

TENDER SPECIFICATION
NO: BHE/PW/PUR/WNT2-GEO/1507

**HYDROGRAPHIC SURVEY,
GEOTECHNICAL INVESTIGATION AND
DETAILED DATA COLLECTION FOR
RIVER INTAKE WATER SYSTEM AND
APPROACH BRIDGE**

FOR

1 X 800 MW STPP WANAKBORI (GUJARAT)

TECHNICAL BID- VOLUME- I

TENDER SPECIFICATIONS CONSISTS OF:

- **Notice Inviting Tender**
- **Volume 1 A - Technical Conditions of Contract,**
- **Volume 1 B - Special conditions of Contract,**
- **Volume 1 C - General conditions of Contract**
- **Volume 1 D - Forms & Procedures**
- **Volume 1 E – Technical Specifications**



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

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BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)
POWER SECTOR - WESTERN REGION
345, KINGS WAY - NAGPUR 440 001

TENDER SPECIFICATION

NO: BHE/PW/PUR/WNT2-GEO/1507

Job;- HYDROGRAPHIC SURVEY, GEOTECHNICAL INVESTIGATION AND DETAILED DATA COLLECTION FOR RIVER INTAKE WATER SYSTEM AND APPROACH BRIDGE FOR 1 X 800 MW STPP WANAKBORI (GUJARAT)

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR Refer Notice Inviting Tender
TENDER SUBMISSION:

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING VOLUME-I-Tech Bid, VOL-I-E-STANDARD SPECIFICATIONM FORGEOTECHNICAL INVESTIGATION, Vol I BCD Rev 00 AND VOLUME- II-Price Bid ARE ISSUED TO:

M/s.

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PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

AGM (Purchase)
Place: Nagpur
Date:

1507

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



Ref: BHE/PW/PUR/WNT2-GEO/1507

dated 22/07/2015

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/WNT2-GEO/1507
ii	Broad Scope of job	Hydrographic Survey, Geotechnical Investigation and detailed data collection for River Intake Water System and Approach Bridge
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>
e	Volume-II	<i>Price Schedule (Absolute value).</i> Applicable
iv	Issue of Tender Documents	<p>1. Sale from BHEL PS Regional office at : Start : 22/07/2015, Time : Closes: 01/08/2015 , Time :15:00 Hrs</p> <p>2. From BHEL website (www.bhel.com) Tender documents will be available for downloading from website till due date of submission</p> Applicable/ Not applicable
v	DUE DATE& TIME OF OFFER SUBMISSION	<p>Date : 01/08/2015 , Time : 15:00 Hrs Place : <u>BHEL PS Regional office at :Nagpur</u></p> <p>Tenders being submitted through representative shall be submitted at dispatch section of of PSWR HQ Office after making entry/registration at the reception. For any assistance on the matter kindly contact following officials: Abhijeet Kumar/ Engineer (Purchase) Pratish Gee Varghese/ Sr Engineer (Purchase) Nirmal PG / Asst. Engineer (Purchase)</p> Applicable
vi	OPENING OF TENDER	<p>1 hours after the latest due date and time of Offer submission</p> <p>Notes: (1) In case the due date of opening of tender</p> Applicable

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SL NO	ISSUE	DESCRIPTION	
		<i>becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day. (2) Bidder may depute representative to witness the opening of tender</i>	
vii	EMD AMOUNT	<i>Rs 1,50,000/- (Rupees One Lakhs Fifty thousand Only)</i>	<i>Applicable</i>
viii	COST OF TENDER	<i>Rs 2000/-.</i>	<i>Applicable</i>
ix	LAST DATE FOR SEEKING CLARIFICATION	<i>Atleast 5 days before the due date of offer submission Along with soft version also, addressing to undersigned & to others as per contact address given below Abhijeet Kumar/ kabhi@bhelswr.co.in; Pratish Gee Varghese/ pgv@bhelswr.co.in; Nirmal PG / nirmalpg@bhelswr.co.in</i>	<i>Applicable</i>
x	SCHEDULE OF Pre Bid Discussion (PBD)	<i>Date :</i>	<i>Applicable/Not applicable.</i>
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)		<i>Applicable/Not Applicable</i>
xii	Latest updates	<i>Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage (www.bhel.com -->Tender Notifications →View Corrigendums) and not in the newspapers. Bidders to keep themselves updated with all such information</i>	

- 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:
- 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)

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- PART-II (Price Bid) – in sealed and superscribed envelope (ENVELOPE-III)
- One set of tender documents shall be retained by the bidder for their reference

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

Sl no	Description	Remarks
Part-I A		
	ENVELOPE – I superscribed as : PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION: CONTAINING THE FOLLOWING:-	
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. Note: <ol style="list-style-type: none"> a. In case of any deviation, the same should be submitted separately for technical & commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained. 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"> i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender 	
iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria. It shall be specifically noted that 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	
xii.	Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item	
xiii.	Any other details preferred by bidder with proper indexing.	

