

TENDER SPECIFICATION

NO: BHE/PW/PUR/WNT2 –Weigh Bridge/1407

Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site

AT
1X800 MW
WANAKBORI
DISTT. – KHEDA
GUJARAT.

TECHNICAL BID - VOLUME- I

TENDER SPECIFICATIONS CONSISTS OF:

- Notice Inviting Tender,
- Technical Conditions of Contract,
- Special conditions of Contract,
- General conditions of Contract
- Forms & Procedures

VOLUME I



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

Volume No	Description	Hosted in website bhel.com as files titled
NIL	Tender Specification Issue Details	(Part of <u>Vol-IA-1407</u>)
NIL	Notice Inviting Tender	(Part of <u>Vol-IA-1407</u>)
I-A	Technical Conditions of Contract	Vol-IA-1407
I-B	Special Conditions of Contract	Vol-IBCD-1407
I-C	General Conditions of Contract	(Part of <u>Vol-IBCD-1407</u>)
I-D	Forms & Procedures	(Part of <u>Vol-IBCD-1407</u>)
II	Price Bid Specification	Vol-II-1407

LEGEND:

This document (i.e. NIT & Vol-I A) is PART of Technical Bid

\$: **“Vol I -B, I-C, I-D” of Part-I (Vol- I) issued as separate book** as a part of Technical Bid.

@: **Price bid is** issued as a separate hard copy booklet ‘Tender Specifications – Volume-II (Price Bid-1407)’.

Tender Specification Issue Details

NO: BHE/PW/PUR/WNT2 –Weigh Bridge/1407

Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site

**AT
1X800 MW
WANAKBORI
DISTT. – KHEDA
GUJARAT.**

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR TENDER SUBMISSION Refer Notice Inviting Tender

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

M/s.

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PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

DY. GENERAL MANAGER (Purchase)

Place: Nagpur

Date:

1407

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



Notice Inviting Tender

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Ref: BHE/PW/PUR/WNT2 –Weigh Bridge/1407

Dt: 13/02/2015

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 –Weigh Bridge/1407
ii	Broad Scope of job	Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site AT 1X800 MW WANAKBORI DISTT. – KHEDA GUJARAT.
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	<ol style="list-style-type: none"> <u>Sale from BHEL PS Regional office at :</u> Start : 13/02/2015, Closes: 21/02/2015 , Time : 16.00 Hrs From BHEL website (www.bhel.com) Tender documents will be available for downloading from website till due date of submission Applicable/ Not applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	Date : 23/02/2015, Time 15.00 Hrs Place : <u>BHEL PS Regional office at :Nagpur</u> Tenders being submitted through representative shall be Applicable

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		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: Pratish Gee Varghese/Sr Engineer(Purchase) Shivkesh Meena / Engineer (Purchase)	
vi	OPENING OF TENDER	1 hours after the latest due date and time of Offer submission Notes: (1) In case the due date of opening of tender becomes a non-working day, then the due date & time of offer submission and opening of tenders get extended to the next working day. (2) Bidder may depute representative to witness the opening of tender	Applicable
vii	EMD AMOUNT	Rs 1,00,000/- (Rupees One Lakhs Only)	Applicable
viii	COST OF TENDER	Rs 2000/- (Rupees Two thousand Only)	Applicable
ix	LAST DATE FOR SEEKING CLARIFICATION	Five days before the due date of offer submission. Along with soft version also, addressing to undersigned & to others as per contact address given below	Applicable
x	SCHEDULE OF Pre Bid Discussion (PBD)	Date :	Not applicable.
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)		Not Applicable
xii	Latest updates	Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage (www.bhel.com -->Tender Notifications →View Corrigendums) and not in the newspapers . Bidders to keep themselves updated with all such information	

- 2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly 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.

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- 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)
 - PART-II (Price Bid) – in sealed and superscribed envelope (ENVELOPE-III)
 - One set of tender documents shall be retained by the bidder for their reference
- 6.0 The contents for ENVELOPES and the superscription for each sealed cover/Envelope are as given below. **(All pages to be signed and stamped)**

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

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

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

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

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

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- However, if reverse auction process is unsuccessful as defined in the RA rules/procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.
- 20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.
- 22.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 23.0 Consortium Bidding (or Technical Tie up) shall be allowed only if specified in Pre Qualifying Requirement (PQR) criteria, and in such a case the following shall be complied with:
- 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.

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

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

for BHARAT HEAVY ELECTRICALS LTD

AGM Pur

Enclosure

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

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ANNEXURE - 1PRE QUALIFYING CRITERIA

JOB	Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site AT 1X800 MW WANAKBORI DISTT. – KHEDA GUJARAT.
TENDER NO	BHE/PW/PUR/WNT2 –Weigh Bridge/1407

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	<u>Technical</u> B.1: Bidder should have Provided services of weigh bridge of 50MT weighing capacity on Build, Own and Operate Basis in the last seven (7) years as on latest date of offer submission. OR B.2: Bidder should have executed Supply / Construction (Installation) of weigh bridge of 50MT weighing capacity in the last seven (7) years as on latest date of offer submission.	APPLICABLE	
C-1	<u>Financial TURNOVER</u> Bidders must have achieved an average annual financial turnover (Audited) of Rs 09.90 Lakhs or more over last three Financial Years (FY) i.e. 2011-2012, 2012-2013, 2013-14.	APPLICABLE	
C-2	<u>NETWORTH</u> (only in case of Companies) Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive	APPLICABLE	

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C-3	PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three Financial Years defined in 'C-1 above based on latest Audited Accounts.	APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)	NOT APPLICABLE	By BHEL
E	Approval of Customer (if applicable) 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.	NOT APPLICABLE	BY BHEL
F	Price Bid Opening Note: Price Bids of only those bidders shall be opened who stand qualified after compliance of criteria A to E	APPLICABLE	BY BHEL
F	Technical Tie up criteria (if applicable)	NOT APPLICABLE	
<p><u>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</u></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 '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 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 IN THE RESPECTIVE ANNEXURES IN THEIR OFFER.

