

# TENDER SPECIFICATION

BHE/PW/PUR/UKH-GEN/1193

FOR

Dismantling of existing Generator stator assembly, erection, Commissioning and testing of new wound stator of Ukai Hydro Unit No.4.

VOLUME – I

## CONSISTING OF:

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



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

**CONTENTS**

Volume No	Description	No. of pages	Hosted in website bhel.com as files titled
NIL	Tender Specification Issue Details	1	(Part of <b><u>Vol-IA-1193</u></b> )
NIL	Notice Inviting Tender	13	(Part of <b><u>Vol-IA-1193</u></b> )
I-A	Technical Conditions of Contract	21	<b><u>Vol-IA-1193</u></b>
I-B	Special Conditions of Contract	47	<b><u>Vol-IBCD-1193</u></b>
I-C	General Conditions of Contract	29	(Part of <b><u>Vol-IBCD-1193</u></b> )
I-D	Forms & Procedures	46	(Part of <b><u>Vol-IBCD-1193</u></b> )
II	Price Bid Specification	3	<b><u>Vol-II-1193</u></b>

**Tender Specification Issue Details**

**TENDER SPECIFICATION  
BHE/PW/PUR/UKH-GEN/1193**

**FOR**

**Dismantling of existing Generator stator assembly, erection, Commissioning and testing of new wound stator of Ukai Hydro Unit No.4.**

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR                      Refer Notice Inviting Tender

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

M/s. ....

.....

PLEASE NOTE:  
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

Bharat Heavy Electricals Limited

AGM (Purchase)

1193

# NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



Ref: BHE/PW/PUR/UKH-GEN/1193

Date: 16.11.2013

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

To

Dear Sir/Madam

**Sub : NOTICE INVITING TENDER**

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

**1.0 Salient Features of NIT**

SL NO	ISSUE	DESCRIPTION	
i	TENDER NUMBER	BHE/PW/PUR/UKH-GEN/1193	
ii	Broad Scope of job	CHEMICAL CLEANING OF BOILER UNIT #4 500 MW MSPGCL BHUSAWAL TPS	
iii	DETAILS OF TENDER DOCUMENT		
a	Volume-IA	<i>Technical Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc</i>	Applicable
b	Volume-IB	<i>Special Conditions of Contract (SCC)</i>	Applicable
c	Volume-IC	<i>General Conditions of Contract (GCC)</i>	Applicable
d	Volume-ID	<i>Forms and Procedures</i>	Applicable
e	Volume-II	<i>Price Schedule (Absolute value).</i>	Applicable
iv	Issue of Tender Documents	<b>Issue start -16.11.2013</b> <b>Close - 05/12/2013</b>	Applicable/ Not applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	<b>Date : 06.12.2013 , Time : 15.00 Hrs</b> <b>Place : <u>BHEL PS Regional office at :Nagpur</u></b>  Tenders being submitted through representative shall be handed over to any of the following BHEL officials after making entry/registration at the reception:  Saravana Kumar/Engineer(Purchase) Nirmal P.G/ Asst.Engineer(Purchase)	Applicable
vi	OPENING OF TENDER	<b>Date : 06.12.2013 , Time : 16.00 Hrs</b> Notes:	Applicable

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

		(1) In case the due date of opening of tender becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day. (2) Bidder may depute representative to witness the opening of tender	
vii	<b>EMD AMOUNT</b>	Rs. 2,00,000/- (Rupees Two Lakhs Only)	Applicable
viii	<b>COST OF TENDER</b>	Rs.2000/-	Applicable
ix	<b>LAST DATE FOR SEEKING CLARIFICATION</b>	Atleast 5 days before the due date of offer submission Along with soft version also, addressing to undersigned .  <b>P. Saravanakumar (Engineer)-</b> <b>E-mail-<a href="mailto:sharavan@bhelpswr.co.in">sharavan@bhelpswr.co.in</a></b> <b>PH: 0712-3048635</b>  <b>Nirmal P.G (Asst. Engineer)-</b> <b>E-Mail-<a href="mailto:nirmalpg@bhelpswr.co.in">nirmalpg@bhelpswr.co.in</a></b> <b>Ph: 0712-3048713</b>	Applicable
x	<b>SCHEDULE OF Pre Bid Discussion (PBD)</b>		Applicable/Not applicable.
xi	<b>INTEGRITY PACT &amp; DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)</b>	-----	Applicable/Not applicable.
xii	<b>Latest updates</b>	Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be intimated by Fax/E-mail. Bidders to keep themselves updated with all such information	<u>Applicable</u>

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

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

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

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

Sl no	Description	Remarks
	<b>Part-I A</b>	
	<p><b>ENVELOPE – I superscribed as :</b>            PART-I (TECHNO COMMERCIAL BID)            TENDER NO :            NAME OF WORK :            PROJECT:            DUE DATE OF SUBMISSION:</p> <p><b>CONTAINING THE FOLLOWING:-</b></p>	
i.	Covering letter/Offer forwarding letter of Tenderer.	
ii.	Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.  <b>Note:</b> <ol style="list-style-type: none"> <li>a. In case of any deviation, the same should be submitted separately for technical &amp; commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.</li> <li>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.               <ol style="list-style-type: none"> <li>i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</li> <li>ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</li> </ol> </li> </ol>	
iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.  It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact ph no, FAX no, etc.	
iv.	All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.	
v.	Integrity Pact Agreement (Duly signed by the authorized signatory)	If applicable
vi.	Duly filled-in annexures, formats etc as required under this Tender Specification/NIT	
vii.	Notice inviting Tender (NIT)	
viii.	Volume – I A : <u>Technical</u> Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc	
ix.	Volume – I B : Special Conditions of Contract (SCC)	
x.	Volume – I C : General Conditions of Contract (GCC)	
xi.	Volume – I D : Forms & Procedures	

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

xii.	Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item	
xiii.	Any other details preferred by bidder with proper indexing.	