PART-I B		
	ENVELOPE – II superscribed as: PART-I (EMD/COST of TENDER) TENDER NO :	

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	NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION: CONTAINING THE FOLLOWING:-	
i.	1. Earnest Money Deposit (EMD) in the form as indicated in this Tender OR Documentary evidence for 'One Time EMD' with the Power Sector Region of BHEL floating the Tender 2. Cost of Tender (Demand Draft or copy of Cash Receipt as the case may be)	

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

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

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

- 7.0 Deviation with respect to tender clauses and additional clauses/suggestions in Techno-commercial bid / Price bid shall NOT be considered by BHEL. Bidders are requested to positively comply with the same.
- 8.0 BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the Tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).
- 9.0 **Assessment of Capacity of Bidders: VOID**

- 10.0 Since the job shall be executed at site, bidders must visit site/ work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation, applicable wage structure, wage rules, etc before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions.
- 11.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- 12.0 BHEL may decide holding of pre-bid discussion [PBD] with all intending bidders as per date indicated in the NIT. The bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Bidders shall plan their visit accordingly. The outcome of pre-bid discussion (PBD) shall also form part of tender.
- 13.0 In the event of any conflict between requirement of any clause of this specification/ documents/drawings/data sheets etc or requirements of different codes/standards specified, the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error/missing pages/ other clerical errors in the tender documents, noticed must be pointed out before pre-bid meeting/submission of offer, else BHEL's interpretation shall prevail.
- 14.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.
- 15.0 Bidders shall submit Integrity Pact Agreement (Duly signed by authorized signatory who signs in the offer), **if applicable**, along with techno-commercial bid. This pact shall be considered as a preliminary qualification for further participation. **The names and other details of Independent External Monitor (IEM) for the subject tender is as given at point (1) above.**
- 16.0 The Bidder has to satisfy the Pre Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened who will be qualified for the subject job on the basis of satisfying the Pre Qualification Criteria specified in this NIT as per Annexure-I (as applicable), past performance etc. and date of opening of price bids shall be intimated to only such bidders. BHEL reserves the right not to consider offers of parties under HOLD.
- 17.0 In case BHEL decides on a 'Public Opening', the date & time of opening of the sealed PRICE BID shall be intimated to the qualified bidders and in such a case, bidder may depute one authorised representative to witness the price bid opening. BHEL reserves the right to open 'in-camera' the 'PRICE BID' of any or all Unsuccessful/Disqualified bidders under intimation to the respective bidders.
- 18.0 Validity of the offer shall be for **six months** from the latest due date of offer submission (including extension, if any) unless specified otherwise.
- 19.0 BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction process. In such case all qualified bidders will be intimated regarding procedure/ modality for Reverse Auction process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. .

However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.
- 20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.

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- 22.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 23.0 Consortium Bidding (or Technical Tie up) shall be allowed only if specified in Pre Qualifying Requirement (PQR) criteria, and in such a case the following shall be complied with:
- 23.1 Prime Bidder and Consortium Partner or partners are required to enter into a consortium agreement with a validity period of six months initially. In case the consortium is awarded the contract, then the Consortium Agreement between the Prime Bidder and Consortium Partner or partners shall be extended till contractual completion period including extension periods if any applicable.
- 23.2 **'Stand alone' bidder cannot become a 'Prime Bidder' or a 'Consortium bidder' or 'Technical Tie up bidder' in a consortium (or Technical Tie up) bidding.** Prime bidder shall neither be a consortium partner to other prime bidder nor take any other consortium partners. However, consortium partner may enter into consortium agreement with other prime bidders. In case of non compliance, consortium bids of such Prime bidders will be rejected.
- 23.3 Number of partners for a consortium Bidding (or Technical Tie up) shall be as specified in the PQR
- 23.4 Prime Bidder shall be as specified in the Pre Qualification Requirement, else the bidder who has the major share of work
- 23.5 In order to be qualified for the tender, Prime Bidder and Consortium partner or partners shall satisfy (i) the Technical 'Pre Qualifying Requirements' specified for the respective package, (ii) "Assessment of Capacity of Bidder" as specified in clause 9.0
- 23.6 Prime Bidder shall comply with additional 'Technical' criteria of PQR as defined in 'Explanatory Notes for the PQR'
- 23.7 Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified
- 23.8 In case customer approval is required, then Prime Bidder and Consortium Partner or partners shall have to be individually approved by Customer for being considered for the tender.
- 23.9 Prime Bidder shall be responsible for the overall execution of the contract
- 23.10 In case of award of job, Performance shall be evaluated for Prime Bidder and Consortium Partner or partners for their respective scope of work(s) as per prescribed formats
- 23.11 In case the Consortium partner or partners back out, their SDs shall be encashed by BHEL. In such a case, other consortium partner or partners meeting the PQR have to be engaged by the Prime Bidder, and if not, the respective work will be withdrawn and executed on risk and cost basis of the Prime Bidder. The new consortium partner or partners shall submit fresh SDs as applicable.
- 23.12 In case the prime Bidder withdraws, the whole contract shall be considered cancelled and short closed.
- 23.13 After execution of work, the work experience shall be assigned to the Prime Bidder and the consortium partner or partners for their respective scope of work. After successful execution of two similar works with the same consortium partner or partners under direct orders of BHEL, the Prime Bidder shall be eligible for becoming a 'stand alone' bidder for similar works, subject to certification from BHEL about the active involvement of the Prime Bidder for satisfactory execution of the works.
- 23.14 The consortium partner shall submit SD equivalent to 2% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value. In case there are two consortium partners, then each partner shall submit SD equivalent to 1% of the total contract value in addition to the SD to be submitted by the prime Bidder for the total contract value.

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

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

for BHARAT HEAVY ELECTRICALS LTD

AGM Purchase

Enclosure

01. Annexure-1: Pre Qualifying criteria.
02. Annexure-2: Check List.
03. Annexure – 3 IMPORTANT INFORMATION
04. Other Tender documents as per this NIT.

