

TENDER SPECIFICATION

No. BHE/PW/PUR/DHJOI-CRH/1055/OJ

FOR

SERVICES OF TOWER CRANE ON MONTHLY HIRING BASIS

FOR

CONSTRUCTION WORK

AT

**2X220 TPH UB + 2X30MW STG + 4XFr6 B GT + 4X110 TPH HRSG
AT ONGC PETRO ADDITIONS LIMITED, SEZ, DAHEJ GUJARAT**

PART: I

**(TECHNICAL BID SPECIFICATION, NOTICE INVITING TENDER & GENERAL
CONDITIONS OF CONTRACT)**



**BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. of India Undertaking)
POWER SECTOR - WESTERN REGION
345-KINGSWAY, NAGPUR-440 001**

C o n t e n t s		
Description	Section/ Appendix no	No. of pages
Tender Specification Issue Details	-----	01
NOTICE INVITING TENDER DETAILS + PQR	-----	14
Check List	-----	01
Important Information	-----	01
Declaration about Relationship in BHEL	-----	01
Declaration by Bidder's authorized signatory	-----	01
Certificate of bidder's knowledge about site		01
Certificate of No-Deviation	-----	01
Project Information	-----	02
Special Conditions of Contract (Scope of Services, Technical Specs of Cranes, Time Schedule, Payment Terms, Technical and Commercial Conditions, EMD, Security Deposit etc.)	SECTION-A	27
Instruction of filling up Appendix		01
Technical details of crane models offered by Bidder	APPENDIX-I	02
General Conditions of Contract	SECTION-B	--
Price Bid Specification	PART-II	@

LEGEND:

@: Issued as separate booklets titled **Part-II** as hard copy. Soft Copy furnished as a single downloadable file containing all eleven volumes in the web page (www.bhel.com) as file titled "Price Bid 1055".

This entire document is also hosted in website (www.bhel.com) as downloadable file titled "Tech Bid 1055"

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/DHJOI-CRH/1055/OJ
ISSUE DETAILS

NAME OF THE WORK:

PROVIDING SERVICES OF TOWER CRANE ON MONTHLY HIRING BASIS FOR CONSTRUCTION WORK AT OPaL (ONGC PETRO ADDITIONS LIMITED), SEZ, DAHEJ, GUJARAT STATE.

LAST DATE & TIME FOR SUBMISSION OF COMPLETED OFFERS: PLEASE OBTAIN THE LATEST DETAILS FROM OUR WEB PAGE <http://www.bhel.com> (Tender Notifications, → View Corrigendums)

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

M/s.....

.....

.....

(THESE TENDER SPECIFICATION DOCUMENTS ARE NOT TRANSFERABLE)

FOR BHARAT HEAVY ELECTRICALS LIMITED

Addl General Manager (Purchase)

PLACE: NAGPUR

DATE :



BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR-WESTERN REGION
'Shreemohini' Complex, 5th floor
345-Kingsway Nagpur 440001
Phone: 0712-3048600-604 Fax: 0712-3048 605, 698, 699

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

To

Ref: BHE/PW/PUR/DHJOI-CRH/1055

Date: 01/10/2012

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/DHJOI-CRH/1055/OJ	
ii	Broad Scope of job	PROVIDING (ROUND THE CLOCK) SERVICES OF TOWER CRANE ON MONTHLY HIRING BASIS FOR CONSTRUCTION WORK AT OPaL (ONGC PETRO ADDITIONS LIMITED), SEZ, DAHEJ, GUJARAT STATE	
iii	DETAILS OF TENDER DOCUMENT		
a	Volume-IA	<i>Technical Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc</i>	<i>Applicable</i>
b	Volume-IB	<i>Special Conditions of Contract (SCC)</i>	<i>Applicable</i>
c	Volume-IC	<i>General Conditions of Contract (GCC)</i>	<i>Applicable</i>
d	Volume-ID	<i>Forms and Procedures</i>	<i>Applicable</i>
e	Volume-II	<i>Price Schedule (Absolute value).</i>	<i>Applicable</i>
iv	Issue of Tender Documents	1. <u>Sale from BHEL PS Regional office at :</u> Start : 28/09/2012 , Time : Closes: 12/10/2012 , Time : 16.00 hrs 2. From BHEL website (www.bhel.com) Tender documents will be available for downloading from website till due date of submission	<i>Applicable</i>
v	DUE DATE & TIME OF OFFER SUBMISSION	Date : 15/10/2012 , Time : 15.00 hrs Place : BHEL, PSWR Nagpur HQ.	<i>Applicable</i>

Bharat Heavy Electricals Limited: PSWR: Nagpur
Tender Specs. No **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

		Tenders being submitted through representative shall be handed over to any of the following BHEL officials after making entry/registration at the reception: RK Ranade/ Sr.Manager (Purchase) Pratish Gee Varghese/ Engineer(Purchase) Nirmal P.G/ Asst.Engineer(Purchase)	
vi	OPENING OF TENDER	Date : 15/10/2012 Time : 16.00hrs <i>Notes:</i> (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. 1.5 Lakhs	Applicable
viii	COST OF TENDER	Rs 2000/-.	Applicable
ix	LAST DATE FOR SEEKING CLARIFICATION	5 days before the latest due date for offer submission. Along with soft version also, addressing to undersigned & to others as per contact address given below Bidders are requested send all queries to the following e-mail ids; rkranade@bhelpswr.co.in pgv@bhelpswr.co.in nirmalpg@bhelpswr.co.in	Applicable
x	SCHEDULE OF Pre Bid Discussion (PBD)		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

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

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)
 - 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.	

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

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

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

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

	OUTER COVER	
--	--------------------	--

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

	<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.

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:

Bidder's capacity for executing the job under tender shall be assessed 'LOAD' wise and 'PERFORMANCE' wise as per the following:

- I. **LOAD:** Load takes into consideration **ALL** the contracts of the Bidder under execution with BHEL Regions, irrespective of whether they are similar to the tendered scope or not. The 'Load' is the sum of the unit wise identified packages (refer Table-1) for contracts with BHEL Regions. The cut off month for reckoning 'Load' shall be the month, two (2) months preceding the month corresponding to the 'latest date of bid submission', in the following manner:

(Note: For example if latest bid submission is in Aug 2011, then the 'load' shall be calculated upto and inclusive of June 2011)

i). Total number of Packages

Total number of Packages in hand = P

Where

- P is the sum of all unit wise identified packages under execution with BHEL Regions as of the cut off month defined above, including packages yet to be commenced.

ii) Weightage "A" assigned to bidders based on Total number of Packages 'P':

- a) If 'P' = 0-9, : "A" will be equal to '4'
- b) If 'P' = 10-18, : "A" will be equal to '3'
- c) If 'P' = 19-36, : "A" will be equal to '2'
- d) If 'P' = 37-60, : "A" will be equal to '1'
- e) If 'P' is above 60 : "A" will be equal to '0'

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

- II. **PERFORMANCE:** Here 'Monthly Performance' of the bidder for all the packages (**under execution/** executed during the 'Period of Assessment' in all the Power Sector Regions of BHEL) **SIMILAR** to the packages covered under the tendered scope, excepting packages not commenced shall be taken into consideration. The 'Period of Assessment' shall be 6 months preceding the cut off month. The cut off month for reckoning 'Period of Assessment' shall be the month two (2) months preceding the month corresponding to the 'latest date of bid submission', in the following manner:

(Note: For example if 'latest date of bid submission' is in Aug 2011, then the 'performance' shall be assessed for a 6 month period upto and inclusive of June 2011, for all the unit wise identified packages (refer Table I)

- i). Calculation of Overall 'Performance Rating' for 'similar Package/Packages' for the tendered scope under execution at Power Sector Regions:
This shall be obtained by summing up the 'Monthly Performance Evaluation' scores obtained by the bidder in all Regions for all the similar Package/packages', divided by the total number of Package months for which evaluation should have been done, as per procedure below:
- $P_1, P_2, P_3, P_4, P_5, \dots, P_N$ etc be the packages (**under execution/** executed during the 'Period of Assessment' in all Regions) **SIMILAR** to the packages covered under the tendered scope, excepting packages not commenced. Total number of similar packages for all Regions = P_T (ie $P_T = P_1 + P_2 + P_3 + P_4 + \dots + P_N$)
 - Number of Months ' T_1 ' for which 'Monthly Performance Evaluation' as per relevant formats, should have been done in the 'Period of Assessment' for the corresponding similar package P_1 . Similarly T_2 for package P_2 , T_3 for package P_3 , etc for the tendered scope. Now calculate cumulative total months ' T_T ' for total similar Packages ' P_T ' for all Regions (i.e $T_T = T_1 + T_2 + T_3 + T_4 + \dots + T_N$)
 - Sum ' S_1 ' of 'Monthly Performance Evaluation' Scores ($S_{1-1}, S_{1-2}, S_{1-3}, S_{1-4}, S_{1-5}, \dots, S_{1-N}$) for similar package P_1 , for the 'period of assessment' ' T_1 ' (i.e $S_1 = S_{1-1} + S_{1-2} + S_{1-3} + S_{1-4} + S_{1-5} + \dots + S_{1-N}$). Similarly S_2 for package P_2 for period T_2 , S_3 for package P_3 for period T_3 , etc for the tendered scope for all Regions. Now calculate cumulative sum ' S_T ' of 'Monthly Performance Evaluation' Scores for total similar Packages ' P_T ' for all Regions (i.e ' $S_T = S_1 + S_2 + S_3 + S_4 + S_5 + \dots + S_N$ ')
 - Overall Performance Rating ' R_{BEHL} ' for the similar Package/Packages** (**under execution/** executed during the 'Period of Assessment') in all the Power Sector Regions of BHEL):

Aggregate of Performance scores for all similar packages in all the Regions

$$= \frac{\text{-----}}{\text{-----}}$$

Aggregate of months for each of the similar package for which performance should have been evaluated in all the Regions

$$= \frac{S_T}{T_T}$$

- e) Bidders to note that the risk of non evaluation or non availability of the 'Monthly Performance Evaluation' reports as per relevant formats is to be borne by the Bidder
- f) Table showing methodology for calculating 'a', 'b' and 'c' above

SI	Item Description	Details for all Regions	Total
----	------------------	-------------------------	-------

