Magnetic Base		6 sets
1.01	Dial indicator – button type and LASTWARD (3 mm		2 set each
1.02	travel, 25 mm dia dial with links for coupling		2 set each
	alignment)		
1.03	Slip gauge upt 10 mm		1 set
1.03	Micro-head level, accuracy 0.1 mm per metre, 150 mm		1 no.
1.04	long		1 110.
1.05	Square level for leveling major parts for installation		1 no.
1.05	(accuracy 0.1 mm, 150 mmX150 mm)		i no.
1.06	Vernier Caliper 150 mm and 300 mm		1 no. each
1.07	Set of spring caliper and divider(150 mm)		1 set
1.08	Zenith caliper for marking (150 mm)		1 no.
1.09	Steel Scale 150 mm, 300 mm, 1000 mm		2 nos each
1.10	Telescopic gauge up to 150 mm		1 set
1.11	Bore dial gauge up to 75 mm		1 set
1.12	Inside micrometer up to 1500 mm		1 set
1.13	Outside micrometer	0-25 mm	2 nos
		0-50 mm	1 no.
		50-200 mm	1 no.
		200-300 mm	1 no.
		300-400 mm	1 no.
		400-500 mm	1 no.
1.14	Taper Gauge up to 20 mm		1 no.
1.15	Taper gauge $0.1 - 10 \text{ mm}$		1 no
1.16	Feeler gauge 100 mm, 200 mm, 300 mm long (from		1 set each
	0.03 to 1.0 mm thick)		
1.17	Feeler strip 0.03 mm, 0.04 mm, 0.05 mm, 0.10 mm X		5 each
	300 mm long		
1.18	Thread Gauge M4 to M56		1 set
1.19	Depth micrometer 0-25 mm		1 no.
1.20	Surface plate 300 mm X 300 mm		1 no.
1.21	Combination set		1 no.
1.22	Ball pen gauge for 3 to 10 mm bore		1 set
1.23	Measuring steel tape 3 M, 15 M		2 each
1.24	500 V hand / motorized megger		1 no.
1.25	1000 V hand / motorized megger		1 no.
1.26	250 V megger		1 no.
1.27	3 <sup>1</sup> / <sub>2</sub> Digit digital multimeter		1 no.

## **CUTTING TOOL**

2.01	Tap set M 5 to M42 (including M27 & m 33)		1 set each
2.02	Die set M 14 to M 65		1 set each
2.03	Pistol Drill	6 mm	2 nos.
	-Do-	15 mm	1 no.
	-Do- with magnetic stand	19 mm	1 no.
2.04	Straight grinder GQ 4		3 nos.
2.05	Angle grinder AG 7 and AG 5		2 nos. each
2.06	Pistol grinder		1 no.
2.07	Flexible grinder with necessary accessories		2 nos.
2.08	Bench grinder 150 mm		1 no.
2.09	Hole punch up to 32 mm		1 set
2.10	Easy out up to M 24		1 set
2.11	Taper reamer up to 18 mm		1 set
2.12	Hand ratchet		2 nos.

## LIFTING TOOL

3.01	Sling- 8 mm, 2.5 metre long tip to tip along with 150 mm eye at both end		1 pair
3.02	Sling 12 mm, eye at both end of 300 mm,	1.5 metre long	1 pair
	, ,	2.5 metre long	1 pair
		3.5 metre long	1 pair
3.03	Sling 19 mm, eye at both end of 450 mm,	2.0 metre long	1 pair
	,	3.0 metre long	1 pair
3.04	Sling 25 mm, eye at both end of 450 mm,	3.0 metre long	1 pair
	•	6.0 metre long	1 pair
3.05	Eye bolt 10, 12, 14 & 16	C	4 nos. each
3.06	Eye bolt 20, 24, 27, 36 & 42		2 nos. each
3.07	D-shackles pin dia. 10 mm, 12 mm		5 pairs each
	D-shackles pin dia. 20 mm, 25 mm, 32 mm, 36 mm &		1 pair each
	44 mm		1
3.08	Ratchet hoist 0.5 T		1 no.
3.09	Chain block 2 T, 5 T		1 no. each
3.10	Manila rope 25 mm, 30 metre long		1 pair
3.11	Cotton rope 25 mm, 10 metre long		1 no.

## OTHER T & P

Gas welding machine	1 set
Hand lamp with 30 metre cable	6 nos.
Switch board with 50 metre cord	2 nos.
Scissors-300 mm	1 set
Shim cutter – 350 mm	1 set
Magnifying glass – 75 mm dia	1 no.
Mirror with handle	1 no.
Vacuum cleaner	1 no.
	Hand lamp with 30 metre cable Switch board with 50 metre cord Scissors-300 mm Shim cutter – 350 mm Magnifying glass – 75 mm dia Mirror with handle

4.09 4.10 4.11 4.12	Carpenter's saw Carpenter's chisel Open "D" D.E. spanner 36X41, 41X46 S.E. span "D" spanner 46, 50, 55, 65, 70, 75, 80, 85, 90, 95, 100, 105	1 no. 3 nos. 2 nos. each 1 no each
4.13	Slogging spanners 36, 41, 55, 65	2 nos. each
4.14	Slogging spanner 46 mm	4 nos.
4.15	Slogging spanners 50, 60, 70, 75, 80, 85, 90, 95, 100, 105	1 each
4.16	Box spanner set with straight handle, ratchet handle, universal extension piece – all heavy duty, up to 46 mm	1 set
4.17	Tubular spanner 20 to 46 mm	1 set
4.18	Allen key set 4 to 27	2 sets
4.19	Pipe wrench 150, 350 & 450 mm	1 no. each
4.20	Slide wrench 200 mm, 300 mm	2 nos. each
4.21	Spray gun for generator varnishing / painting with necessary high pressure hose	1 no.
4.22	High pressure air hose at least 30 metre long	1 no.
4.23	Tubular spanner	1 set
4.24	Gland packing remover	1 set

## **HAND TOOLS**

5.01	Chisels (Chrome-Vanadium) 1 mm	6 nos.
5.02	Center punch (Chrome-Vanadium) small & big	1 each
5.03	Letter punch – 4 mm size	1 set
5.04	Number punch – 6 mm size	1 set
5.05	Bearing scrapper – half round and triangular	2 nos. each
5.06	Flat scrapper (made out of 1.5 inch power saw blades	8 nos.
2.00	and pipes	0 1105.
5.07	Hammer 250 gms., 500 gms.	1 no. each
5.08	Hammer 1 kg., 2 kg.	3 nos. each
5.09	Hammer 5 kg.	2 nos.
5.10	Hammer 8 kg.	1 no.
5.11	Copper Hammer 2 kg.	1` no.
5.12	Lead Hammer 2 kg.	1 no.
5.13	Nylon mallet	3 nos.
5.14	Needle file	2 sets
5.15	Assorted file	4 dozens
5.16	Screw driver 150 mm, 300 mm, 450 mm (Taparia	2 nos. each
	make)	
5.17	Tommy bar 32 mm X 1 metre	1 no.
5.18	Crow bar – big and small	2 nos. each
5.19	Hole bar (Assorted size)	4 nos.
5.20	Hacksaw frame (good quality)	2 nos.
5.21	Pliers, cutting nose, grip, O/S circlip, I/S circlip	2 nos. each
5.22	Magnetic needle for dust in small holes	1 no.
5.23	Oil stone (rough and smooth)	6 nos. each
5.24	H.S.S. 12 mm square section X 100 mm parallel bits	2 nos.
	(accurate with 0.01 mm in section)	

#### 5.25 Copper rod 12 mm dia., 25 mm dia., 50 mm dia., 300 1 pc. Each mm length 5.26 Bench vice 150 mm 2 nos. Channel lock 150 mm 5.27 2 nos. 5.28 Vice grip 150 mm 1 no. Cutogen gas cutting set with hose, jubilee clamps and 5.29 1 set regulators 5.30 Hydraulic jacks (50 tons capacity) 4 nos. Welding generators (with lead holder) 1 no. 5.31 5.32 Brazing torch set 2 no. 5.33 Cutting nozzle no 19, 20 2 no each

E-TENDER ENQUIRY NO.: PSER:PUR:MJA-S394:19(ENQ:19:PP:0015:PUR:131)

Hydraulic jacks (25 tons and 100 tons capacity)

5.34

The above list of T&P's are not exhaustive but indicative only .Any shortage may be made up by the vendor as may be required for overall job completion.

Date- 28/01/2020

2 nos. each

### ANNEXURE - III

## LIST OF CONSUMABLES TO BE ARRANGED BY THE CONTRACTOR IN ADDITION TO THE NORMAL CONSUMABLES.

1) Dye penetration test kit As may be required. 2) Emery paper (fine and coarse) As may be required. 3) Emery clothes sheets. As may be required 4) Eutectic electrode L & T – 670/680 As may be required. 5) All consumables as may be required for welding, brazing, gas cutting etc. 6) Petrol, Diesel As may be required. 7) Rustolene. As may be required. 8) 25 mm thick planks X 200mm wideX 3000 mm long for keeping dismantled parts 9) Asbestos cloth and asbestos powder. As may be required 10) ACETONE. As may be required 11) Stag B, Molykote, Holdtite, M seals, Hylomar, Selastic etc. As may be required.

Any other consumables, supplementary requirement has to be provided by the vendor for successful completion of the job.

### SPECIAL NOTE TO BIDDERS

#### 01. LUMPSUM PRICE:

The bidders should quote lump sum price for the total scope of work mentioned in ANNEXURE– I Compliance to Annexure SAS – I is mandatory. If successful bidder fails for compliance of Annexure SAS I, then total expenditure towards the said items shall be deducted from the successful bidder's bill.

- 02. Successful bidder has to submit the following documents on and during execution of the job:
  - a) Labour license for the subject work.
  - b) Insurance coverage of the total workers engaged for the job.
  - c) Monthly wage certificate of the total work force.
  - d) EPF for the workers engaged.
  - e) Submit safety plan.
  - f) Submit bar chart / job completion schedule as & when asked for.
  - g) No due certificate from MEJIA TPS/DVC personnel dept.

<u>Successful bidder has to obtain "No Objection Certificates" from concerned depts. and P&A dept. of customer.</u>

The scope under the specification (as per Annexure –I of scope of work) is not exhaustive but indicative only. However, any activity covered under the normal course of works mentioned in annexure-I at MEJIA TPS/DVC shall be deemed to be within the scope.

Transportation of materials, T & Ps including Special T & Ps, lifting tackles etc from MEJIA TPS/DVC site stores to work spot as per requirement along with material reconciliation and also transportation of the T&P's / Instruments etc. from BHEL-KOL HQ / OTHER Eastern Region Sites to MEJIA TPS/DVC site & back, is included in the scope of the vendor at their own cost. In case any part of the job is not carried out, a deduction will be effected as per percentage shown against those items.

- O3. Any related work not detailed under the above schedule of work but found essential for completion of the job has to be executed by vendor free of cost.
- O4. The vendor has to strictly comply with the SAFETY RULES & procedures of the MEJIA TPS /DVC. It is suggested that the prospective bidders may visit & contact MEJIA TPS/DVC to know further details of their safety rules before quoting their price.
- Disposal of scrap/ waste/ insulation generated while overhauling work to be disposed off at predetermined place as indicated by MEJIA TPS/DVC by the bidder including transportation of the waste.
- O6. Defect liability period against bad workmanship shall be 6 (six) months from the date of commissioning/synchronization of the unit. During this period if any re work are required to be carried out, then the same are to be done by the successful bidder. The successful bidder shall be responsible for timely execution and quality of overhauling job and stand guarantee against any defect due to bad workmanship. Once defect is registered within defect liability period, the successful bidder has to rectify the same free of cost during next available opportunity.
- Arrangement of four crane operators duly vetted by customer and BHEL site engineer in charge for round the clock basis during entire duration of work.
- O8. Security Deposit: Vendor shall furnish security deposit as per clause no.1.8 of GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB] and clause no (D) of SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOBS. Security Deposit shall be released to vendor after successful completion of defect liability period of six (06) months and this shall be read in conjunction with clause no.1.8.9 of GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB].
- 09. **Terms of Payment:** Clause no (F), Sub clause 03(Terms of Payment), SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOBS shall be read as bellow:
  - a) 80% of the contract value plus BOCW cess (as applicable) but excluding the amount of GST shall be payable against submission of three progressive running bills. Each of the billed amount shall correspond to the quantum of job actually completed and to that effect the claim can be preferred

- based on percentage allotments (to be given in the work order) made. This, however, has to be certified by the resident manager / engineer of the site.
- b) 10% of contract value plus BOCW cess (as applicable) but excluding the amount of GST shall be payable on submission of statutory documents & 'no due certificate from customer's personnel department'.
- c) Balance 10% of contract value plus BOCW cess (as applicable) but excluding the amount of GST shall be payable after synchronization of the unit and on receipt of final payment by BHEL from Customer MEJIA TPS / DVC & after confirmation of full GST Credit to BHEL. Any Interest if levied thereon for reasons elaborated in Tax clause of the tender which is not attributable to BHEL will be recovered for the Final Payment / Retention.

BHEL at its discretion may further split up the percentage break up given in billing schedule and effect payment to suit site condition, cash flow requirement etc. according to progress of work.

- d) Applicable GST shall be released to the vendor upon compliance of following:
  - i. Vendor declaring such Invoice in his GSTR-1
  - ii. Material Receipt Certificate (MRC)/ Engineering Protocol
  - iii. Confirmation of payment of GST thereon by vendor on GSTN Portal
  - iv. Above is subject to receipt of goods / service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.
- 10. EXTRA WORK RATES CURRENTLY BEING ADMITTED BY BHEL, PS-ER [Page-10, SPECIFIC TERMS AND CONDITIONS FOR SERVICES JOBS, clause no. A (a) & A (b)] shall be read as below:-
  - a) Average single man hour rate including overtime if any, supervision, T&P, other site expenses and incidentals including consumables as certified by site-in-charge of BHEL.
     Rs 60/- per man hour (Rupees sixty per man hour only)
  - b) Same as above (a) but excluding supply of consumables by vendor. Rs 40/- per man hour (Rupees forty per man hour only)

## **HSE & OHSAS**

1.0	OCCUPATIONAL HEALTH, SAFETY & ENVIRONMENT MANAGEMENT/	
	QUALITY ASSURANCE PROGRAMME:  BHEL, Power Sector Regions (PSNR/ER/WR/SR) are each certified for ISO 9001. Quality of work to customer's satisfaction and fulfillment of system	
	requirements are the essence of ISO 9001 certification. BHEL, PS Region have HSE certification (ISO 14001 & OHSAS 18001) and therefore Contractor	
	also shall organize / plan/ perform all their activities to meet with the applicable requirements of these standards.	
1.1	HSE (Health, safety & Environment): Contractor will comply with HSE (Health, safety & Environment) requirements of BHEL. HSE requirements in brief, are given below :-	
1.1.1	Contractor will nominate one of their qualified and experienced employees as Safety Officer, who will be responsible for all HSE related issues of contractors work area. Safety Officer will have authority to stop any activity, in case he observes that the activity is not being carried out in safe manner. He will conduct surprise inspection as well as periodic inspection/drill (at least once in a Week) and submit such reports to BHEL. He will conduct periodic meetings with working groups and explain HSE issues and use of PPEs to them. Reports of such meetings will be submitted to BHEL. Contractor will develop suitable work procedures based upon HSE guidelines and OCPs and implement it. Such work procedures will consist of Area of work, T&P Details, Work Procedure, PPE requirements etc.	
	Contractor should highlight the requirement of safety to staff and labour through daily tool box meeting before start of the days job	
1.1.2	The contractor shall ensure that proper job specific health check-up is done by medical professional for their employees during initial mobilization and thereafter if there is any change of job.	
1.1.3	Following personnel protective equipments (PPEs), in adequate numbers, will be made available at site & their regular use by all concerned will be ensured :-	
	- HELMET - SAFETY GOGGLES & WELDING FACE SHIELDS	
	- SAFETY BELTS AND PROTECTIVE NET FOR WORKING AT HEIGHT	
	- SAFETY SHOES - EAR PLUG	
	- ANY OTHER SAFETY EQUIPMENT REQUIRED FOR SAFE COMPLETION OF THE WORK	

1.1.4	Providing appropriate First Aid facilities for prompt treatment of injuries and illness at work place. Arranging training to contractor workmen/ employees for giving first aid.
1.1.5	Arranging ambulance in case of any emergency situation .
1.1.6	Identification of nearest hospital and health check-up of workmen/employees
1.1.7	Providing filtered drinking water at work place in cool container.
1.1.8	Providing appropriate fire fighting equipment at designated work place and nominate a fire officer/warden adequately trained for his job.
1.1.9	Identification of nearest fire station and display contact telephone nos. / person's name around work places for cases of emergencies .
1.1.10	Providing adequate no. of 24 V sources and ensure that no hand lamps are operating at voltage level above 24 Volts.
1.1.11	Fulfilling safety requirements at all power tapping points.
1.1.12	Red & White caution tape of proper width(1.5 to 2 inch) to be used for cordoning unsafe area such as open trench, excavation area etc.
1.1.13	Providing contractors company logo on cloths /uniform/ proper identity cards with photographs, for correct identification of people working at project site .
1.1.14	High/ Low pressure welders to be identified with separate colour clothings. No welders will be deployed without passing appropriate tests and holding valid welding certificates. Approved welding procedure should be displayed at work place.
1.1.15	Displaying safe handling procedures for all chemicals such as lube oil, acid, alkali, sealing compounds etc , at work place .
1.1.16	All scaffolding/ platforms should be made from materials of appropriate quality/grade so that these are safe for use. It should be certified/declared safe for use by an experienced contractor person, before any scaffolding/platform is used.
1.1.17	All T&Ps/ MMEs should be of reputed brand/appropriate quality & must have valid test/calibration certificates bearing endorsement from competent authority of BHEL.
1.1.18	Ensure that the regulatory requirement of excessive weight limit (to carry/lift/move weights beyond prescribed limits) for male and female workers are complied with.
1.1.19	Safety slogan, Safety/ Caution boards, wherever required to be displayed in consultation with BHEL.