ANNEXURE - 1

PRE QUALIFYING REQUIREMENTS

JOB	Hydrographic Survey, Geotechnical Investigation and detailed data collection for River Intake Water System and Approach Bridge.
TENDER NO	BHE/PW/PUR/WNT2-GEO/1507

SL NO	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Name and Description of qualifying criteria	Page no of supporting document. Bidder must fill up this column as per applicability
A	Submission of Integrity Pact duly signed (if applicable) (Note: To be submitted by Prime Bidder & Consortium/Technical Tie up partner jointly in case Consortium bidding is permitted, otherwise by the sole bidder)	NOT APPLICABLE	
B	<p>Technical Bidders shall essentially meet all the Qualifying Requirements in last seven years as on latest date of bid submission (i.e. B.1, B.2 and B.3 (If B.3 applicable)) as under.</p> <p>B.1: Bidder should have successfully executed similar works (Geotechnical Investigation OR Hydrographic Survey + Geotechnical Investigation Works as combined) during last seven years as on last date of offer submission as below:</p> <p>B.1.1) Executed single similar work of value not less than of Rs. 44 Lakhs against single work order.</p> <p style="text-align: center;">OR</p> <p>B.1.2) Executed two similar works each of value not less than of Rs. 28 Lakhs against maximum two work orders.</p> <p style="text-align: center;">OR</p> <p>B.1.3) Executed three similar works each of value not less than of Rs.22 Lakhs against maximum three work orders.</p> <p style="text-align: center;">AND</p> <p>B.2: Bidders should have successfully executed Geotechnical Investigation OR Hydrographic Survey + Geotechnical Investigation Works as combined for a Dam/ River/Power Project (Nuclear/ Thermal/ Gas/Combined Cycle)/ Industrial projects during last seven years as on date of offer submission.</p> <p>Note 1: Industrial projects shall mean projects in sectors like Power /Petro / Chemical/Refinery / Oil and Gas/ Cement /Fertilizer/ Aviation /Metal Refining/Agricultural Processing/ Ports.</p> <p>Note 2: For the Hydrographic survey, bidder should have expertise in survey of cross section of water source, min/max discharge of water source,</p> <p style="text-align: center;">AND</p> <p>B.3. IF the bidder satisfies any of PQR in B.1 OR B.2 based on work order/s issued for combined Work of Hydrographic Survey & Geotechnical Investigation will be exempted from assessment of PQR B.3 & shall be considered qualified In PQR. B. If not (qualification in B.1 OR B.2 is not based on combined work experience of Hydrographic Survey & Geotechnical Investigation), bidder should</p>	APPLICABLE	

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	<p>have executed the following;</p> <p>B.3.1) Executed one job of Hydrographic Survey of value of Rs. 5.0 Lakhs or above in a single work order.</p> <p>Relevant document in support of above shall be submitted.</p>		
C-1	<p>Financial TURNOVER Bidders must have achieved an average annual financial turnover (Audited) of Rs 16.5 Lakhs or more over last three Financial Years (FY) i.e. 2012-2013, 2013-14, 2014-15 OR 2011-2012, 2012-2013, 2013-14 if Annual Accounts for FY 2014-15 are not audited.</p>	APPLICABLE	
C-2	<p>NETWORTH (only in case of Companies) Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive</p>	APPLICABLE	
C-3	<p>PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three Financial Years defined in 'C-1' above based on latest Audited Accounts.</p>	APPLICABLE	
D	<p>Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)</p>	NOT APPLICABLE	By BHEL
E	<p>Approval of Customer (if applicable) Note: Names of bidders (including consortium/Technical Tie up partners in case consortium bidding is permitted) who stand qualified after compliance of criteria A to D shall be forwarded to customer for their approval.</p>	NOT APPLICABLE	BY BHEL
F	<p>Price Bid Opening Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E</p>		BY BHEL
G	<p>Technical Tie up criteria (if applicable)</p>	NOT APPLICABLE	
<p>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</p> <ol style="list-style-type: none"> 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 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. 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) 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 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"> _____ Bidder should have executed similar work of any one of the following: <ol style="list-style-type: none"> One (1) work of value not less than Rs XXX _____ OR Two (2) works of not less than Rs YYY _____ OR Three (3) works of not less than Rs ZZZ (Value XXX, YYY, ZZZ shall be as indicated by BHEL _____ 'Similar' work for criteria 5 above means <ol style="list-style-type: none"> Civil or Structures or Civil & Structures or Chimney respectively as applicable to the tendered scope in respect of 'CIVIL' Works Electrical works in respect of 'ELECTRICAL' CI works in respect of 'CI' Works Material Handling and/or Management works in respect of 'MM' works 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 			

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	<p>7. 'EXECUTED' means the Vendor should have achieved the criteria specified in the Technical criteria of PQR (as in 'B' above) even if the Contract has not been completed or closed</p> <p>8. Unless otherwise specified, for the purpose of 'Technical' criteria of PQR (as in 'B' above), the word 'EXECUTED' means:</p> <ol style="list-style-type: none">1. "BOILER LIGHT UP" in respect of Boiler & Aux and ESP2. "SYNCHRONISATION" in respect of STG/CTG and 'SPINNING' in case of HTG3. "STEAM BLOWING COMPLETION" in respect of at least Main Steam Line of Power Cycle Piping4. "HYDRAULIC TEST" of the system in respect of Structures, Pressure parts/IBR Piping5. "CHARGING" in respect of power Transformers, Bus ducts, HT/LT switchgears6. "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 Works8. "Readiness for coal Filling" in respect of Bunker Structure Work. <p>9. Boiler means HRSG or WHRB or any other types of Steam Generator</p> <p>10. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines</p> <p>11. For the purpose of evaluation of the PQR, one MW shall be considered equivalent to 3.5TPH where ever rating of HRSG/BOILER is mentioned in MW. Similarly, where ever rating of Gas Turbine is mentioned in terms of Frame size, ISO rating in terms of MW shall be considered for evaluation.</p> <p>12. In case the experience/PO/WO certificate enclosed by bidders do not have separate break up prices for the E&C portion of Electrical and CI Works, (i.e. the certificates enclosed are for composite order for supply and erection of Electrical & CI and other works if any), then value of Erection and Commissioning for the Electrical & CI portion shall be considered as 15% of the supply & erection of Electrical & CI, unless otherwise specifically indicated in the PQR.</p> <p>13. Scope for capital overhaul of STG shall cover Bearing Inspection work and overhauling of all cylinders of the Turbine unless otherwise specifically indicated in the PQR.</p> <p>14. In case the tendered scope is not a Pulverised Fuel Boiler, experience of Oil/Gas Fired Boilers also can be considered unless otherwise specifically indicated in the PQR</p> <p>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.</p>
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BIDDER SHALL SUBMIT ABOVE PRE-QUALIFICATION CRITERIA FORMAT, DULY FILLED-IN, SPECIFYING RESPECTIVE ANNEXURE NUMBER AGAINST EACH CRITERIA AND FURNISH RELEVANT DOCUMENT IN THE RESPECTIVE ANNEXURES IN THEIR OFFER.