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

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

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

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

---

	○ Envelopes III	
--	-----------------	--

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

- 7.0 Deviation with respect to tender clauses and additional clauses/suggestions in Techno-commercial bid / Price bid shall NOT be considered by BHEL. Bidders are requested to positively comply with the same.
- 8.0 BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the Tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).
- 9.0 Since the job shall be executed at site, bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation, applicable wage structure, wage rules, etc before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions.
- 10.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- ~~11.0 BHEL may decide holding of pre-bid discussion [PBD] with all intending bidders as per date indicated in the NIT. The bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Bidders shall plan their visit accordingly. The outcome of pre-bid discussion (PBD) shall also form part of tender.~~
- 12.0 In the event of any conflict between requirement of any clause of this specification/ documents/drawings/data sheets etc or requirements of different codes/standards specified, the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error/missing pages/ other clerical errors in the tender documents, noticed must be pointed out before pre-bid meeting/submission of offer, else BHEL's interpretation shall prevail.
- 13.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.
- 14.0 Bidders shall submit Integrity Pact Agreement (Duly signed by authorized signatory who signs in the offer), **if applicable**, along with techno-commercial bid. This pact shall be considered as a preliminary qualification for further participation. **The names and other details of Independent External Monitor (IEM) for the subject tender is as given at point (1) above.**
- 15.0 The Bidder has to satisfy the Pre Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened who will be qualified for the subject job on the basis of satisfying the Pre Qualification Criteria specified in this NIT as per Annexure-I (as applicable), past performance etc. and date of opening of price bids shall be intimated to only such bidders. BHEL reserves the right not to consider offers of parties under HOLD.
- 16.0 In case BHEL decides on a 'Public Opening', the date & time of opening of the sealed PRICE BID shall be intimated to the qualified bidders and in such a case, bidder may depute one authorised representative to

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

Page 10 of 37

.....  
witness the price bid opening. BHEL reserves the right to open 'in-camera' the 'PRICE BID' of any or all Unsuccessful/Disqualified bidders under intimation to the respective bidders.

- 17.0 Validity of the offer shall be for **Six Months** from the latest due date of offer submission (including extension, if any) unless specified otherwise.
- 18.0 BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction process. In such case all qualified bidders will be intimated regarding procedure/ modality for Reverse Auction process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. .
- However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.
- 19.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 20.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.
- 21.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 22.0 The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self-certified and stamped by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.
- 23.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 24.0 Order of Precedence  
In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:
- a. Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL
  - b. Notice Inviting Tender (NIT)
  - c. Price Bid
  - d. Technical Conditions of Contract (TCC)—Volume-1A
  - e. Special Conditions of Contract (SCC) —Volume-1B
  - f. General Conditions of Contract (GCC) —Volume-1C
  - g. Forms and Procedures —Volume-1D

for BHARAT HEAVY ELECTRICALS LTD

AGM/Purchase

**Enclosure**

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

**PRE QUALIFYING REQUIREMENTS**

<b>JOB</b>	R & M work- Dismantling of existing Generator stator assembly, erection, magnetic centre correction of rotor w.r.t stator , Commissioning and testing of new wound stator of Ukai Hydro Unit No.4		
<b>TENDER NO</b>	BHE/PW/PUR/UKH-GEN/1193		
<b>SL NO</b>	<b>PRE QUALIFICATION CRITERIA</b>	<b>Bidders claim in respect of fulfilling the PQR Criteria</b>	
		<b>Name and Description of qualifying criteria</b>	Page no of supporting document. <b>Bidder must fill up this column as per applicability</b>
A	Submission of Integrity Pact duly signed (if applicable)	NOT APPLICABLE	
B	<p><b><u>Technical</u></b></p> <p>Bidder must have executed following works {i.e. Bidder must meet (B.1.1 or B.1.2 or B.1.3)} in the last seven (7) years as on latest date of bid submission:-</p> <p><b>B.1.1)</b> Bidder must have, Executed Erection, Testing and Commissioning (Up to Synchronization of the Unit or beyond) of One set of Hydro Turbine Generator (HTG) of 30 MW or higher rating.</p> <p style="text-align: center;"><b>OR</b></p> <p><b>B.1.2)</b> Bidder must have, Executed Renovation &amp; Modernization (Up to Synchronization of the Unit or beyond) of One set of Hydro Turbine Generator (HTG) of 30 MW or higher rating</p> <p style="text-align: center;"><b>OR</b></p> <p><b>B.1.3)</b> Bidder must have, Executed Overhauling 'OR' assembly of hydro generator of 60 MW and higher rating.</p>	APPLICABLE	
C-1	<p><b><u>FINANCIAL TURNOVER</u></b></p> <p>Bidders must have achieved an average annual financial turnover (Audited) of <b>Rs.75 Lakhs</b> or more over last three Financial Years (FY) i.e. 2010-2011, 2011-2012, 2012-2013.</p>	APPLICABLE	
C-2	<p><b><u>NETWORTH (only in case of Companies)</u></b></p> <p>Net worth of the Bidder based on the latest Audited</p>	APPLICABLE	