1.1.20	Take suitable measures for waste management and environment related laws/legislation as a part of normal construction activities. Compliance with the legal requirements on storage/ disposal of paint drums (including the empty ones), Lubricant containers, Chemical Containers, and transportation and storage of hazardous chemicals will be strictly maintained. Ensure proper cleanliness of work place, housekeeping and waste management (including proper waste disposal) on daily basis.
1.1.21	The Contractor is required to provide proper safety net systems where ever the hazard of fall from height is present as per instruction of BHEL Engineer. The safety nets shall be fire resistant, duly tested and shall be of ISI Mark and the nets shall be located as per site requirements to arrest or to reduce the consequences of a possible fall of persons working at different heights.
1.1.22	All applicable OCPs (Operational control procedures) will be followed by contractor as per BHEL instructions. This will be done as part of normal scope of work. List of such OCPs is given below. In case any other OCP is found to be applicable during the execution of work at site, then contractor will follow this as well, within quoted rate. These OCPs (applicable ones) will be made available to contractor during work execution at site. However for reference purpose, these are kept with Safety Officer of BHEL at the Power Sector Regional HQ, or available in downloadable format in the website, which may be refereed by contractor, if they so desire.
	<ul><li>□ OCP for safe handling of chemicals</li><li>□ OCP for Electrical safety</li></ul>
	□ OCP for energy conservation
	☐ OCP for safe welding and gas cutting operation
	☐ OCP for fire safety
	OCP for safety in use of hand tools
	OCP for first aid
	<ul><li>□ OCP for food safety at canteen</li><li>□ OCP for safety in use of cranes</li></ul>
	J
	☐ OCP for storage and handing of gas cylinders

	OCP for manual arc welding
	OCP for safe use of helmets
	OCP for good house keeping
	OCP for working at height
	OCP for safe excavation
	OCP for safe filling of Hydrogen in cylinder
	OCP for illumination
	OCP for handling and erection of heavy metals
	OCP for safe acid cleaning
	OCP for safe alkali boil out
	OCP for safe oil flushing
	OCP for steam blowing
	OCP for safe working in confined area
	OCP for safe operation of passenger lift, material hoists & cages
	OCP for Vehicle maintenance
	OCP for safe radiography
	OCP for waste disposal
	OCP for working at night
	OCP for blasting
	OCP for DG Set
	OCP for handling & storage of mineral wool
	OCP for drilling, reaming and grinding(machining) etc.
	OCP for hydraulic test
	OCP for spray insulation
	OCP for trial run of rotary equipment
	OCP for stress relieving
	OCP for material preservation
	OCP for cable laying/tray work
	OCP for electrical maintenance
	OCP for transformer charging
	OCP for safe handling of battery system
	OCP for computer operation
	OCP for storage in open yard
	OCP for sanitary maintenance
	OCP for batching
	OCP for piling rig operation
	OCP for gas distribution test

	OCP for cleaning of hotwell /
	deaerator
]	OCP for electro-resistance heating
]	OCP for compressor operation
]	OCP for O&M of control of AC plant & system
]	OCP for air compressor
]	OCP for passivation
	OCP for Safe EDTA Cleaning
]	OCP for Safe Chemical cleaning of Pre boiler system
]	OCP for Safe Boiler Light up
[	OCP for Safe Rolling and Synchronisation
	OCP for Safe Loading of Unit
	SAFETY AND CLEANLINESS:
1.3	The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per discretion of BHEL or its authorised officials (Site Construction Manager) to prevent loss of human lives, injuries, to personne engaged and damage to property. Before commencing the work, the contractor shall submit a "Safety Plan" to the above authorised BHEL official and obtain approval on the same. The safety plan shall indicate in detail the measures that would be taken by the contractor to ensure safety of men, equipment, materials and environment during execution of the work. This will also include an organization structure, role and responsibilities of the concerned key personnel, the safety practices that will be followed, PPEs deployed, plan for handling critical activities and emergencies.  If the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions issued by the authorised BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor.
1.4	During the course of construction, alternation or repairs, scrap with protruding nail, sharp edge etc and all other debris shall be kept clean from working areas, passage, ways and stairs in and around site.
-	Combustible scrap and debris shall be removed at regular intervals during the course of execution. Safe means shall be provided to facilitate such removal. The combustible scrap should be stored in safe place away from the plant materials to avoid fire accidents. The area shall be chosen in consultation with the Engineer and to be cordoned off.
1.6	Rigging equipment for materials handling shall be inspected prior to use in
	each shift and as necessary during its use to ensure that it is safe. Defective

	rigging equipment will be removed from service.
1.7	Rigging equipment shall not be loaded in excess of its recommended safe working load. Rigging equipment, when not in use, shall be removed from the original work area so as not to present a hazard to employees.
1.8	Contractor shall notify the engineer, of his intention to bring on to site any equipment or any container, with liquid or gaseous fuel or other substance which may create a hazard. The Engineer shall have the right to prescribe the condition under which such equipment or container may be handled and used during the performance of the works and the contractor shall strictly adhere to such instructions. The Engineer shall have the right to inspect any construction tool and to forbid its use, if in his opinion it is unsafe. No claim due to such prohibition will be entertained.
1.9	Where it is necessary to provide and/or store petroleum products or petroleum mixture & explosives, the contractor shall be responsible for carrying out such provision / storage in accordance with the rules & regulations laid down in the relevant petroleum act, explosive act and petroleum and carbide of calcium manual, published by the chief inspector of explosives of India. All such storage shall have prior approval if necessary from the chief inspector of explosives of any other statutory authority. The contractor shall be responsible for obtainin the same.
1.10	Cylinders shall be moved by tilting and rolling them on their bottom edges. The shall not be intentionally dragged, struck or permitted to strike each othe violently.
1.11	When cylinders are transported by powered vehicle they shall be secured in a vertical position.
1.12	All workmen of the contractor working on construction area shall wear safety shoes, hand gloves, safety helmets and safety belt as applicable. The contractor shall provide to its workforce and ensure the use of following personnel protective equipment as found necessary and as directed by BHEL.
1.12.1	Safety Helmets conforming to IS-2965: 1984
1.12.2	Safety Belts conforming to IS-3521:1983
1.12.3	Safety Shoes conforming to IS-1989: 1978
1.12.4	Eye and face protection devices conforming to IS – 8620 : 1977 & IS – 8950 : 1978.

1.12.5	Hand and body protection devices conforming to IS – 2575 : 1975 and IS – 6994 : 1973, IS – 8907 : 1970 & 8619 : 1977
1.13	The contractor shall insure his workmen against all accidents and the policy shall be presented to BHEL Engineer on demand. Other wise, BHEL will arrange the same and the expenditure towards this will be debited to the contractor. In case of a fatal or disabling injury accident to any person at construction site due to lapses by the contractor, the victim and/or his/her dependants shall be compensated by the contractor as per statutory requirements. However, if considered necessary BHEL shall have the right to impose appropriate financial penalty on contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependence before imposing any such penalty. Appropriate enquiry shall be held by BHEL giving opportunity to the contractor for presenting his case. Above safety conditions are not exhaustive but gives an idea for the contractor and contractor shall adhere to all safety precaution given by the Engineer at site.
1.14	The contractor shall arrange at his cost adequate lighting facilities e.g. flood lighting, hand lamps, area lighting etc. at various levels for safe and proper working operations during night hours at the work spot as well as at the preassembly area.
1.15	The contractor shall be responsible for provision of all the safety notices and safety equipment as enjoined on him by the application of relevant statutory regulation / provisions and/or as called upon by BHEL from time to time. He shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instruction that may endanger safety of men, equipment and material.
1.16	The contractor shall provide temporary fencing wherever required as a safety measure against accident and damage to properties. Suitable caution notices shall be displayed where access to any part is found to be unsafe and hazardous.
1.17	Contractor shall ensure safety of all the workmen, material and equipment either belonging to him or to others working at site. He shall observe safety rules and codes applied by BHEL without exception.
1.18	It will be the responsibility of the contractor to ensure safe lifting of the equipment, taking due precaution to avoid any accident and damage to other equipment and personnel. All requisite tests and inspection of handling

	equipment, tools & tackle shall be periodically done by the contractor. Defective equipment shall be removed from service. Any equipment shall not be loaded in excess of its recommended safe working load.
1.19	The contractor shall provide necessary first aid facilities for all his employees, representatives and workmen at site and BHEL shall have no obligation in this regard. The first aid boxes should be placed at various elevations so as to make them available within the reach and at the quickest possible time. The contractor should conduct periodical first –aid classes to keep his supervisor and Engineers properly trained for attending to any emergency.
1.20	All the contractor's supervisory personnel and sufficient number of workers shall be trained for fire protection systems. Enough number of such trained personne must be available during the tenure of contract. Contractor should nominate his supervisor to coordinate and implement the safety measures.
1.21	Contractor shall provide enough fire protecting equipment of the types and numbers at his office, stores, temporary structure in labour colony etc. Such fire protection equipment shall be easy and kept open at all times. The fire extinguishers shall be properly refilled and kept ready which should be certified at periodic intervals. The date of changing should be marked on the Cylinders. A other fire safety measures as laid down in the "codes for fire safety at construction site" issued by safety coordinator of BHEL shall be followed. Noncompliance of the above requirement under fire protection shall in no way relieve the contractor of any of his responsibility and liabilities to fire accident occurring either to his materials or equipment or those of others.
1.22	The contractor shall at his cost, remove from vicinity of work at least once each day all combustible waste, scrap, panting materials, rubbish, unused or other materials and deposit them in places specified by BHEL to keep the work site clear and tidy. Use of undercoated canvas paper, corrugated paper, fabricated carton, plastic or other flammable materials shall be restricted to the minimum and promptly removed.
1.23	The contractor shall not use any hand lamp energized by Electric power with supply voltage of more than 24 volts in confined spaces like inside water boxe turbine casings, condensers etc.
1.24	All portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed. Only electricians licensed by appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works.

1.25	In case of any delay in completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have the right to recover cost of such delay from the payments due to the contractor, after notifying the contractor suitably.
1.26	Valve protection caps shall be kept in place and secured.
1.27	The contractor shall be responsible for the safe storage and handling of his radio-active sources as per BARC rules and regulations.
1.28	Tarpaulin being inflammable should not be used (instead, only non infusible covering materials shall be used) as protective cover while preheating, welding, stress relieving etc. at site.
1.29	If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given reasonable opportunity to do so and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instruction regarding safety issued by BHEL, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than 7 days indicating the steps that would be taken by BHEL.
1.30	If the contractor succeeds in carrying out its job in time with out any fatal or disabling injury accident and without any damage to property BHEL may, at its sole discretion, favorably consider to reward the contractor suitably for the performance.
1.31	The contractor shall carefully follow the safety requirement of BHEL/ the purchaser with the regard to voltages used in critical areas.
1.32	The contractor shall use only properly insulated and armored cables which conform to the requirement of Indian Electricity Act and Rules for all wiring, electrical applications at site. BHEL reserves the right to replace any unsafe electrical installations, wiring, cabling etc. at the cost of the contractor. All electrical appliances used in the work shall be in good working condition and shall be properly earthed. No maintenance work shall be carried out on live equipment. The contractor shall maintain adequate number of qualified electricians to maintain his temporary electrical installations.
1.33	The contractor shall arrange adequate number of persons specifically for clearing any debris and for house keeping of the erection area including restacking of components in the erection areas.

1.34	In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover the cost of such damages from the contractor after holding an appropriate enquiry.
1.35	The contractor shall submit report of all accidents, fires and property damage etc to the Engineer immediately after such occurrence, but in any case not later then 24 hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. In addition periodic reports on safety shall also be submitted by the contractor to BHEL from time to time as prescribed by the Engineer.
1.36	Before commencing the work, the contractor shall appoint/nominate a responsible person to supervise implementation of all safety measures and liaison with his counterpart of BHEL.
1.37	Suitable scaffolds shall be provided for workman for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration of work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made of steel. The steps shall have a minimum width of 45 cm and a maximum rise of 30 cm. Suitable handholds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper then ¼ horizontal and 1 vertical.
1.38	Scaffolding or staging more than 3.6 m above the ground floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly bolted, braced or otherwise secured, at least 90 cm above the floor or platform of such scaffolding or staging and extending along the entire length of the out side and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it form saver, from swaying, from the building or structure.
1.39	Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform gangways provided is more than 3.6 m above ground level or floor level, they shall be closely boarded and shall have adequate width which shall not be less than 750 mm and be suitably fenced as described above.
1.40	Every opening in the floor or a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm.

1.41	Wherever there are open excavation in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons
	slipping into the excavations.
1.42	Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m in the length while the width between side rails in rung ladder shall in no case be less than app. 29.2 cm for ladder upto and including 3 m in length. For longer ladders this width shall be increased at least ¼" for each additional foot of length.
1.43	A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to Construction.
1.44	All personnel of the Contactor working within the plant site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal worker shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
1.45	Adequate precautions shall be taken to prevent danger for electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.
1.46	All trenches, four feet or more in depth, shall at all times be supplied with at least one ladder for each 30 m in length or fraction thereof. The ladder shall be extended from bottom of the trench to at least 90 cm above the surface of the ground. Sides of the trenches which are 1.50 m or more in depth shall be stepped back to give suitable slope or securely held by timer bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
1.47	The Contactor shall take all measures at the sites of the work to protect all persons from accidents and shall be bound to bear the expenses of defense of every suit, action or other proceeding at law that may be brought by any persons for injury sustained or death owing to neglect of the above precautions and to pay any such persons such compensation or which may with the consent of the Contractor be paid to compromise any claim by any such person should such claim proceeding be filed against BHEL, the Contractor hereby agrees to indemnify BHEL against the same.
1.48	Before any demolition work is commenced and also during the process of the

	work the following shall be ensured:
1.48.1	All roads and open areas adjacent to the work site shall either be closed or suitably protected.
1.48.2	No electric cable or apparatus which is liable to be a source of danger nor a cable or an apparatus used by the operator shall remain electrically charged.
1.48.3	All practical steps shall be taken to prevent danger to persons employed from the risks of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render them unsafe.
1.49	All necessary personnel safety equipment as considered adequate by the Engineer should be kept available for the use of the persons employed in the Site and maintained in a condition suitable for immediate use and the Contactor should take adequate steps to ensure proper use of equipment by those concerned.
1.49.1	Workers employed on mixing asphalted materials, cement and lime mortars shall be provided with protective foot wear and protective goggles.
1.49.2	Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.
1.49.3	Those engaged in welding works shall be provided with welder's protective eyesight lids.
1.49.4	Stone breakers shall be provided with protective goggles and protective clothing and seated sufficient to safe intervals.
1.49.5	Where workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into manhole, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
1.49.6	The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken.
1.49.6.1	No paint containing lead or lead products shall be used except in the form of paste or ready made paint.