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ANNEXURE - 2

CHECK LIST

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

1	Name and Address of the Tenderer		
2	Details about type of the Firm/Company		
3.a	Details of Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:	
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: Email ID: Fax No:	
4	EMD DETAILS	DD No: Date : Bank : Amount: <u>Please tick (✓) whichever applicable:-</u> ONE TIME EMD / ONLY FOR THIS TENDER	
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE	
		APPLICABILITY(BY BHEL)	ENCLOSED BY BIDDER
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format	Applicable	YES / NO
7	Audited profit and Loss Account for the last three years	Applicable/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	Not Applicable	YES/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

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14	Declaration for relation in BHEL	Applicable/ Not Applicable	YES/NO
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)

IMPORTANT INFORMATION**1. 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 / PUR, Email id: ska@bhelswr.co.in. Ph: +91 – 712 – 3048633
- Engineer / PUR, Email id: svm@bhelswr.co.in , Ph: +91 – 712 – 3048715

2. 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)**3. All Statutory Requirements as applicable for this project shall be complied with.****4. Please take note of following Revised Tender Clauses:**

- b) Notice Inviting Tender: SI No 9
- c) 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 shall not be Applicable:

7. OVER RUN COMPENSATION

Over Run Compensation Clause no. 2.12 of Vol I C GCC shall not be Applicable

Notice Inviting Tender

Tender Specification No : BHE/PW/PUR/WNT2 –Weigh Bridge/1407

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8. 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:

- 8.1. 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).
- 8.2. 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.
- 8.3. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 8.4. 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.
- 8.5. 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.
- 8.6. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 8.7. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 8.8. 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.
- 8.9. 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.
- 8.10. Reverse auction will be conducted on scheduled date & time.

Notice Inviting Tender

Tender Specification No : BHE/PW/PUR/WNT2 –Weigh Bridge/1407

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- 8.11. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
 - 8.12. 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.
 - 8.13. 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.
 - 8.14. 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.
 - 8.15. 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.
 - 8.16. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
 - 8.17. 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.

1407

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

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Volume-IA	Part-I: Contract specific details		
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8	Taxes and other Duties	Chapter-VIII	2
9	Technical Specification	Chapter-IX	8

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I : Project Information

1.0	Project Information
1.1	<u>INTRODUCTION</u> Location : Wanakbori, District-Kheda, Gujarat Nearest Railway Station : Sevaliya (8KM) – Anand-Godhra main line Nearest Airport : Vadodara (85 KM from site), Ahmadabad (100 KM from site) Nearest Sea Port : Kandla Access By Road : 10KM from Dakor-Godhra NH No. 8, 02 KM from Balasinor-Sevaliya SH No. 59 Major Towns/Cities: 13 KM from Balasinor and 10KM from sevaliya. Land: Within existing Thermal Power Station. North-East side of the existing plot. Source Of Coal: Indian coal sourced from captive mines Machha in Talchar, Orissa. Source Of Water: River Mahi, flowing by side of existing Wanakbori Power Station. Meteorological Data Dry bulb temperature (max&min.) : 40.8°C &10.8°C Humidity (min. & max.) : 42.5% to 81.5% Average Annual Rainfall : 750mm Wind speed : Basic wind speed of 39 m/sec as per IS -875(Part-3) Seismic Zone : Zone-III as per IS-1893

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.0 SCOPE OF WORK

WEIGH BRIDGE: Scope of Services/Work & Contractor's Responsibilities:

Providing services of Pit-less Weighbridge of 100 MT Capacity of size 20 m x 3.5 m on Build, Own and Operate basis at the construction site of 1X800 MW Wanakbori.

The Scope of Services shall include Design, Procurement/Manufacturing, Deployment at Project Site, Civil Construction, Installation, Testing, Commissioning, Operation (including manning in required shifts as per BHEL requirement), Maintenance (including supply of spare parts for day to day operation and also for the scheduled and/ or breakdown maintenance of all the equipment, Instruments and complete installation in totality), Dismantling after closure of Services, removal and disposal of equipment, scrap, earth, debris etc. from project site and restoration of the location in clean, level & soil compacted state.

2.1.01

The above scope of work includes complete civil work like excavation, suitably capable foundation & backfilling, leading and trailing ramps of RCC of gentle gradient etc. complete for installation of Weigh Bridge and Operation-cum-Control Room including, Mechanical, Electrical and Electronics items and any other items necessary for regular operation of the Weigh Bridge including cost of materials, labor, permits, licenses etc as applicable

2.1.02

All equipment necessary for the required service shall be tested as per relevant IS and/or other applicable specifications at works prior to the shipment to site for Installation. On completion of Installation and Commissioning of the complete facility the same shall, in witness of BHEL, be subject to Load Test / Acceptance Test as per applicable Indian Standards or relevant engineering practice. On successful completion and acceptance of such test duly certified by BHEL, the equipment/installation shall be declared Operational for contractual purposes.