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

	Accounts as furnished for 'C-1' above should be positive		
C-3	<b>PROFIT</b> Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three Financial Years defined in 'C-1' above based on latest Audited Accounts.	APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)	NOT APPLICABLE	By BHEL
E	<b>Approval of Customer (if applicable)</b> <b>Note:</b> Names of bidders (including consortium/Technical Tie up partners in case consortium bidding is permitted) who stand qualified after compliance of criteria A to D shall be forwarded to customer for their approval.	NOT APPLICABLE	BY BHEL
F	<b>Price Bid Opening</b> <b>Note:</b> Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E	APPLICABLE	BY BHEL
G	Consortium criteria	NOT APPLICABLE	
<p><b><u>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</u></b></p> <ol style="list-style-type: none"> <li>1. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against C-1 above along with all annexures</li> <li>2. In case audited Financial statements have not been submitted for all the three years as indicated against C-1 above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e total divided by three.</li> <li>3. C-2:-NETWORTH : Shall be calculated based on the latest Audited Accounts as furnished for C-1 above. Net worth = Paid up share capital + Reserves. (Net worth is required to be evaluated in case of companies)</li> <li>4. C-3:- PROFIT : shall be NET profit (PAT + Non cash expenditure viz depreciation) earned during any one of the three financial years as in C-1 above</li> <li>5. 'Additional' Criteria in respect of 'Technical' criteria of PQR (as in 'B' above) for Civil, Electrical, CI, unless otherwise specified:- <ol style="list-style-type: none"> <li>1. Bidder should have executed similar work of any one of the following: <ol style="list-style-type: none"> <li>a. One (1) work of value not less than Rs XXX OR</li> <li>b. Two (2) works of not less than Rs YYY OR</li> <li>c. Three (3) works of not less than Rs ZZZ (Value XXX, YYY, ZZZ shall be as indicated by BHEL)</li> </ol> </li> <li>2. 'Similar' work for criteria 5 above means <ol style="list-style-type: none"> <li>a. Civil or Structures or Civil &amp; Structures or Chimney respectively as applicable to the tendered scope in respect of 'CIVIL' Works</li> <li>b. Electrical works in respect of 'ELECTRICAL'</li> <li>c. CI works in respect of 'CI' Works</li> <li>d. Material Handling and/or Management works in respect of 'MM' works</li> </ol> </li> </ol> </li> <li>6. Time period for achievement of the 'Technical' criteria of PQR (as in 'B' above) will be the last 7 years ending on the 'latest date' of Bid submission</li> <li>7. 'EXECUTED' means the Vendor should have achieved the criteria specified in the Technical criteria of PQR (as in 'B' above) even if the Contract has not been completed or closed</li> <li>8. Unless otherwise specified, for the purpose of 'Technical' criteria of PQR ( as in 'B' above), the word 'EXECUTED' means:</li> </ol>			

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

Page 13 of 37

1. ~~“BOILER LIGHT UP” in respect of Boiler & Aux and ESP~~
2. ~~“SYNCHRONISATION” in respect of STG/GTG and ‘SPINNING’ in case of HTG~~
3. ~~“STEAM BLOWING COMPLETION” in respect of at least Main Steam Line of Power Cycle Piping~~
4. ~~“HYDRAULIC TEST” of the system in respect of Structures, Pressure parts/IBR Piping~~
5. ~~“CHARGING” in respect of power Transformers, Bus ducts, HT/LT switchgears~~
6. ~~“Completion of RCC Shell and liner (steel or brick as per tendered scope) up to the HEIGHT specified using slip form” in case of RCC Chimney.~~
7. ~~Achievement of physical Quantities as per respective PQRs in respect of Civil & Structures and Piling Works~~
8. ~~‘Readiness for coal Filling’ in respect of Bunker Structure Work.~~
9. ~~Boiler means HRSG or WHRB or any other types of Steam Generator~~
10. ~~Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines~~
11. ~~For the purpose of evaluation of the PQR, one MW shall be considered equivalent to 3.5TPH where ever rating of HRSG/BOILER is mentioned in MW. Similarly, where ever rating of Gas Turbine is mentioned in terms of Frame size, ISO rating in terms of MW shall be considered for evaluation.~~
12. ~~In case the experience/PO/WO certificate enclosed by bidders do not have separate break up prices for the E&C portion of Electrical and CI Works, (i.e. the certificates enclosed are for composite order for supply and erection of Electrical & CI and other works if any), then value of Erection and Commissioning for the Electrical & CI portion shall be considered as 15% of the supply & erection of Electrical & CI, unless otherwise specifically indicated in the PQR.~~
13. ~~Scope for capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine unless otherwise specifically indicated in the PQR.~~
14. ~~In case the tendered scope is not a Pulverised Fuel Boiler, experience of Oil/Gas Fired Boilers also can be considered unless otherwise specifically indicated in the PQR.~~
15. **The value of work (Experience submitted against PQR B) shall be updated as per the PVC indices for “All India Avg. Consumer Price Index for Industrial Workers” with base month as date of execution (completion of contract/work) and indexed upto two months prior to bid opening month.**

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

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

Page 14 of 37

**ANNEXURE - 2**

**CHECK LIST**

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

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

**BHEL PSWR**  
**Notice Inviting Tender**  
**Tender Specification No : BHE/PW/PUR/UKH-GEN/1193**

Page 15 of 37

17	Capacity Evaluation of Bidder for current Tender	NOT Applicable	
18	Tie Ups/Consortium Agreement are submitted as per format	NOT Applicable	
19	Power of Attorney for Submission of Tender	Applicable	YES/NO
20	Analysis of Unit rates	Applicable	YES/NO

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

DATE :

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

**ANNEXURE 4: IMPORTANT INFORMATION**

1. The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site ( [www.bhel.com](http://www.bhel.com) ---> Tender Notification -> List of Banned Firms )
2. All Statutory Requirements as applicable for this project shall be complied with.
3. Please take note of following Revised Tender Clauses:
  - i. General conditions of Contract: Clause No 1.15.13 (New), Clause No 2.8.3, 2.8.4 and 2.8.5
4. Price Variation Compensation is not applicable
5. Overrun Compensation shall not be applicable.
6. Interest bearing advance shall not be paid for this contract.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



# TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

---

SI No	DESCRIPTION	Chapter	No. OF PAGES
<b>Volume-IA</b>	<b>Part-I: Contract specific details</b>		
1	Project Information	Chapter-I	1
2	Scope of Works	Chapter-II	2
3	T&Ps and Consumables to be deployed by Contractor	Chapter-III	3
4	Facilities in the scope of Contractor/ BHEL	Chapter-IV	1
5	Manpower to be deployed by contractor Time Schedule	Chapter-V	1
6	Time Schedule	Chapter-VI	1
7	Terms of Payment	Chapter-VII	1
8	Taxes & Duties	Chapter-VIII	2
9	Special Terms and Other Conditions	Chapter-IX	3
10	Safety	Chapter-X	4

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-I Project Information**

---

<b>1.0</b>	<b>Project Information</b>
	<p>1) Purchaser : Gujarat State Electricity Corporation Limited</p> <p>2) Project Title : GSECL Ukai Hydro Power Plant, Dist. Tapi, Gujarat.</p>

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

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II Scope of Works

---

**Job:** Dismantling of Existing Generator stator assembly, Erection, Commissioning and Testing of New Wound Stator of Ukai Hydro Unit No.4.