1.49.6.2	Suitably face masks should be supplied for use by the workers where paints are applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
1.49.6.3	Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
1.50	When the work is being done near any place where there is risk of drowning all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
1.51	Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safe guards. Hoisting appliance should be provided with such means as will reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installations which are already energized, insulting mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductor of electricity.
1.52	All scaffolds, ladders and other safety devices mentioned or described hereing shall be maintained in safe condition and no scaffold, ladder or equipment shat be altered or removed while it is in use. Adequate washing facilities should be provided at or near the places of work.
1.53	The contractor shall maintain and ensure necessary safety measures as required for inspection and tests HV test, Pneumatic test, Hydraulic test, Spring test, Bend test etc as applicable, to enable. inspection Agency for performing Inspection. If any test equipment is found not complying with proper safety requirements then the Inspection Agency may withhold inspection, till such time the desired safety requirements are met.
1.54	The Contractor shall notify BHEL of his intention to bring to site any equipment or material which may create hazard. BHEL shall have the right to prescribe the conditions under which such equipment or materials may be handled and the contractor shall adhere to such instructions. BHEL may prohibit the use of any construction machinery, which according to him is unsafe. No claim for compensation due to such prohibition will be entertained by BHEL.

1.55	All safety precautions shall be taken for welding and cutting of IS-818. All safety precautions shall be taken for found excavation marks as per IS-3764.						
1.56	These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent, place at work spot. The persons responsible for compliance of the safety code shall be named therein by the Contractor.						
1.57	To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangement made by the contract shall be open to inspection by the Engineer of the Engineer's Representative.						
1.58	Keeping the work area clean/ free from debris, removed scaffoldings, scraps insulation/sheeting wastage /cut pieces, temporary structures, packing woods etc. will be in the scope of the contractor. Such cleanings has to be done by contractor within quoted rate, on daily basis by an identified group. If such activity is not carried out by contractor / BHEL is not satisfied, then BHEL may get it done by other agency and actual cost alongwith BHEL overheads will be deducted from contractor's bill. Such decisions of BHEL shall be binding on the contractor.						
1.59	Notwithstanding the above clauses there is nothing to exit the Contractor fro the operations of any other Act or Rule in force in area of work in this respect.						
	Provided always that all safety measures apart from those specifically provided in this agreement which are brought to the notice of the Contractor from time of time by the Engineer shall be complied by the Contractor. Provided further that all consequences, damages, or losses arising by reason of any safety coefshall be met with by the Contractor.						
1.60	NON COMPLIANCE:- NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND BHEL HAS RIGHT TO IMPOSE FINES ON THE CONTRACTOR AS UNDER for every instance of violation noticed:						
	SN Violation of Safety Norms	Fine (in Rs)					
	01 Not Wearing Safety Helmet	50/-					
	02. Not wearing Safety Belt	100/-					
	03. Grinding Without Goggles	50/-					
	04. Not using 24 V Supply For Internal Work	500/-					

	05.	Electrical Plugs Not used for hand Machine	100/-			
	06.	Not Slinging property	200/-			
	07.	Using Damaged Sling	200/-			
	08.	Lifting Cylinders Without Cage	500/-			
	09.	Not Using Proper Welding Cable With Lot of Joints And Not Insulated Property.	200/-			
	10.	Not Removing Small Scrap From Platforms	200/-			
	11.	Gas Cutting Without Taking Proper Precaution or Not Using Sheet Below Gas Cutting	200/-			
	12.	Not Maintaining Electric Winches Which are Operated Dangerously	500/-			
	13.	Improper Earthing Of Electrical T&P	500/-			
	14.	Accident Resulting in Partial Loss in Earning	25,000/-			
		Capacity	per			
			victim			
	15. Fatal Accident/Accidents Resulting in total loss in					
	Earning Capacity					
	Larring Capacity					
1.61	Any other non-conformity noticed not listed above will also be fined as deef it by BHEL. The decision of BHEL engineer is final on the above. The am will be deducted from running bills of the contractor. The amount colle above will be utilized for giving award to the employees who could accident by following safety rules. Also the amount will be spent for purchathe safety appliances and supporting the safety activity at site.  CITATION:-If safety record of the contractor in execution of the awarded job to the satisfaction of safety department of BHEL, issue of an appropriate activities to the contractor may be safety activity at site.					
	certificate to recognize the safety performance of the contractor may be considered by BHEL after completion of the job					
1.62	MEMORANDUM OF UNDERSTANDING After Award Of Work, Contractors Are Required To Enter Into A Memorandum Of Understanding As Given Below:					
	Memorandum of Understanding  3/4 BHEL, Power SectorRegion is committed to Health, Safety and Environment Policy (EHS Policy).  3/4 M/sdo hereby also commit to the same					

EHS Policy while executing the Contract Number  3/4 M/s shall ensure that safe work practices not limited to the above are followed by all construction workers and supervisors. Spirit and content therein shall be reached to all workers and supervisors for compliance.  3/4 BHEL will be carrying out EHS audits twice a year and M/s shall ensure to close any non-conformity observed/reported within fifteen days.
Signed by authorized representative of M/s
Name :
Place & Date:

#### **PRICE SCHEDULE (UNPRICED)**

#### **PLEASE REFER**

E-PROCUREMENT PORTAL <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a>

#### **PRICE SCHEDULE**

#### **PLEASE REFER**

E-PROCUREMENT PORTAL <a href="https://bhel.abcprocure.com">https://bhel.abcprocure.com</a>

#### **ANNEXURE-A**

#### Suspension of business dealings with Suppliers/ Contractors

1.0	Suspension of Business dealings with Suppliers/ Contractors
1.1	BHEL reserves the right to take action against Suppliers/ Contractors who fail to perform or indulge in malpractices, by suspending business dealings with them.
1.2	Suspension of business dealings with Suppliers/ Contractors could be in the form of following:  a) Hold within the unit for specific item(s)/ material category(ies)/ type of work(s) for one year.  b) Hold within the unit for all item(s)/ material category(ies)/ type of work(s) for two years  c) Banning across BHEL for all items/ material category(ies)/ type of work(s) for three years.  The Supplier may be either put on hold or banned, as detailed hereinafter on the basis of one or more of the category wise reasons as enumerated hereunder.
	<ul> <li>Hold within the unit for a specific item(s)/ material category(ies)/ type of work(s) shall be imposed in the following cases, if</li> <li>i) In the last three consecutive supplies of a specific material category, average quality rating, as provided in the supplier performance rating (SPR) as per SEARP, falls below 80% of the quality weightage. This is irrespective of supplies against PO(s) having single/ multiple delivery schedules.</li> <li>Note: Not applicable in cases for erection works of Power Sector Regions, where separate guidelines for evaluation of capacity of bidders is being followed.</li> <li>ii) Two consecutive delays, for reasons of delay attributed to the Supplier, in execution of the contracts where delay occurred is such that <ul> <li>a) prescribed maximum LD time limits of the contracts is exceeded or</li> <li>b) delay period has equaled/ exceeded half the original delivery period specified in the contracts whichever among the above is earlier.</li> </ul> </li> </ul>
1.3	<ul> <li>iii) <ul> <li>a) Overall SPR (Supplier Performance Rating) in that particular Unit in line with SEARP falls below 60% of the specific material category.</li> <li>b) Bids of contractors (in PS-MSX portal) shall not be considered (if average score of last six months falls 60% or below as per guidelines for evaluation of capacity of bidders formula).</li> </ul> </li> <li>Note: – for (b), No specific period of hold shall be applicable.</li> <li>iv) Supplier works are under strike/ lockout for a period of more than three months.</li> </ul>
	<ul> <li>Hold within the unit for all item(s)/material category(ies)/ type of work(s) shall be put in the following cases, if</li> <li>i) Supplier tampers with tendering procedure affecting ordering process.</li> <li>ii) Supplier has misused BHEL documents/ drawings/ technical information or has breached the confidentiality agreement with BHEL.</li> <li>iii) after placement of order, Supplier fails to execute the contract.</li> <li>iv) within warranty period as per contract, Supplier continues to supply low/ less/ non-performing equipment/ services, repetitive failures, remains non-responsive.</li> </ul>
1.4	v) Wherever risk purchase clause (amounting to more than 5% of contract value) has been invoked.  Banning across BHEL shall be imposed in following cases, if
	<ul> <li>i) After price bid opening but before placement of order, Supplier withdraws his offer or varies it in any manner within the validity period.</li> <li>ii) Supplier is found to be responsible for submitting fake/ false/ forged documents, certificates, or information or misrepresentation/ wilful suppression of facts, or has resorted to unethical, illegal means or has forged BHEL documents, certificates etc. for securing business, meeting PQR or for enlistment in BHEL or with customers other than BHEL.</li> <li>iii) In spite of warnings, the Supplier persistently violates or circumvents the provisions of labour laws/ regulations/ rules or other statutory requirements.</li> <li>iv) Supplier is found to be involved in cartel formation or in any other act so as to influence the bidding process or influence the</li> </ul>
1.4.1	<ul> <li>price.</li> <li>v) The Supplier has indulged in malpractices or misconduct such as bribery, corruption and fraud, pilferage, coercion etc.</li> <li>vi) The Supplier is found guilty by any court of law for criminal activity/ offences involving moral turpitude in relation to business dealings.</li> <li>vii) Supplier is found to have obtained any internal information/ documentation of BHEL by unauthorized means.</li> <li>viii) The foreign Principals along with the representing Agent shall be banned together if information submitted by them about their precise relationship, commission/ remuneration etc. payable/ receivable and other particulars as asked by BHEL, as per the extant guidelines regarding dealing with Agents of Foreign Suppliers is found false/ incorrect, at any stage.</li> <li>A Supplier can also be banned with the approval of Director (E, R&amp;D) provided a direction to this effect has been received from</li> </ul>
1.4.2	the administrative ministry of the Government.

Note: Above shall be applicable along with Guidelines for "Suspension of Business dealings with Suppliers/ Contractors" available in BHEL website <a href="http://www.bhel.com">http://www.bhel.com</a>. These shall form part of tender documents.

#### **ANNEXURE-B**

#### **Certificate by Chartered Accountant on letter head**

										ed office 06, (Entrepren	
		No (Part-II)							dtc	l:	···· ,
		d from the B al year								er the latest	
1.	and buildir		ems spe	ecified I	by the					est excluding la	
	Rs	Lacs									
2.	furniture, fi		ther iter							d building and may be notified	d
	Rs	Lacs									
			(;	Strike o	ff wh	ichever is n	ot applic	cable)			
										sL Inder MSMED	
						Or					
app (dd its	olicable) an l/mm/yyyy) original ca	d the date which is with	of grad hin the notified	uation of period of vide 5.	of su of 3 y .0. N	ch enterpris ears from to. 3322(E)	se from the date	its original of gradua	al category	e off which is y isch enterprise fied in the gaze	 rom
Da	te:										
(Si	gnature)										
Na	me-										
Ме	mbership n	umber -									
Sea	al of Charte	red Account	tant								

#### **DECLARATION FOR RELATION IN BHEL**

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,
(Write Name & Address of Officer of BHEL inviting the Tender)
Dear Sir,
Sub: Declaration for relation in BHEL
Ref: 1) NIT/Tender Specification No:,
I/We hereby submit the following information pertaining to relation/relatives of Proprieter/Partner(s)/Director(s) employed in BHEL.
Tick $()$ any one as applicable:
1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL
OR
2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:
(i)
(ii)
Signature of the Authorized Signatory
Noto:
Note:  1. Attach separate sheet, if necessary.

2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.

#### FORMAT FOR SEEKING CLARIFICATION

(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: Request for Clarification

Ref: 1) NIT/Tender Specification No: .....,

2) All other pertinent issues till date

SI no	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's clarification
1				
2				
3				

Yours faithfully,

(Signature, date & seal of Authorized Representative of the Bidder)

### **FORMAT FOR DETAILS OF BIDDER**

NAME OF BIDDER	
FAX NO.	
Registration Number*	
Name of Partners / Directors	
Bidder Type Indian/ Foreign*	
City*	
State*	
Country*	
Postal Code*	
PAN/TAN Number*	
Company's Establishment Year	
Company's Nature of Business*	
Company's Legal Status* {limited company/undertaking/joint venture/partnership/other}	
Company Category* {micro unit as per MSME/small unit as per MSME/medium unit as per MSME/Ancillary unit/project affected person of this company/ssi/other}	
Enter Company's Contact Person Details Title(Mr. / Mrs. / Ms. / Dr. / Shri)*	
Contact Name*	
Date Of Birth*	
Correspondence Email* (Correspondence Email ID can be same as your Login ID. All the mail correspondence will be sent only to the Correspondence Email ID.)	
Designation	
Phone*	
Mobile*	

#### PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)

In consideration of the Bharat Heavy Electricals Limited (hereinafter referred to as the Employer which
expression shall unless repugnant to the context or meaning thereof, include its successors and
permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at
BHEL House, Siri Fort, Asiad, New Delhi - 110049 through its Unit at Bharat Heavy Electricals Limited,
Power Sector Eastern Region, BHEL Bhawan, Plot No 9/1, DJ Block, Sector-II, Salt lake City, Kolkata -
700091 having agreed to exempt (Name of the Vendor / Contractor / Supplier) having its registered
office at1 (hereinafter called the said Contractor which term includes supplier), from demand
under the terms and conditions of the Contract reference No² dated
^2 valued at Rs^2 ( Rupees) $^2$ for <nature of="" the="" work=""><math>^3</math></nature>
(hereinafter called the said Contract) of Security Deposit for the due fulfilment by the said contractor of
the terms and conditions contained in the said Contract, on production of a Bank Guarantee for
Rs 4 (Rupees only),
we(indicate the name and address of the Bank) having its Head Office at(address of
the head Office) (hereinafter referred to as the Bank) at the request of
[Name of Contractor(s)] do hereby undertake to pay to the
Employer an amount not exceeding Rs in the event of any breach by the said
Contractor(s) of any of the terms and conditions contained in the said Contract.
We,(indicate the name of the Bank), do hereby undertake to pay the amounts due and payable
under this guarantee without any demur, merely on a demand from the Employer. Any such demand
made on the bank, shall be conclusive as regards the amount due and payable by the Bank under this
guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding
Rs
We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes
raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating
thereto our liability under this present being absolute and unequivocal.
The payment so made by us under this guarantee shall be a valid discharge of our liability for payment

hereunder and the Contractor(s) shall have no claim against us for making such payment.

We, further agree that the guarantee herein contained shall remain in full force and effect during the
period that would be taken for the performance of the said Contract and that it shall continue to be
enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid
and its claim satisfied or discharged or till $\_\_\_\_\_\_\_\_$ or till the office/Department/Division of
Bharat Heavy Electricals Limited certifies that the terms and conditions of the said Contract have been
fully and properly carried out by the said contractor(s) and also including the satisfactory performance of
the equipment during guarantee period and accordingly discharges this guarantee. Unless a demand or
claim under this guarantee is made on us in writing on or before the $\_\_\_$ $^6$ , (3 months
more than the present date of validity of Bank Guarantee) we shall be discharged from all the liability
under this guarantee thereafter.
We,(indicate the name of the Bank)further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.
This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
We, BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.
Notwithstanding anything to the contrary contained hereinabove:
a) The liability of the Bank under this Guarantee shall not exceed
b) This Guarantee shall be valid up to <sup>8</sup>
c) Unless the Bank is served a written claim or demand on or before9 (3 months
more than the present date of validity of Bank Guarantee) all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.
We,(indicate the name of the Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Data

Any claim or dispute arising under the terms of this document shall only be enforced or settled in the courts of at Kolkata only.