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

n										
o	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
1	Similar Packages for all Regions →	P ₁	P ₂	P ₃	P ₄	P ₅	...	P _N	Total No of similar packages for all Regions = P_T ie Sum (Σ) of columns (iii) to (ix)	
2	Number of Months for which 'Monthly Performance Evaluation' as per relevant formats should have been done in the 'period of assessment for corresponding similar Package (as in row 1)	T ₁	T ₂	T ₃	T ₄	T ₅	...	T _N	Sum (Σ) of columns (iii) to (ix) = T_T	
3	Monthly performance scores for the corresponding period (as in Row 2)	S ₁₋₁ , S ₁₋₂ , S ₁₋₃ , S ₁₋₄ , ... S _{1-T1}	S ₂₋₁ , S ₂₋₂ , S ₂₋₃ , S ₂₋₄ , ... S _{2-T2}	S ₃₋₁ , S ₃₋₂ , S ₃₋₃ , S ₃₋₄ , ... S _{3-T3}	S ₄₋₁ , S ₄₋₂ , S ₄₋₃ , S ₄₋₄ , ... S _{4-T4}	S ₅₋₁ , S ₅₋₂ , S ₅₋₃ , S ₅₋₄ , ... S _{5-T5}	S _{N-1} , S _{N-2} , S _{N-3} , S _{N-4} , ... S _{N-TN}	-----	
4	Sum of Monthly Performance scores of the corresponding Package for the corresponding period (as in row-3)	S ₁	S ₂	S ₃	S ₄	S ₅	...	S _N	Sum (Σ) of columns (iii) to (ix) = S_T	

ii) Weightage "B" assigned to bidders based on Overall Performance Rating (R_{BHEL}) at Power Sector Regions, for the respective Package:

- If R_{BHEL} is ≥ 80%, "B" will be equal to '6'
- If R_{BHEL} is ≥ 75% < 80%, "B" will be equal to '5'
- If R_{BHEL} is ≥ 70% < 75%, "B" will be equal to '4'
- If R_{BHEL} is ≥ 65% < 70%, "B" will be equal to '3'
- If R_{BHEL} is ≥ 60% < 65%, "B" will be equal to '2'
- If R_{BHEL} is < 60%, "B" will be equal to '0'

III. 'Assessment of Capacity of Bidder' to be Qualified for the tender:

Shall be based on the sum of the weightages obtained in 'LOAD' (A) and 'PERFORMANCE' (B) as below:

- If the sum (A+B) is 6 or above for each of the applicable Package, then the Bidder is considered 'Qualified' for the tender
- If the sum (A+B) is less than 6 for any of the applicable Package, then the Bidder is considered 'NOT Qualified' for the tender

IV. Explanatory note:

- Similar package means Boiler or ESP or Piping or Turbine or Civil or Structure or Electrical or CI, etc at the individual level irrespective of rating of Plant, and irrespective of whether the subject tender is a single package or as part of combined/composite packages. Normally Boiler, ESP,

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

Piping, Turbine, Electrical, CI, Civil, Structure, etc is considered individual level of package. For example in case the tendered scope is a Boiler Vertical Package comprising of Boiler, ESP and Power Cycle Piping (i.e the 'identified packages as per Table-1 below), the 'PERFORMANCE' part against sl no II above, needs to be evaluated considering all the identified packages (ie Boiler, ESP and Power Cycle Piping) and finally the Bidder's capacity to execute the tendered scope is assessed in line with III above

b) Identified Packages (Unit wise)

Table-1

	Civil	Electrical & CI	Mechanical
	i). Enabling works ii). Pile and Pile Caps iii). Civil Works including foundations iv). Structural Steel Fabrication & Erection v). Chimney vi). Cooling Tower vii). Others (Civil)	i). Electrical ii). CI iii). Others (Elec & CI)	i). Boiler & Aux (All types including CW Piping if applicable) ii). Power Cycle Piping/Critical Piping iii). LP Piping iv). ESP v). Steam Turbine Generator set & Aux vi). Gas Turbine Generator set & Aux vii). Hydro Turbine Generator set & Aux viii). Turbo Blower (including Steam Turbine) ix). Material Handling x). Material Management xi). Material Handling & Material Management xii). Others (Mechanical)

- c) Vendors who are first timers to any BHEL Region, may be considered subject to satisfying other tender conditions. Eligibility of the party for the next tender of any package in that Region, shall be subject to the bidder satisfying the 'Assessment of Capacity of Bidder' for a period of first **nine months** after commencement of work or contract duration whatever is lesser.

In case the first timer is executing any other packages in any BHEL Region, then the performance evaluation will be based on the data available for the other packages though not similar, for the 'Period of assessment', for the purpose of 'Assessment of Capacity of Bidder'

- d) Vendors who are not first timers and who have not been executing any package or packages similar to the packages under the tender in the 'Period of assessment', shall be considered qualified subject to them satisfying all other tender conditions.
- e) In the unlikely event of all bidders shortlisted against Technical and Financial Qualification criteria not meeting the criteria on 'Assessment of Capacity of Bidders' detailed above, OR leads to a single tender response on applying the criteria of 'Assessment of Capacity of Bidders', then BHEL at its discretion, reserves the right to consider the further processing of the Tender based on the **Overall Performance Rating 'R_{BHEL}'** only.
- f) 'Under execution' shall mean works in progress as per the following:
- i. upto Boiler Steam Blowing in case of Steam Generator and Auxilliaries
 - ii. upto Synchronisation in case of all other works excepting sl no (i) and (iii)
 - iii. upto execution of at least 75% of anticipated contract value (unit wise), in case of Enabling works or Civil & Structures.

Note : BHEL at its discretion can extend (or reduce in exceptional cases in line with Contract conditions) the period defined against (i), (ii) and (iii) above, depending upon the balance scope of work to be completed.

- g) Performance evaluation in CL 9 above is applicable to Prime bidder and consortium partner (or Technical tie up partner) for their respective scope of work
- 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.
- 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

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

- 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.
- 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

for BHARAT HEAVY ELECTRICALS LTD

AGM (Purchase)

Enclosure

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

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

ANNEXURE - 1**PRE QUALIFYING REQUIREMENTS**

JOB	PROVIDING SERVICES OF TOWER CRANE ON MONTHLY HIRING BASIS FOR CONSTRUCTION WORK AT OPaL (ONGC PETRO ADDITIONS LIMITED), SEZ, DAHEJ GUJARAT STATE.
TENDER NO	

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> <u>Technical</u> B.1) Bidder must be in the business of providing Services of Crane hiring in last seven years as on 31/08/2012 AND B.2) The crane offered by the bidder must meet the technical requirements of BHEL.	Applicable	
C-1	<u>Financial TURNOVER</u> Bidders must have achieved an average annual financial turnover (Audited) of Rs.26.00 Lakhs or more over last three Financial Years (FY) i.e. 2009-2010, 2010-2011, 2011-2012 if Annual Accounts for FY 2011-12 are audited or for, 2008-2009, 2009-2010 and 2010-2011 if not audited.	Applicable	
C-2	<u>NETWORTH (only in case of Companies)</u> Net worth of the Bidder based on the latest Audited Accounts as furnished for 'C-1' above should be positive	Applicable	

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

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	Applicable	By BHEL
E	Approval of Customer	Not Applicable	BY BHEL
F	Consortium criteria	Not Applicable	

Explanatory Notes for the PQR (unless otherwise specified in the PQR):

1. Explanatory Notes for QR 'B'

(*) - Handling of Cement bags, Sacks and Packages shall not be considered.

2. 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
3. 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.
4. 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)
5. 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
6. ~~'Additional' Criteria in respect of 'Technical' criteria of PQR (as in 'B' above) for Civil, Electrical, CI, unless otherwise specified:-~~
 1. ~~_____ Bidder should have executed similar work of any one of the following:~~
 - a. ~~_____ One (1) work of value not less than Rs XXX~~
 - ~~_____ OR~~
 - b. ~~_____ Two (2) works of not less than Rs YYY~~
 - ~~_____ OR~~
 - c. ~~_____ Three (3) works of not less than Rs ZZZ~~
(Value XXX, YYY, ZZZ shall be as indicated by BHEL)
 2. ~~'Similar' work for criteria 5 above means~~
 - a. ~~Civil or Structures or Civil & Structures or Chimney respectively as applicable to the tendered scope in respect of 'CIVIL' Works~~
 - b. ~~Electrical works in respect of 'ELECTRICAL'~~
 - c. ~~CI works in respect of 'CI' Works~~
 - d. ~~Material Handling and/or Management works in respect of 'MM' works~~
7. 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
8. '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
9. Unless otherwise specified, for the purpose of 'Technical' criteria of PQR (as in 'B' above), the word 'EXECUTED' means:
 1. ~~"BOILER LIGHT UP" in respect of Boiler & Aux and ESP~~
 2. ~~"SYNCHRONISATION" in respect of STG/GTG and 'SPINNING' in case of HTG~~
 3. ~~"STEAM BLOWING COMPLETION" in respect of at least Main Steam Line of Power Cycle Piping~~
 4. ~~"HYDRAULIC TEST" of the system in respect of Structures, Pressure parts/IBR Piping~~
 5. ~~"CHARGING" in respect of power Transformers, Bus ducts, HT/LT switchgears~~
 6. ~~"Completion of RCC Shell and liner (steel or brick as per tendered scope) up to the HEIGHT specified~~

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

	<p>using slip form" in case of RCC Chimney.</p> <p>7. ————— Achievement of physical Quantities as per respective PQRs in respect of Civil & Structures and Piling Works</p> <p>8. ————— 'Readiness for coal Filling" in respect of Bunker Structure Work.</p> <p>10. Boiler means HRSG or WHRB or any other types of Steam Generator</p> <p>11. Critical/Power Cycle piping means Main Steam, Hot Reheat, Cold Reheat, HP Bypass, LP Bypass lines</p> <p>12. 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>13. In case the experience/PO/WO certificate enclosed by bidders do not have separate break up prices for the E&G 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>14. 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>15. 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>
--	---

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

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	Details of Contact person for this Tender	Name : Mr/Ms Designation: Telephone No: Mobile No: 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 LATEST DUE DATE OF TECHNICAL BID OPENING	
		APPLICABILITY	BIDDER REPLY
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format	Applicable	YES / NO
7	Audited profit and Loss Account for the last three years	Applicable	YES/NO
8	Copy of PAN Card	Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable	YES/NO
10	Declaration by Authorised Signatory	Applicable	YES/NO
11	No Deviation Certificate	Applicable	YES/NO
12	Declaration confirming knowledge about Site Conditions	Applicable	YES/NO
13	Declaration for relation in BHEL	Applicable	YES/NO
14	Bank Account Details for E-Payment	Applicable	YES/NO
15	Power of Attorney for Submission of Tender/Signing Contract Agreement	Applicable	YES/NO
16	BIDDER HAS FAMILIARIZED HIMSELF WITH ALL RELEVANT LOCAL LAWS & CONDITIONS	Applicable	YES/NO
17	COPY OF SIMILAR WORK EXECUTED IN THE PAST 7 YEARS	Applicable	YES/NO

NOTE : STRIKE OFF 'YES' OR 'NO', AS APPLICABLE
DATE :

AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

ANNEXURE 3:

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

IMPORTANT INFORMATION

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)

DECLARATION SHEET
(Refer Clause 1.19.8 of General Instructions to the Tenderer)

The Bidders are requested to furnish the following information while quoting, failing which their offer will be summarily rejected.