### **2.0 SCOPE OF WORK:**

#### **[A] DISMANTLING OF COMPLETE UNIT:-**

- [1] Removal of PMG and exciter
- [2] Removal of top cover assembly
- [3] Removal of rotor poles air guide and fan segments
- [4] Removal of rotor assembly and bearings
- [5] Dismantling of stator winding coils
- [6] Dismantling of core
- [7] Removal of key bars, HS Plates from existing stator frame
- [8] Straightening of key bars for re use
- [9] Removal of stator frame from position
- [10] Other miscellaneous dismantling required for the completion of this job satisfactory and Successfully

#### **[B] ASSEMBLY OF STATOR FRAME :-**

- [1] Placing of new stator frame segments on support stool and joined together leveling by Micro water level and sweep gauge perfectly
- [2] Place support finger and assemble core punching then welding of support fingers
- [3] Fixing of key bars
- [4] Assembly of glued packets RTD's
- [5] Building of core, tightening in stages
- [6] Conducting core flux test. Core Flux test kit is to be arranged by contractor.
- [7] Spray painting of stator
- [8] Placement of stator in position
- [9] Place stator on leveled sole plate
- [10] Bolting stator with sole plate
- [11] Other miscellaneous assembling required for the completion of this job satisfactory and successfully

#### **[C] WINDING OF STATOR**

- [1] Laying of winding coils
- [2] Wedging bracing of overhang
- [3] Brazing of coil joints and insulation
- [4] UT test of all brazing joints is to be carried out.
- [5] Cleaning, dry out and HV Test, Stages HV Test is also to be conducted by contractor . HV test kit is to be arranged by contractor
- [6] Stator frame readiness, Core building, Bar laying, Brazing of coil joints& insulation is to be done with extreme care and adequate no of experienced technicians is to be deployed for these work.
- [7] Any inexperienced manpower will not be allowed to carry out stator work.

#### **[D]MECHANICAL WORK BEFORE ASSEMBLY**

- [1] Blue matching of generator thrust and guide bearing pads and scraping of pads if required. Ultrasonic and DP Test of generator guide and thrust bearing and turbine guide bearing Pads

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-II Scope of Works

---

- [2] Checking of TGB, thrust bearing pads, springs, cleaning and clearance
- [3] Lowering of rotor in position, Measurement of run out and checking of alignment and level of turbine generator in assembled condition. Inspection of rotor overhang support bracket bolts, lacing cord repair in case required
- [4] Checking of stator & rotor forms magnetic offset, centering of stator after alignment
- [5] Dowelling of new stator frame with sole blade
- [6] Complete adjustment of magnetic centre and air gap including pole position correction as Pole position correction work is part of activity of magnetic centering pole stop/Pole T head adjustment.
- [7] Assembly of top bottom air baffles
- [8] Boxing up of bearing and other assemblies
- [9] Cleaning of all Generator coolers and hydro test of same and assembly with new stator.
- [10] All related activities under the scope ( electrical as well as mechanical) during dismantling and assembly of new stator shall be carried out by BHEL.

### **[E] TESTING & COMMISSIONING**

- [1] All required electrical testing like IR, PI , Rotor Pole impedance etc.
- [2] Dry out of stator prior to commissioning of machine.
- [2] Recording of Governing characteristics & correction if required.
- [3] No Load & No Excitation test.
- [5] Commissioning of machine ( 72 hrs Continuous operation)

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-III LIST OF TOOLS AND PLANTS & CONSUMABLES TO BE ARRANGED BY CONTRACTOR

---

All T&P required for the above mentioned job should be arranged by contractor before commencement of the job. The T&P available with customer supplied as standard tools of BHEL will be handed over to you during execution of work as where is condition on returnable basis. Core Flux test kit & HV test kit is also to be arranged by contractor.

### 3.0 LIST OF T& P AND MEASURING INSTRUMENTS TO BE DEPLOYED BY CONTRACTOR.

1. Welding Generator sets with regulator, cables, electrodes, holders and shields etc.
2. Pulley Blocks- Single Sheave, Multi Sheave.
3. Grinding Machines.
4. Chain pulley blocks- Assorted size – as required.
5. Sets of DE and Ring spanners (6-15mm). Measuring steel tapes (3-5 meters).
6. Spirit Level Precision spirit level (with micro head).
7. Sets of box spanners (as per requirement).
8. D.P. test kit (with consumable).
9. Crowbars, tin cutters, pliers (cutting plier /nose plier circlip-outside and inside)
10. Screw drivers.
11. Hammers including sludge hammers - 10 lbs - 1 lbs.
12. Drilling machine with magnetic stand up to 30mm with drill bits.
13. Lifting devices - Eye bolts, D-shackles, Slings of various sizes, guide roads etc.
14. Torch light/hand lamps with cables.
- 15.. 230/24V Transformer with cable and 24V bulbs.
16. Manila Rope of different size.
17. Wooden sleepers.
18. Safety helmets, Safety Belts and other appliances like gas cutting/welding goggles.
19. Tarpaulins.
20. Electrode Heating Oven.
21. Thermo Chalks.
22. Insulating coils for preheating/post heating.
27. Tri square.
28. Vernier calipers (0 to 300 mm).
29. Steel rulers.
30. Allen keys of various sizes (from 2mm onwards).
32. Slogging and single ended spanners (36mm & above).
33. Adjustable wrenches, pipe winches and heck saws.
34. Files - flat round, half round and square rough and smooth (sizes 6" and 12")
35. Bench grinders, straight grinders (GQ4 & GQ6 angle grinders).
36. Number punch, letter punch, centre punch and hole punches etc.
38. Steel wire brushes, wire brush wheels, nylon wire brushes and painting brushes.
39. Hand gloves asbestos, manila rope, asbestos cloth, leather and rubber glows.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-III LIST OF TOOLS AND PLANTS & CONSUMABLES TO BE ARRANGED BY CONTRACTOR