2.1.03

The service shall be rendered to suit BHEL site requirement, which may require single shift & two shift. The services may be required on weekends and holidays as well, as per BHEL site activities.

2.1.04

Providing the environment control and regulation equipments such as Room Air Conditioner, Dust guard, Air Curtain etc as may be required to take care of electronics systems and installations to ensure continuous satisfactory availability and operation of service facilities is within the scope of work.

2.1.05

All Tools & Plants including crane, if any, materials, consumables etc required for installation of Weigh Bridge and all other facilities etc are in the scope of the service provider. All consumables required for Operation and the contractor shall arrange maintenance of the facilities. BHEL shall not provide any facility in this regard.

2.1.06

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

All staff, skilled, semi/un-skilled labour for Installation and Commissioning, Operation and Maintenance and any other requirement for rendering the service shall be in the contractor's scope.

2.1.07

Contractor shall arrange and ensure periodical calibration of the facilities/ equipment with / from the Government authorized agency / Govt. Department with traceability to National Physical Laboratory of India. Also, all the relevant test as per IS and/or any other requirement shall be arranged by the contractor. The proof of all such calibrations and tests shall be furnished to BHEL. All fees, charges as applicable in this regard are in contractor's scope.

2.1.08

Contractor shall arrange Inspection by the Statutory Authorities as applicable to all his facilities and operation. Contractor shall pay all fees, charges etc as applicable.

2.1.09

The Contractor shall arrange construction water required for civil works of the Weigh Bridge.

2.1.10

BHEL shall provide at one point the electricity supply 230 V, 50Hz, for Installation and for Operation & Maintenance of the contractor's site facilities. However, all necessary arrangements for drawl and distribution (with complete arrangement for cables, distribution boards and protection devices such as breakers etc) for his use shall be arranged by the contractor. This set up has be approved and cleared for use by the relevant authority (electrical inspectorate). BHEL shall not be responsible for damage(s), if any, to contractor's facilities/ equipments etc on account of any fluctuation in supply side parameters.

2.1.11

Contractor shall arrange appropriate insurance cover for his installations and facilities as also for staff and labour for entire period of contract and extension thereof, if any. Proof of it shall be furnished to BHEL.

2.1.12

Contractor shall make security arrangement for his installations and facilities.

2.1.13

Contractor shall provide area illumination around his facilities suitable to need and in consultation with BHEL.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.1.14

Regular repair, maintenance and upkeep of all installations & facilities arising out of wear and tear during use particularly of ramps and platforms shall be ensured for satisfactory availability and operation of installations & facilities as incidental.

2.1.15

On completion of service contract period the complete set up installed and other facilities created shall be removed by the contractor and from the project premises and level the ground etc without any additional cost to BHEL within time frame specified by BHEL. BHEL will not provide any T&P, consumables etc for removal of contractor's facilities and equipments etc.

2.1.16

Contractor shall follow all regulations and BHEL directives with regard to Safety as applicable to the service being rendered.

2.1.17

Contractor shall obtain necessary Gate Pass, permission for shift operation/overstay as may be required by BHEL/Client for the time being.

2.1.18

Contractor at all times during the currency of this contract shall possess necessary license, permits as applicable to the provision of this service and pay all fee and charges as may be applicable. BHEL shall in no way be held responsible for any of the lapse of the contractor.

2.2.1 **BRIEF TECHNICAL SPECIFICATION OF THE WEIGH BRIDGE**

A brief technical Specification of the electronic weighbridge is as follows:

Number required	: 1
Carrying capacity/strength	: 120T
Weight capacity	: 100T
Type	: Pit Less Type Road Weigh Bridge
Number of Platform	: 1
Size of platform	: 20 m x 3.5 m
Least count	: 10 Kg

BHEL-PSWR

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

Purpose	: Weighment of Laden and Empty Trucks, Trailers, Tankers etc
Accuracy	: (+) (-) 0.05% of Full Scale
Type of the system	: Microprocessor controller based with : load cells
Display: Print out	Digital display in Kilograms for full Automatic print out should be generated for each weighment through the System

Capacity and should have adequate font size (at least 13mm) legible with contrasting background

Bidder shall along with his offer submit the complete technical information with regard to the weighbridge offered as part of service.
For detail please refer Technical specification chapter.

2.2.2 FACILITIES TO BE PROVIDED BY BHEL

2.2.3

BHEL will provide only the space/land (60 m x 15 Mtrs) approximate free of cost for setting up the equipments and facilities required for this service.

2.2.4

Approach road to Weigh Bridge shall be provided by us for the movement of loaded/unloaded trailers/trucks etc.

2.2.5

As provided elsewhere BHEL will provide Electric supply at one point free of charge to the contractor. However, any cess and duties levied/leviable on electricity consumed shall be to the contractor's account.

2.2.6

AVAILABILITY OF SERVICES, PREVENTIVE MAINTENANCE, BREAKDOWN MAINTENANCE & PENALTY DUE TO BREAKDOWN ETC.