Bidder's Response to BHEL TECHNICAL PQR (WHICHEVER IS APPLICABLE)

PQR No	Pre-Qualifying Requirement	Credentials (Detailed Work Order, Completion Certificate, TDS Certificates etc) based on which bidder is claiming PQR	Reference of the documents	Page No
B	Bidders shall essentially meet all the Qualifying Requirements in last seven years as on latest date of bid submission (i.e. B.1, B.2 and B.3 (If B.3 applicable)) as under.			
B.1.	<p>Bidder should have successfully executed similar works (Geotechnical Investigation OR Hydrographic Survey + Geotechnical Investigation Works as combined) during last seven years as on last date of offer submission as below:</p> <p>B.1.1) Executed single similar work of value not less than of Rs. 44 Lakhs against single work order.</p> <p style="text-align: center;">OR</p> <p>B.1.2) Executed two similar works each of value not less than of Rs. 28 Lakhs against maximum two work orders.</p> <p style="text-align: center;">OR</p> <p>B.1.3) Executed three similar works each of value not less than of Rs.22 Lakhs against maximum three work orders.</p>			
B.2	<p>Bidders should have successfully executed Geotechnical Investigation OR Hydrographic Survey + Geotechnical Investigation Works as combined for a Dam/ River/Power Project (Nuclear/ Thermal/ Gas/Combined Cycle)/ Industrial projects during last seven years as on date of offer submission.</p> <p>Note 1: Industrial projects shall mean projects in sectors like Power /Petro / Chemical/Refinery / Oil and Gas/ Cement /Fertilizer/ Aviation /Metal Refining/Agricultural Processing/ Ports.</p> <p>Note 2: For the Hydrographic survey, bidder should have expertise in survey of cross section of water source, min/max discharge of water source,</p>			

Bidder's Response to BHEL TECHNICAL PQR (WHICHEVER IS APPLICABLE)

PQR No	Pre-Qualifying Requirement	Credentials (Detailed Work Order, Completion Certificate, TDS Certificates etc) based on which bidder is claiming PQR	Reference of the documents	Page No
B.3	<p>IF the bidder satisfies any of PQR in B.1 OR B.2 based on work order/s issued for combined Work of Hydrographic Survey & Geotechnical Investigation will be exempted from assessment of PQR B.3 & shall be considered qualified In PQR. B. If not (qualification in B.1 OR B.2 is not based on combined work experience of Hydrographic Survey & Geotechnical Investigation), bidder should have executed the following;</p> <p>B.3.1) Executed one job of Hydrographic Survey of value of Rs. 5.0 Lakhs or above in a single work order.</p>			
C1	<p>Bidders must have achieved an average annual financial turnover (Audited) of Rs 16.5 Lakhs or more over last three Financial Years (FY) i.e. 2012-2013, 2013-14, 2014-15 OR 2011-2012, 2012-2013, 2013-14 if Annual Accounts for FY 2014-15 are not audited</p>	<p>Turnover for 2011-12 (in lakhs):</p> <p>Turnover for 2012-13 (in lakhs):</p> <p>Turnover for 2013-14(in lakhs):</p> <p>Turnover for 2014-15(in lakhs):</p> <p>Average of 03 years (in lakhs):</p>		
C2	<p>Net worth (<i>only in case of Companies</i>) of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive</p>	<p>Net worth as per latest audited accounts is</p> <p><input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> NA</p>		
C3	<p>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.</p>	<p>Cash Profit as per audited accounts is positive for</p> <p><input type="checkbox"/> 2011-12 <input type="checkbox"/> 2012-13 <input type="checkbox"/> 2013-14 <input type="checkbox"/> Not positive in any financial year</p>		
<ul style="list-style-type: none"> • NOTE: BIDDERS MUST CLEARLY INDICATE IN THE TABLE ABOVE, HOW THEY ARE SATISFYING TECHNICAL PQR ALONG WITH THE REFERENCE OF THE SUPPORTING DOCUMENTS AND THE PAGE NUMBER IN WHICH THE REFERRED DOCUMENTS ARE ANNEXED IN THE BID DOCUMENT. • BHEL WILL NOT CONSIDER ANY OTHER DOCUMENT OTHER THAN THOSE SPECIFIED BY THE BIDDERS IN THE TABLE ABOVE FOR EVALUATION OF TECHNICAL PQR. • BIDDER MAY ATTACH SEPERATE SHEET IF NECESSARY 				

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/WNT2-GEO/1507

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ANNEXURE - 2

CHECK LIST

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

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

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

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

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

DATE :