---

40. Set of needle files.
41. Air blower-electric.
42. Electric drills 1/4", 12", 5/8".
43. Ball pen hammer of various sizes, Chisels of various sizes.
44. Gas cutting and heating set with torches, regulators, hoses and cylinder(min. 6 sets).
45. Pneumatic grinder, hose pipes for compressed air bench vices.
46. Hydraulic jacks and mechanical jacks as per requirement.
47. Electric switch boards and flood light arrangements with fuse boxes and isolating switches, plugs and sockets.
48. In addition to above T&P contractor will be required to fabricate related to the scope of work.
49. Pedestal fans/air coolers, wooden sleepers, magnifying glass, plastic helmets, fibre helmets, gas cutting/welding goggles, tarpaulin.
50. Suitable Cable along with associated equipment for stator Core flux test, Core consolidation, HV test Kit, dry out equipment/tools, low p.f watt meter are to be arranged by Contractor.

Note: The above list is only indicative and not exhaustive. Arrangement for any other T&P required for the timely completion of the job shall be the responsibility of the contractor and shall be arranged by him if the measuring instruments & tools shall be duly calibrated and recent certificate to that effect should be submitted to our Resident Manager/Engineer before the start of work.

### **3.1 LIST OF CONSUMABLES TO BE ARRANGED BY CONTRACTOR** (The list is indicative only not exhaustive)

1. Kerosene.
2. Rustolene.
3. Petrol/white petrol/benzene/CRC-226.
4. Grease/Graphite grease.
5. Hacksaw blades.
6. Waste cloth/cotton.
7. Marking/lint free-cloth/muslin.
8. Asbestos cloth/asbestos cord.
9. Prussian blue.
10. Graphite (Banked) powers/ molycote/ Mosil.
11. Hold tight/shellac/gasket sealing compound.
12. Lead wire 1.0 mm/1.5 mm/0.5 mm.
13. Liquid soap.
14. Carborundum grinding paste coarse/fine/diamond lapping paste.
15. Emery papers/rolls.
16. Cut off wheels.
17. Grinding wheels.

**TECHNICAL CONDITIONS OF CONTRACT (TCC)**  
**Chapter-III LIST OF TOOLS AND PLANTS & CONSUMABLES TO BE**  
**ARRANGED BY CONTRACTOR**

---

18. Oil stones, mounted wheels, rotary cutters.
19. DP/MPI test chemicals in ample quantity.
20. Gas cylinders for cutting/welding.
21. Chalk pieces, marking pens, thermo chalks upto 400° C.
22. Insulation tape, Johnson tapes
23. Polythene sheets.
24. Araldite, M-seals, Insta-bond, Dentrite.
25. CRC 226 white spirit.
26. Electric fuse wire, cables for the connections.
27. Dye penetration test kit with required consumables.

All the consumables required for above said works like cotton waste, kerosene, petrol, CTC, plastic sheets , grinding wheels, general purpose electrode for welding temporary works, industrial Oxygen, Acetylene, Nitrogen gas cylinder & Rustolene etc.

Note: The above list is only indicative and not exhaustive. Arrangement for any other consumables required for the timely completion of the job shall be the responsibility of the contractor and shall be arranged by him within his quoted rates.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IV Facilities in the scope of Contractor/BHEL

---

### **4.0. FACILITIES AND AMENITIES TO BE ARRANGED BY CONTRACTOR**

1. General area lighting only will be provided to contractor. Local lighting as required to be arranged by contractor as his own cost.
2. Compressed air supply will be made available at one point. All other arrangement and accessories to be arranged by contractor at his own cost like pipe valves etc.
3. Pumps for carrying out hydro test for various coolers shall be arranged by contractor at his own cost.
4. Contractor has to make necessary arrangement of accommodation for their staff at site.
5. Contractor has to make his own arrangement for transport of his own staff from residence to site and back. Similarly they have to arrange for transportation of material at site.
6. Required space near to the work spot will be provided for storing of materials and T&P but erection of temporary covering/cordoning is the responsibility of contractor only.
7. Contractor has to arrange watchmen in shift duty for security/safety of the equipment under overhaul.
8. Transportation is to be arranged by the contractor for materials/components from sites to work and back. Also transportation of scrap materials to stores and scrap yards to be arranged by the contractor.
9. Contractor should arrange for cleaning of working area.
10. All test kit should be calibrated by NABL laboratory.
11. Suitable Cable along with associated equipment for stator Core flux test, Core consolidation, HV test Kit, dry out equipment/tools, low p.f watt meter are to be arranged by Contractor.

### **5.1. Facilities to be provided by GSECL/BHEL free of cost if available.**

- A) Workshop facility with operator for minor work if required with prior information to BHEL.
- B) EOT crane with operator
- C) Mobile crane trailer with operator for transporting materials from store to site and back if available.
- D) Structural materials required for temporary support on returnable basis to be transported from stores if available.
- E) Scaffolding materials on returnable basis to be transported from store and back to store if available.
- F) Special T&P supplied along with equipment.
- G) Water supply.
- H) Electrical power& service air will be given free of cost.