Dai <del>e</del>	Day of	
for	(indicate the name of the Bank)	

(Signature of Authorised signatory)

Day of

#### Note:

- 1. Units are advised that expiry of claim period may be kept 2/3 months after validity date.
- 2. In Case of Bank Guarantees submitted by Foreign Vendors
  - a. From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
  - b. From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)
  - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter-Guarantee by Foreign Bank in favour of the Indian Bank (BHEL's Consortium Bank). It is

<sup>&</sup>lt;sup>1</sup> NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

<sup>&</sup>lt;sup>2</sup> DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

<sup>&</sup>lt;sup>3</sup> PROJECT/SUPPLY DETAILS

<sup>&</sup>lt;sup>4</sup> BG AMOUNT IN FIGURES AND WORDS

<sup>&</sup>lt;sup>5</sup> VALIDITY DATE

<sup>&</sup>lt;sup>6</sup> DATE OF EXPIRY OF CLAIM PERIOD

<sup>&</sup>lt;sup>7</sup> BG AMOUNT IN FIGURES AND WORDS.

<sup>&</sup>lt;sup>8</sup> VALIDITY DATE

<sup>&</sup>lt;sup>9</sup> DATE OF EXPIRY OF CLAIM PERIOD

advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

- **b.2** In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.
- b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG)
   758 (as amended from time to time). In case, of Foreign Vendors, the BG Format provided to them should clearly specify the same.
- **b.4** The BG should clearly specify that the demand or other document can be presented in electronic form.

#### **BANK GUARANTEE FOR PERFORMANCE SECURITY**

Bank Guarantee No: Date:
То
NAME
& ADDRESSES OF THE BENEFICIARY
Dear Sirs,
In consideration of the Bharat Heavy Electricals Limited (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at BHEL House, Siri Fort, Asiad, New Delhi – 110049 through its Unit at Bharat Heavy Electricals Limited, Power Sector Eastern Region, BHEL Bhawan, Plot No 9/1, DJ Block, Sector-II, Salt lake City, Kolkata – 700091 having awarded to (Name of the Vendor / Contractor / Supplier) having its registered office at
we,, (hereinafter referred to as the Bank), having registered/Head office at
raised by the Contractor/ Supplier in any suit or proceeding pending before any Court or Tribunal relating
thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the contractors/supplier shall have no claim against us for making such payment.

We thebank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.
We
The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.
This Guarantee shall remain in force upto and including
This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.
Unless a demand or claim under this guarantee is made on us in writing on or before the
We,
c) Unless the Bank is served a written claim or demand on or before9 (3 months more than the present date of validity of Bank Guarantee) all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

E-TENDER ENQUIRY NO.: PSER:PUR:MJA	-S394:19(ENQ:19:PP:0015:PUR:131)	Date- 28/01/2020
We, Bank, have power to issu	e this Guarantee under law and the und	dersigned as a duly
authorized person has full powers to sign this G	uarantee on behalf of the Bank.	
Any claim or dispute arising under the terms of to of at Kolkata only.	this document shall only be enforced or s	settled in the courts
	For an	d on behalf of
	(Name	of the Bank)
Dated		
Place of Issue		
<sup>1</sup> NAME AND ADDRESS OF THE VENDOR /CONTR	RACTOR / SUPPLIER.	
<sup>2</sup> DETAILS ABOUT THE NOTICE OF AWARD/CON	TRACT REFERENCE	
<sup>3</sup> PROJECT/SUPPLY DETAILS		
<sup>4</sup> BG AMOUNT IN FIGURES AND WORDS		
<sup>5</sup> VALIDITY DATE		
<sup>6</sup> DATE OF EXPIRY OF CLAIM PERIOD		
<sup>7</sup> BG AMOUNT IN FIGURES AND WORDS.		

<sup>8</sup> VALIDITY DATE

<sup>9</sup> DATE OF EXPIRY OF CLAIM PERIOD

#### Note:

- 1. Units are advised that expiry of claim period may be kept 2/3 months after validity date.
- 2. In Case of Bank Guarantees submitted by Foreign Vendors-
  - From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches a. in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
  - From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of b. the Vendor country's Bank)
  - **b.1** In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by any of the Consortium Banks only will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank (BHEL's Consortium Bank). It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
  - **b.2** In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at **sl.no. b.1** will required to be followed.

020

- **b.3** The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). In case, of Foreign Vendors, the BG Format provided to them should clearly specify the same.
- **b.4** The BG should clearly specify that the demand or other document can be presented in electronic form.

List of Consortium Banks *						
	Nationalised Banks		Nationalised Banks			
1	Allahabad bank	19	Vijaya Bank			
2	Andhra bank		Public Sector Banks			
3	Bank of Baroda	20	IDBI			
4	Canara Bank		Foreign banks			
5	Corporation bank	21	CITI Bank N.A			
6	Central bank	22	Deutsche Bank AG			
7	Indian Bank	23	The Hongkong and Shanghai Banking Corporation Limited			
8	Indian Oversea Bank	24	Standard Chartered Bank			
9	Oriental bank of Commerce	25	J P Morgan			
10	Punjab National Bank					
11	Punjab & Sindh Bank		Private banks			
12	State Bank of India	26	Axis Bank			
13	State Bank of Hyderabad	27	The Federal Bank Limited			
14	Syndicate Bank	28	HDFC			
15	State Bank of Travancore	29	Kotak Mahindra Bank			
16	UCO Bank	30	ICICI			
17	Union Bank of India	31	Indusind Bank			
18	United Bank of India	32	Yes Bank			

wef 22.03.2016

#### **RTGS FORMAT**

#### Form for getting payment through RTGS (Real Time Gross Settlement)

- 01. NAME OF VENDOR
- 02. **ADDRESS**
- **VENDOR'S BANK A/C NAME** 03.
- VENDOR'S BANK A/C NO. 04.
- 05. NAME OF BANK
- 06. NAME OF BRANCH
- 07. BRANCH PH. NO.
- 08. CITY
- 09. IFSC CODE OF THE BRANCH

THE CHARGES IF ANY FOR PAYMENT THROUGH RTGS MAY BE RECOVERED FROM THE BILL SUBMITTED BY US.

SIGNATURE OF AUTHORISED REPRESENTATIVE OF VENDOR WITH DATE & SEAL

**CONFIRMATION BY BANKER WITH OFFICE SEAL** 

Note: Incorrect information will crate accounting complications and payment will be delayed.

#### RTGS DETAILS OF BHEL-PSER FOR FET BY BIDDER/CONTRACTOR

Form for getting payment through RTGS (Real Time Gross Settlement)

BHARAT HEAVY ELECTRICALS LTD.

Name of Vendor BHEL HOUSE, SIRI FORT, N. DELHI 01.

Address 02.

Vendors Bank Ale Name BHARAT HEAVY ELECTRICALS LTD. 03.

11107800029 Vendors Bunk A/c No. 04.

STATE BANK OF INDIA Name of Bank 115.

COMMERCIAL BR. , SALT LAKE, SECTOR-V Name of Branch 06.

KULKATA

033-23575666 Branch Phone No. 07

KOLKATA City 018

IFSC Code of the Branch SBIN 0004289 119.

The charges if any for payment through RTGS may be recovered from the Bill submitted by us.

DV. General Manager (Fin) seal

BHEL: PSER / Kolkata-700 091

Note: Incorrect information will create Accounting complications and payment will be delayed

Date- 28/01/2020



## GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB]

<u>PSER</u> KOLKATA

# SECTION – I Instructions to Tenderers GENERAL INSTRUCTION TO TENDERERS

- 1.1 Submission of Tender in "Three Parts".
  - (1) Technical Tender: All particulars asked for from the Vendor except the Price Bid & E.M.D in an envelope.
  - (2) EMD in a sealed envelope clearly superscribing on the envelope "E.M.D", the Tender Number, Name of Work, addresses of Vendor and addressee. One time EMD holders needn't enclose this provided that proof of EMD remittance is enclosed in the technical tender.
  - (3) Price Bid in the price schedule enclosed in the tender, in sealed envelope, clearly superscribing "Price Bid", Tender Number, Name of Work, Name of the Vendor and addressee.

All the above "Parts" can be placed in an sufficiently large outer envelope for submission.

1.1.1a This Tender specification as a whole, duly furnishing the following details shall be duly signed and sent in a sealed cover superscribing:

TENDER		FOR
TENDER	SPECIFICATION	NO.
DUE ON		

- 1.1.1b DURATION OF JOB
- 1.1.1.1 Earnest Money Deposit.
- 1.1.1.2 Income Tax & Sales Tax Clearance Certificate.
- 1.1.1.3 Detailed organisation chart for manpower resources available with the tenderer and to be employed for the present jobs.
- 1.1.1.4 Time to be taken for commencement and completion of Work.
- 1.1.1.5 A list of experience as mentioned in the tender document.
- 1.1.1.6 The details of the present jobs being handled.
- 1.1.1.7 Certificate from the BHEL's scheduled Banks to establish financial capability of the tenderer as per format enclosed at Annexure-I.
- 1.1.1.8 Attested copies of partnership deed, power of attorney and tender specifications duly signed as mentioned in the tender documents.
- 1.1.1.9 Price schedule and other relevant information.

NOTE: All Xerox copies enclosed by the Vendor should be attested and sealed for authenticity.





## GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB]

<u>PSER</u> KOLKATA

1.1.2 The tender shall be addressed to:

HEAD, PURCHASE DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR, EASTERN REGION, (2<sup>ND</sup> FLOOR), PLOT-9/1, BLOCK-DJ, SECTOR-II, SALT LAKE, KOLKATA – 700091.

- 1.1.3 Tenders submitted by post shall be sent "REGISTERED POST ACKNOWLEDGEMENT DUE" and shall be posted with the due allowance for any postal delay. The tenders received after the due date and time of opening are liable to be rejected. Telegraphic offers and offers received by telex may not be considered unless confirmed in writing by a detailed offer.
- 1.1.4 Tenders shall be opened by the authorised officer of BHEL at his office at the time and date as specified in the tender notice in the presence of such of those tenderers or their authorised representatives who may be present.
- 1.1.5 The Tenderer shall closely peruse all the clauses, specifications and drawings indicated in the Tender Documents before quoting. Should the tenderer have any doubt about the meaning of any portion of the Tender Specifications or find discrepancies or omission in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, scope of work etc., he shall at once contact the authority inviting the tender for clarification before the submission of the offer.
- 1.1.6 Before tendering, the tenderer is advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour. No claim will be entertained later on the ground of lack of knowledge.
- 1.1.7 Tenderers must fill up all the schedules and furnish all the required information as per the instructions given in various sections of the tender specification. Each and every page of the Tender Specification & deceleration must be signed bearing seal and submitted along with the offers by the Tender in token of complete acceptance thereof. The information furnished shall be complete by itself. The booklet of G.S.C.C may be retained by the bidder if deceleration is enclosed along with the bid duly filled in and signed and sealed.
- 1.1.8 The tender shall quote the rates in English language and internationals numerals. The rates shall be in whole rupees. These rates shall be entered in figures as well as in words. For the purpose of the tender, the metric system of units shall be used.
- 1.1.9 All entries in the tender shall either be typed or be in ink. Erasures and overwriting are not permitted and may render such tenders liable to summary rejection. All cancellations and insertions shall be duly attested by the tenderer.
- 1.2 Qualifications of Tenderers:
  - Only tenderers who have previous experience in work of this nature and description detailed in this tender specification and/or registered with BHEL, PS-ER-SAS for such works are expected to quote for this work duly detailing their experience along with the offer. Offers from tenderers who do not have established experience in the field are not likely to be considered.





## GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB]

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#### 1.3 Data to be enclosed:

Full information shall be given by the tender in respect of following. Non-submission of this information may lead to rejection of the offer/tender.

#### 1.3.1 Financial Status:

- a) A certificate from BHEL's scheduled Bank to prove his financial capacity/capability to undertakes the work of solvency certificate from the concerned Government Authority.
- b) Contractors other than those who are registered in ER, should submit their audited annual accounts for three years preceding the financial year in which tenders are called for.

#### 1.3.2 Income Tax / Sales Tax Certificate:

A certificate of Income Tax / Sales Tax verification from the appropriate authority in the forms prescribed therefor duly indicating annual turnover. The certificates shall be valid for one year from the date of issue or for the period prescribed therein for all tenders submitted during the period.

#### 1.3.3 Previous Experience:

A statement giving particulars duly supported by documentary evidence of the various services rendered for each similar work by the tenderer indicating the particulars and value of each work, the site location and the duration and date of completion and also a list of site locations and particulars and value of various services that are under progress.

#### 1.3.4 Organisation Chart:

The organisation pattern that is totally available with the tenderer and that will be employed by the tenderer for this work duly indicating the number of Engineers and Supervisors, their qualification and experience in the line, the number of skilled and unskilled workmen etc.

- 1.3.5 An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor, shall also be attached.
- 1.3.6 In case of an individual:

His full name, address and place and nature of business.

#### 1.3.7 In case of Partnership firms:

The name of all the partners and their addresses. A copy of the Partnership Deed (Instrument of partnership) duly certified by the Notary Public shall be enclosed.

#### 1.3.8 In case of Companies:

Date and place of registration including Date of Commencement Certificate in case of public companies (certified copies of Memorandum and Articles of Associations are also to be furnished).





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- 1.3.9 Nature of business carried on by the Company and the provision of the Memorandum relating thereof.
- 1.3.10 Names and particulars including addresses of all the Directors and their previous experience.
- 1.3.11 A list of tools and tackles that the tenderer is having and those that will be earmarked for this job.
- 1.3.12 In addition to the above, the particulars required in various annexures.

### 1.4 **EARNEST MONEY DEPOSIT (EMD):**

- 1.4.1 Every tender Must be accompanied by the prescribed amount of Earnest Money Deposit in any one of the following forms:
- 1.4.1.1 Cash deposit as permissible under the extant Income Tax Act (Before tender opening) The amount should be remitted by the party to the Cashier of Bharat Heavy Electricals Limited, PS-ER, Kolkata between 14.00 hours and 16.00 hours on working days and cash receipt issued by him shall be enclosed along with the tender.
- 1.4.1.2 **Electronic Fund Transfer** credited in Bharat Heavy Electricals Limited, PS-ER' account (before tender opening). RTGS details of BHEL-PSER is available in tender.
- 1.4.1.3 **Banker's Cheque/Pay Order/Demand Draft** payable at Kolkata duly pledged in Favour of Bharat Heavy Electricals Limited, Kolkata (along with offer).
- 1.4.1.3(a) Any other mode as per latest guidelines issued by Govt. of India.
- 1.4.1.4 Parties/bidders who have submitted/submits One Time EMD (OEMD) in this Power Sector Region (i.e. BHEL-PSER) for Service After Sales (SAS) a sum of amount Rs. 5,00,000/- (Rupees Five Lakh only) are exempted from payment of E.M.D. on each such tender in that unit on case to case basis.
- 1.4.2 Tenders received without Earnest Money in full in the manner prescribed above are liable to be rejected. EMD shall not carry any interest.
- 1.4.3 The Earnest Money Deposit of the successful tenderer will be retained as part of Security Deposit.
- 1.4.4 EMD given by all unsuccessful tenderers shall be refunded normally within 15 days of award of work.
- 1.4.5 BHEL reserves the right of forfeiture of Earnest Money Deposit submitted by the tenderer if:
  - a) After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.
  - b) The Contractor fails to deposit the required Security Deposit or commence the work within the period as per LOI/Contract.

EMD by the tenderer shall be withheld in case any action on the tenderer is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers/contractors" and forfeited/released based on the action as determined under these guidelines"





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#### 1.5 Authorisation and Attestation:

1.5.1 Tenders shall be signed by persons duly authorised/empowered to do so. Certified copies of such authority and relevant documents shall be submitted along with the tenders.

#### 1.6 Validity of Offer:

The rates in the tender shall be kept open for acceptance for a minimum period of six months from the due date of opening of tenders. If a tenderer withdraws or revokes his tender or increases the tender rates and/or conditions for any item within the aforesaid period, his Earnest Money Deposit is liable to be forfeited. In case the Bharat Heavy Electricals Limited calls for negotiations, such negotiation shall not amount to cancellation or withdrawal of the original offer which shall be binding on the tenderers.