1. Whether any relative(s) of Partner/Director
/Owner is presently employed in BHEL?
If so, his connection with the Firm : **YES/ NO**
(If yes, please give particulars)
2. Whether any BHEL employee is
Holding any share in Firm? : **YES/NO** (If yes, please give
particulars)

Signature of the Tenderer

Note:

1. Attach separate sheet, if necessary.
2. If the BHEL Management comes to know, at a later date, that the information furnished by the Bidder is false, suitable action will be taken according to law against the contractor

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

DECLARATION BY BIDDER'S AUTHORIZED SIGNATORY

TENDER SPECIFICATION No. BHE/PW/PUR/DHJOI-CRH/1055/OJ

I, _____ HEREBY CERTIFY THAT ALL THE INFORMATION AND DATA FURNISHED BY ME WITH REGARD TO THIS TENDER SPECIFICATION ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I HAVE GONE THROUGH THE SPECIFICATIONS, CONDITIONS AND STIPULATIONS IN DETAIL AND AGREE TO COMPLY WITH THE REQUIREMENTS AND INTENT OF THE SPECIFICATION. I FURTHER CERTIFY **THAT I AM DULY AUTHORISED REPRESENTATIVE OF THE UNDERMENTIONED BIDDER AND A VALID POWER OF ATTORNEY TO THIS EFFECT IS ALSO ENCLOSED.**

DATE:

SIGNATURE OF AUTHORIZED SIGNATORY WITH SEAL

SPECIAL CONDITIONS OF CONTRACT
SECTION-A
CERTIFICATE CONFIRMING
KNOWLEDGE ABOUT SITE CONDITIONS

TENDER SPECIFICATION No. BHE/PW/PUR/DHJOI-CRH/1055/OJ

We, M/s
hereby declare and confirm that we have visited the project site(s) for
which we have submitted our offer and acquired full knowledge and
information about the site conditions.

We further confirm that the above information is true and correct and we
shall not be eligible for any additional payment of any nature due to lack
of knowledge or non-familiarization of site conditions.

BIDDER'S NAME AND ADDRESS:

SIGNATURE & OFFICIAL SEAL OF BIDDER'S
AUTHORISED SIGNATORY

PLACE:

DATE:

SPECIAL CONDITIONS OF CONTRACT
SECTION-A
CERTIFICATE OF NO-DEVIATION

TENDER SPECIFICATION No. BHE/PW/PUR/DHJOI-CRH/1055/OJ

I/WE, M/s

HEREBY CERTIFY THAT NOTWITHSTANDING ANY CONTRARY INDICATIONS/ CONDITIONS ELSEWHERE IN OUR OFFER DOCUMENTS, I/WE HAVE NEITHER SET ANY TERMS AND CONDITIONS NOR THERE IS ANY DEVIATION TAKEN FROM THE CONDITIONS OF BHEL'S TENDER SPECIFICATIONS, EITHER TECHNICAL OR COMMERCIAL, AND I/WE AGREE TO ALL THE TERMS AND CONDITIONS MENTIONED IN BHEL'S TENDER SPECIFICATION WITH ASSOCIATED AMENDMENTS AND CLARIFICATIONS.

Signature of the Bidder

Date:

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

PROJECT INFORMATION

1.0	Project Information
1.1	<p>INTRODUCTION</p> <p>ONGC Petro Additions Limited (OPaL) is setting up a Petrochemical Complex at Dahej in the state of Gujarat, India. The complex consist of dual feed Ethylene Cracker of 1100 KTPA capacity.</p> <p>The scope of the present project is to set up a steam and power generation system to primarily meet the process steam requirement and incidentally generate power to partly meet the power requirement for the Petrochemical Complex. The project shall consist of 2X220 TPH Utility Boilers, 2X30 MW STG, 4XFr6B GTG and 4X110 TPH HRSG with associated auxiliary systems and accessories.</p> <p>BHEL has been awarded the EPC package comprising of system design, detailed engineering, manufacturing, procurement, civil works, supply, fabrication, inspection, transportation, storage, installation, insurance, testing, mechanical completion, pre-commissioning, commissioning and performance guarantee test runs of the complete system. The project is to be completed within 30 months from zero date i.e. 15/04/2011.</p> <p>Site information</p> <p>a) Location : Dahej SEZ near Village Ambhetha at Dahej, District-Bharuch, Gujarat</p> <p>b) Longitude : 21°40'47"N to 21°41'48"N</p> <p>c) Latitude : 72°35'24"E to 72°36'44"E</p> <p>d) Nearest Railway Station : Bharuch – 45 km</p> <p>e) Nearest Town : Bharuch - 45 Km, Vadodara - 140 Km</p> <p>f) Nearest Port : Dahej - 10 Km</p> <p>g) Nearest Air Port : Vadodara - 140 km</p> <p>h) Access Road : Bharuch-Dahej State Highway - SH6 - 1.2 Km</p> <p>i) Height above mean sea level : Mean Sea Level (MSL) = 5.1M w.r.t. Chart datum Finished Grade Level (FGL)=6.6M/ 7.1M/ 7.6M above MSL</p>
1.2	<p><u>CLIMATIC CONDITIONS</u></p> <p>1. <u>Seismic data</u></p> <p style="padding-left: 20px;">a. Zone : III</p> <p>2. <u>Air Temperature</u></p> <p style="padding-left: 20px;">a. Air Temperature Max/Min : 40° C / 13° C</p> <p style="padding-left: 20px;">b. Design dry bulb Temp Max/Min : 42° C / 29° C</p> <p>3. <u>Relative Humidity</u> : 90%@ 42 °C</p>

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

	<p>4. Rainfall Annual Rainfall : 1000 mm</p> <p>5. Wind velocity/ direction a. March- October : 44 km/h/ South west b. November- February : 15KM/Hr/ North west/North/ North East</p> <p>6. Climatic Conditions : Tropical</p>

The bidder is advised to visit and examine the site of works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into the contract. All costs for and associated with site visits shall be borne by the bidder.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

1.0 BROAD SCOPE OF WORK.

PROVIDING SERVICES OF TOWER CRANE ON MONTHLY HIRING BASIS FOR CONSTRUCTION WORK AT OPaL (ONGC PETRO ADDITIONS LIMITED), SEZ, DAHEJ, GUJARAT STATE.

The cranes shall be engaged in the project construction work of 2X220 TPH UB + 2X30MW STG + 4XFr6 B GT + 4X110 TPH HRSG, Civil and Structural works of various plant buildings , Erection of Utility Boiler with Aux, HRSG with Aux, HRSG Stack, By pass stack, other equipment/structures of this project wherever required as per instructions of the BHEL Engineer-in-Charge

The intent of this tender specification is to hire the services of one no. of Tower crane on monthly hire basis to suit the specified requirements.

1.1) Tower Crane: Tower Crane one no. with Accessories

Technical Requirement & Duration of Deployment

The offered crane shall meet the following requirements.

SN	Description of Parameter/Feature	Details/Requirement
01	Number of Tower Crane Required	1 No.
02	Crane Version	Cross Base Foundation, Flat top model with providing of all materials for Tower Crane as scope of work.
	Details of Lifts (Heavy Object, High Elevations)	
04	Min. Working height	45 Meter
05	Min. Working Radius	55 Meter
06	Load criteria: Tip load at 55 Meter jib Radius	3 MT lifting capacity required at 55 M length
07	Load criteria: Critical load at the centre of jib Radius.	8 MT lifting capacity required at centre of the boom
08	Tower type	Self-telescoping type tower with hydraulic climbing facility
09	Mechanism	Hoisting, Slewing, trolleying etc
10	Safety Devices Required	The crane shall be provided with all kinds of safety devices including load limiter, height limiter, slewing limiter, trolley brake etc. which are all mechanical & Electrical integration products, sensitive and reliable with the capability of working in construction site environment
11	Jib type	With Self Dismantling facility.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

SN	Description of Parameter/Feature	Details/Requirement
12	Protective facilities with the crane	The crane shall be equipped with rest platform and guard rail etc. and other protective facilities for operator's personal safety when moving up & down. Bidder shall specifically indicate the climbing facility provided with the crane.
13	Electrical power requirement to operate the crane which Shall be provided by BHEL on chargeable basis	Bidder shall clearly indicate electrical power requirement to operate the crane which shall be provided by BHEL on chargeable basis as mentioned elsewhere in this document. BHEL shall provide power supply at one single point approx. 500M from the crane location. Bidders shall arrange & install necessary cables, DBs etc. for drawing the power within their quoted price.
14	Minimum free standing height of the crane and external Anchoring details	Bidder shall indicate the minimum free standing height of the crane and external anchoring details if required.
15	Wind speed limitation	Wind speed limitation considering storm conditions as per standard to be indicated by bidder. This is to be considered suitably while designing the foundation.
16	Deployment tentatively by	2nd Week of Oct'12
17	Deployment of Crane & Commencement of Services	Crane with crew complete in all respect shall reach project site & made available for BHEL's work after load test within 30 (Thirty) days from BHEL's written deployment notice for mentioned crane.
18	Duration of Hiring	Regular Duration: 9 (Nine) months, Extendable by another 3 (three) months under the contractually agreed rate, terms & conditions.
19	THE AGE OF THE CRANE	THE AGE OF THE CRANE SHALL NOT BE MORE THAN 7 (SEVEN) YEARS & RELEVANT DOCUMENTS SHOULD BE ATTACHED IN SUPPORT OF THE SAME.
20	Total amount payable towards mobilization and de-mobilization	As mentioned in Price bid by BHEL
21	Monthly hiring charges (considering cost of foundation for Tower crane) = 30 daysX12hrs.	To be quoted separately in Price Bid

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

SN	Description of Parameter/Feature	Details/Requirement
22	Dismantling, local shifting and re-erection at different location at site (per shifting)	To be quoted (in terms of %age of sl. No. 20 above)

1.2 GENERAL REQUIREMENTS

1. The offered crane should have all kinds of safety devices including load limiter, height limiter, slewing limiter, grip block, trolley brake etc. which are all mechanical & Electrical integration products, sensitive and reliable with the capability of working in construction site environment. Other additional safety features, if any, should be made available to user without any additional cost.
2. Bidder shall submit along with technical bid a **copy of load chart** and technical details of crane offered as per Annexure I.
3. **Deployment of Crane & Commencement of Services**
The deployment schedule of the crane indicated earlier here is tentative. Notwithstanding such indications, **you shall deploy and make the crane operational at site within Thirty (30) days from the written intimation for deployment of crane.** A separate written notice asking to deploy the crane shall be issued for each crane by BHEL.
4. The crane shall be equipped with rest platform and guard rail etc. and other protective facilities for operator's personal safety when moving up & down. Bidder shall specifically indicate the climbing facility provided with the crane.
5. **THE CRANE MUST BE IN THE POSSESSION OF BIDDER.** The manufacturing year of Cranes should not be more than 7 years as on the date of deployment. If at any moment of time during the execution of work, any crane is found to be not in a good working condition and non-performing at desired minimum capacity, as certified by BHEL engineer, the contractor shall deploy another crane in good working condition with minimum desired capacity.
6. The crane shall be provided with operator, helper, service & maintenance staff & all other consumables (if any) on fixed monthly hire basis, with separate mobilization, demobilization charges. The crane should be in good working condition. Bidder may please note counter weight as required shall be in the scope of supply of bidder. Bidder shall also furnish detail Load Chart with range diagram and relevant drawings of Tower Crane. The cranes proposed to be hired are planned for erection work in Boiler Area (UB, HRSG), Power House Area and SWGR & GIS building area wherein tower height requirement may vary. Hence the subject Crane shall have the capability of working at various heights.