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

Annexure-3

IMPORTANT INFORMATION

Sealed Tenders shall be submitted at following address to AGM /Purchase BHEL PSWR NAGPUR:

BHEL PSWR, SRIMOHINI COMPLEX , 345 KINGSWAY, NAGPUR 440001, INDIA

All correspondences regarding this tender shall be addressed to AGM / PURCHASE BHEL PSWR at above address. Bidders may also opt to correspond with following BHEL officials regarding this tender through email at following email ids . However please be informed that sealed tenders shall necessarily be submitted in original at above address:

AGM Purchase, Email id: rajeebc@bhelpswr.co.in . Ph: +91 – 712 – 3048633

Engineer Purchase, Email id: kabhi@bhelpswr.co.in , Ph: +91 – 712 – 3048714

Asst Engineer Purchase, Email: nirmalpg@bhelpswr.co.in Ph: +91-712-3048732

Sr Engineer Purchase, Email: pgv@bhelpswr.co.in, Ph: +91 – 712 – 3048713

1. **The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site (www.bhel.com ---> Tender Notification -> List of Banned Firms)**
2. **Refer Chapter XII of Volume IB Special Conditions of Contract regarding Suspension of Business Dealings: The abridged version of extant ‘Guidelines for suspension of business dealings with suppliers/contractors’ has now been uploaded on www.bhel.com on “supplier registration page” at the following link: http://www.bhel.com/vender_registration/pdf/Suspension-of-Business-Dealings-with-Supplier-issued-Sept13_abridged.pdf**
3. **All Statutory Requirements as applicable for this project shall be complied with.**
4. **Please take note of following Revised Tender Clauses:**
 - i. Notice Inviting Tender: SI No 9
 - ii. General conditions of Contract: Clause No 1.15.13 (New), Clause No 2.8.3, 2.8.4 and 2.8.5

5. Following Notes are added to Form F- 15 of Volume I D 'Forms & procedures'

- i. It is only indicative and shall be as per the online format issued by BHEL time to time.
- ii. No request will be entertained after specified date of the current month w.r.t the changes requested in the scores of immediate previous month.

6. PRICE VARIATION CLAUSE

Price Variation Compensation Clause no. 2.17 of Vol I C GCC is Not Applicable

7. OVER RUN COMPENSATION

OVER RUN COMPENSATION Clause no. 2.12 of Vol I C GCC is Not Applicable

8. Acceptance of Bank Guarantee (BG)

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

Clause No. 1.10.3 (V) of Vol IC GCC is revised as below:-

“Bank Guarantee issued by:

- a. Any of the BHEL consortium bank listed below :

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

- b. Any public sector Bank (other than consortium banks) with a clause in the text of Bank Guarantee that it is enforceable at Nagpur, Maharashtra
- c. Any private sector banks, with a clause in the text of Bank Guarantee that it is enforceable by being presented at any branch of the bank

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

9. Broad Terms & Conditions of Reverse Auction

In continuation to Clause 19.0 of NIT (Notice Inviting Tender) following are the broad terms and conditions of Reverse Auction is given in Annexure V of NIT:

- 9.1. Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).
- 9.2. BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids. In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit „online sealed bid“ in the Reverse Auction. Non-submission of „online sealed bid“ by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 9.3. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 9.4. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit ‘online sealed bid’ in the Reverse Auction. Non-submission of ‘online sealed bid’ by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 9.5. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
- 9.6. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 9.7. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 9.8. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.

- 9.9. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for noncompliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
- 9.10. Reverse auction will be conducted on scheduled date & time.
- 9.11. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 9.12. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
- 9.13. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL’s standard practice.
- 9.14. Bidders shall be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the “Business Rules of Reverse Auction”, which will be communicated before the Reverse Auction.
- 9.15. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
- 9.16. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
- 9.17. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

22nd
July 22,
2015

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

SI No	DESCRIPTION	Chapter	No. OF PAGES
Volume-IA	Part-I: Contract specific details		
1	Project Information	Chapter-I	1
2	Scope of Works and Technical Specifications	Chapter-II	2
3	Facilities in the scope of Contractor/BHEL (Scope Matrix)	Chapter-III	3
4	T&Ps and MMEs to be deployed by Contractor	Chapter-IV	1
5	T&Ps and MMEs to be deployed by BHEL on sharing basis	Chapter-V	1
6	Time Schedule	Chapter-VI	2
7	Terms of Payment	Chapter-VII	2
8	Taxes and other Duties	Chapter-VIII	3
9	Tender Drawings		

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I: Project Information

1.0	Project Information
1.1	<p><u>INTRODUCTION</u></p> <p>Location : Wanakbori, District-Kheda, Gujarat</p> <p>Nearest Railway Station : Sevaliya (8KM) – Anand-Godhra main line</p> <p>Nearest Airport : Vadodara (85 KM from site), Ahmedabad (100 KM from site)</p> <p>Nearest Sea Port : Kandla</p> <p>Access By Road : 10KM from Dakor-Godhra NH No. 8, 02 KM from Balasinor-Sevaliya SH No. 59</p> <p>Major Towns/Cities: 13 KM from Balasinor and 10KM from sevaliya.</p> <p>Land: Within existing Thermal Power Station. North-East side of the existing plot.</p> <p>Source Of Coal: Indian coal sourced from captive mines Machha in Talchar, Orissa.</p> <p>Source Of Water: River Mahi, flowing by side of existing Wanakbori Power Station.</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

2.0 Scope of Work

Hydrographic Survey, Geotechnical Investigation and detailed data collection for River Intake Water System and Approach Bridge

a) Surveying River Section and shore of the area marked in Annexure-I of Technical Specification. In river section, cross sections shall be taken at right angles to the river and should not be more than at 50M chainage. In every cross section the bed levels shall be taken at 10M intervals.

b) Carrying out Geotechnical investigation at river bed at the location of Intake structure & pump house as suggested by bidder and obtain Hydraulic data for design of Intake well and approach bridge.

c) Data Required.