#### 1.7 Execution of Contract:

The successful tender's responsibility under this contract commences from the date of issue of the Letter of Intent by Bharat Heavy Electricals Limited. The successful tenderer may be required to execute an agreement in the prescribed form with the BHEL within a reasonable time after the acceptance of his tender and in any case before submitting first RA bill for payment. The expenses for completing and stamping the agreement shall be borne by the tenderer.

#### 1.8 **Security Deposit (SD):**

- 1.8.1 Security Deposit means the security provided by the contractor towards fulfilment of any obligations in terms of the provisions of the contract. Upon acceptance of tender, the successful tenderer within the time specified in the Letter of Intent must deposit the required amount towards Security Deposit before start of the work. The Security Deposit shall not carry any interest.
- 1.8.2 The total amount of **Security Deposit will be 5% (Five percent) of the contract value.** EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.
- 1.8.3 If the value of the work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall immediately be deposited by the contractor or recovered from payments due to the contractor.
- 1.8.4 Regarding adjustment of Earnest Money Deposit towards part of Security Deposit, refer clause 1.8.2 above, the successful tenderer shall not commence any work under the contract before remitting the Security Deposit except as directed by BHEL.
- 1.8.5 Failure to deposit the Security within the stipulated time may lead to forfeiture of Earnest Money and cancellation of the award of work.
- 1.8.6 The balance amount to make up the required Security Deposit of 5% of the contract value may be furnished in any one of the following forms:
  - i) Cash (as permissible under the Income Tax Act)
  - ii) Local cheques of scheduled banks (subject to realization)/Pay Order/Demand Draft/Electronic Fund Transfer credited in Bharat Heavy Electricals Limited, PS-ER' account.





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- iii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL. Bank Guarantee for S.D. must be posted by the Bank by registered post directly to us, and it should not be submitted by the bidder directly to us.
- iv) Fixed Deposit Receipt 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).
- v) Securities available from Indian Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/hypothecated/ pledged, as applicable, in favour of BHEL).
- vi) Any other mode as per latest guidelines issued by Govt. of India.

Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

### 1.8.7 Collection of Security Deposit:

- 1.8.7.1 At least 50% of the required Security Deposit, including EMD, should be collected before start of work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the contractor till the amount of the required Security Deposit is collected.
- 1.8.7.2 If the value of the work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall immediately be deposited by the contractor or recovered from payments due to the contractor.
- 1.8.7.3 The recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, subject to approval of BHEL.
- 1.8.7.4 Security Deposit should cover up to the period of guarantee also.

(Note: In case of SAS jobs, work can be started before the required Security Deposit is collected. However, payment can be released only after collection/recovery of initial 50% Security Deposit).

1.8.8 BHEL reserves the right of forfeiture of Security Deposit in addition to other claim and penalties in the event of the contractor's failure to fulfil any of the contractual obligations including statutory or in the event of termination of contract as per terms and conditions of contract.

#### 1.8.9 Return of Security Deposit:

If the contractor duly performs and completes the contract in all respects to the entire satisfaction of BHEL, and presents an absolute "No Demand Certificate" in the prescribed form and return properties belonging to BHEL handed over, lent or hired by him for carrying out the said works the security deposit will be released to the contractor after deducting all costs or expenses or other contracts entered into with the contractor, only after the satisfactory completion or guarantee period as per clause 2.13.

- 1.8.10 No interest shall be payable by BHEL on Earnest Money / Security Deposit or any money due to the contractor from BHEL.
- 1.8.11 In no case Security Deposit can be released before settling all claims under this contract.

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- 1.9 Rejection of Tender and other conditions:
- 1.9.1 The acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:
  - a) to reject any or all of the tenders.
  - b) To split up the work amongst two or more tenderers.
  - c) To award the work in part.
  - d) Either of the contingencies stated in (b) and (c) to modify the time for completion suitably.
  - e) To modify the scope of work after mutual agreement.
- 1.9.2 Conditional and unwitnessed tenders:

Tenders containing absurd or unworkable rates and amounts and tenders which are incomplete and otherwise considered defective and tenders not in accordance with the tender conditions, specifications etc. are liable to be rejected.

- 1.9.3 If a tenderer expires after his submission of the tender or after the acceptance of his tender, BHEL may at their discretion, cancel such tender. If a partner of a firm expires after the submission of the tender or after the acceptance of the tender, BHEL may cancel such tender at their discretion unless the firm retains its character.
- 1.9.4 BHEL will not be bound by any Power of Attorney granted by the tenderer or by changes in the compositions of the firm made subsequent to the execution of the contract. They may, however, recognise such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
- 1.9.5 If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded and forfeit the Earnest Money/Security Deposit.
- 1.9.6 Canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the contractor who resort to canvassing are liable to rejection.
- 1.9.7 Should a tenderer or contractor or in the case of a firm or Company of Contractors one or more of its Partners/shareholders/Directors have a relation or relations employed in the capacity of an officer of BHEL, the authority inviting tender shall be informed of the fact along with the offer, failing this, BHEL may at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money/Security Deposit.
- 1.9.8 The successful tenderer should not sub-contract the part or complete work detailed in this tender specification undertaken by him without permission of BHEL. The tenderer is solely responsible to BHEL for the work awarded to him. Any deviation in this regard will entail termination of such contract by BHEL at the risk and responsibility of contractor.
- 1.9.9 The successful tenderer shall inform/keep BHEL informed if he has already undertaken any work/is likely to be awarded any job with the same customer with whom BHEL is entering into contract.



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#### SECTION - II

#### GENERAL TERMS & CONDITIONS OF THE CONTRACT

#### 2.1 Definition:

The following terms and expressions shall have the meaning hereby assigned to them except where they context otherwise requires:

- 2.1.1 'BHEL' (or B.H.E. Ltd.) shall mean Bharat Heavy Electricals Limited, a company registered under Indian Companies Act., 1956, with its Registered Office at BHEL House, SIRI FORT, NEW DELHI-110049, Power Sector, Eastern Region, Service After Sales Services, DJ-9/1,Salt Lake, Kolkata 700091 or its Administrative officers or its site Engineer or the employees authorised to deal with any matters with which these persons are concerned on its behalf.
- 2.1.2 "GENERAL MANAGER"/DEPUTY IN CHARGE" shall mean the Officer in Administrative charge of BHEL, PS-ER, SAS Services, Kolkata or their other regional offices.
- 2.1.3 "ENGINEER" or "ENGINEER IN CHARGE" shall mean Engineer deputed by BHEL. The terms include "SITE ENGINEER", "RESIDENT ENGINEER" and "ASSISTANT SITE ENGINEER" of BHEL at the site as well s the officers in-charge at Kolkata office.
- 2.1.4 "SITE" shall mean the place or places at which the plants/equipment are to be overhauled and services are to be performed as per the specification of this contract.
- 2.1.5 "CLIENTS OF BHEL" or "CUSTOMER" shall mean the Project authorities to whom BHEL is supplying the equipment/services.
- 2.1.6 "CONTRACTOR" shall mean the individual, firm or company who enters into this contract with BHEL and shall include their executors, administrators, successors and permitted assigns.
- 2.1.7 "CONTRACT" or "CONTRACT DOCUMENT" shall mean and include the agreement or work order, the accepted appendices of rates, schedule of quantities, if any and general condition of contract, the special conditioning of contract instructions of the tenderers, the drawings, the specifications, the special specification, if any, the tender specifications, the special specification, if any, the tender documents and the Letter of Intent/Accepting Letter issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or supporting letters shall not form part of the contract unless specifically accepted in writing by BHEL and incorporated in the agreement.
- 2.1.8 "GENERAL CONDITIONS OF CONTRACT" shall mean the instructions to tenderers and general conditions of contract pertaining to the work detailed.
- 2.1.9 "TENDER SPECIFICATION" shall mean the "Specific Conditions, technical specifications, appendices, site information and drawings, "pertaining to the work for which the tenderers are required to submit their offer. Also this will include the specifications detailed in NIT of client of BHEL for overhauling, erection, testing and commissioning of plant. Individual specification no. will be assigned to each tender specification.



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- 2.1.10 "TENDER DOCUMENTS" shall mean the General conditions of contract (2.1.8) and tender specification (2.1.9)
- 2.1.11 "LETTER OF INTENT" shall mean the intimation by a letter to the tenderer that the tender has been accepted in accordance with provisions contained in that letters. The responsibility of the contractor commences from the date of issue of this letter and all the terms and conditions of contract are applicable from this date.
- 2.1.12 "COMPLETION TIME" shall mean the period by date specified in the acceptance of tender for handing over the overhauled equipment/plant which are found acceptable by the engineer being of required standard and conforming to the specification of the contract or recommissioning of the machine successfully whichever is later. Completion time will be reckoned from the date of LOI with the period for mobilisation as prided with LOI, added to the same.
- 2.1.13 "PLANT" shall mean and cannot the entire assembly of the plant and equipments covered by the contract.
- 2.1.14 "EQUIPMENT" shall mean all equipments, machineries, materials, structurals, electricals and other components of the plant covered by the contract.
- 2.1.15 "TESTS" shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL, in order to ascertain the quality workmanship, performance and efficiency of the contract work or part thereof.
- 2.1.16 "APPROVED" "DIRECTED" or "INSTRUCTED" shall mean approved, directed or instructed by BHEL.
- 2.1.17 "WORK OR CONTRACT WORK" shall mean and include supply of all categories of labour, specified consumables, tools and tackles required for complete and satisfactory site transportation, handling, stacking, storing, overhauling erection, testing and commissioning of the equipment to the entire satisfaction of BHEL.
- 2.1.18 "SINGULAR AND PLURAL ETC" words carrying singular number shall also include plural and vice versa, where the context so requires, words importing the masculine gender shall be taken to include any company or Association or body of individuals, whether incorporated or not.
- 2.1.19 "HEADINGS" The Leadings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in interpretation or construction thereof or of the contract.
- 2.1.20 'MONTH" shall mean calendar month.
- 2.1.21 "WRITING" shall include any manuscript, type written or printed statement under the signature or seal as the case may be.
- 2.2 Law governing the contract and Court Jurisdiction:

The contract shall be governing by the Law for the time being in force in the Republic of India. The Civil Court having ordinary original civil jurisdiction, Kolkata shall alone have exclusive Jurisdiction in regard to all claims in respective of this contract.



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#### 2.3 Issue of Notice:

The contractor shall furnish to the BHEL Engineer the name, designation and address of his authorised agent and all complaints, notices, communications and reference shall be deemed to have been duly given to the contractor if delivered to the contractor or his authorised agent or left at or posted to the address either of the contractor or of his representative and shall be deemed to have been so given in the case of posting on the day on which they would have reached such address in the ordinary course of past or on which they were so delivered or/or left.

#### 2.4 Use of Land:

No land belonging to BHEL or their customer, under temporary possession of BHEL shall be occupied by the contractor without the written permission of BHEL.

- 2.5 Commencement of Work:
- 2.5.1 The contractor shall commence the work within the time indicated in the Letter of Intent from BHEL and shall proceed with the same with due expedition without delay. For computing the scheduled completion date, commencement, of work will be reckoned from the date of complete mobilisation as per LOI, unless specifically amended by Head (Services), BHEL, Kolkata.
- 2.5.2 If the successful tenderer fails to start the work within the stipulated time, BHEL as its discretion will have the right to cancel the contract. His Earnest Money and / or Security Deposit with BHEL will stand forfeited without any further reference to him, without prejudice to any and all of BHEL's other rights and remedies in this regard.
- 2.5.3 All the works shall be carried out under the direction and to the satisfaction of BHEL.
- 2.5.4 The erected overhauled plant or work performed under the contract shall be taken over when it has been completed in all respects and or satisfactorily put into operation at site.
- 2.6 Mode of payment and measurement of the work completed.
- 2.6.1 "All payment due to the contractor shall be paid only by Account payee Cheques"
- 2.6.2 The contractor shall present his bill on the format prescribed by BHEL for every payment. After verification of such bills by BHEL, all items having financial value shall be entered and certified in BHEL Measurement Book by BHEL Engineer and the bills prepared based on the same and connected technical documents which form part of this tender specification.
- 2.6.3 Lump sum omission will be entered for deduction. Measurement shall be restricted to that for which it is required to ascertain the financial liability of BHEL under this Contract.
- 2.6.4 Work which is to be measured in details shall be measured as per standard procedure without reference to any local procedures without reference to any local procedures excepting where it is otherwise stated in the tender documents. The measurement shall be taken jointly by person duly authorised on the part of BHEL and by the contractor.



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- 2.6.5 If, at any time due to reason whatsoever, it becomes necessary to remeasure the work done in full or in part, the expenses towards such remeasurement shall be borne by the contractor.
- 2.6.6.1 The contractor shall bear the expenditure involved, if any, in making the measurement. The Contractor shall, without extra charges, provide all the assistance with appliances with appliance and other things necessary for measurement.
- 2.6.7 The measurement entered in the Measurement Books and the bills prepared shall be signed and dates by both the contracting parties.
- 2.6.8 The Contractor will be intimated in writing by the site Engineer, the proposed date of measurement. If the contractor, representative fails to participate in the joint measurement, the BHEL engineer shall have the power to proceed by himself to take measurement in which case the measurement shall be accepted by the contractor as final.
- 2.6.9 Passing of measurement as per bills does not amount to acceptance of the completion of work mentioned. Any left out work has to be completed if pointed out at a later dated by BHEL.

#### 2.7 Rights of BHEL:

- 2.7.1 To withdraw any portion of work and/or to restrict / alter the quantum of work as indicated in the contract during the progress of work and get it done through other agency and/or by departmental labour to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergency reasons / BHEL's obligation to its customer.
- 2.7.2 To terminate the contract or withdraw portion of work and get it done through other agency, at the risk and cost of the contractor after due notice of a period of 14 days' by BHEL in any of the following cases:
  - i) Contractor's poor progress of the work vis-à-vis execution timeline as stipulated in the Contract, backlog attributable to contractor including unexecuted portion of work does not appear to be executable within balance available (#) period considering its performance of execution.
  - ii) Withdrawal from or abandonment of the work by contractor before completion of the work as per contract.
  - iii) Non-completion of work by the Contractor within scheduled completion period as per Contract or as extended from time to time, for the reasons attributable to the contractor.
  - iv) Termination of Contract on account of any other reason (s) attributable to Contractor.
  - v) Assignment, transfer, subletting of Contract without BHEL's written permission.
  - vi) Non-compliance to any contractual condition or any other default attributable to Contractor.
  - (#) In-case inputs from BHEL/Customer are likely to be delayed or are actually delayed, this delay may also be taken into account while considering balance period available for execution of Contract.

#### **Risk & Cost Amount against Balance Work:**

Risk & Cost amount against balance work shall be calculated as follows:

Risk & Cost Amount=  $[(A-B) + (A \times H/100)]$ 

Where,

A= Value of Balance scope of Work (\*) as per rates of new contract

B= Value of Balance scope of Work (\*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC & ORC, if any.

H = Overhead Factor to be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).



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(\*) Balance scope of work (in case of termination of contract):

Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Work for calculating risk & cost amount. Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

Items for which total quantities to be executed have exceeded the Contract Quantities based on drawings issued to contractor from time to time till issue of Termination letter, then for these items total Quantities as per issued drawings would be deemed to be contract quantities.

Substitute/ extra items whose rates have already been approved would form part of contract quantities for this purpose. Substitute/ extra items which have been executed but rates have not been approved, would also form part of contract quantities for this purpose and rates of such items shall be determined in line with contractual provisions.

However, increase in quantities on account of additional scope in new tender shall not be considered for this purpose.

NOTE: In-case portion of work is being withdrawn at risk & cost of contractor instead of termination of contract, contract quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work' for calculating Risk & Cost amount.

#### LD against delay in executed work in case of Termination of Contract:

LD against delay in executed work shall be calculated in line with LD clause as per GCC/SCC/TCC/Special note/any other annexure of tender document (in compliance with order of precedence), for the delay attributable to contractor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of work till termination of contract.