2.0 OPERATION, MAINTENANCE AND OPERATING CREW CHARGES

- 2.1 The price quoted shall be inclusive of operation (**excluding fuel**) and preventive as well as breakdown maintenance of the crane. The bidder shall deploy Operator-cum-Mechanic, Helper and Maintenance Crew to ensure smooth operation and maintenance of the crane without affecting work. No extra payment shall be made towards engagement of crew in overtime working hours. The crane shall be available for service on all days of the month.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

Bidder shall carry out preventive maintenance beyond normal working hours or as per schedule agreed with BHEL engineer.

- 2.2 Bidder shall provide all lubricants, spare parts, filters and other necessary consumables (**except fuel**) that are necessary to fulfil the scope of services under this specification within the quoted rates. BHEL/erection contractors of BHEL will provide fuel commensurate with utilization time and agreed consumption rate.

3.0 **Construction Power & Water:**

3.1 **CONSTRUCTION POWER: Shall be provided on chargeable basis.**

Tariff & other details shall be as follows:

1. BHEL is lining up construction power from M/s Torrent and it is available at site at 415 V at a single point.

Construction power will be provided on chargeable basis. The charges will comprise of per unit charges as charged by M/s Torrent plus 56% additional charges towards fixed cost. Hence the monthly charges to be paid by bidder will be as below:

Monthly Charge = 1.56 X (per unit rate charged by M/s Torrent) X (Units consumed for that month)

Per unit rate charged by M/s Torrent may vary in future and same shall be applicable to contractor. The rate charged by M/s Torrent as on September '2011 is Rs 6.30 per unit as energy charges.

There will be number of contractors using construction power at LT side. In case there is a difference in energy consumption in HT & LT side, i.e the sum of LT side energy meter readings with individual agency are less than the total energy consumption recorded in HT side energy meter of respective month, the differential consumption shall be proportionately distributed among all users in line with their energy consumption

2. Construction power (three phase, 415 V/ 440 V) will be provided at one point near the site at a distance of approx. 500M. **The electricity shall be provided on chargeable basis including all taxes, duties, levies etc as applicable.** Further distribution shall be arranged by the contractor at his own cost and services. Contractor shall be responsible for fulfilment of all requirements including statutory requirements in this regard. Contractor shall deploy and install required energy meter, cables, fuses, distribution boards, switchboards, bus bars, earthing arrangements, protection devices and any other installation as specified by statutory authority/act. Contractor shall also obtain approvals of appropriate authority and pay necessary fees, levies etc towards the clearance of such installations, prior to use. Sufficient power factor compensation equipments like capacitor shall be provided by contractor for reactive loads like welding machines etc. In case of any fine/penalty on account of low power factor, same shall be shared by contractor proportionately according to power consumption.
3. Contractor shall make necessary arrangements for onward distribution of construction power taking due care of surrounding construction activities like movement of cranes & vehicles, civil work, fabrication/construction/assembly/

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

erection etc and safety of personnel. It may become necessary to relocate some of the installations to facilitate work by other agencies or by him.

4. It shall be the responsibility of the Contractor to provide, maintain the complete installation on the load side of the supply with due regard to the safety requirements at site. All cabling and installations shall comply in all respects with the appropriate statutory requirements. The installation and maintenance of this shall be done by licensed and experienced electrician.
5. While reasonable efforts will be made to ensure continuous electric power supply, interruptions cannot be ruled out and no claim from the Contractor shall be entertained on this account such as idle labour, extension of time etc. The Contractor shall adjust his working shift accordingly and deploy additional manpower, if necessary, so as to achieve the target.
6. Contractor shall be well equipped with back-up power supply arrangement like DG set and diesel operated welding machine etc to tackle situations arising due to failure of supplied power, so as to ensure continuity and completion of critical processes that are underway at the time of power failure or important activities planned in immediate future.
7. BHEL is not responsible for any loss or damage to the Contractor's equipment as a result of variations in voltage or frequency or interruptions in power supply.
8. Contractor is requested to maintain the power factor above 0.95. On account of lapses by contractor on such account, the penalty as charged by M/s Torrent Power on account of drop in power factor below 0.9 shall be charged proportionately by sub-contractors working in the respective calendar month.
9. Contractor is advised to maintain the calibrated energy measuring instruments and use their system as efficiently as possible to maintain the HT side input energy meter reading and LT side outgoing energy meter reading to sub-contractors as equal.

In case there is any difference between the sum of the LT side meter readings of all sub-contractors and the HT side meter reading of M/s Torrent, same shall be distributed proportionately among all sub-contractors working during the respective calendar month.

- 1) Any taxes, duties, levies, cess etc as being charged/ levied by M/s Torrent/ state statutory authority shall be passed on to the sub-contractors proportionately in the respective calendar month bill.

2.4.2 Construction and Potable water shall be arranged by Contractor within the quoted rate. No additional payment shall be made on account of this.

Since the project site is under the SEZ's Area (Special Economic Zone), benefit of Exemption in Excise Duty, Service Tax, VAT etc may be availed by the contractor. For this necessary document as available shall be provided by BHEL to Contractor for obtaining Exception Certificate from the concerned Authority.

4.0 COMMENCEMENT OF CONTRACT, REGULAR CONTRACT PERIOD, TERMINATION & FORECLOSING

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

The contract period shall commence from the 1st successful load testing of Tower crane with mutually agreed working height and working radius project site location and its written acceptance by BHEL at first location. Duration of hiring will generally be as indicated under 'Regular Duration' in tabular form earlier here. Contract Period may be extended depending upon the requirement of BHEL as specified therein. Load testing,

If the performance/services of the contractor or the deployed crane are not to the satisfaction of BHEL, the contract is liable for termination without prior notice.

BHEL reserves the right of foreclosing the contract within the contract period with 30 days advance written notice without assigning reason and no payments will be made for the period after foreclosure.

5.0 REGULAR WORKING HOURS

The services of crane with operating crew shall be made available for duration of Twenty Four **(24) hours per day** including total two-hour break (60 minutes for lunch and 4 tea intervals of 15 minute each). **The working hours will be round the clock.** However, this shall be adjusted to suit the working hours of the project site from time to time.

6.0 RATE SCHEDULE, QUOTED RATES/PRICE & CONTRACT VALUE.

6.01 Bidders shall quote their price in the Rate Schedule furnished in "Price Bid Specification" issued as Part-II of this tender specification.

6.02 Total amount payable towards mobilization and de-mobilization of respective crane shall be as in the table below:

S No.	Description of Crane	Total Amount for Mobilization and Demobilization
1	Tower Crane	Rs. 11,00,000.00/-

Respective amounts are also indicated in the Rate Schedule for respective cranes. Bidder shall neither quote any amount towards mobilization and demobilization separately nor make any alteration in these amounts specified by BHEL. Offers with any deviation in this regard will be rejected.

6.03 Bidder shall quote only monthly hire charges rate and indicate the corresponding amount for the duration indicated in the Rate Schedule. Bidder shall also indicate the total amount comprising of total monthly hire charges and mobilization & de-mobilization charges for the crane. In case of any discrepancy between the rates and amounts, the monthly hire charge rate quoted by the bidder shall be considered as correct and the grand total amount for the crane shall be re-calculated for the purpose of offer evaluation.

6.04 Agreed monthly hire charge shall remain **firm** throughout the **Regular Duration** indicated against the crane. Applicable monthly hire charge for **Extension Period** as proposed in this Tender Specification shall be **90%** of the rate agreed for the regular contract/hiring period. No other revision of the rate shall be admitted during these periods.

6.05 Road permits, Octroi, VAT, CST and Declaration Forms etc. required for deployment of the crane at the destination sites shall be arranged by the bidder within the agreed price/ rates. BHEL will neither issue any Road Permit or VAT/CST declaration forms for this purpose nor pay any taxes in this regard.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

6.06 Prices shall be inclusive of all applicable taxes (**excepting Service Tax**), levies, services, consumables (**excepting fuel**), as per provisions under the Terms & Conditions in scope of contractor mentioned in this Tender Specification.

7.0 TAXES, DUTIES, LEVIES (Consolidated Rev 02 dated 20/09/2012)

7.1. For All types of works excepting works covered under sl no 7.2

7.1.1

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.

7.1.2 Service Tax & Cess on Service Tax

OPAL DAHEZ Project falls under SEZ "Special Economic Zone" as such Service Tax is exempted for this project.

Contractor should ensure as flows.

- a) Invoices raised by contractor should state the wording that " Services provided Within the SEZ"
- b) Invoices should also bear the name of customer i.e. "OPAL Dahej"

7.1.3 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.

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

7.2 ~~'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~~

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

~~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.~~

7.3 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.

7.4 BUILDING & OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 (BOCW Act) AND RULES OF 1998 READ WITH BUILDING & OTHER CONSTRUCTION WORKERS CESS Act, 1996 & CESS RULES, 1998.