2.2.7

Contractor shall provide his equipment and other resources in such a manner so as to ensure uninterrupted service as and when required by BHEL. Accordingly all his installations and facilities shall be operative. No undue delays shall occur in weighing of carriers on account of any failure of contractor's services.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.2. 8

For preventive maintenance, contractor shall plan the activities in advance in consultation with BHEL and execute such plans within the time approved by BHEL, expeditiously so as to ensure barest minimum down time. No penalty will be charged for such down time for preventative maintenance.

2.2. 9

For unforeseen Breakdowns in a service month a cumulative Service Non-availability of 3 days (72 Hrs) but not exceeding 12 Hrs. at a stretch on any single occasion will be permitted, as incidental and no penalty shall be levied for such breakdowns. However, contractor shall expedite remedial action so as to restore the services back to normal with least of disruption. Such allowable breakdown duration can be availed only in the concerned service month and cannot be adjusted against any other service month. Also such allowance shall be applicable only in case of a machinery breakdown/malfunction and not for any break in services attributable to absenteeism of personnel.

2.3. 1

GENERAL INFORMATION

2.3.1

VARIATION IN QUANTITY/DURATION:-

It is anticipated that in total about **24000 MT** of incoming and outgoing materials, mostly steel, will pass through the weighbridge spread over the Operation Period and Extensions thereof. However, these quantities and Operation Period may vary to any extent on upper/lower side depending upon the site conditions and BHEL requirements. No claim whatsoever from the contractor shall be entertained on account of any such variation in quantities or Operation Period.

2.3.2

The service shall be rendered and facilities shall be available for exclusive use of BHEL. The facilities shall not be used for any commercial use other than that as specified in this Tender Specification.

2.3.3

Service provider shall take back the entire installation (building, foundation, equipment, accessories etc.) after the completion of Contract Period (including extensions thereof).

2.3.4

The contract shall deem to be completed when so certified by BHEL.

All the above works shall be measured and paid under relevant item of BOQ.

All the above jobs shall be as per BHEL Engineer's instructions, drawings, detailed specification and respective bill of quantities furnished in the Rate Schedule.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.4 VARIATION IN QUANTITY

The quantities against each item of the Rate Schedule are approximate and may vary up to any extent or may be deleted altogether. The agreed rate of each item shall remain firm for any variation in individual quantities. Compensations on account of such variation shall be dealt **as per clause no. 2.14 of GCC**. The Payment shall be made as per agreed item rates for the quantities actually executed and measurements by BHEL. The contractor has to take note of this and quote his rates accordingly.

2.5 Responsibility of the Contractor

2.5.1

The contractor shall engage all the unskilled, skilled and especially skilled labor including fabricators, welders and fitters etc. and supervisory staff. Only trained and competent personnel with previous experience in the job shall be employed. However, BHEL reserves the right to decide on the suitability of the workers and other personnel who will be employed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they found him unsuitable. The contractor shall be bound to follow the instruction of BHEL.

2.5.2

All the materials like steel, structural members, painting materials, G.I. Sheets, MS square bar and necessary electric goods etc. shall be supplied by the contractor as per the specification mentioned in the tender/Indian standard specification. The contractor is required to quote their rates inclusive of cost of all materials, labor, etc. BHEL reserves the right to inspect and reject any material not found satisfactory.

2.6 General

2.6.1

During execution of the job, it is very essential that proper and adequate inspection should be made constantly by the contractor to maintain quality of workmanship and to ensure that deviations from BHEL drawings not exceed the permissible limits, which shall be approved by BHEL. Necessary laboratory test shall be conducted on random sampling basis for the materials like Bricks, steel, cement etc if so desired by BHEL Engineer. Apart from that Contractor shall also ensure **Field Quality Test (FQA)** like Compressive Strength Test of concrete (cube test), Sieve Analysis of aggregates, and Compaction Test for backfilling as per Standard Practice and Relevant IS codes either at site or nearby Field Quality Lab. approved by BHEL. **All the testing charges shall be borne by the contractor.** Decision of BHEL engineer shall be binding on the contractor.

Contractor shall procure reinforced / structural steel & cement from reputed manufacturer/ Authorized dealer & approval for the same shall be obtained from BHEL well in advance before ordering of the materials.

2.6.2

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

The contractor shall visit the site and ascertain the local conditions, entry and traffic restrictions, all obstructions in the area and also ascertain all site conditions and particularly the sub-soil conditions etc. **The contractor shall carry out the survey to study the properties of soil/sub soil like strength to withstand the weight of structure during all weather conditions without sinking of foundation.** If any of such defects like cracks, sinking of foundation etc. occur after completion of work till the performance guarantee period, it shall be rectified by contractor free of cost including the supply of materials required. No claim shall be entertained on this account under any circumstances from the contractor.

2.6.3

The contractor shall provide and maintain at his own cost pumps and other equipment to keep the work free from water and continue to do so until the handing over of the work. The contractor shall clear all trees, rubbish, vegetation, brickbats etc. And dispense them suitably in allotted areas at his own cost.

2.6.4

The contractor shall take adequate precautions to ensure complete safety and prevention of accidents at site. The safety precautions shall conform to IS codes wherever applicable.