Following detailed data are required:-

i) High Flood level (HFL) of river.

ii) Minimum water level of river.

iii) Maximum discharge of river.

iv) Minimum discharge of river.

v) Maximum velocity of river.

vi) Minimum velocity of river.

Work shall cover mobilization of necessary equipment, motor boats and all other tools and materials, providing necessary engineering supervision and technical personnel, skilled and unskilled labour, necessary transport demobilization etc. as required to carry out the Hydrographic survey, data collection and Geotechnical investigation including laboratory tests, analysis and interpretation of data and results, tables, charts & drawings and furnishing the data collection report as per the specifications and details furnished in the subsequent clauses.

The detailed scope of work is furnished in the following listed documents

1) TECHNICAL SPECIFICATION FOR HYDROGRAPHIC SURVEY, GEOTECHNICAL INVESTIGATION AND DETAILED DATA COLLECTION FOR RIVER INTAKE WATER SYSTEM & APPROACH BRIDGE

All the report shall be submitted in the prescribed preform as mentioned in Technical specification including graphical representation, calculation, Log-sheets etc. & no extra claim shall be entertained on this account.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

Agency has to get their Interim as well as Final report approved by BHEL PEM New Delhi as well as from BHEL respective Customer/Consultant. Final report shall be submitted in sufficient copy (in hard as well in soft form) as described elsewhere in this tender specification. Quoted Rate shall be inclusive of all the above aspect.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – III : Facilities in the scope of Contractor/BHEL

Sl.No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
a	OFFICE	YES		
b	Open space for storage (as per availability)	YES		
c	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
d	Bidder's all office equipments, office / store / canteen consumables		Yes	
e	Canteen facilities for the bidder's staff, supervisors and engineers etc		Yes	
f	Fire fighting equipments like buckets, extinguishers etc		Yes	
g	Fencing of storage area, office, canteen etc of the bidder		Yes	
3.1.2	FOR LIVING PURPOSES OF THE BIDDER			
a	Open space for labour colony (as per availability)	Yes		
b	Labour Colony with internal roads, sanitation, complying with statutory requirements		Yes	
3.2.0	ELECTRICITY			
3.2.1	Electricity for construction purposes 3 Phase 415/440 V (To be specified whether chargeable or free)			
a	Single point source	YES		Free
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.2	Electricity for the office, stores, canteen etc of the bidder (to be specified whether chargeable or free)			
a	Single point source		YES	

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – III : Facilities in the scope of Contractor/BHEL

Sl.No.	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc		Yes	
a	Single point source	Yes		
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.3.0	WATER SUPPLY			Chargeable @ Rs 11 per KL
3.3.1	For construction purposes:(to be specified whether chargeable or free)			
a	Making the water available at single point	YES		.
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.3.2	<u>Water supply for bidder's office, stores, canteen etc</u>			
a	Making the water available at single point	YES		.
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.3.3	<u>Water supply for Living Purpose</u>			.
a	Making the water available at single point	Yes		
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.4.0	LIGHTING			

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – III : Facilities in the scope of Contractor/BHEL

Sl.No.	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
a	For construction work (supply of all the necessary materials) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
b	For construction work (execution of the lighting work/ arrangements) 1. At office/storage area 2. At the preassembly area 3 At the construction site /area		Yes	
c	Providing the necessary consumables like bulbs, switches, etc during the course of project work		Yes	
d	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
3.5.0	COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER			
a	Téléphone, fax, internet, intranet, e-mail etc.		Yes	
3.6.0	COMPRESSED AIR wherever required for the work		Yes	
3.7.0	Demobilization of all the above facilities		YES	
3.8.0	TRANSPORTATION			
a	For site personnel of the bidder		Yes	
b	For bidder's equipments and consumables (T&P, Consumables etc)		Yes	

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

Contractor shall deploy all necessary T&P to meet the schedules & as prescribed by BHEL engineer and required for completion of work.

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

BHEL WILL NOT PROVIDE ANY T & P's FOR THIS WORK

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: TIME SCHEDULE

6. TIME SCHEDULE & MOBILIZATION

6.1.1 INITIAL MOBILIZATION AND TENTATIVE SCHEDULE

Contractor shall reach site, make his own site establishment and be ready to commence the work within **Seven days** from the date of fax Letter of Intent or as per directions of BHEL.

The contractor has to subsequently augment his resources in such a manner that the entire work is completed to achieve the following **tentative** schedule:

ACTIVITY	SCHEDULE OF COMPLETION
Mobilisation of Manpower and T&P	7 days from the date of issue of LOA
Hydrographic Survey and Field work	35 days from the date of issue of LOA
Submission of Draft Report	49 days from the date of issue of LOA
Submission of Final Report	Within 14 days from the date of receipt of comments of BHEL by the contractor.

6.1.2

In order to meet above schedule and other intermediate targets/activities as set by BHEL Engineer In charge at site, to meet customer requirements/project schedule, contractor shall arrange all necessary resources and work force in consultation with BHEL engineer at site to undertake parallel works in all fronts as made available to contractor.