In case any portion of work involves execution through building or construction workers, then compliance to the above titled Acts shall be ensured by the contractor and contractor shall obtain license and deposit the cess under the Act. In the circumstances it may be ensured as under:-

- i. It shall be the sole responsibility of the contractor in the capacity of employer to forthwith (within a period of 15 days from the award of work) apply for a licence to the Competent Authority under the BOCW Act and obtain proper certificate thereof by specifying the scope of its work. It shall also be responsibility of the contractor to furnish a copy of such certificate of licence / permission to BHEL within a period of one month from the date of award of contract.
- ii. It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under these act and rules including that of payment / deposit of 1% cess on the extant of work involving building or construction workers engaged by the contractor within a period of one month from the receipt of payment.
- iii. It shall be the responsibility of the sub-contractor to furnish the receipts / challans towards deposit of the cess together with the number, name and other details of beneficiaries (building workers) engaged by the sub-contractor during the preceding month.
- iv. It shall be the absolute responsibility of the sub-contractor to make payment of all statutory payments & compensations to its workers including that is provided under the Workmen's Compensation Act, 1923.

8.1 Contract Value for Offer Evaluation & Work Order (Award Value):

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

- (i) Total amount payable towards mobilization and de-mobilization.
- (ii) Total hire charges of Crane for the Regular Duration of the crane as per Tender Specification.

9.0 SECURITY DEPOSIT & BANK GUARANTEE

9.01 Security Deposit: **Please refer GCC.**

9.02 Contract Value for Security Deposit (SD):

At the beginning of contract, the Security Deposit shall be calculated according to the awarded Contract Value. Subsequently amount of SD shall be regulated based on the Contract Value that is arrived at after taking care of time extensions, short closure etc. Accordingly contractor shall pay additional amount of SD or BHEL will adjust/refund excess SD if any.

9.3. Guidelines for acceptance of Bank Guarantees are as follows :

- Vendors are advised to obtain BG from any of the following BHEL consortium banks

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

- The Bank Guarantees of all Public sector banks shall be accepted (Other than consortium banks also).
- The Bank Guarantees of Co-operative banks shall not be accepted.
- Bank Guarantees of other banks (banks other than consortium bank, public sector bank, & Co-operative banks) can be accepted subject to an overall exposure limit (at BHEL, PSWR, Nagpur) of RS. 10 crores for banks with net worth of more than Rs. 500 crores as on last balance sheet date and Rs 5 crores for banks with net worth between Rs. 350 to Rs 500 crores (A certificate and copy of latest Balance Sheet to be given at the time of submission of bank guarantees .

In case Bank Guarantees given by non consortium banks (Private sector or Public sector), the bank Guarantees shall be enforceable at Nagpur, Maharashtra.

10.0 PAYMENT TERMS

10.1

The contractor shall submit his Running Account (RA) Bills towards mobilization, monthly charges, de-mobilization charges and Service Tax etc with all the details required by BHEL on or before the specified date every month. Payment of Monthly Hire Charges as certified by the BHEL Engineer-in-Charge will be made once in a calendar month at BHEL Site. Billing cycle may be as per mutually agreed cut-off dates.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

10.2

Payment for RA Bills will normally be released in around 30 days of submission of the bill with measurement/log sheets. Contractor shall make his own arrangement for making payment of impending labour wages and other dues in the meanwhile.

10.3

Progressive Monthly hiring period shall be considered for payment purpose from the date of successful load testing of the crane and till the crane withdrawn for demobilization at one particular point. The next hiring charges will again start from the date of successful load testing of crane at new location till further withdrawal & so on.. The intermediate period will be accounted against mobilization/demobilization, local shifting etc. which shall be paid separately under relevant item in BOQ and as mentioned under Section A of SCC clause No. 1.1 point no. 22.

10.4

No advance payments shall be made by BHEL for this contract.

10.5

Payment towards mobilization and de-mobilisation of crane shall be made in the manner as specified below.

1. First 60% of the specified amount for mobilization and demobilization will be paid after deployment of the crane complete in all respects including all assemblies, sub-assemblies, accessories & components, assembly of crane as required by BHEL and BHEL's acceptance of load test of assembled crane at site.
2. Remaining 40% of the specified amount for mobilization and demobilization will be paid after removing the crane from the project site and clearing the site premises in all respect.

10.6 PRO RATA DAILY & HOURLY HIRE CHARGES

In case services are availed for part of a calendar month, pro-rata payment of Hire Charges for the utilized number of days shall be made by BHEL. Pro-rata daily hire charges shall be calculated as follows.

10.6.1 Pro Rata Daily Hire Charges = Monthly Hire Charges divided by 30

10.6.2 Pro Rata Hourly Hire Charges = Monthly Hire Charges divided by 360

11.0 STAUTORY/MANDATORY REQUIREMENTS & TAXES (PREVAILING)

All statutory/mandatory requirements in respect of entry permits, taxes & levies as applicable shall be in the scope of contractor.

Safety, Occupational Health and Environmental Management

BHEL PSWR has been certified for Environmental Management under ISO 14001:1996 standard and Occupational Health & Safety under OHSAS 18001 by DNV. In order to comply with the above standards, it shall be the endeavour of BHEL and all its subcontractors to meet and implement the requirements by following the guidelines issued

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

under Environmental, Occupational Health and Safety Management (EHS) manual a copy of which will be available with the BHEL Site-in-charge.

Contractor shall also enter into a “Memorandum of Understanding” as given in clause 9.9 in case of award of contract.

12.0 Responsibility of the Contractor in Respect of Safety of Men, Equipment, Material and Environment.

12.1 The Contractor shall:

12.1.1

Abide by the Safety Regulations applicable for the Site/Project and in particular as mentioned in the booklet “Safe Work Practices” issued by BHEL. Contractors are also to ensure that their employees and workmen use safety equipments as stipulated in the Factories Act (Latest Revision) during the execution of the work. Failure to use safety equipment as required by BHEL Engineer will be a sufficient reason for issuance of memo, which shall become part of Safety evaluation of the contractor at the end of the Project. Also all site work may be suspended if it is found that the workmen are employing unsafe working practice and all the costs/losses incurred due to suspension of work shall be borne by contractor. A comprehensive list of National Standards from which the contractor can draw references for complying with various requirements under this section is given under 9.10

12.1.2

Hold BHEL harmless and indemnified from and against all claims, cost and charges under Workmen’s Compensation Act 1923 and 1933 and any amendment thereof and the contractor shall be solely responsible for the same.

12.1.3

Abide by the Procedure governing entry/exit of the contractor’s personnel within the Customer/Client premises. All the contractors employees shall be permitted to enter only on displaying of authorized Photo passes or any other documents as authorized by the Customer/Client.

12.1.4

Be fully responsible for the identity, conduct and integrity of the personnel/workers engaged by them for carrying out the contract work and ensure that none of them are ever engaged in any anti national activity

12.1.5

Prepare a signboard giving the following information and display it near work site:

- i) Name of Contractor
- ii) Name of Contractor Site-in-charge & Telephone number
- iii) Job Description in short
- iv) Date of start of job
- v) Date of expected completion
- vi) Name of BHEL Site-in-charge.

12.1.6

Abide by the rules and regulations existing during the contract period as applicable for the contractors at the Project premises.

12.1.7

Observe the timings of work as advised by BHEL Engineer-in-charge for carrying out the contract work.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

13 SPECIAL CONDITIONS

13.1 Safety

13.1.1 Safety Plan

Before commencing the work, contractor shall submit a "safety plan" to the authorized BHEL official. The safety plan shall indicate in detail the measures that would be taken by the contractor to ensure safety to men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified hereunder.

The contractor shall submit "safety plan" before start of work. During negotiations, before placing of work order and during execution of the contract, BHEL shall have right to review and suggest modifications in the safety plan. Contractor shall abide by BHEL's decision in this respect.

13.1.2

The contractor shall take all necessary safety precautions and arrange for appropriate appliances and/or as per direction of BHEL or it's authorized person to prevent loss of human lives, injuries to men engaged and damage to property and environment.

13.1.3

The contractor shall provide to his work force and also ensure the use of Personnel Protection Equipment (PPE) as found necessary and/or as directed and advised by BHEL officials without which permission is liable to be denied.

- Safety helmets conforming to IS 2925/1984 (1990)
- Safety belts conforming to IS 3521/1989
- Safety shoes conforming to IS 1989 part-II /1986(1992)
- Eye and face protection devices conforming to IS 2573/1986(1991), IS 6994 (1973), part-I (1991), IS 8807/1978 (1991), IS 8519/1977(1991).
- Other job specific PPEs of standard ISI make as may be prescribed

13.1.4

All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, cages, safety nets, ladders, equipment, etc used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item found to be unsafe.

13.1.5

All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirements of Indian Electricity Act and Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carryout all types of electrical works. All electrical appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

13.1.6

The contractor shall not use any hand lamp energized by electric power with supply voltage of more than 24 volts. For work in confined spaces, lighting shall be arranged with power source of not more than 24 volts.

13.1.7

The contractor shall adopt all fire safety measures as per relevant Indian Standards

13.1.8

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

Where it becomes necessary to provide and/or store petroleum products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down by the relevant government acts, such as petroleum act, explosives act, petroleum and carbides of calcium manual of the chief controller of explosives, Government of India etc. The contractor in all such matters shall also take prior approval of the authorized BHEL official at the site.

13.1.9

Proper means of access must be used e.g. ladders, scaffolds, platforms etc. No makeshift access such as oil drums or pallets shall be used. Design of these will be in accordance with relevant standards and certified by competent persons before use.

13.1.10

Temporary arrangements made at Site for lifting , platforms, approach access etc should be properly designed and approved before being put to use.

13.1.11

All excavations and openings must be securely and adequately fenced/barricaded and warning signs erected when considered necessary as per relevant code of practice.

13.1.12

No persons shall remove guardrails, covers or protective devices unless authorized by a responsible supervisor and alternative precautions have been taken

13.1.13

Access ways, means of escape and fire exits shall be clearly marked, kept clear and unobstructed at all times

13.1.14

Only authorized persons holding relevant license will drive and operate site plant and equipments e.g. cranes, dumpers, excavators, transport vehicles etc

13.1.15

Only authorized personnel are allowed to repair, commission electrical equipments.

13.1.16

Gas Cylinders shall be handled and stored as per Gas Cylinders Rules and relevant safe working practices

13.1.17

All wastes generated at Site shall be segregated and collected in a designated place so as to prevent spillage/contamination/scattering at Site, until the waste is lifted for disposal to designated disposal area as advised by BHEL official.

13.1.18

The contractor shall arrange at his cost (wherever not specified) appropriate illumination at all work spots for safe working when natural day light is not adequate for clear visibility.

13.1.19

The contractor shall train adequate number of workers/supervisors for administering "FIRST AID". List of competent first aid administers should be prominently displayed.

13.1.20

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

The contractor shall display at strategic places and in adequate numbers the following in fluorescent markings

- Emergency telephone numbers
- Exit, Walkways
- Safe working load charts for wire ropes, slings, D shackles etc
- Warning signs

13.1.21

The contractor shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instructions that may endanger safety of men, equipment, material and environment in his scope of work or other contractors or agencies. Cost of damage, if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.