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

SI.No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	PART I ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
a	Open space for office (as per availability)	Yes		Location will be finalized after joint survey with owner
b	Open space for storage (as per availability)	Yes		Location will be finalized after joint survey with owner
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			

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	Open space for labor colony (as per availability)	Yes		Location will be finalized after joint survey with owner
b	Labor Colony with internal roads, sanitation, complying with statutory requirements		Yes	
3.2.0	ELECTRICITY			
3.2.1	Electricity for construction purposes 3 Phase of Voltage 415/440 V (To be specified whether chargeable or free)			FREE
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	
3.2.2	Electricity for the office, stores, canteen, labour colony etc of the bidder (to be specified whether chargeable or free)			Chargeable(Applicable Tariff)

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	Single point source	Yes		At an available distance from site (Distance may vary up to an extent depending on site condition). Cabling shall be done by bidder at their own cost.
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			
a	Single point source		Yes	Contractor has to make suitable arrangement at their own cost.
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			

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	
3.3.1	For construction purposes: (to be specified whether chargeable or free)			FREE
a	Making the water available at single point	Yes		In case of inadequate supply / non-availability of construction water from customer, contractor shall have to arrange construction water at his own expenses.
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>			Chargeable(Applicable Tariff)
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>		Yes	Contractor has to make suitable arrangement at their own cost.
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	Telephone, fax, internet, intranet, e-mail etc		Yes	
3.6.0	Compressed Air wherever required for the work			Not Required
3.7.0	Demobilization of all the above facilities		YES	
3.8.0	TRANSPORTATION			
a	For site personnel of the bidder		Yes	

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

SI.No	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
b	For bidder's equipments and consumables (T&P, Consumables etc)		Yes	

SI.No	Description PART II 3.9.0 ERECTION FACILITIES	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.9.1	Engineering works for construction:			NOT APPLICABLE
a	Providing the erection/constructions drawings for all the equipments covered under this scope	Yes		For Details PI refer Chapter-II-
b	Drawings for construction methods	Yes	Yes	In consultation with BHEL
c	As-built drawings – where ever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes			NOT APPLICABLE
d	Shipping lists etc for reference and planning the activities			NOT APPLICABLE
e	Preparation of site erection schedules and other input requirements		Yes	In consultation with BHEL

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

SI.No	Description PART II 3.9.0 ERECTION FACILITIES	Scope / to be taken care by		Remarks
		BHEL	Bidder	
f	Review of performance and revision of site erection schedules in order to achieve the end dates and other commitments	Yes	Yes	In consultation with BHEL
g	Weekly erection schedules based on SI No. e		Yes	In consultation with BHEL
h	Daily erection / work plan based on SI No. g		Yes	In consultation with BHEL
i	Periodic visit of the senior official of the bidder to site to review the progress so that works are completed as per schedule. It is suggested this review by the senior official of the bidder should be done once in every two months.		Yes	
j	Preparation of preassembly bay			NOT APPLICABLE
k	Laying of racks for gantry crane if provided by BHEL or brought by the contractor/bidder himself			NOT APPLICABLE
L	Arranging the materials required for preassembly			NOT APPLICABLE

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

A: TOOL & PLANTS

B: MEASURING AND MONITORING DEVICES (MMD):

AS PER REQUIREMENT TO BE FINALIZED AT SITE.

NOTE:

THIS ABOVE LIST IS ONLY INDICATIVE AND NEITHER EXHAUSTIVE NOR LIMITING. QUANTITIES INDICATED ABOVE ARE ONLY THE MINIMUM REQUIRED. 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 MATERIAL OR ANY T & P's FOR THIS WORK

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6. TIME SCHEDULE AND MOBILIZATION

The contractor shall reach site, make his establishment and be ready to commence the **installation/construction activities within one weeks from issue of detailed letter of award** or as per directions of Construction Manager of BHEL. **The Contractor shall have to subsequently augment his resources in such a manner that the entire facility for weigh bridge is ready for BHEL's use within one months.**

6.1.1 Contract Period

The total contract period shall be **46 months** and be divided in two parts as under:

(a) **Installation Period:**

The Installation Period of 2 months is provided for contractor to install & commission his equipment, set up the necessary establishment and make operational all his facilities for rendering the service.

(b) **Operation Period:**

The Operation Period shall be 44 months from the date of declaring the facilities of contractor as "Operational" as per relevant clause.

6.1.2 Extension of the Contract Period, Penalty for Delay/Overrun Charges for Extension in Operation Period

(a) **Installation Period:** Installation of the required facilities in all respect shall have to be completed within the stipulated Installation Period. Delay in this if any, attributable to the Contractor shall attract levy of penalty @ 0.5% per week or part thereof limited to 5% of the Contract value. Appropriate amount (penalty) will be deducted from the proceeds of the first bill of the Contractor.

BHEL will grant extension of Installation Period for reasons not attributable to the Contractor. It shall be the sole responsibility of the Contractor to prove that the reasons of delay are not attributable to the Contractor. Contractor shall record such factors in the form of Minutes of Meeting with BHEL Site.

In the event the delay is partially attributable to the Contractor, the penalty leviable on Contractor will be limited to that part of the delay, which is attributable to him.