## Method for calculation of "LD against delay in executed work in case of termination of contract" is given below.

- i) Let the time period from scheduled date of start of work till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1
- ii) Let the value of executed work till the time of termination of contract= X
- iii) Let the Total Executable Value of work for which inputs/fronts were made available to contractor and were planned for execution till termination of contract = Y
- iv) Delay in executed work attributable to contractor i.e. T2=[1-(X/Y)] x T1
- v) LD shall be calculated in line with LD clause [as per GCC/SCC/TCC/Special note/any other annexure of tender document (in compliance with order of precedence)] of the Contract for the delay attributable to contractor taking "X" as Contract Value and "T2" as period of delay attributable to contractor.

## 2.7.3 Recoveries arising out of Risk & Cost and LD or any other recoveries due from Contractor

Following sequence shall be applicable for recoveries from contractor:

- a) Dues available in the form of Bills payable to contractor, SD, BGs against the same contract.
- b) Demand notice for deposit of balance recovery amount shall be sent to contractor, if funds are insufficient to effect complete recovery against dues indicated in (a) above.
- c) If contractor fails to deposit the balance amount to be recovered within the period as prescribed in demand notice, following action shall be taken for balance recovery:
  - Dues payable to contractor against other contracts in the same Region shall be considered for recovery.
  - ii) If recovery cannot be made out of dues payable to the contractor as above, balance amount to be recovered, shall be informed to other Regions/Units for making recovery from the Unpaid Bills/Running Bills/SD/BGs/Final Bills of contractor.
  - iii) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor.
- 2.7.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customers are terminated for any reason.

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- 2.7.5 While every endeavour will be made by BHEL they cannot guarantee uninterrupted work due to conditions beyond their control. Contractor will not be entitled to any compensation / extra payment on this account.
- 2.8 Responsibilities of the Contractor:
  - The following are the responsibilities of the contractor in respect of observation of local laws, employment of personnel, payment of taxes and execution of job etc.
- 2.8.1 As far as possible, unskilled workers shall be engaged from the local areas in which the work is being executed.
- 2.8.2 The Contractor at all times during the continuance of this contract, shall in all his dealing with local labour for the time being employed on or in connection with the work, have due regard to all local festivals and religious and other customs.
- 2.8.3 The contractor shall comply with all state and central Laws, Statutory Rules, Regulations etc., such as:
  - The payment of wages Act, Minimum Wage Act, Workmen compensation Act, Employers Liability Act, Industrial Disputes Act, Employees Provident Fund Scheme,
  - Employees Insurance Scheme, Contract Labour (Regulation & Abolition) Act 1970 and other Acts, Rules & Regulations for labour as may be enacted by the Government during the tenure of the Contract and having force or jurisdiction at site. The Contractor shall give to the local Governing Body, Police and other relevant authorities all such notices as may be required by law.
- 2.8.4 The Contractor shall pay all taxes, fees, licence charges, deposits duties, tools, royalty, commission or other charges which may be leviable on account of any 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 the contractor either from his bills or otherwise as deemed fit.
- 2.8.5 The Contractor shall be responsible for provision of health and sanitary arrangements, more particularly described in contract Labour (Regulation & Abolition Act) safety precautions etc., as may by required of same and satisfactory execution of the contract.
- 2.8.6 The contractor shall fulfil all his obligation in respect of accommodation including proper medical facilities for the personnel employed by him.
- 2.8.7 The contractor shall be responsible for the proper behaviour at site and observance of all regulations by the staff employed by him.
- 2.8.8 The Contractor shall ensure that no damage is caused to any person / property of other parties working at site. If any such damages is caused, it is the responsibility of the contactor to make the losses or compensate for the same.
- 2.8.9 All the properties / equipments / components of BHEL / their client loaned with or without deposit to the contractor in connection with the contract shall remain the properties of BHEL / their client. The Contractor shall use such properties for the purpose of execution of this contract. All such properties / equipment / components shall be deemed to be in good condition when received by the contractor unless he notified within 48 hours to the contrary. The Contractor shall return them in good conditions as and when required by BHEL / their client. In case of case of non-return, loss damage, repairs, etc. the cost thereof, as may be fixed by the site Engineer, will be recovered from the contractor.



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- 2.8.10 It is not obligatory on the part of BHEL to supply any tools and tackles or other materials other than those specifically agreed to do so by BHEL. However, depending upon the availability / possibility BHEL's customers' handling equipment and other plants may be made available to the contractor on payment of the hire charges / free of charges as fixed, subject to the condition laid down by BHEL. Customer form time to time, Unless paid in advance, such hire charges if applicable shall be recovered from contractor's bill / security Deposit in one instalment.
- 2.8.11 The contractor shall not claim any compensation of the scope of the work, due to changes in design which curtails quantum.
- 2.8.12 The Contractor shall fully indemnify BHEL against all claims of whatsoever nature arising during the course of erection / overhauling / performing work under the contract.
- 2.8.13 In case the contractor is required to undertake any major work outside the scope of this contract the rates payable shall be decided by BHEL Resident Engineer.
- 2.8.14 The contractor shall keep the area of work clean and shall remove debris etc., while executing day to day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places to be specified by the BHEL Engineer. The contractor will also demolish all hutments, sheds, partitions, offices, constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be removed by the BHEL. The expenses thereof will be recovered from contractor.
- 2.8.15 The contractor shall arrange and co-ordinate his work in such a manner as to cause no inconvenience to other agencies working in the area.
- 2.8.16 All safety rules and codes applied by the client / BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment / material and work to be performed by him and shall maintain all light, fencing guards, signs etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the Engineer with a view to prevent pilferage, accidents, fire hazards and atmospheric conditions. Suitable number of electrical staff, watch and ward, store keepers to take care of the equipment, materials and construction tools and tackles, shall be posted at site by the contractor till completion of the work under this contract. The contractor shall arrange for such safety devices as are necessary for such type of work and carry out the requisite tests of handling equipment, lifting tools, tackles etc, as per prescribed standards and practices.
- 2.8.17 The contractor will be directly responsible for payment of wages to his women. A pay roll sheet giving all the payments given to workers and duly signed by the contractor's representative should be furnished to BHEL site office for record purpose. BHEL site In-charge may be intimated the date of disbursement of wages to the workmen engaged for the work, so that his representative can witness the same.
- 2.8.18 The intent of specification, is to provide services according to most modern and proven techniques and codes. The omission of specific reference to any method, requirement or material necessary for the proper and efficient performance of work shall not relieve the contractor of the responsibility of providing such facilities to complete the work.

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- 2.8.19 In case of any clause of the work for which there is no such specification as laid down in the contract, such work shall be carried out in accordance with the instructions and requirements of the BHEL Engineer.
- 2.8.20 No levy or payment or charge made or imposed shall be impeached by reason of any clerical error or by reason of any mistake in the amount levied or demanded or charged.
- 2.8.21 The details drawings, specifications, instructions manual, if any available with the BHEL Engineer will form part of tender specification. These documents will be made available for reference only to the contactor during execution of work.
- 2.8.22 Should any error or ambiguity be discovered in the specification or information, the contractor shall forthwith bring the same to the notice of BHEL before commencement of work. BHEL's interpretation in such cases shall be final and binding on the contractor.
- 2.8.23 No idle labour charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour being rendered idle due to any cause of any type.
- 2.8.24 No over run charges shall be paid in the event of the completion period being extended for any reason whatsoever.
- 2.8.25 It is possible that some repair/rectification, modification may be needed on the equipments to be overhauled / work to be performed under this specification, for reasons not attributions to the contractor. All such repair / rectification / modification work which can be done, with the available facilities at site shall be carried out by the contractor free of cost and no extra charges shall be paid to contractor.
- 2.8.26 The quality and progress of work will be regularly reviewed. The schedule and progress of work will be given to the contractor in advance and it will be the obligation / responsibility of the contractor to achieve the desired quality and progress of work by suitably reinforcing their labour force and/or by working extra hours or in more than one shift without any extra cost. Workmen found unsuitable for the work will be replaced immediately by the contractor on being informed by BHEL.
- 2.8.27 During the overhauling work under the contract it is very essential that proper and adequate inspection should made constantly to maintain the quality or workmanship so that any deviation from design dimension does not exceed permissible limits. The proper functioning of the unit, while in operation, depends to a great extent on the above factors. The fact that effective supervision and inspection at the execution stage is less costly than any down time of running unit even for a short period need not be over emphasized. For the details regarding alignment and permissible dimensional deviations in the sub-assembles BHEL Engineer may be consulted.
- 2.8.28 The contractor shall be furnish fortnightly labour report showing by classification of number of employees engaged in various categories or work date wise and submit a progress report of wok as required by BHEL Engineer.
- 2.8.29 The contractor shall execute the work in the most substantial and workmen-like manner in stipulated time. Accuracy of work and timely execution are the essence of this contract. The contractor shall be responsible to ensure that the assembly and workmanship conform to the dimensions and clearances given in the drawings and/or as per instructions of BHEL Engineers.
- 2.8.30 The contractor shall take all responsible care to protect the materials and work till such time the plant/equipment has been taken over by BHEL / their client. Where necessary, suitable temporary fencing and lighting shall have to be provided by the contractor as a safety measure against accident and damage of property of BHEL. Suitable caution notice shall be displayed where access to any part may be deemed to be unsafe and hazardous.
- 2.8.31 It will be the responsibility of the contractor to ensure safe lifting of the equipments taking due precautions to avoid any accidents and damage to other equipments and personnel.
- 2.9 **Void**





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- 2.10 Insurance:
- 2.10.1 BHEL / their customer shall arrange for insuring the materials / properties of BHEL/customer covering risks during transit, storage, overhauling, erection and commissioning.
- 2.10.2 It is the sole responsibility of the contractor to Insure his workman against accident and injury while at work as required by relevant rules and to pay compensation, if any, to workmen as per workmen's compensation Act. Contractor shall insure his staff against accidents. The work will be carried out in a protected area and all the rules and regulations of the client / BHEL in the area of project which are in force from time to time, will have to be followed by the contractor.
- 2.10.3 If due to negligence and /or non-observations of safety and other precautions, any accident / injury occurs to any other person/public, the Contractor shall have to pay necessary compensation and other expenses, if so decided by the appropriate authorities. Third party insurance coverage is to be made by the contractor.
- 2.10.4 If due to contractor's carelessness, negligence or non-observance of safety precautions damage to BHEL's /Customer's property and personnel should occur, and if BHEL is unable to recover, in full, cost from the Insurance Company, the balance will be recovered from the Contractor.

#### 2.11 Strikes & Lockouts:

The contractor will be fully responsible for all the disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the lockout declared is not settled within a period of one week BHEL shall have the right to get the work executed employing the own labour or through any other agencies or both and the cost so incurred by BHEL, shall be deducted from the contractor's bills as per

clause 2.7. For all purposes whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL.

### 2.12. Force Majeure:

2.12.1 The following shall amount to Force Majeure:

Acts of God, Acts of any Government, war, sabotage, riots, civil commotion, police action, revolution, flood, fire, cyclones, earthquake and epidemic and other similar causes over which the contractor has no control.

2.12.2 If the contractor suffers delay in the due execution of the contractual obligation due to delays caused by Force Majeure as defined above, the agreed time of completion of the job covered by this contract or the obligations of the Contractor shall be extended by a period of time equal to the period of delay provided that on the occurrence of any such contingency the Contractor immediately reports to BHEL in writing the causes of delay and the contractor shall not be eligible for any compensation.

### 2.13 Performance Guarantee:

Even though the work will be carried out under supervision of BHEL Engineers. The contractor shall guarantee against defects attributable to faulty workmanship or procedure adopted in the overhaul for items covered in the contract for a period of six months from the date of re-commissioning of the set after the capital overhaul. The guarantee should cover all defects notified during this period and shall have to be attended to free of cost immediately or at the time our clients are able to give shut down of the set for the required period. when necessary. In case of failure of contractor to attend to such defects as and when required in time, BHEL shall arrange to attend the defects and the charges shall be levied to contractor's account and shall be recoverable from the security deposit / progressive payments.

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#### 2.14. **ARBITRATION & CONCILIATION:**

#### **2.14.1 ARBITRATION:**

2.14.1.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 2.14.2 herein below or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or. in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, commence arbitration in respect of such Dispute by issuance of a notice in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice'). The Notice shall contain the particulars of all claims to be referred to arbitration in sufficient detail and shall also indicate the monetary amount of such claim. The arbitration shall be conducted by a sole arbitrator to be appointed by the Head of the BHEL Power Sector Region issuing the Contract within 60 days of receipt of the complete Notice. The language of arbitration shall be English.

The Arbitrator shall pass a reasoned award.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder as in force from time to time shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Kolkata (the place from where the contract is Issued). The Contract shall be governed by and be construed as per provisions of the laws of India. Subject to this provision 2.14.1.1 regarding ARBITRATION, the principal civil court exercising ordinary civil jurisdiction over the area where the seat of arbitration is located shall have exclusive jurisdiction over any DISPUTE to the exclusion of any other court.

2.14.1.2 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018 as amended from time to time.

- 2.14.1.3 The cost of arbitration shall initially be borne equally by the Parties subject to the final allocation thereof as per the award/order passed by the Arbitrator.
- 2.14.1.4 Notwithstanding the existence of any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner unless the dispute inter-alia relates to cancellation, termination or short-closure of the Contract by BHEL.

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#### 2.14.2 **CONCILIATION:**

If at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation effect, interpretation or breach of the agreement, contract), which the Parties are unable to settle mutually, arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee (IEC) to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.

#### Notes:

- 1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators.
- 2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators.

The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Procedure 2.3: "Procedure for conduct of conciliation proceedings" (as available in <a href="www.bhel.com">www.bhel.com</a>). The Procedure 2.3: "Procedure for conduct of conciliation proceedings" (as available in <a href="www.bhel.com">www.bhel.com</a>) together with its Formats (as available in <a href="www.bhel.com">www.bhel.com</a>) will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in this GCC.

The Contractor hereby agrees that BHEL may make any amendments or modifications to the provisions stipulated in the Procedure 2.3: "Procedure for conduct of conciliation proceedings" (as available in <a href="www.bhel.com">www.bhel.com</a>) from time to time and confirms that it shall be bound by such amended or modified provisions of the Procedure 2.3: "Procedure for conduct of conciliation proceedings" (as available in <a href="www.bhel.com">www.bhel.com</a>) with effect from the date as intimated by BHEL to it.

### 2.14.3 NO INTEREST PAYABLE TO CONTRACTOR:

Notwithstanding anything to the contrary contained in any other document comprising in the Contract, no interest shall be payable by BHEL to Contractor on any moneys or balances including but not limited to the Security Deposit, EMD, Retention Money, RA Bills or the Final Bill, or any amount withheld and/or appropriated by BHEL etc., which becomes or as the case may be, is adjudged to be due from BHEL to Contractor whether under the Contract or otherwise.

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Date- 28/01/2020



# GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB]

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## SPECIAL CONDITIONS OR CONRACT

- 3.1 Quantum of Work:
- 3.1.1 The scope of work given in the tender specification is only approximate and is liable to variation and alternation at the discretion of BHEL Resident Engineer. No compensation on this account shall be payable to the contractor unless specifically recommended by BHEL Resident Engineer as the variation forming major additions to the original scope of work. All repair / rectification work arising out of normal wear and tear, seizure of parts etc. have to be done by the contractor and the same will be covered by the scope of work of the contract.
- 3.1.2 The scope of work details out the major activities only. However, as per the general maintenance requirement and site condition, certain related activities may have to be carried out without any extra cost.
- 3.2 Commencement and completion of work:
- 3.2.1 The starting time and completion time is the essence of the of the tender. As the time bound programme is firmly committed to customer, the starting time and completion time should be strictly adhered to. It will be not be possible to grant extension in completion time except in extraordinary circumstance, which will be decided entirely at the discretion of BHEL Resident Engineer. Work should normally be carried out in two shifts and sometimes also in three shifts in consultation with BHEL Resident Engineer.

A detailed programme of the various activities covered under this contract with specific time period to fall in the overall frame work of the above dates should be prepared and got approved by BHEL Resident Engineer. The progress against this programme shall be reviewed with BHEL Resident Engineer at the end of each day and critical areas identified and suitable steps taken in time.