13.1.23

In case of a fatal or disabling injury/accident to any person at construction sites due to lapses by the contractor, the victim and/or his/her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

13.1.24

In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.

13.1.25

In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have the right to recover cost of such delay from payments due to the contractor after notifying the contractor suitably and giving him opportunity to present his case.

13.1.26

If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so, and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.

13.1.27

Emergency Response

BHEL will have an Emergency Response Plan for each Project Site in consultation with the Owner as the case may be, detailing the procedure for mobilization of personnel and equipment, and defining the responsibilities of the personnel indicated, in order to prepare for any emergency that may arise in order to ensure the priorities of

- Safeguard of life
- Protect assets under construction or neighbouring
- Protect environment

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

- Resumption of normal operations as soon as the emergency condition is called off

All Contractors shall also be part of the Emergency response Plan and the personnel so nominated shall be aware of their duties and responsibilities in an emergency response situation.

13.1.28

At least 5% Contractors supervisors and workmen shall undergo training in administering 'First Aid'. The trained persons should represent for all categories of work and for all areas of work. Adequate number of trained persons should be available for each shift. These first aides shall be included in the emergency response team. Contractor employees and workmen are encouraged to participate in first aid training programmes whenever organized by BHEL.

13.2 OCCUPATIONAL HEALTH

13.2.1

Specific occupational health hazards will be identified through the hazard evaluation processes in consultation with BHEL engineers and the necessary prevention/reduction/elimination methods implemented.

13.2.2

All personnel working in an activity with a potential risk to health shall be made aware of all those risks and the actions they must take to reduce/control/eliminate the risk

13.2.3

Safety coordinator shall conduct periodic checks to ensure that every group of workers engaged in similar activities are aware of potential risks to health and the actions required to be taken to mitigate the risk

13.2.4

In order to protect personnel from associated health hazards, the following main areas will be focused

- Issue of approved Personnel Protective Equipment
- Verification that the PPE are adequate/maintained and worn by all staff involved in operations that are potentially hazardous to their health
- Ensure that the personnel deployed are physically fit for the operation/work concerned
- Provide hygienic and sanitary working conditions

13.2.5

Contractor workers employees engaged in noise risk areas shall be issued with hearing protection aids and the use of the same will be enforced. Further, these workers will be educated on the hazards of noise

13.2.6

Contractor workers engaged in dust environment shall be issued with necessary dust protection aids and the use of the same shall be enforced

13.2.7

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

Workers engaged in exposure to bright light/rays as in welding or radiation shall be issued with eye protection devices and the use of the same shall be enforced

13.2.8

Adequate arrangements shall be made to provide safe drinking water

13.2.9

Health monitoring records on at least sample basis for contractor employees & workmen shall be maintained for persons engaged in specified categories of work. These shall include

- Noise induced hearing loss
- Lung Function test
- Ergonomic Test
- Eye Test for Welders, Grinders, Drivers etc

13.3 HYGIENE and HOUSEKEEPING

13.3.1

Good house keeping and proper hygiene is one of the key requirements of Occupational Health Safety and Environment management. Towards this the contractor shall encourage his workers and supervisors to maintain cleanliness in their area of work.

13.3.2

The Contractor shall arrange to place waste bins/chutes at convenient locations for the collection of scrap and other wastes. The bins shall be clearly marked and segregated for metal, non-metal, hazardous and non hazardous wastes.

13.3.3

BHEL may take up appropriate remedial measures at the cost of the contractors if the contractors fail in good house keeping and if there is an imminent risk of pollution

13.4 ENVIRONMENT MANAGEMENT

13.4.1

BHEL has a sound environmental management system, which is to be maintained and implemented by all the contractors. The system allows for project specific objectives to be set and developed sensitive to client requirements, applicable environmental legislation and BHEL's own objectives and policy. BHEL engineers will assess and monitor the environmental impact of their work and lay out objectives for their minimization. The contractors shall implement the objectives for continual improvement of environmental performance. BHEL shall regularly audit environmental impacts and their improvements.

13.4.2 WASTE MANAGEMENT

1

The objective of waste management is to ensure the safe and responsible disposal of waste, ensuring that it is correctly disposed of and being able to audit the process to ensure compliance.

2

Chemical wastes if any shall be collected separately and disposed of to BHEL designated refuse yard as per BHEL advice.

3

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

No dangerous chemicals, noxious waste products or materials will be disposed off on or off site without approval obtained through BHEL.

4

All disposal of wastes generated during construction shall be in accordance with all relevant legislation.

5

Acid and alkali cleaning wastes shall be neutralized to acceptable norms before disposal to the designated area.

6

All necessary measures shall be taken to ensure safe collection and disposal of waste oils. In particular to ensure the prevention of their discharge into surface waters, ground waters, coastal waters or drainages

13.5 SUPERVISION

1

Contractor must provide at least one full time on site safety coordinator when the manpower engaged is in excess of 50 for the contract activities in the premises. If the manpower is less than 50, the on site safety coordination responsibilities shall be assumed by any one of the contractor's other supervisory staff; however in both the cases, the contractor must specify in writing the name of such persons to the BHEL Engineer in Charge.

2

Contractor's safety coordinator or his supervisor responsible for safety as the case may be shall conduct at his work site, and document formal safety inspection and audits at least once in a week. Such documents are to be submitted to BHEL Engineer in Charge for his review and record.

Contractor, supervisor must attend all schedule safety meetings as would be intimated to him by the BHEL Engineer in Charge.

3

Before starting work under any contract, the contractor must ensure that a job specific safety procedures/field practices as required over and above the safety permit conditions are prepared and followed .He should also ensure that all supervisors and workers involved understand and follow this procedures /field practices.

4

Contractor must ensure that in his work site appropriate display boards are put displaying signs for site safety, potential hazards and precautions required.

13.6 TRAINING & AWARENESS

1

Contractor shall deploy experienced supervisors and other manpower who are well conversant with the safety and environment regulations of the Project. The electricians to be deployed on the job should have wireman license.

2

All Supervisors & Workmen of the Contractor shall undergo Fire safety training/ demonstration whenever arranged by BHEL with the help of either Customer's Fire and Safety department or outside faculty so as to acquire knowledge of fire prevention and also to be able to make use of appropriate fire extinguishers.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

3

Contractor must familiarize himself from BHEL Engineer in Charge about all known potential fire, explosion or toxic release hazards related to the contract. He in turn will ensure that same information has been passed to the supervisors and workmen

4

Contractor must ensure that all his supervisors are properly trained and each employee has received and understood from his supervisor necessary training and briefing about the safety requirement. Necessary document as a means to verify that employees have understood the training is to be maintained.

5

The contractor supervisors shall also give a small safety briefing to all the workmen under his charge before undertaking any new work and specially understand the safety requirements that are mandatory

9.5.0 **REPORTING**

9.5.1

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrences to the authorized BHEL official immediately after such occurrence but in any case not later than twelve hours of the occurrence. Such report shall be furnished in the manner prescribed by BHEL and also to meet statutory requirement.

9.5.2

Any injury sustained by any of the contractor's employees within the Project premises must be reported to BHEL supervisor and FIRST AID should be immediately administered. The Contractor shall be responsible for keeping and maintaining proper records of Accidents to his personnel.

9.5.3

Contractor must arrange to immediately investigate, properly document and report any injury, accident or near miss involving any of his employees and take appropriate follow up action. He must furnish within 12 hours of the incident a written report to BHEL Engineer in charge and the Safety Section.

9.5.4

According to the Factory Act and the Employees state Insurance Act & regulation, any person sustaining any injury within the project premises and absenting himself from work for more than 46 hours, his accident report has to be sent to the respective Government Authorities. Therefore contractor shall inform the owner's representative such matter immediately for their needful action.

9.5.5

In addition, contractor shall submit periodic reports on safety to the authorised BHEL official from time to time as prescribed.

9.5.6

Before commencing the work, the contractor shall appoint/nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

9.6 AUDIT REVIEW AND INSPECTION

9.6.1

BHEL shall conduct audit on the contractor performance and compliance with the project specific requirements of the Environment and Occupational Health & Safety Management systems. The programme of audit shall cover all activities under the contract but will focus particularly on high-risk activities. The Construction Manager shall decide the schedule of audit. The audit findings shall be communicated to the contractors and necessary remedial action as advised by BHEL Engineers shall be under taken within the stipulated time.

9.6.2

Inspections shall be carried out regularly by the contractors and by BHEL Engineers on activities, facilities, equipment, documentation, to cover the following aspects.

- Compliance with procedures and systems
- Availability, condition and use of PPE
- Condition of maintenance tools, equipments, facilities
- Availability of fire fighting equipments and its condition
- Use of fire fighting equipments and first aid kit
- Awareness of occupational health hazard
- Awareness of safe working practices
- Presence of quality supervision
- Housekeeping

The Safety coordinator shall visit and inspect work sites daily. All unsafe acts, unsafe conditions that have imminent potential for causing harm/injury/damage will be immediately corrected. He shall maintain a daily logbook giving details of unsafe acts or conditions observed and the corrective action taken and recommendations for preventing recurrence. Adequacy of corrective actions will be verified

The contractor shall take remedial measures as per the findings of each inspection
Besides the above, the contractor shall be required to carry out the following inspections

Sl no	Equipment	Scope of inspection	Inspection by	Schedule
1	Hand tools	To identify unsafe/defective tool	User	Daily
2	Power tools	To identify unsafe/defective tool	User	Daily
3	Fire Extinguishers	To check pressure and any defect	User / Safety Coordinator	Daily Every month
4	Lifting equipment/tackles	To check for defects and efficacy of brakes	User Third party	Daily Every Year
5	PPE	To check for defects	User	Daily

9.7 **NON COMPLIANCE:-**

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

9.7.1

NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND THE BHEL HAS RIGHT TO IMPOSE FINES ON THE CONTRACTOR AS UNDER **for every instance of violation noticed:**

Sl. No	Instance of Violation	Fine (in Rs)
01	Not Wearing Safety Helmet	50/-
02.	Not wearing Safety Belt	100/-
03.	Grinding Without Goggles	50/-
04.	Not using 24 V Supply For Internal Work	500/-
05.	Electrical Plugs Not used for hand Machine	100/-
06.	Not Slinging property	200/-
07.	Using Damaged Sling	200/-
08.	Lifting Cylinders Without Cage	500/-
09.	Not Using Proper Welding Cable With Lot of Joints And Not Insulated Property.	200/-
10.	Not Removing Small Scrap From Platforms	200/-
11.	Gas Cutting Without Taking Proper Precaution or Not Using Sheet Below Gas Cutting	200/-
12.	Not Maintaining Electric Winches Which are Operated Dangerously	500/-
13.	Improper Earthing Of Electrical T&P	500/-
	Major Accident or Accidents causing partial loss of earning to the victim	50,000/- per victim
14	Fatal Accident or Accidents causing permanent loss of earning to the victim	1,00,000/- per victim

Any other non-conformity noticed not listed above will also be fined as deemed fit by BHEL. The decision of BHEL engineer is final on the above. The amount will be deducted from running bills of the contractor. The amount collected above will be utilised for giving award to the employees who could avoid accident by following safety rules. Also the amount will be spent for purchasing the safety appliances and supporting the safety activity at site.