(b) **Operation Period:** BHEL at its discretion and requirement may extend the Operation Period on existing terms and conditions for another period of maximum of Six (6) Months after the completion of Operation Period of 46 Months. For such extended period a consolidated payment (Overrun Charges) of Rs. 40,000/ per month will be made by BHEL to the contractor. This amount will be pro-rated (Daily rate = Rs. 40,000.00 divided by 30) for part of the month. No other payments will be made in the extended period.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6.1.3

PENALTY

In case the contractor fails in delivering the contracted service over and above the allowed period as specified above, BHEL shall levy penalty for each additional hour or part thereof beyond such allowances in the following manner:

- (a) The regular payment (as per Terms of Payment) for those many hours of service not available beyond allowance shall not be paid. The Hourly rate shall be calculated as under:

$$\text{HOURLY RATE} = \frac{\text{Amount Payable for the relevant Service Month}}{\text{30 days X 16 hours}}$$

- (b) In addition to the disallowance of regular payment as above, a non-refundable penal charge at the rate of 50% of such hourly rate for the hours of service not available beyond allowed periods shall also be levied in the RA bill of respective month.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VII: Terms of Payment

7.1 PRICE OFFER AND TERMS OF PAYMENT

7.1.1

PRICE OFFER

Contractor shall offer a lump sum price in price bid which shall be inclusive of all cost elements such as costs of equipment, construction, installation, operation & maintenance, spares, all taxes, duties, levies and charges etc excepting those obligations which are specified as BHEL scope. The agreed price shall remain firm throughout the Contract Period including extensions if any.

7.1.2 TERMS OF PAYMENT

The agreed lump sum price for this service will be paid in the following manner by BHEL at the project site.

7.1.2.1

15% of the accepted lump sum price shall be paid on BHEL's certification of contractor's facilities as "Operational" for the service as per relevant clauses.

7.1.2.2

The balance **85%** will be paid in 45 equal installments as regular monthly payment toward each completed month of service on providing satisfactory services and certification thereof by BHEL engineer. Where services are rendered for a part of the month the payment shall be made on pro-rata basis for the utilized number of days.

7.1.2.3

Contractor shall raise bills accordingly and payment will be made at site by local account payee check. Payments for such running bills shall be made within 30 days from the date of each of such RA bill.

7.1.2.4

BHEL shall not pay any charges other those specified in these specifications.

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Chapter-VIII: Taxes and Other Duties

TAXES, DUTIES, LEVIES

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

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

8.1.1

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

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

8.1.2 Service Tax & Cess on Service Tax

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

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

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

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

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

8.1.3 VAT (Sales Tax /WCT)

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

In any case the Contractor shall register himself with the respective Sales Tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. Contractor will submit all the details of

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

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 —‘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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-IX TECHNICAL SPECIFICATION

Part B - Technical Specification

S. No.	PARTICULARS & BHEL SPECIFICATION	
1.0	CONFIGURATION	
2.1	Construction	Pit-Less Type
2.2	Weighing Capacity	100 metric ton (10000 kg)
2.3	Platform Size (minimum)	20 m x 3.5 m
2.4	Platform height from ground level	Bidder to Specify
2.5	Ramp inclination ratio	Bidder to Specify
2.6	Mechanism / Principle	Electronic with Load Cells
2.7	No. of Load Cells	Minimum 8 Nos. Bidder to Specify
2.8	Weight Indication	Digital Indication System
3.0	BASIC DESIGN & CONSTRUCTIONAL FEATURES	
3.1	The basic design shall be suitable for electronic measuring system using load cells and digital indication system.	
3.2	The measuring accuracy shall be as per Class-III Accuracy and abided by Indian Weights & Measures Act.	
3.3	The weigh-bridge shall be of free motion strut mounted type construction.	
3.4	For a better and balanced weighing, the load cell should be suitably arranged for supporting the platform. Vendor to confirm and give details.	
3.5	The platform structure shall be fabricated type with welded rolled steel sections and plates of reputed make like SAIL, JINDAL, TISCO, etc. Bidder has to submit the details on the platform construction with outline drawings and material used, along with the offer. Thickness of Plate used for the platform to be specified.	
3.6	The fabricated platform structures are to be shot blasted prior to painting and finished with primer and epoxy coating of required Dry Film Thickness (DFT). Bidder to give details on paints applied and DFT.	
3.7	The platform plates are to be provided with "anti-skid ribbing" or made of checkered plates.	
3.8	Bolt-on type side railing with brackets are to be provided for the platform.	
3.9	Stoppers or bumpers are to be provided in longitudinal and transverse directions.	

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-IX TECHNICAL SPECIFICATION

S.No.	DESCRIPTION / PARTICULARS	
3.10	The design of the weigh bridge shall be such that all the load cells can be accessed easily during maintenance/ breakdown.	
3.11	The weigh bridge indicator cum display system shall be compatible with a PC, for taking print-outs, data entry to hard disk of the PC and giving connectivity to external IT network system through suitable and reliable communication cables and ports.	
4.0	LOAD CELL DETAILS	
4.1	Rated Capacity of each Load Cell (metric ton)	Bidder to Specify
4.2	Type of Load cell	Compression type Bidder to specify and give complete details
4.3	Load cell technology	Analog / Digital Bidder to Specify and give complete details
4.4	Make & Model no.	Bidder to Specify
4.5	Accuracy Level	In the order of 0.02% Bidder to Specify
4.6	Electrical Input Supply [Minimum & Maximum]	Bidder to Specify
4.7	External Communication	Bidder to Specify
4.8	Output Resolution	Bidder to Specify
4.9	Output Update Rate	In the order of 10 readings per second. Bidder to specify
4.10	Repeatability	Bidder to Specify
4.11	Overload Rating (Safe)	Not less than 125% of rated capacity. Bidder to Specify
4.12	Overload Rating (Ultimate)	Not less than 250% of rated capacity. Bidder to Specify
4.13	Sensitivity in mV/V	2.0 ± 0.1%
4.14	Operating Temperature Range	10°C to 50°C
4.15	Temperature Effect on Sensitivity	Bidder to Specify
4.16	Temperature Effect on Zero Balance	Bidder to Specify
4.17	Protection Class	IP 67/IP 68