### **5.2. Facilities to be provided on chargeable basis by BHEL/GSECL.**

- 1) Accommodation in GSECL Town ship on chargeable basis.
- 2) Medical facilities to the extent available in GSECL.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-V Manpower to be deployed by contractor

---

### **4. Manpower:**

Contractor shall arrange the manpower required for carrying out the above work for scope of work given in Clause no.2.0 , Chapter-II, The work has to be carried out on round the clock basis in the specified period as above. Arrangement for additional manpower required for completing the job within stipulated period shall be the responsibility of the contractor and shall be arranged by contractor as per BHEL instruction. The list of the tentative manpower proposed for the work is also to be submitted with the tender document. Please note that no workmen shall be allowed to work more than 12 hrs. Contractor shall manage to work two shift round the clock from day one. Two shift working is mandatory.

**Apart from the normal manpower the contractor has to engage following experts during entire execution period. Payment to expert will be made by contractor.**

- a) Engineer for mechanical dismantling & assembly work- 01 No ( Entire Period of work-210 days)**
- b) Electrical Engineer during New stator building –01 No (During Stator assembly/180 days )**
- c) Expert for Correction of Magnetic centre -01 No ( During assembly/20 days)**

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VI: Time Schedule

---

### **6.0 Period of completion:**

The work as per scope of work given in Annexure-I, is to be completed within **regular contract duration of 150 days and 30 days of grace period (Total 180 days)** . No compensation shall be payable to the contractor for the delay due to unforeseen reasons.

### **6.1. Mobilisation Period :**

AFTER RECEIPT OF FAX LOI, CONTRACTOR SHALL DISCUSS WITH PROJECT MANAGER / CONSTRUCTION MANAGER REGARDING INITIAL MOBILISATION. CONTRACTOR SHALL MOBILIZE NECESSARY RESOURCES WITHIN **7 DAYS** OF ISSUE OF FAX LETTER OF INTENT OR AS PER THE DIRECTIVE OF PROJECT MANAGER / CONSTRUCTION MANAGER. SUCH RESOURCES SHALL BE PROGRESSIVELY AUGMENTED TO MATCH THE SCHEDULE OF MILESTONES AND COMMISSIONING.

### **6.3 Expected date of commencement**

The above job is expected to commence in Dec-2013 tentatively in the financial year 2013-14 depending upon the available shut down from GSECL Ukai HEP. The date of shut down of the unit will be intimated 07 days in advance for mobilising the site

The requisite man/T&P etc have to be mobilized within 07 days on intimation by us for the above work. You shall arrange accommodation and transport for your staff and transport of material at site during the course of execution of above job.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter VII- Terms of Payment

---

### **7.0 Terms of Payment:**

Bidder should quote lump sum rate as in schedule "A" for the scope of work mentioned in Annexure I. No extra work will be paid while execution of work. Periodical Payment will be made in the following manner

- 20% on completion of dismantling work at site and putting scrap material in store.
- 10 % Stator frame assembly.
- 20% completion of Core building & successfully core flux test.
- 20 % completion of winding , Brazing, painting & HV test
- 20 % Completion of stator assembly, Top bracket and all related parts & commissioning of machine
- 10% after synchronizing and full loading of machine and submission of all statutory documents like PF challan, wage sheet, insurance copy etc.

Release of payment in each running bill will be restricted to 95% of the value of work admitted as per stages of progressive pro rata payments.

The 5% thus remaining shall be treated as 'Retention Amount'/Performance Guarantee Money and shall be released as per terms specified in the General Conditions of Contract.

### **7.1.Performance Guarantee:**

The contractor shall guarantee against any defects attributable to faulty workmanship/ procedure adopted/ deterioration in performance of machine in items covered in the contract for a period of 12 months from the date of synchronisation of the machine. The guarantee should cover all the defects noticed during this period and shall have to be attended by the contractor free of cost immediately or at the time our clients are able to give shut down of the machine for the required period when necessary.

### **Note:**

1. Price Variation Compensation & Overrun Compensation shall not be paid.
2. No Advance shall be paid against this contract.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII: Taxes and Other Duties

---

### 8.0 TAXES, DUTIES, LEVIES

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

##### 8.1.1

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

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

##### 8.1.2 Service Tax & Cess on Service Tax

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

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

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

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

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

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

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

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-VIII: Taxes and Other Duties

---

In any case the Contractor shall register himself with the respective Sales Tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. Contractor will submit all the details of VAT/CST paid for the contract in the prescribed format of the respective state VAT laws. Also, the contractor will issue the tax Invoices to BHEL as per the Tax laws of respective state on monthly basis. Contractor shall also be required to furnish to BHEL necessary proof of VAT remittance on monthly basis.

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

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

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

### 8.2 New Taxes/Levies

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

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

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

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IX- SPECIAL TERMS AND OTHER CONDITIONS

---

### **9.0 Other terms and conditions:**

- (1) Contractor should arrange proper and adequate Insurance covers for all the employee deputed/deployed by him at the site for the work.
- (2) Contractor has to furnish establishment code numbers and deduct EPF as per rules and submit a proof of its remittance to BHEL.
- (3) Necessary Labour license should be obtained based on the Form-5 issued by the Principal Employer in your name. The copy should be submitted to BHEL site I/C.
- (4) Wage payment to the employees should be witnessed by BHEL site I/C or his nominee and a copy of wage register duly certified are submitted to BHEL site I/C.
- (5) Proper records are required to be maintained by the contractor on the material drawn from the stores (Includes BHEL's supply as well as spares issued from GSECL).
- (6) Security and safety of the labour of the contractor to be ensured as per statutory requirements particularly use of PPE's such as helmets, safety shoes, safety belts, welding goggles, safety hand gloves etc must be ensured.
- (7) All the logistics and procedural formalities required to be done at the Power Station for mobilization and to be followed during the course of execution are to be taken care of by Contractor. You may visit the Site and ascertain the same before quoting.