6.1.3

Contractor shall have to work round the clock on such critical activities as a part of catch up programme to meet the project requirement to the extent possible and shall also provide required resources as part of scope of work.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: TIME SCHEDULE

6.1.4 Start of Contract Period and Duration.

The total contract period for completion of entire work s as per tender specification shall be **63(Sixty Three) Days** from the date of LOA,

6.2 Progress Monitoring, Contract Extension and Over Run

6.2.4 Progress Monitoring

Progress will be reviewed periodically (daily / weekly / monthly) including month end review vis-à-vis the plans drawn as above. The contractor shall submit periodical progress reports, and other reports / information including manpower, consumables etc as desired by BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VII: TERMS OF PAYMENT

7.00 TERMS OF PAYMENT

7.0.1

The contractor shall submit his monthly on account bills with all the details required by BHEL on specified date every month covering progress of work in all respects and areas from the 25th of previous calendar month to 24th of the current month.

NO PVC AND ORC IS APPLICABLE

7.0.2

General conditions of contract shall be referred to as regards mode of payment, and measurement of the work completed.

Rates are inclusive of all taxes except Service taxes.

7.0.3

Release of payment in each running bill will be restricted to **100% of the value of work admitted.**

Detailed Terms of Payment (Weight age assigned against each activity)

Mobilisation of T&P and Manpower required to complete Scope of Work -10%

Completion of Hydrography Survey as Per Specification- 15%

Completion of Geotechnical Investigation as Specification- 35%

Data Collection- 10%

Submission of Final Report-30%

7.0.4

The payment for running bills will normally be released within around 30 days of submission of running bill with measurement sheets. Contractor shall make his own arrangement for making payment of impending labour wages and other dues in the meanwhile.

7.0.5

BHEL will release payment through **Electronic Fund Transfer (EFT)/RTGS**. In order to implement this system, the following details are to be furnished by the contractor pertaining to his bank accounts where proceeds will be transferred through **BHEL's banker:**

Name of the Company

Name of Bank

Name of Bank Branch

City/Place

Account Number

Account type

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IFSC code of the Bank Branch
MICR Code of the Bank Branch

BHEL May Also Choose To Release Payment By Other Alternative Modes As Suitable.

7.0.6 Progressive Payment For Civil

The percentage of payment for progressive completion of work in various categories of work shall be as under:

7.0.7 Civil Work

100% of Item Rate on Pro-Rata Basis against Monthly RA Bills.

The RA bill payment shall be made as made as per Cl no 10.0 of Chapter –X of SCC and as per CL NO: 2.6 of GCC

7.0.8 Extra/Additional Items Of Work:-

As Per GCC.

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8.0 TAXES, DUTIES, LEVIES (Consolidated Rev 04 dated 14/05/2015)

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

8.1.1

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

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

8.1.2 Service Tax & Cess on Service Tax

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

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

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

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

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

8.1.3 VAT (Sales Tax /WCT)

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

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

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

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

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

8.2 'Enabling Works'

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

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

8.3 New Taxes/Levies

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

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

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

8.4 BOCW Cess

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The quoted rates shall be exclusive of the BOCW Cess which shall be paid extra by BHEL against Documentary evidence. However, the applicability of the BOCW Cess shall be got confirmed from BHEL in writing, before remitting such Cess/tax.

8.5 GST: As and when GST becomes applicable to this contract, the net differential (negative or positive) financial liability of the bidder to the Authorities (as compared to such liability prior to applicability of GST), if any, shall be to the account of BHEL. For this purpose, all available options under the GST shall be explored, and the decision of BHEL in this regard shall be final and binding on the bidder.

APPENDIX-VI

SUMMARY OF LABORATORY TEST RESULTS
ON ROCK CORE SAMPLES

BORE HOLE NO.	
DEPTH	
CORE PIECE NO.	
MOISTURE CONTENT	
SPECIFIC GRAVITY	
HARDNESS	
POROSITY	
DRY DENSITY	
SLAKE DURABILITY	
POINT LOAD STRENGTH INDEX	
DEFORMABILITY (DRY /SATURATED)	
UNCONFINED COMPRESSIVE STRENGTH (INSITU/SATURATED)	
CORE DESCRIPTION	
REMARKS	

<u>For strength test</u>		ϕ	Angle of internal friction (degrees)	CBR	California Bearing Ratio (%)
UCC	Unconfined compression test	S.Pr	Swelling pressure (kN/Sq.m)		
VST	Vane shear test	FSI	Free swell index (%)		
Tuu	Unconsolidated undrained triaxial test	e_o	Initial Void ratio		
Tcu	Consolidated Undrained Triaxial test with pore pressure	Pc	Preconsolidation pressure (kN/Sq.m)		
Tcd	Consolidated drained triaxial test (Note: Replace T by D for Direct Shear test)	Cc	Compression index		

APPENDIX-VIII

INDICATIVE LIST OF TEST TO BE CARRIED OUT

(PLEASE REFER SEPARATE SHEET)

S.N.	Test place	Subject	Test required to be done	Specification ref.
1	Field investigation			
	1	Drilling boreholes through all kinds of soil including rock	1)SPT 2)Stand pipes and piezometers for GWT. 3)Sub soil water samples for Chemical analysis like pH, turbidity, sulphate, carbonate, nitrate, chloride contents, presence of organic content and Suspended Solid in laboratory 4)Permeability test: (a) By Constant head method or (b) Falling head method (c) Single and double packer method for rocks 5)Field vane shear test 6)Pressure meter test 7)Cross hole shear test 8)Lab tests	Cl. No.6 ,P/8 of 50
	2	Drilling boreholes through rock with NX size & TC bits.		Cl. No.6 ,P/8 of 50