If during the review, at any stage of overhauling, BHEL Resident Engineer feels that the delays are not likely to be made up, BHEL reserves the right to take corrective steps as considered necessary by BHEL Resident Engineer to complete work in scheduled time and debit the cost incurred thereon to the contractor. This does not however absolve the contractor of his own efforts in consultation with BHEL Resident Engineer. Every endeavour will be made to see that work proceeds uninterruptedly.

- 3.2.2 The tenderers should indicate the time required for starting the work once the letter of intent is issued and the time required for completion. The work may have to commence immediately after opening of the tenders. Hence, preference may be given to those tenderers who can commence the work earlier, and also ensure early completion.
- 3.2.3 The Contractor shall ensure completion of the job in all respects within the day from the date of commencement of work as given in contract.
- 3.3 Penalty for delay:
- 3.3.1 In the event of failure to complete the work in given time, an amount equal to ½% [half percent] of the contract value per day subject to a maximum of 10% [ten percent] of the contract value will be levied as penalty, in case the balance work is allowed to be completed by the contractor beyond the scheduled time of completion, which is at the discretion of BHEL. In case of delays on contractor's part, at any stage during the scheduled period or after, BHEL shall have the option of ensuring completion of the job by any other means at its disposal and the charges on this account shall be levied on the contractor. These shall be adjusted against contractor's bills or Security Deposit.

In case of LD recovery, the applicable GST shall also be recovered from vendor.

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3.4 Terms of Payment:

A minimum time of 15 days will be required for processing the bills and release of payment after the bills are presented to BHEL.

#### **3.4.1 As per STC**

All payments are subjects to income tax deductions @1% of the bill amount at source or as per Central Government Laws. No request for advance payment will be entertained by BHEL.

3.5 Inspection and Completion:

The work being carried out by the contractor will be supervised and inspected by our Site Engineers under the overall supervision of BHEL Resident Engineer.

- 3.6 The work will be deemed as complete when it is finally accepted by BHEL Resident Engineer and job completion certificate is issued. No extra payment will be made for any rework carried out by the contractor to rectify any defective work.
- 3.6 The contractor shall not be entitled for labour idling charges under any circumstances.
- 3.6 Tools, Tackles, Test Equipments & Consumables:
- 3.6.1 All tools and tackles and consumables required for day-to-day work like gas and gas cutting sets with accessories, AC/DC welding sets, TIG welding kits, welding cables, electrodes, all necessary power connection at his own cost. However, in case of emergency, BHEL may supply certain items if available, to contractor at actual cost plus handling charges, these will be deducted from contractors' running bills, testing equipment for conducting various tests, during the progress of overhauling / re- commissioning s h a I I have to be provided by the contractor. Spare parts going into permanent installation shall only be provided by BHEL.
- 3.7 Accommodation for site staff and store space:
- 3.7.1 Contractor has to arrange for the stores and office at site; space for the same shall be made available as per the availability at site. The contractor shall be responsible to provide all necessary facilities like residential accommodation with sanitary facilities, transport, electricity, water, medical bonus etc. as required under various labour laws and statutory rules and regulations framed thereunder to the personnel employed by him.
- 3.8 Responsibilities of the contractor:
- 3.9 Supervisory staff and labour:

The contractor shall employ, specially skilled labour, supervisor and engineers thoroughly conversant with particular type of work to ensure quality work. BHEL reserves the right to decide on the suitability of the workers and other staff employed by the contractor. BHEL reserves the right to insist on removal of any employees of the contractor at any time if they find him unsuitable and the contractor should forthwith remove him.

3.9 Planning and Execution:

Contractor shall submit a job planning in form of Bar Chart or PERT Chart. A List of manpower category wise, indicating individuals responsibility job activity wise, shall have to be submitted. Daily programme of job shall be displayed on board near work site on day in advance. A daily progress report along with Manpower utilities has to be submitted and backlog of the work, if any, shall be covered up in consultation with BHEL Resident Engineer.

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3.9 Safety and Accident Coverage

Contractor shall ensure safety of all his employees at site of work. All employees shall be covered by insurance (workmen compensation) against accident, failing which proper action will be taken against the contractor.

Contractor shall ensure proper safety of the equipments under overhauling by deputing personnel to guard the equipments round the clock. Open oil spaces, steam spaces shall be covered properly against ingress of foreign materials while working.

RESPONSIBLITIES OF THE CONTRACTOR IN RESPECT OF SAFETY OF MAN, EQUIPMENT, MATERIAL AND ENVIRONMENT

- 3.8.3.1 Before commencing the work, contractor shall submit a 'SAFETY PLAN" to the authorised BHEL official. The 'Safety Plan' shall indicate in detail the measures that would be taken by the contractor to ensure safety of men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified here under. The contractor shall submit safety plan along with his offer. During negotiations before placing or work order and during execution of the contract, BHEL shall have right to review and suggest modifications in the safety Plan. Contractor shall abide by BHEL decision in this respect.
- 3.8.3.2 The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL or it's authorised officials to prevent loss of human lives, injuries to personnel engaged, and damage to property and environment.
- 3.8.3.3 The contractor shall provide to it's work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorised BHEL officials:
  - a. Safety Helmets conforming to IS-2925: 1984
  - b. Safety Belts confirming to IS 3521: 1983
  - c. Safety shoes conforming to IS-1989: 1978
  - d. Eye & Face Protection devices conforming to IS-8520 : 1987 and IS-8940 : 1978
  - e. Hand & body protection devices conforming to:

IS - 2573 : 1975 IS - 6994 : 1973 IS - 8807 : 1973 IS - 8513 : 1977

- 3.8.3.4 All tools tackles, lifting appliances, material handling equipment scaffolds, cradles, safety nets, ladders, equipment etc. used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorised BHEL official who shall have the right to ban the use of any item.
- 3.8.3.5 All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirements of Indian Electricity Act & Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works. All electrical appliance including portable electrical tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

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- 3.8.3.6 The contractor shall not use any hand lamp energised by electric power with supply voltage of more than 24 volts. For work in confined spaces, lighting shall be arranged with power source not more than 24 volts.
- 3.8.3.7 The contractor shall adopt all fire safety measures as laid down in the "Code for Fire Safety at Construction Sites' issued by the safety Department of the Construction Management (HQ) of BHEL and as per directions of the authorised BHEL official. A copy of the above referred "Code for Fire Safety at Construction Sites" shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.
- 3.8.3.8 Where it become necessary to provide and / or store petroleum products, explosives, chemicals, and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and / or storage in accordance with the rules and regulations laid down in the relevant government acts, such as Petroleum Act, Explosives Act, Petroleum & Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India, etc. Prior approval of the authorised BHEL official at the site shall also be taken by the contractor in all such matters.
- 3.8.3.9 The contractor shall arrange at his cost (wherever not specified) appropriate illumination at all work spots for safe working, when natural daylight may not be adequate for clear visibility.
- 3.8.3.10 The contractor shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instructions, that may endanger safety of men, equipment, material and environment in his scope of work or another contractor's or agency's Cost of damage if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.
- 3.8.3.11 In case of a fatal or disabling injury, accident to any person at construction site due to lapses by the contractor, the victim and / or his / her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and / or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.
- 3.8.3.12 In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.
- 3.8.3.13 In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have right to recover c o s t of such delay from payments due to the contractor, after notifying the contractor suitably and giving him opportunity to present his case.
- 3.8.3.14 If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so, and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorised BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.

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- 3.8.3.15 The contractor shall submit report of the accidents, fires and property damage, dangerous occurrences, to the authorised BHEL official immediately after such occurrence, but in any case not later than twelve hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. In addition, periodic reports on safety shall also be submitted by the contractor to the authorised BHEL official from time to time as prescribed.
- 3.8.3.16 Before commencing the work, the contractor shall appoint / nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.
- 3.8.3.17 If safety record of the contractor in execution of the awarded job is to the satisfaction of safety Department of BHEL, issue of an appropriate certificate to recognise the safety performance of the contractor may be considered by BHEL after completion of the jobs.
- 3.9 Housekeeping and preservation:
- 3.9 Work floor/area shall be cleaned every day and be kept absolutely clean. A regular cleaning gang may be engaged for the purpose.

All dismantled components of the equipments under overhauling should be tag marked and stored properly according to type of components, namely all loose/small parts shall be kept in boxes bearing and matching components shall be kept on wooden planks. A list of such components shall be maintained to identify / locate be preserved properly against probable damages.

No floor shall be damaged while working and necessary steps shall be taken by the contractor for repair in case of any damage.

3.9 Tools stores and Consumables:

Tools & tackles, other than special tools and tackles supplied along with the equipments, shall be arranged and kept properly by the contractor. A register must be maintained and updated regularly.

All consumables, other than those going permanently into the equipment, shall be stored by the contractor for daily use. Regular check shall be made at end of each day's work and exhausted consumables shall be replenished immediately.

The store may be visited by BHEL Engineers without notice for verification.

3.9 The contractor shall make all necessary arrangement to receive spares from BHEL/Customer's stores, as and when required. The unused and scrap materials shall be returned to BHEL / Customer's stores on completion of the work.

A detailed account shall be submitted by the contractor to this effect at the end of the work certifying no dues remained against them duly signed by Resident Engineer BHEL/Customer.







- 3.9 General:
- 3.9.1 Standard printed conditions if enclosed with the offer by the tenderers will not be accepted and only those in main body of the offer will be considered for acceptance.
- 3.9.2 The tenders are likely to be rejected if the tendered is not acceptable to the ultimate customer.
- 3.9.3 It will be the responsibility of the contractor to carry out trial run of all the equipments overhauled and confirm the satisfactory operation of equipment. The contractor's personnel shall also be present at time of final commissioning and attend to any defects that shall occur during this time.





Annexure - V

### A) <u>TENDERING</u>

- 1. Tenders may be submitted through Registered post with acknowledgement due, in the name of the addressee only indicated, or by hand delivery or by courier service obtaining acknowledgements of receipt. Telegraphic / Telex offers received in time can be considered, if only followed by acceptable written tender documents in accordance with the telex / telegram and does not result in any advantage over other tenderers because of any possible manipulation in price or date of completion etc.
- Each and every page of tender documents from declaration of bidders to Annexure VI
  enclosed should be signed by the tenderer providing his / their seal and date as taken of
  their full acceptance of the scope of work, terms and conditions etc., and should be
  returned along with the tender offers.
- 3. The tenders should be quoted in English language and international numbers.
- 4. All entries in the tender shall be typed in ink legibly written without ambiguity.
- 5. Qualifications of Tenderers: for open tenders only, the tenderers who have previous experience in the similar nature of work as detailed in this tender specifications are expected to quote duly detailing their relevant experience / credentials along with the offer. Offers of other than the above are not likely to be considered. (List of similar jobs done)

   Enclosure 1
- 6. Financial Status: A current / valid certificate from a scheduled bank to provide the financial soundness / capability of the bidder to undertake the work, is required to be submitted along with offer.

   Enclosure 2
- 7. Income Tax / Sales Tax certificates : A certificate of income tax / sales tax clearance from the appropriate authority, is to be submitted in the form prescribed therefor, valid for the period of contract.

   Enclosure 3
- 8. Organization Chart: The organization pattern and that will be deployed by the tenderer for this work duly indicating the number of supervisors, their qualifications and experience in the line, the number of skilled and unskilled persons / etc. is required to be indicated in the offer.

   Enclosure 4
- THE FOLLOWING DOCUMENTS SHOULD ALSO BE ENCLOSED.
  - a) An attested copy of the power of attorney in case the tender is signed by an individual other than the sole proprietor.
  - b) In case of an individual his full name, address, nature of business and valid trade licence.





- c) In case of partnership firm, the names of all partners and their addresses. (A copy of the partnership deed / instrument of partnership, duly attested by the Notary public shall be enclosed.)
- d) In case of companies, date and place of incorporation / registration including date of commencement certificate (for public companies). (Certified copies of Memorandum and articles of association are also to be furnished).

### B) <u>EARNEST MONEY DEPOSIT</u>:

For this, please refer article 1.4 (page 4 of 23) of the General and special conditions of contract – 1991 (GSCC) enclosed / supplied with the form issued for empanelment.

### C) <u>VALIDITY OF OFFER</u>:

The rates in the tender shall be kept open for acceptance for a minimum period of <u>six</u> <u>months</u> from the due date of opening of tenders. For details, please refer article 1.6 (page 7) of GSCC enclosed.

### D) <u>SECURITY DEPOSIT</u>:

As per clause no. 1.8 of GENERAL & SPECIAL CONDITIONS OF CONTRACT [FOR SERVICES JOB].

#### **Return of Security Deposit:**

If the contractor duly fulfils the contractual obligations as per contrcat in all respects to the entire satisfaction of BHEL, and presents an absolute "No Demand Certificate" in the prescribed form and return properties belonging to BHEL handed over, lent or hired by him for carrying out the said works the security deposit will be released to the contractor after deducting all costs or expenses or other contracts entered into with the contractor, only after the satisfactory completion of guarantee period irrespective of release of last 10% payment. In no case Security Deposit can be released before settling all claims of BHEL on contractor under this contract.

No interest shall be payable by BHEL on Earnest Money / Security Deposit or any money due to the contractor from BHEL.

### E) ACCEPTANCE / REJECTION OF TENDERS:

For this, please refer article 1.9 (pages 6 to 10) of GSCC enclosed. Also acceptance of customer is pre-requisite for consideration of bid, wherever applicable.

#### F) ADDITIONAL SPECIFIC TERMS AND CONDITIONS:

### 01. EXECUTION.

i) If the site in question is subjected to industrial relations unrest / disturbances / problems, then the successful bidder should take adequate precautionary measures against dislocation of the job on account short problems. Any liability on this account, lies entirely with the contractor.



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- i) The contractor shall commence the work at site with full manpower, T&P etc. and complete as specified in the particulars of the tender. In case of any delay on the completion of work attributable to the contractor BHEL reserves full rights to cancel the contract fully or partly and to award the job in full or part to an alternate agency and recover the costs towards the same including BHEL's overheads from the contractor.
- iii) In the event of termination of contract or restriction of quantum of job by our client, before or during the execution of contract, BHEL reserves the right to terminate the contract or restrict the quantum of work of subcontractors accordingly without paying any compensation.
- iv) Manpower: For various category of manpower and their numbers recommended, please refer to the Annexure IV of the tender enquiry. The contractor shall engage proper skilled / qualified personnel and ensure the expected quality of work. If any of their personnel has been found to be unsuitable, by BHEL / or their client, the contractor shall withdraw them and provide suitable replacement immediately, failing which BHEL reserves full rights to get the job done by alternate suitable persons at risk and cost of the contractor. The delay on this account is attributable to the contractor.
- v) TOOLS (TACKLES & PLANTS): All tools, tackles and plants including precision measuring instruments, lifting devices shall have to be arranged by the contractor. (List of recommended T&P, for guidance, is provided in Annexure II of the tender enquiry). All lifting tackles and pulling devices to be used must bear valid / latest test certificates for their suitability, and the sales tax furnished along with the offer itself.

Also certificates of test / calibration with date of validity for various measuring / test instruments have to be submitted by the tenderer preferably along with the offer itself, or else the same is required to be produced at site before start of job failing which the LOI / W.O. is liable to be cancelled without any compensation.

Successful bidder shall provide valid calibration certificates for IMTEs, fitness certificates for T&Ps and Construction Equipment (e.g. wire ropes, hand operated chain pulley blocks, pulling and lifting machines, electric welding generators, arc welding transformers etc.). Calibration of IMTEs is to be arranged from the accredited agencies. Calibration certificates should have the traceability as per national/international standards. At work site the IMTEs, T&Ps and Construction Equipment shall be checked/tested/inspected by BHEL engineers. The procedure for fitness testing and storage preservation and maintenance of Construction Equipment and T&Ps shall be as per Doc. Nos. PSER:FEX:001:94, PSER:SAS(CAL):016:95 and PSER:FEX:002:94 available with BHEL site engineers.

vi) CONSUMABLES: All consumables required ( list for guidance is given in Annexure III of the tender enquiry) for the job shall be arranged by the contractor





at his cost. However, any spares / components / consumables / materials going permanently into the clients equipment shall be provided to the contractor.