9.8

CITATION:-If safety record of the contractor in execution of the awarded job is to the satisfaction of safety department of BHEL, issue of an appropriate certificate to recognize the safety performance of the contractor may be considered by BHEL after completion of the job

9.9 Memorandum of Understanding

After Award Of Work, Contractors Are Required To Enter Into A Memorandum Of Understanding As Given Below:

Memorandum of Understanding

BHEL, PSWR is committed to Health, Safety and Environment Policy (EHS Policy) as given in the booklet titled “ Safe Working Practices” issued to all contractors.

M/s _____ do hereby also commit to the same EHS Policy while executing the Contract Number _____

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

M/s _____ shall ensure that safe work practices not limited to the above booklet are followed by all construction workers and supervisors. Spirit and content therein shall be reached to all workers and supervisors for compliance.

BHEL will be carrying out EHS audits twice a year and M/s _____ shall ensure to close any non-conformity observed/reported within fifteen days.

Signed by authorized representative of M/s-----

Name :

Place & Date:

9.10

Comprehensive list of National Standards for reference and use wherever applicable in the execution of Civil, Erection and Commissioning Contracts.

IS No	YEAR	Amd upto	DESCRIPTION
IS 10204	1982		PORTABLE FIRE EXTINGUISHERS MECHANICAL FOAM TYPE
IS 10245	1994		SPECIFICATION FOR BREATHING APPARATUS
IS 10291	1982		SAFETY CODE FOR DRESS DRIVERS IN CIVIL ENGINEERING WORKS
IS 10658	1983		HIGHER CAPACITY DRY POWDER FIRE EXTINGUISHERS (TROLLEY MOUNTED)
IS 10662	1992		COLOUR TELEVISION
IS 10667	1983		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR PROTECTION OF FOOT AND LEG
IS 11037	1984		ELECTRONIC FAN REGULATORS
IS 11057	1984		INDUSTRIAL SAFETY NETS
IS 11451	1998		RECOMMENDATION FOR SAFETY AND HEALTH REQUIREMENT RELATING TO OCCUPATION EXPOSURE TO ASBESTOS
IS 1169	1967		PEDESTAL FANS
IS 1179	1967		SPECIFICATION FOR EQUIPMENT FOR EYE AND FACE PROTECTION DURING WELDING
IS 11833	1986		DRY POWDER FIRE EXTINGUISHERS FOR METAL FIRES
IS 11972	1987		CODE OF PRACTICE FOR SAFETY PRECAUTION TO BE TAKEN WHEN ENTERING A SEWAGE SYSTEM
IS 1287	1986		ELECTRIC TOASTER
IS 13063	1991		STRUCTURAL SAFETY OF BUILDINGS ON SHALLOW FOUNDATIONS ON ROCKS
IS 13385	1992		SPECIFICATIONS FOR FIRE EXTINGUISHERS 50 LITRE WHEEL MOUNTED WATER TYPE (GAS CARTRIDGES)
IS 13386	1992		SPECIFICATIONS FOR FIRE EXTINGUISHERS 50 LITRE MECHANICAL FOAM TYPE
IS 13415	1992		CODE OF SAFETY FOR PROTECTIVE BARRIERS IN AND AROUND BUILDINGS
IS 13416	1992		RECOMMENDATIONS FOR PREVENTIVE MEASURES AGAINST HAZARDS AT WORKING PLACE PART 1 TO PART 5
IS 13430	1992		CODE OF PRACTICE FOR SAFETY DURING ADDITIONAL

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

IS No	YEAR	Amd upto	DESCRIPTION
			CONSTRUCTION AND ALTERATION TO EXISTING BUILDINGS
IS 13849	1993		PORTABLE FIRE EXTINGUISHERS DRY POWDER TYPE (CONSTANT PRESSURE)
IS 1446	1985		CLASSIFICATION OF DANGEROUS GOODS (FIRST REVISION)
IS 1476	1979		REFRIGERATORS
IS 1641	1988		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): GENERAL PRINCIPLES OF FIRE GRADING AND CLASSIFICATION
IS 1642	1989		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS- DETAILS OF CONSTRUCTION
IS 1643	1988		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): EXPOSURE HAZARD
IS 1646	1997		CODE OF PRACTICE FOR FIRE SAFETY OF BUILDINGS (GENERAL): ELECTRICAL INSTALLATIONS
IS 1904	1986		CODE OF PRACTICE FOR DESIGN AND CONSTRUCTION OF FOUNDATIONS IN SOIL
IS 1905	1987		STRUCTURAL SAFETY OF BUILDINGS MASONARY WALLS
IS 2082	1985		ELECTRICAL GEYSERS
IS 2171	1985		PORTABLE FIRE EXTINGUISHERS DRY POWDER TYPE (CARTRIDGE)
IS 2309	1989		PRACTICE FOR THE PROTECTION OF BUILDINGS AND ALLIED BUILDINGS AGAINST LIGHTENING
IS 2312	1967		EXHAUST FANS
IS 2361	1994		SPECIFICATION FOR BUILDING GRIPS - FIRST REVISION
IS 2418	1977		TUBULAR FLUORSCENT LAMPS IS 2418 (FT-1)
IS 2750	1964		STEEL SCAFFOLDINGS
IS 2762	1964		SAFE WORKING LOADS IN KGS FOR WIRE ROPE SLINGS
IS 2878	1986		FIRE EXTINGUISHERS CARBON DIOXIDE TYPE (PORTABLE AND TROLLEY MOUNTED)
IS 2925	1984		SPECIFICATION FOR INDUSTRIAL SAFETY HELMETS
IS 3016	1982		CODE OF PRACTICE FOR FIRE PRECAUTIONS IN WELDING AND CUTTING OPERATIONS- FIRST REVISION
IS 3315	1974		DESERT COOLERS
IS 3521	1989		INDUSTRIAL SAFETY BELTS AND HARNESS
IS 368	1983		IMMERSION WATER HEATERS
IS 3696	1991		SAFETY CODE OF SCAFFOLDS AND LADDERS PART 1 TO 2
IS 3737	1996		LEATHER SAFETY BOOTS FOR WORKERS IN HEAVY METAL INDUSTRIES
IS 374	1979		CEILING FANS INCLUDING REGULATORS
IS 3764	1992		EXCAVATION WORK - CODE OF SAFETY
IS 3786	1983		METHOD FOR COMPUTATION OF FREQUENCY AND SEVERITY RATES FOR INDUSTRIAL INJURIES AND CLASSIFICATION OF INDUSTRIAL ACCIDENTS
IS 3935	1966		CODE OF PRACTICE FOR COMPOSITE CONSTRUCTION
IS 4014	1967		CODE OF PRACTICE FOR STEEL TUBULAR SCAFFOLDING
IS 4081	1986		SAFETY CODE FOR BLASTING AND RELATED DRILLING OPERATIONS

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

IS No	YEAR	Amd upto	DESCRIPTION
IS 4082	1977	1996	STACKING AND STORAGE OF CONSTRUCTION MATERIALS AND COMPONENTS AT SITE
IS 4130	1991		DEMOLITION OF BUILDINGS - CODE OF SAFETY PART 1 TO 2
IS 4138	1977		SAFETY CODE FOR WORKING IN COMPRESSED AIR (FIRST REVISION)
IS 4155	1966		GLOSSARY OF TERMS RELATING TO CHEMICAL AND RADIATION HAZARDS AND HAZARDOUS CHEMICALS
IS 4209	1967		CODE OF SAFETY FOR CHEMICAL LABORATORY
IS 4250	1980		FOOD MIXERS
IS 4262	1967		CODE OF SAFETY FOR SULFURIC ACID
IS 4756	1978		SAFETY CODE FOR TUNNELING WORK
IS 4912	1978		SAFETY REQUIREMENTS FOR FLOOR AND WALL OPENINGS, RAILINGS AND TOE BOARDS
IS 5121	1969		SAFETY CODE FOR PILING AND OTHER DEEP FOUNDATIONS
IS 5182	1969	1982	METHODS FOR MEASUREMENT OF AIR POLLUTION
IS 5184	1969		CODE OF SAFETY FOR HYDROFLUORIC ACID
IS 5216	1982	2000	RECOMMENDATIONS ON SAFETY PROCEDURES AND PRACTICE IN ELECTRICAL WORK PART I AND II
IS 555	1979		TABLE FANS
IS 5557	1995		INDUSTRIAL AND SAFETY LINED RUBBER BOOTS (SECOND REVISION)
IS 5916	1970		SAFETY CODE FOR CONSTRUCTION INVOLVING USE OF HOR BITUMINOUS MATERIALS
IS 5983	1980		SPECIFICATION FOR EYE PROTECTORS - FIRST REVISION
IS 6234	1986		PORTABLE FIRE EXTINGUISHERS WATER TYPE (STORED PRESSURE)
IS 692	1994		CRITERIA FOR SAFETY AND DESIGN OF STRUCTURES SUBJECTED TO UNDERGROUND BLASTS
IS 6994	1973		SPECIFICATION FOR SAFETY GLOVES
IS 7155	1986		CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY (PART 1 TO 8)
IS 7205	1974		SAFETY CODE FOR ERECTION OF STRUCTURAL STEEL WORK
IS 7293	1974		SAFETY CODE FOR WORKING WITH CONSTRUCTION MACHINERY
IS 7323	1994		GUIDELINES FOR OPERATIONS OF RESERVOIRS
IS 7812	1975		CODE OF SAFETY FOR MERCURY
IS 7969	1975		SAFETY CODE FOR HANDLING AND STORAGE OF BUILDING MATERIALS
IS 8089	1976		CODE OF SAFE PRACTICE FOR LAYOUT OF OUTSIDE FACILITIES IN AN INDUSTRIAL PLANT
IS 8091	1976		CODE OF PRACTICE FOR INDUSTRIAL PLANT LAYOUT
IS 8095	1976		ACCIDENTS PREVENTION TAGS
IS 818	1968	1997	CODE OF PRACTICE FOR SAFETY AND HEALTH REQUIREMENTS IN ELECTRIC AND GAS WELDING, AND CUTTING OPERATIONS
IS 8448	1989		AUTOMATIC LINE VOLTAGE CORRECTOR (STABILISER)
IS 8519	1977		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR BODY PROTECTION