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TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-IX TECHNICAL SPECIFICATION

4.18	Citation (For Test Certificate)	OIML R60
4.19	Creep in 30 min.	Bidder to Specify
4.20	Shall be unaffected by 'off-centre' loads	
4.21	Canister design to be strong enough to withstand wear, tear and accidental damage due to harsh usage	
4.22	Shall be hermetically sealed.	
4.23	Shall be provided with automatic diagnostics	
S.No.	DESCRIPTION / PARTICULARS	
4.24	Shall withstand hostile conditions due to extreme temperatures, lightning, wind, shock and vibration	
4.25	Shall be provided with over-load protection	
4.26	Shall be provided with 'low-torque' anti-rotation load button	
4.27	Shall be provided with water-proof connectors	
4.28	Test Certificate for Load Cell's Accuracy Test conducted from reputed laboratory is required	
5.0	DIGITAL INDICATION SYSTEM	
5.1	Make & Model no.	Bidder to Specify
5.2	Processor	Micro-Processor based [Bidder to specify make and model]
5.3	Processor Clock	Bidder to specify
5.4	Real Time Clock	On Board Battery Backed
5.5	Memory	For data storage, capable of storing around 1500 weighment records with battery back-up. Bidder to specify the memory storage capacity.
5.6	Power Supply	Switched Mode Power Supply
5.7	Input Voltage	230 V AC, 50 Hz
5.8	Protection	
5.8.1	Fuse of suitable rating for Input AC Mains.	Bidder to specify
5.8.2	Input Line Filter for EMI and RFI Suppressions.	Bidder to confirm
5.8.3	Spike Suppressors for input transits.	Bidder to confirm
5.8.4	High voltage protectors.	Bidder to confirm
5.8.5	Degree of Resistance to dirt	Vendor to specify the IP

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TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-IX TECHNICAL SPECIFICATION

	and moisture.	(Ingress Protection) number
5.8.6	Splash proof keypad	Bidder to specify
5.9	Power Consumption (Watts)	Bidder to specify
5.10	A/D Conversion	Bidder to furnish details
5.11	Load-Cell Excitation	Bidder to furnish details
5.12	Repeatability	± 0.01% of Full Scale
5.13	Display	A suitable Illuminated Display (with Backlight) for displaying numerals as well as alphabets, at any time.
5.14	Remote Display	Remote Display port to connect to red LED seven segment display to indicate weight on the platform

S.No.	DESCRIPTION / PARTICULARS	
5.15	Reading Capacity of Display unit	Minimum 80 metric ton (i.e. 20 metric ton above the rated capacity of the weigh bridge) Vendor to specify
5.16	Features	Configurable Decimal points Flicker free display of weight Configurable Zero tracking Over & Under Range Indication Character height (mm) Number of digits Vendor to specify
5.17	Printer Port	Compatible for connecting dot matrix / laser printer for printing of weighment records and reports
5.18	Serial Port / Ethernet	RS-232 Serial Port for computer interfacing or driving remote display and provision of Ethernet to Net Connectivity. Bidder to specify
6.0	Computer and Printer: Computer installed with Operating System, keyboard, mouse and Printer will be arranged by BHEL. Vendor to specify the configuration details like OS version, Size of RAM and Hard disk, type of printer required etc.	

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Chapter-IX TECHNICAL SPECIFICATION

7.0	WEIGHBRIDGE SOFTWARE
7.1	The OFFER shall also include the SOFTWARE required to integrate the functions of the Hardware with the Operations of the Weigh-Bridge offered. Bidder to specify the software capability to interface with SAP or other software at BHEL. NOTE: Bidder to list down the technical features / functions of the SOFTWARE in detail
7.2	Software for SMART CALIBRATION (minor weigh correction by software) shall be provided by the vendor. In addition to Software for pre-start data entry for loading details, date & time, location, etc. Bidder to specify.