	3	Excavation of trial pits in all types of soil & weathered rock	1)Percolation test for permeability 2)SPT 3)Undisturbed samples are used to estimate physical,strength and settlement properties of soil for which static cone penetration test can be done which is useful to estimate various physical and engineering properties of soil in a strata.	Cl. No.6.6 ,P/20 of 50
	4	Plate load test (PLT)		Cl. No.6.10 ,P/24 of 50
	5	Static Plate load test (SPLT)	As per IS code (if required)	
	6	Cyclic Plate load test (CPLT)		Cl. No.6.11 ,P/25 of 50
	7	Standard Penetration Test (SPT)		
	8	Dynamic cone penetration test(DCPT)		Cl. No.6.9 ,P/23 of 50
	9	Static cone penetration test(SCPT)		Cl. No.6.8 ,P/23 of 50
	10	Electrical resistivity test. (ERT)		Cl. No.6.13 ,P/26 of 50
	11	Pressure Meter test (PMT)		Cl. No.6.16 ,P/28 of 50
	12	Seismic refraction test (SRT)		Cl. No.6.14 ,P/26 of 50
	13	Cross hole Shear wave test (CHSWT)		Cl. No.6.15 ,P/27 of 50
	14	Field vane shear test (FVST)		Cl. No.6.7 ,P/22 of 50
	15	Pump-in type Field permeability test (FPT) by -		

		(a) Falling head method (in bore hole)		Cl. No.6.5.2 (b),P/19 of 50
		(b) Constant head method (in bore hole)		Cl. No.6.5.2 (a),P/19 of 50
		(c) Percolation Test (in trial pit)		Cl.No.6.5.2 (c) ,P/19 of 50
	16	Field permeability test (FPT) by -		
		(a) Single Packer method		Cl.No.7.6(a) ,P/34 of 50
		(b) Double Packer method		Cl.No.7.6(b) ,P/34 of 50
	17	Wave propagation test	As per IS code (if required)	
	19)	Field CBR test		Cl.No.6.12 ,P/26 of 50
	20)	Pressure meter test		Cl.No.6.16,P/28 of 50
2	Laboratory Test on Soil Samples			
	1	Bulk density and moisture content	Undisturbed soil samples	Cl. No. 8.2, P/36 of 50
	2	Sieve analysis		Cl. No. 8.2(a), P/36 of 50
	3	Hydrometer analysis		Cl. No. 8.2(a), P/36 of 50
	4	Liquid limit and plastic limit		Cl. No. 8.2(a), P/36 of 50
	5	Shrinkage limit		Cl. No. 8.2(a), P/36 of 50
	6	Specific gravity	Disturbed sample	Cl. No. 8.2(a), P/36 of 50
	7	Swell pressure		Cl. No. 8.2(a), P/36 of 50
	8	Free swell index		Cl. No. 8.2(a), P/36 of 50
	9	Relative density(for sand)	Undisturbed soil samples	Cl. No. 8.2, P/36 of 50
	10	Unconfined compressive strength	Undisturbed soil samples	Cl. No. 8.2, P/36 of 50
	11	Box shear test	Undisturbed soil samples	Cl. No. 8.2, P/36 of 50

	12	Direct shear test		
	13	Triaxial shear test	Undisturbed/disturbed soil samples depending on type of soil and field conditions	Cl. No. 8.2, P/36 of 50
		(a) unconsolidated undrained		
		(b) Consolidated undrained test with the measurement of pore water pressure		
		(c) Consolidated drained		
		One dimensional consolidation test		
	15	Standard Proctor compaction test		NA
	16	CBR test	Undisturbed/disturbed soil samples	Cl. No. 8.3(h), P/36 of 50
		(a) soaked conditions		
		(b) un-soaked conditions		
	17	Chemical analysis		
	Chemical analysis of sub soil water	Determination of pH,carbonate,sulphate,chloride and nitrate contents,organic matter,salinity and any other chemicals harmful to foundation material		Cl.No.8.3(f) ,P/38 of 50
	Chemical analysis of sub soil water sample	Colour,odour,turbidity,pH and chemical contents such as carbonate,sulphate,chloride,nitrate,organic matter and any other chemicals harmful to foundation material		Cl.No. 8.3(g) ,P/38 of 50
	18	Consolidation test		
	19	Bearing capacity		
	3 Laboratory Test on Rock Samples			
	1	Moisture content, porosity & density		Cl. No. 8.2(C), P/37 of 50
	2	Specific gravity		Cl. No. 8.2(C), P/37 of 50

	3	Hardness		Cl. No. 8.2(C), P/37 of 50
	4	Slake durability index		Cl. No. 8.2(C), P/37 of 50
	5	Unconfined compressive strength		Cl. No. 8.2(C), P/37 of 50
		(a) saturated		
		(b) In-situ water content		
	6	Point load strength		Cl. No. 8.2(C), P/37 of 50
	7	Deformability test (Saturated & Dry sample)		Cl. No. 8.2(C), P/37 of 50
	Disturbed samples	lab tests such as sieve analysis,index properties,specific gravity,chemical analysis.which was available from SPT		
	Undisturbed samples	to estimate physical,strength and settlement properties of soil		
	Note	Drilling boreholes through all kinds of soil including rock	All Bore-Log should have the following information apart from the other test report	
			I: No. of boreholes,	
			II: depth of boreholes,	
			III: Co-ordinates (m)	
			IV: Ground Elevation(R.L.) m	
			V: Ground Water Table (GWT) m	

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CHAPTER IX –DRAWINGS

Refer VOL-I-E- STANDARD SPECIFICATION FOR HYDROGRAPHIC SURVEY,
GEOTECHNICAL INVESTIGATION AND DETAILED DATA COLLECTION FOR
RIVER INTAKE WATER SYSTEM & APPROACH BRIDGE