### **9.1 Terms and conditions regarding industrial and labour laws**

1. Persons below the age of 18 years shall not be employed for the work
2. No female workers shall be employed in the night shift between 07.00 PM to 06.00 AM
3. Contractor shall maintain valid labour license under the Contract (Regulation & Abolition Act 1972 for employing necessary manpower to be required by him. In the absence of such licence, the contract shall be liable to be terminated without assigning any reasons thereof.
4. The contractor shall at his own expense comply with all the labour laws and keep the Corporation indemnified in respect thereof; Some of the major liabilities under various labour and Industrial laws which the contractor shall have to comply with areas under.
5. Payment of contribution of employees (contractor labour) as well as employer's contractor contribution towards provident Fund, Family Pension Scheme, Employees Deposit Linked Insurance

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IX- SPECIAL TERMS AND OTHER CONDITIONS

---

Scheme, Administrative charges, Inspection charges etc., at the rates made applicable from time to time by Government of Gujarat/Government of India or other statutory authorities.

6. Labour engaged by you shall be entitled for earn leave as per the provision laid down in factory act 1948. Contractor shall extend the facility of E.L. as per the provision laid down in factory act. & shall also have to maintain leave records in prescribed form under factory act.
7. No labours are allowed to enter in power station premises who do not have identity prescribed under factory act.
8. Contractor shall have to comply with the Maternity benefit if he happens to engage female labour as per maternity benefit act
9. Contractor shall have to obtain insure of the labours engaged by him to carry out contractual work before commencement of the work under workmen's compensation Act
10. P.F.CODE NUMBER / PAN NO.

The contractor shall have to submit details of his own P.F. code number along with offer from appropriate authorities, without P.F. code. The tender is likely to be disqualified.

### 11. PROVIDENT FUND AND FAMILY PENSION SCHEME:

The contractor shall submit along with his bill (Month wise) a statement regarding deductions at the rate of 12% of the wages against Employees Provident Fund & Family Pension scheme in respect of each concerned employee (or at the rates made applicable by the Government from time to time) of the wages. The contractor's contribution and his workers contribution towards Provident fund and family Pension Scheme shall be deposited by the contractor with Regional provident Fund commissioner Ahmedabad or to the authority prescribed under the Act. Along with the other charges applicable.

12. If any workman engaged by contractor meets with fatal or non-fatal accident while on duty then contractor shall be liable to pay compensation to the legal heir or to the workman as the case may be as per workman's compensation Act.

### 13. EMPLOYEES DEPOSIT LINKED INSURANCE SCHEME:

The contractor shall have to deposit ½% of the rate applicable from time to time of the wages in respect of employees who are a member of the Provident Fund against the contribution towards Deposit linked insurance scheme with regional Provident Fund Commissioner, Ahmedabad

14. The contractor should pay prevailing minimum wages to the labour engaged by him as per the Minimum Wages Act in presence of the Corporations Officer of Representative

### 15. ADMINISTRATIVE CHARGES

Administrative charges for maintaining Provident Fund Account shall be deposited by the contractor with Regional Provident Fund commissioner, Ahmedabad at the rates applicable

---

BHEL-PSWR

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-IX- SPECIAL TERMS AND OTHER CONDITIONS

---

### 16. LABOUR LICENSE FOR LABOUR CONTRACT:

The contractor shall have to obtain the copy of labour contract licence under contract labour (Regulation & Abolition) Act from the appropriate authorities before commencement of work

17. Contractor shall have to issue the appointment letter to their labour engaged during the contract period each and every instance & should narrated clear cut terms & conditions for the liabilities of the concerned employees.
18. After completion of the contract work, the Work Completion Certificate is required to be produced before the D.G.M / I.R.O for the purpose of No due certificate and cancellation of the gate passes issued to the contractor's workman at the time of execution of the contract work.
19. The contractor shall have to maintain all the relevant records under labour laws as mentioned here in above and keep ready for verification by the Corporations authority as well as the authority of the Government officials as and when asked for the checking
20. The contractor shall have to produce/submit the original copy of wage register/muster roll and relevant records under labour laws for the contract work as and when demanded by the Corporation for statutory compliance if arise in future

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-X- SAFETY

---

### **10.0. Statutory Obligations, Safety and Security:**

Contractor and all his personnel deployed on the work shall adhere to and abide by the safety provision/norms specified and as required by BHEL and their Customer. In case of violation of any provision is noticed at any time, a fine at the discretion of our Engineer-In- Charge or as levied by BHEL and/or their Customer shall be imposed for each of such violation and shall be recovered from the contractor's Running Account Bills or any other payments due. The contractor shall submit his safety plan to BHEL Site In charge. The contractor shall maintain and submit the following records for inspection anytime by BHEL/their Client/any statutory Authority.

- |                                    |                             |
|------------------------------------|-----------------------------|
| a) Attendance Register of Workers. | h) Fine Register.           |
| b) Pay/Wages Register.             | i) Leave Register.          |
| c) Advance Payment Register.       | j) Provident Fund Register. |
| d) O.T. Register.                  | k) Bonus Register.          |
| e) Identity Card Register.         | l) Labour license.          |
| f) Privilege Leave Register.       |                             |
| g) Workers List Register           |                             |

Contractor shall arrange round the clock security and watch & ward for the safety and security of materials, items. Tools and Plants & Spares issued to him during execution of the work. He shall also maintain proper lock & key arrangement for storing the items dismantled from Unit or issued to him by customer. In case of any loss and/or damage to any of the equipment / spares the contractor will be held responsible.

### **10.1 "GENERAL SAFETY RULES TO BE OBSERVED BY THE CONTRACTORS".**

All the Contractors working under Ukai Power Station are required to scrupulously observe following safety rules. They are also responsible for informing and observance of these rules by their employees OR employees of their Sub-Contractor. Prior to commencing the work, they will have to submit written assurance on their letterhead to the concerned Sectional Head that they have read and will follow these safety rules while execution of work awarded to him and have educated their employees / sub-contractor. They will have to indemnify the GSECL for any loss or damage/accident/injury to the GSECL's property/employee or employees of their own in default of non-observing these rules.