S.No.	DESCRIPTION / PARTICULARS	
8.0	PRINT-OUT FIELD: The print out slip should contain the following details: a) BHEL Logo b) Ticket number and Date - auto generated. c) Vehicle Registration Number - up to 25 space alphanumeric and special characters. d) Tare Weight, Net Weight, Gross Weight - in kg, e) Date (DD/MM/YYYY) & Time (hh:mm:ss – 24 hour format) of each Weighment. f) Item Particulars / Description - minimum 32 characters comprising of space, alpha-numeric and special characters mode. g) Address of Transporter with Phone Number - 50 characters. h) Invoice number (manually entered) - comprising of alphanumeric, space and special characters. i) Stores Dept. Code Number, Designation of persons for Weighing and Authority, etc. in a PRINTABLE FORMAT To be discussed in detail at the time of order finalization.	
8.1	Report generation	Date wise, Vehicle wise, sorting data based on print out fields. Bidder to specify
9.0	Hardware	The Bidder has to list down the Hardware required to be supplied to assure the specified functions from the weigh-bridge offered.
10.0	Additional Features	Bidder to list down the list of additional features available in the

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TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-IX TECHNICAL SPECIFICATION

	OFFERED Weight Bridge & Control Unit.
11.0	LIGHTING SYSTEM - A spot light with sufficiently long cable shall also be provided for 24 V AC supply.
12.0	UN-INTERRUPTED POWER SUPPLY UNIT (UPS)
12.1	UPS of suitable rating with maintenance free dry batteries shall be provided for operations lasting over three continuous hours.
12.2	Make. : APC / MICROTEK / AMARON or any other reputed make acceptable to BHEL
12.3	Model & Rating (kVA): Bidder to specify
12.5	Catalogue of the UPS and battery shall be submitted with the Technical Offer.
12.4	Spares Package for the UPS for 2 years working also shall be offered.

S.No.	DESCRIPTION / PARTICULARS
13.0	IMPORTANT POINTS
13.1	Single Phase AC (3 wire system) 230V ± 10%, 50 Hz ± 1.5 Hz, Power Supply Source will be provided by BHEL at a single point near the weighing machine, as per the layout recommended by Vendor. All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the machine/control cabinets, shall be the responsibility of vendor.
13.2	All electrical equipment shall be tropicalized and shall have IP 54 degree of protection
13.3	All electrical control cabinets & panels should be dust and vermin proof
13.4	Vendor should ensure the proper Earthing for the machine and its accessories. Bidder has to ensure the works relating to the running of earth flat from all the load cells used, and connecting to the common earth pit provided for the subject weigh bridge. This complete work is under the scope of the Bidder.
14.0	ENVIRONMENTAL PERFORMANCE OF THE MACHINE
14.1	The machine shall be suitable for an ambient temperature of around 50 C and relative humidity of 95 % respectively, but both do not occur simultaneously.
14.2	Weather conditions are tropical, Atmosphere may be dust

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Chapter-IX TECHNICAL SPECIFICATION

	laden during some part of the year.
14.3	Paint of the machine shall be weather resistant and shall not peel off due to weathering.
14.4	Vendor to ensure that the Thermal Stability of the complete machine to be designed keeping in view the specified Ambient Conditions and accuracy requirements of BHEL for trouble free operation of the weighing machine.
14.5	If any safety / environmental protection enclosure is required it shall be built in the weighing machine by the vendor.
15.0	MACHINE SPARES
15.1	Load Cell – 2 nos. Digital Indicating System – 1 set. Remote Display Unit – 1 No. Itemized break-up of mechanical and electrical spares used on the machine in sufficient quantity as per recommendation of Vendor for 2 years of trouble free operation on two shifts continuous running basis should be offered by vendor. Unit Price of each item of spare shall be offered.
15.2	Electrical: All types of Relays/Contactors/Push Buttons, Indicating Lamps/Fuses, and PCBs shall be quoted.
15.3	All types of spares for total machine and accessories should be available for at least ten years after supply of the weighing machine.
16.0	DOCUMENTATION: THREE sets of following documents (Hard Copies) in English language shall be supplied along with machine
16.1	Operating Manuals of Weighing Machine and Indicator System
16.2	Programming Manuals for the Weighing Machine
16.3	Detailed Maintenance Manual (for troubleshooting and service) of machine with all drawings of machine assemblies/sub-assemblies/parts including Electrical / Mechanical and Instrumentation circuit diagrams. Technical Manual & Data sheet for Load cell, Indicating system and other components
16.4	Complete back-up of hard disk / software on GHOST CD and clear written Instructions (3 copies) to take back-up and

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX TECHNICAL SPECIFICATION

	reloading of a new hard disk.
16.6	One additional set of all the above documentation on CD ROM, wherever possible.
17.0	MACHINE FOUNDATION
	Vendor shall submit the preliminary layout drawing for getting BHEL's approval within FOUR WEEKS from the date of issue of BHEL Purchase Order. Vendor shall submit complete foundation details including static and dynamic loads within a month after getting BHEL's approval. The layout should consist of all requirements pertaining to complete weighing machine including control room.
18.0	INSPECTION & MACHINE ACCEPTANCE
18.1	Pre-dispatch inspection - Machine shall be offered for inspection by BHEL engineers at vendor's works. Vendor to confirm Vendor to give details on MACHINE INSPECTION Tests to be performed by Vendor at Vendor's works, on the machine, before dispatch.
18.1.1	Full load test to demonstrate the maximum capacity of the weighing machine. (If possible)
18.1.2	Demonstration of all features of the weighing machine, indicator system & accessories
18.1.3	Travel, board & lodging for the BHEL Engineers who will be visiting vendor's works for pre-dispatch inspection, shall be borne by BHEL. Vendor to note
18.2	Tests / Activities to be carried out by Vendor at BHEL works while commissioning the machine:
18.2.1	Accuracy, Repeatability, Safe Over-Load Testing, Communication Connectivity and tests recommended by the Vendor