- vii) Successful bidder has to arrange proper storing facilities at site with traceabilities for IMTEs, T&Ps, construction equipments and consumables used during job execution.
- viii) All the T&Ps, consumables etc. must be mobilized at site at least three days prior to actual start of the job. They must be in accordance with those recommended in the Annexure II and III respectively of the Tender Enquiry and must be got verified to that effect. Formal clearance in writing must be obtained from BHEL's resident engineer before the contractor starts the job.

T&P found defective / improper / insufficient or not having valid test / calibration certificate should be made good immediately.

If the contractor fails to mobilize at least 90% of the recommended T&P and manpower within the stipulated period, the order on the contractor is liable to be cancelled without paying any compensation on to him.

- viii) Storage: The contractor shall be responsible for proper storing of all dismantled components, spares, T&P etc., identify them properly and preserve them throughout the execution of the job. Any loss or damage of the components caused due to the lapses attributable to the contractor or his personnel, shall be chargeable to the contractor.
- ix) Transportation of Spares / materials / consumables :

Any material / components / spares required for the work must be collected by the vendor and carried safely to the work site from the point of issue in our clients premises, through his own resources and cost.

Similarly, excess materials / spares etc. must be returned to the client's stores /

any other place, within the client's premises, indicated by site-in-charge of BHEL.

Any debris, rubbish at the work spot must be cleared very day by the contractor using his own resources and cost, and disposed off at a placement for, as to be informed to him.

#### x) Space / Accommodation:

The contractor will be allowed to have his site office, stores etc. by erecting temporary partitions / chambers / sheds etc. at the work spot according to the availability of space, which will have to be vacated and dismantled at the end of the jobs to restore the space to the client. The contractor should make his own arrangements for the security / watch and ward.

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No residential accommodation / spare can be provided by BHEL to the contractor for any residential accommodation of his personnel. Contractor has to make arrangements/accommodation at site at his cost.

xi) The contractor shall ensure responsible execution of the job and proper behavior of their personnel and observance of all the rules and regulations of our clients.

#### xii) Safety:

- a) Standard safety norms/ regulations shall be conserved by the contractor during the execution of the job. The contractor should provide the necessary / stipulated safety devices to his personnel deputed to the site, such as grinding / welding goggles, masks, safety belts, helmets etc. No worker will be permitted to work without necessary safety appliances. Delay of work due to work without necessary safety appliances. Delay of work due to these lapses are attributable to the contractor.
- b) All norms related to Health, Safety & Environmental (HSE) norms conforming to ISO-14001 & OHSAS-18001 shall be followed by successful bidder. Bidders may contact SAS-PSER office for getting detailed norms to be followed by bidder at Site
- c) The contractor shall comprehensively insure all his site personnel against any hazard / accident and submit a copy of the insurance certificate covering all his site personnel to our resident engineer before commencement of work.
- d) In case of any accident / hazard, the contractor shall arrange for medical attendance immediately shall compensate the personnel concerned in accordance with the workmen's compensations act in force and shall keep BHEL indemnified against any provisions of the act.
- e) The successful bidder is to arrange a full set of First Aid kit for attending to manpower deployed by him at site as per requirement.
- f) Successful bidder should follow all safety norms at work site. The Doc. No. PSER:PMX:004:94 in this regard is available with BHEL engineer at site.

#### 02. STATUTORY COMPLIANCE:

The contractor shall comply with all state and central laws, statutory rules regulations etc. such as:



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The payment of wages act, maximum wages act, workmen's compensation act., industrial disputes act, employees provident funds act / scheme, Employees' state insurance scheme, contract labour (Regulation & abolition) act, 1970 etc. and all other acts, rules & regulations for employment of labour as may have been and as may be enacted by the Government during the tenure of the contract and having force or jurisdiction at site. The contractor shall give to the local government body, police, labour authorities and other relevant authorities and all such intimation and notices as may be required by low and appraise BHEL site-in-charge of such compliance.

- ii) The contractor shall pay all taxes, fees, licence charges, deposits, duties, fines, royalty commissions or other charges which may be leviable on account of any 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 the contractor either form his bills or other issue as deemed fit.
- iii) The contractor shall obtain requisite licence from appropriate authority of the ministry of labour under the provision of the contract labour (Regulation and abolition) Act as soon as the work is avoided to him and indemnify BHEL against the application of any provisions of the act.
- iv) The contractor shall be responsible for provision of welfare and health of his employees / workmen, more particularly described in the contract labour (Regulation & abolition ) act / rules, and safety precautions etc., as may be required for satisfactory execution of the contract.
- v) The contractor shall fulfil all his obligations in respect of canteens, rest rooms, accommodation including proper medical facilities etc. for the personnel employed by him, more particularly described in the contract labour (regulation & abolition) act / rules.
- vi) The contractor will be directly responsible for payment of wages to his workmen more specifically described in the contract labour (regulation and abolition) act / rules. A pay roll sheet showing all the wage payments representative should be furnished to BHEL site office for record purpose. BHEL site in-charge may be intimated the date of disbursement of wages to the workmen engaged for the work; so that his representative can witness the same. The contractor shall indemnify BHEL against any statutory liability on account of dues to his workmen.
- vii) The bidders should be having appropriate licence from the local Boiler Inspectorate if the job involves welding of pressure parts. Also they should be having alloy steel / carbon steel high pressure welders (for PIG and submerged are welding approved by the local Boiler Inspectorate for welding the pressure parts. The bidders should clearly indicate the same in the offer.





#### 03. <u>TERMS OF PAYMENT</u>:

- No advance shall be payable to the contractor unless specifically spelt out in the tender enquiry.
- ii) A minimum time of fifteen days will be required for the processing of bills presented and for their payment.
- iii)
- a) 80% of the contract value shall be payable against submission of three progressive running bills. Each of the billed amount shall correspond to the quantum of job actually completed and to that effect the claim can be preferred based on percentage allotments (to be given in the work order) made. This, however, has to be certified by the resident manager / engineer of the site.
- b) 10% of contract value shall be payable after submission of statutory documents & 'no due certificate from customer's personal department'.
- c) Balance 10% of contract value shall be paid after successful synchronization / commissioning and on receipt of final payment by BHEL from Customer.
- BHEL at its discretion may further split up the percentage break up given in billing schedule and effect payment to suit site condition, cash flow requirement etc. according to progress of work.
- iv) The bidder should be financially sound to maintain the site establishment with regard to timely payment of wages to his workmen, arrangements of other inputs viz. T&P consumables etc.
  - Non-receipt of progressive payment from BHEL due to any reasons should not be a constraint for the smooth execution of the job at site.
- v) The bidder should make all out efforts to provide all inputs in consultation with BHEL engineers at site for completing the job in the specified time frame.
- vi) No over run/escalation / idle charges are payable against any services job under any circumstances. (in exceptional cases such claims may be considered provided BHEL's customer admits of such payment).
- vii) Extra work rate being admitted off by BHEL for other similar contracts have been stated on the page no.10 of this annexure.
  - For any additional work not envisaged in the scope of work or quantities exceeding the stated quantities, these rates shall be applicable.
- viii) All claims for extra works should be settled before claiming the final (10%) bill. The contractor should prefer the final claim with the certificate that 'no other claim is due from BHEL against this contract', without which final bill cannot be processed for payment.
- ix) For reduction / deletion / withdrawal in the scope of work proportionate deduction in contract value will be made.





### 4. <u>PERFORMANCE:</u>

 As soon as job is awarded, the contractor has to submit a barchart to the resident engineer nominated showing the detailed schedule for all activities.

This schedule will be reviewed by the resident engineer from time to time to enable the contractor to recast the barchart matching the planned completion of the job.

ii) It shall be the responsibility of the contractor's supervisor to distribute the work among his workmen deployed at site and get day to day activities executed as per BHEL's requirement.

BHEL's engineers / supervisors will check the correctness of the job done and will also give the daily programme of work to the contractors supervisor. The contractor has to ensure completion of daily programme and if there is any spill over, the same has to be completed by putting in same additional resources. (Technical guidance wherever required will be provided by BHEL).

iii) The scope of work mentioned in this tender enquiry gives the broad outline of the actual work involved and it not is possible to mention all minute details of the work. For proper evaluation, the bidders may seek clarifications from this office. Or else, they may visit site and study the job content before submitting offers and be well informed and acquainted with the actual working and other prevalent conditions of the site, facilities available etc.

No claim will be entertained later on the ground of lack of knowledge. iv)

The bidders have to furnish the bio-data and experience details of the site-in-charge, other key workmen, supervisors, senior technicians etc. to be deployed. In case of award of contract, the key members of the contractor's team may be interviewed at site by BHEL's resident engineer to ascertain their suitability. Replacement of non-acceptable personnel will have to be arranged by the contractor immediately at his own cost.

v) Penalty for the delay in job completion will be 0.5% per day of delay, limiting to maximum 10% of the contract value, to be imposed on the contractor in case the delay in work completion is attributable to the lapses on the part of the contractor.

In case of LD recovery, the applicable GST shall also be recovered from vendor.

vi) Performance Guarantee: Even though the work will be carried out under supervision of BHEL Engineers, the contractor shall guarantee against defects attributable to faulty workmanship or procedure





adopted in the overhaul for items covered in the contract for a period of Six months from the date of re-commissioning of the set after the overhaul. The guarantee should cover all defects notified during this period and shall have to be attended free of cost immediately or at the time our clients are able to give shutdown of the set for the required period, when necessary. In case of failure of contractor to attend to the defect as and when required in time, BHEL shall arrange to attend the defects and the charges shall be levied to the contractor's account and shall be recoverable from the security deposit / progressive payments.

### 5. <u>MISCELLANEOUS</u>:

i) The bidders shall submit a list of jobs being carried out by them or expected to be taken up by them during the period as called for in the participation of the tender.

Enclosure – 6.

- ii) The contractor has to engage a cleaning gang at site to ensure continuous cleaning of the floor at work site to protect the parts and to give safe access at the work site.
- iii) Obtaining licenses / permits / road permits in connection with the fulfillment of the contractual obligations is entirely the contractors responsibility. However, wherever applicable BHEL can only offer support to the extent possible.
- iv) For all matters bearing on the execution of the job at site, the decisions of the resident engineer are final and binding upon the contractor.
- v) The contractor has to retain suitable minimum work force at site for a period of one month from the date of completion or work / commissioning, to attend any small / miscellaneous problems, as leakage etc.
- vi) The contractor has to mobilize on a short notice (within 4 days) to attend any troubles encountered in the equipment worked on, during warranty period of six months.
- vii) After dismantling and during execution of the job, successful bidder has to suitably tag the components and sub-assemblies for traceability and store properly before final assembly. This is as per Doc. Nos. PSER:PMX:002:94 & PSER:PMX:001:94.
- viii) Process control of Special Processes like Welding and Heat Treatment shall be carried by successful bidder as per Doc. Nos. PSER:QLY:001:99, PSER:QLY:001:94 (3 VOL) and PSER:QLY: 003:99.
- ix) Proper segregation, identification, tagging and up-keep of all dismantled items at work site during job execution have to be done by successful bidder.

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- x) Successful bidder is to obtain necessary "No Dues" certificates before demobilisation from site.
- xi) Any NDT within the scope shall be as per Non-Destructive Examination manual (Doc. No. PSER:QLY:002:99 available with BHEL site engineer).
- xii) Unless otherwise mentioned specifically in this tender elsewhere, the storage & preservation of components, sub-assemblies, IMTEs, T&Ps, Construction Equipments etc, maintenance of stores, watch and ward of stores and BHEL site office is in the scope of the successful bidder.
- xiii) The successful bidder is to arrange extra illumination at work site to augment the existing site illumination if required to enable round-the-clock safe working.

Note: Any of the documents mentioned above can be referred before submission of tender at the office of PSER:SAS(CAL).

#### EXTRA WORK RATES CURRENTLY BEING ADMITTED BY BHEL, PS-ER

A. The following all inclusive manhour rates will be applicable for modification, rectification work and services work.

(For all categories)

 a) Average single manhour rate including overtime if any, supervision, T&P, other site expenses and incidentals including consumables as certified by site-in-charge of BHEL.

Rs 60/- per man hour (Rupees sixty per man hour only)

- b) Same as above (a) but excluding supply of consumables by vendor. Rs 40/- per man hour (Rupees forty per man hour only)
- B. The following all inclusive rates will be applicable for modification work involving welding of high pressure butt joints only. Extra work involving other types of joints will be done on the above manpower basis.

Unit rate per equivalent joint of size OD 63.5 mm x 6.3 mm thick

Average unit rate per equivalent joint, including NDT and stress reliving.





Carbon Steel Rs.200/- (Rs. Two hundred only)

Alloy Steel Rs.250/- (Rs. Two hundred fifty only)





List of enclosure to be furnished by the bidder along with tender documents.

- a) Experience certificate Enclosure 1 \*
   b) Banker's certificate of financial Enclosure 2 \*
   soundness as per BHEL' format
- c) IT / ST clearance certificate Enclosure 3. d) Organisation Chart Enclosure 4. \*
- e) List of concurrent jobs held by the Enclosure 5. contractor / bidder.
  - ( \* Vendors registered with BHEL should submit documents in support of sl. no. c only.)

List of documents to be furnished by the contractor to the resident engineer before commencement of the jobs / during the execution.

- i) Barchart (if not furnished in the offer)
- ii) List of T&P being mobilized. Test / Calibration certificate with date of validity for lifting / pulling devices and measuring / test instrument (if not furnished in the offer).
- iii) Category wise list of manpower being mobilized. iv)
  - List of consumables being mobilized.
- v) Licence from the department of Labour under contract Labour (Regulation & Abolition) Act / Proof of Application for Lincence.
- vi) ESI coverage, if applicable.
- vii) Insurance certificate covering the site personnel.
- viii) Proof of remittance of provident fund to the concerned authorities, for all workmen employed for this job.
- ix) Third party insurance coverage.



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#### **ANNEXURE - VI**

### QUESTIONAIRE TO BE FILLED IN BY THE BIDDER, SIGNED WITH DATE AND SEAL, AND TO BE RETURNED ALONG WITH TECHNICAL TENDER.

BIDDER'S NON-ACCEPTANCE OF TENDER REQUIREMENTS CAN DISQUALIFY HIS BID FOR OPENING OF "PRICE BID"

TENDER NO: PSER:SCT:		DATE:/20
01	NAME OF THE ORGANISATION. ADDRESS, TELEPHONE / FAX NO.	:
02	MODE AND PARTICULARS OF EMD ENCLOSED	
03	BANKER'S CERTIFICATE FOR FINANCIAL SOUNDNESS / CAPABILITY TO UNDERTAKE WORK.	
04.	IS THE FIRM HAVING VALID TESTED / CALIBRATED TOOLS AND MEASURING INSTRUMENT REQUIRED FOR THIS TYPE OF JOB AND EQUIPMENT.	
05.	ORGANISATION CHART / MANPOWER	: Enclosed / Not enclosed.
06.	STATUTORY REQUIREMENTS AS PER RELEVANT ACTS WITH LATEST AMENDMENT (PI. tick out) i) LICENCE FOR EMPLOYING CONTRACT LABOUR ii) MINIMUM WAGES ACT iii) INSURANCE OF SITE PERSONNEL EMPLOYED. iv) WORKMEN'S COMPENSATION ACT v) THIRD PARTY INSURANCE	: Will be complied with  : - do - : - do - : - do -
	v) THIRD PARTY INSURANCE vi) EMPLOYEE'S LIABILITY ACT vii) INDUSTRIAL DISPUTES ACT viii) EMPLOYEE'S PROVIDENT FUNDS ACT	: Will be complied with  : - do -  : - do -

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ix) CONTRACT LABOUR: - do -

(REGULATION AND ABOLITION)

ACT / RULES

x) SAFETY APPLIANCES / DEVICES : - do -

FOR WORKMEN

xi) BOILER INSPECTORATE : - do - xii) ARBITRATION ACT : - do -

07. **AGREEABILITY TO "NO OVERRUN** : Agreeable

CHARGES" CLAUSE

08. **AGREEABILITY TO "NO IDLE TIME** : Agreeable

**CHARGES" CLAUSE** 

09. AGREEABILITY TO EXECUTE FULL: Agreeable

SCOPE OF WORK OF TENDER ENQUIRY

(INCLUDING RELATED MINOR

ACTIVITIES).

Signature of the bidder

Date :

Name of the person signing:

Designation :

SEAL