- 01 Persons to be employed for carrying out the work shall possess required qualification, are fully trained and conversant for works to be done.
- 02 The Contractor shall all the required safety measures prior to commencement of work on dangerous substances, machineries or area at which cautionary notice is displayed and

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-X- SAFETY

- obtain line clear or work permit through the concerned department / Section prior to commencing the work.
- 03 Prior to commencing the work in the area where inflammable material is lying, all such inflammable material shall be removed or covered under protective covering. Special care shall be taken before carrying out welding, gas cutting, furnace heating or other hot work job. They should also keep ready fire extinguishing materials like water and sand buckets or appropriate equipment at such place.
- 04 While carrying out work in confined space or inside vessel necessary confined space/vessel entry permit” shall be obtained prior to commencing work. For lighting in such area 24 volt (ISI certified & with guard) hand lamp should be used. For taking care of the persons working within the confined space/vessel, a Supervisor capable of under-taking rescue operation should be present. While working within the gutter or trench, for warning to other entrants/passers by; caution notice shall be displayed. This can be done by making a temporary fence with a rope or red ribbon. After completion of the works, all the lids shall be fixed in original position and leave the place in safe condition so as to prevent accident to fellow workers.
- 05 Staircases, lifts or other passages and gangways shall be kept free by not stacking of any material, spare parts, tools/tackles, equipment etc., Such passages are necessary for safe escape in the event of emergency. If it is utmost necessary to carryout work in such area with blocking of passage, prior permission of competent authority or the Engineer in charge shall be obtained. To demonstrate the area as unsafe, proper fencing with caution notice shall be displayed and the traffic shall be diverted through other safe passage.
- 06 While using electrically operated gadgets or power operated equipment/hand tools like welding machine, hand grinder, hand drilling machine etc., they should be ensured for safe operation. Defective or unsafe equipment shall not be used. Power connection for using such equipment shall be obtained only through the concerned Section and should be connected under observation/guidance of concerned Section. The Electrical Section shall provide temporary electric connection up to Contractor’s Main Board on which mains switch, ELCB and fuses shall be installed. All the equipments shall be properly and fully earthed to prevent electrical shock, sparking, short circuit etc. Power cord to be used shall be of single length. Single phase and three-phase connection shall use 3 wire and 4 wire cords only. The plugs, receptacles, pin holders etc., should be of adequate capacity and safe to use.
- 07 Use personal protective equipments as per job requirement compulsorily: Following is the list of personal protective equipments for various work/work sites.

01	Industrial Safety Helmet	: For protection of Head
02.	Safety Goggles (Grinding/Welding/Leather mask/Panorama Goggles	: For protection of Eyes

## TECHNICAL CONDITIONS OF CONTRACT (TCC)

### Chapter-X- SAFETY

	etc.,)	
03.	Face shield (Half or full)	: For face protection
04.	Ear plug / Ear muffs	: For ears
05.	Apron (Rubber/PVC/Asbestos/Leather/Cotton/Electrical shock proof)	: For body protection
06.	Gloves/(Rubber/PVC/Asbestos/Leather/Cotton/Electrical shock proof)	For protection of hand.
07.	Leg Guards/Industrial Safety Shoes/Gum boots/Leather Shoes/Asbestos shoes	For protection of legs & feet
08.	Safety Belt/Safety Rope/Life line	:For working at heights or depth, working in vessel or in confined space
09	Dust Respirator / Scarf	: Protection of respiratory system in dust-prone area.
10	Chemical cartridge Respirators	Protection against smoke, chemical fume, vapour etc.,
11	Canister Gas mask	Protection against toxic gases
12	Air supply respirators	: Working in oxygen deficient zone

- 08 All the lifting tackles and associated fixtures, such as D-shackles, slings, “U” clamps, Eye bolt shall be checked before use for this safety and pursue that these are certified through competent authority every year and certificate obtained. They shall be fixed properly 7 firmly prior to lifting the weight.
- 09 While working at height, scaffolding of adequate size and capacity should be used While climbing on such scaffolding, safety belt and Helmt should be used and chin straps of Helmet be fixed.
- 10 All the electrical and mechanical equipment etc., viz welding machine, cutting machine, Grinder, Drill, Chain Pulley Block, Hook, chooks etc., should carry ISI certification mark. The consumables to be used on which expiry date is mentioned shall be used before the expiry date only. Old material shall not be used.
- 11 Contractor or their employee shall not interfere in others’ activities except their assigned job. They should not loiter and oprate others’ machinery and equipment. The Contractor shall instruct their employees not to sit or take rest at the place where the plant/system/machinery is working and the area is prone to accident
- 12 In case of fire or smoke coming out during the working, efforts should be made for extinguishing the fire and Fire Station should be informed on phone No.4444/5555 & 4344.
- 13 Poisonous/toxic or inflammable/explosive Gas Bottles viz., Oxygen, Acetylene, LPG, Hydrogen, Ammonia, Chlorine and CO2 etc., shall be handled with special are and trolley should be used for their handling. They shall not be handled by rolling.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

## Chapter-X- SAFETY

---

- 14 On completion of the work, cotton waste, spilled oil/grease, pieces of welding rod and other waste material shall be removed and the area shall be left clean and safe.
- 15 In case of injury/accident while working, accident report shall be filled and forwarded to the Safety Officer through the Sectional Head. Form No.21 for this purpose can be obtained from Safety other or concerned Section.
- 16 The Contractor shall provide standard make (ISI certified) personal protection Equipments to their staff. The Contractor shall also educate their staff for use of such P.P.E.s, insist, and enforce to use it while at works.
- 17 The Contractor is obliged to follow all the safety regulations and legal provisions. They shall specifically obey to the provisions of Factory's Act 1948 and Gujarat State Factory's rules 1963 (up to latest amendments). They shall also honor the instructions of the Competent authority for safety requirements
- 18 The above rules shall be scrupulously followed and where required, they may contact the Safety Officer in case of unable to understand.