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

IS No	YEAR	Amd upto	DESCRIPTION
IS 8520	1977		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR EYE, FACE AND EAR PROTECTION
IS 875	1987		STRUCTURAL SAFETY OF BUILDING: LOADING STANDARD PART 1 TO 5
IS 8807	1978		GUIDE FOR SELECTION OF INDUSTRIAL SAFETY EQUIPMENT FOR PROTECTION OF ARMS AND HANDS
IS 8978	1985		INSTANTANEOUS WATER HEATERS
IS 8989	1978		SAFETY CODE FOR ERECTION OF CONCRETE FRAMED STRUCTURES
IS 940	1989		PORTABLE FIRE EXTINGUISHERS WATER TYPE (GAS CARTRIDGE)
IS 9457	1980		SAFETY COLOURS AND SIGNS
IS 9679	1980		CODE OF SAFETY FOR WORK ENVIRONMENTAL MONITORING
IS 9706	1997		CODE OF PRACTICE FOR THE CONSTRUCTION OF AERIAL RPEWAYS FOR THE TRANSPORTATION OF MATERIAL
IS 9759	1981		GUIDELINES FOR DEWATERING DURING CONSTRUCTION
IS 9815	1989		SERVO MOTOR OPERATED LINE VOLTAGE CORRECTOR (SERVO STABILISER)
IS 9944	1992		RECOMMENDATIONS ON SAFE WORKING LOAD FOR NATURAL AND MAN-MADE FIBRE ROPE SLINGS
IS 996	1979		SINGLE PHASE ELECTRIC MOTORS
ISO 3873	1977		SAFETY HELMET

10.0: BREAK IN SERVICES DUE TO BREAKDOWN, ABSENCE OF OPERATING CREW ETC. : DISALLOWANCE OF RENTAL/ OFFSETTING OF LOST HOURS

10.1

The contractor shall ensure 100% availability of the services of crane. If however there is any breakdown of the crane, the services shall be restored at the earliest so as not to affect the work at project site. **Disallowance in monthly rental charges** shall be made towards non-availability of services of crane for any reasons whatsoever as under:

10.1.1 Individual Incidences of Breakdown

- a) **Up to 4 (four) hours in a single incidence:** Single pro-rata basis.
- b) **Single Incidence stretching more than four hours:** Single pro-rata basis up to 4 hours, followed by double pro-rata basis for duration exceeding four hours.

10.1.2 Cumulative Breakdown Duration in a Month

- a) **Up to 36 Hours in a Complete Calendar Month:** Single Pro-Rata basis.*
- b) **Exceeding 36 Hours in a Complete Calendar Month:** Single Pro-Rata basis up to 36 hours, followed by double pro-rata basis for duration exceeding 36 hours. *

*** In both the cases (10.1.2.a and 10.1.2.b) as above, the conditions regarding disallowance due to individual incidence of breakdown**

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

(10.1.1.a and 10.1.1.b) shall essentially be applicable irrespective of the Cumulative Duration in the month.

10.1.3 For billing period less than one calendar month, the limit of 36 hours shall be pro-rated as 10% of the Hire Period in number of hours (e.g. Hire Period in hours = utilized number of days in the calendar month x 12 hours per day).

10.2

BHEL may also choose to utilize the services of the crane in extended hours or on holidays to offset the lost hours due to breakdown in lieu of disallowance as stipulated above. Construction Manager BHEL shall permit offsetting of lost hours only after the incidence of such breakdown and usually within the remaining period of the concerned calendar month of breakdown. Carrying forward to subsequent months shall be at the sole discretion of BHEL construction manager.

Offsetting shall be done with express prior permission of BHEL Construction Manager by availing the services in extended hours or on holidays maximum up to the same number of hours lost due to breakdown irrespective of the total duration or single instance duration mentioned in earlier paragraphs. Depending on the actual project requirement, BHEL may opt to offset the lost hours due to breakdown either partly or fully. In the event of partial offsetting, disallowance as in relevant clause shall be applicable for the remaining lost hours.

10.3

In case there is a major breakdown of the crane, the contractor shall repair it or substitute with similar or higher capacity crane with BHEL's prior consent (regarding acceptability of the substitute) within 15 days. Failure to do so, shall entitle BHEL to arrange alternative at the risk and cost of contractor. Disallowance of rental charges shall be applicable in accordance with relevant clause.

11.0 SCOPE FOR MOBILISATION & DEMOBILISATION

Contractor shall arrange suitable capacity assist cranes and Tools & Tackles at the respective project site for unloading of crane sub-assemblies, components, assembly, dismantling/loading of the crane during mobilization & de-mobilization of crane. Contractor shall also arrange to and fro transportation, skilled manpower and consumables at his own cost.

12.0 DAILY LOG BOOK

The contractor shall maintain a logbook in duplicate giving full operation details, preventive maintenance and Breakdown records and obtain counter signature of BHEL Engineer in Charge on a daily basis. Original log sheets shall be submitted to BHEL at regular intervals as directed by BHEL and before submission of monthly bills.

13.0 REPAIR & MAINTENANCE COST

The cost of repairs arising during the operation should be borne by the contractor. Necessary manpower, fuel, lubricants, tools & tackles, assist cranes and spare parts shall be made available by the contractor as a normal scope to attend the breakdowns.

14.0 RELIEVERS FOR OPERATING CREW

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

In case any member of the operating crew proceeds on leave/ is absent, the contractor shall arrange alternative beforehand for continuation of work to meet BHEL's time-bound erection programme.

15.0 BOOM EXTENSION & REDUCTION

First assembly of the entire crane including required boom length, as decided by Construction Manager BHEL and dismantling for demobilization are in regular scope of these services.

For any in-between requirement of boom extension or reduction of the cranes at site, the manpower, tools and tackles required shall be provided by BHEL's erection agency free of charges. However the Contractor shall extend supervisory services of the operating crew for all such instances as necessary for BHEL. This duration shall be treated as services utilized and considered for payment of hire charges.

16.0 INSURANCE COVER FOR MEN & MATERIALS

The Contractor shall arrange necessary CPM Insurance cover with appropriate Third Party Liability cover for the cranes and WC/Personal Accident Policy as applicable for the O&M crew. If any accident/injury/loss occurs due to the operation of the crane/cranes, to any other persons/public and the properties of BHEL/client/other agencies/third party, the contractor shall have to pay necessary compensation and other expense, so decided by the appropriate authorities.

BHEL/Client has obtained comprehensive Marine cum Erection All Risks Insurance Policy for the plant under installation and other assets of BHEL. Accidental loss/damage to these materials will be covered under this policy. Contractor shall arrange for necessary insurance cover for the assets owned by him.

17.0 ACCOMODATION & LOCAL CONVEYANCE

Contractor has to make their own arrangement for accommodation, local transport and other amenities for their crew at project site.

18.0 FITNESS OF CRANE AS HEAVY LIFTING EQUIPMENT

Contractor shall arrange and submit fitness certificate of the assembled crane at site from the statutory authority as applicable.

19.0 LOAD TESTING AT SITE

BHEL will provide suitable load for carrying out the load test on assembled crane, however contractor shall arrange to & fro transportation of such test load within plant premises and return the same after completion of load test at their own cost. Depending upon the availability of load, the load test shall be conducted at the appropriate radius as applicable for a particular boom length as per crane load capacity chart.

21.0 GATE PASS FOR MEN & MATERIALS

Contractor shall arrange the entry/out gate pass for their crew and materials for which necessary documents will be forwarded by BHEL to the client. Contractor shall maintain duly endorsed records of all incoming equipments to facilitate grant of outward gate pass.

22.0 LIQUIDATED DAMAGES

Please refer GCC

SPECIAL CONDITIONS OF CONTRACT

SECTION-A

23.0 FUEL, LUBE AND HYDRAULIC OIL ETC.

Fuel oil (HSD) for normal operation of the crane shall be provided by BHEL/ BHEL's erection contractor after the services of the crane is accepted by BHEL after first load test till the services are being utilized by BHEL. Consumption of fuel shall be as indicated by the bidder in this offer (Technical Bid). Excess consumption, if any, due to inefficient engine performance, leakage, theft and other reasons attributable to the bidder/crane shall be on the bidders account. The bidder at his own cost shall arrange and meet the HSD required during breakdown maintenance.

Hydraulic oil, Engine Oil, Grease and all other lubricants and associated consumables e.g. filter elements etc have to be arranged by the contractor/bidder at his own cost. In case such or any consumables are arranged by BHEL, recovery at actual procurement cost plus overhead charges (Currently @30%) shall be recovered by BHEL.

24.0 HOLIDAYS AND OTHER BENEFITS:

Three national holidays shall be treated as holidays for the operation of this contract. In case services are availed on these days, the same will be treated as overtime. Being an important power project construction work, erection activities are likely to be carried out on Sundays and other holidays as well. No extra payments are envisaged other than the rentals for such holidays as specified elsewhere herein. The rates quoted by bidders shall be inclusive of such considerations.

25.0 STATUTORY REQUIREMENTS

ESI & EPF as applicable shall be obtained by the Contractor within the quoted rates.

26.0 GENERAL

In case of any contradiction between "General Condition of Contract" & "Special Conditions of Contract" of this Tender Specification, the provisions of Special Condition of Contract shall prevail.

In case of contradictions between Quoted Unit Rate and Total Amount, the quoted Unit Rate shall be taken as correct and total amount recalculated for the intended order quantity.

In case of contradictions between Rates in Figures and Rates Words, the lesser of the two shall be considered as correct.

Bidders are free to quote separate rates/prices in case alternative models/make of crane offered for a specific requirement. In case more than one such option is found technically acceptable for the same requirement, BHEL's choice for order will be based on the lowest (L-1) price of all such options. However, Contractor will be permitted to deploy other technically acceptable models within the ordered (L-1) price for the same requirement.

In case BHEL finds that any bidder has furnished incorrect information, the offer is liable for rejection.

INSTRUCTION FOR FILLING UP APPENDICES

Please note the following while filling up the Appendices.

- 1. Blank Formats for technical and other essential details of offered Crane/s are furnished in these Appendices. Bidder must fill up all the details and submit as part of Technical cum Commercial Bid. These details shall not be furnished with Price Bid.**
- 2. In case the Bidder offers alternative models for a particular requirement, they shall use copy of the relevant Appendix for furnishing these details for each alternative/option.**
- 3. Options must be clearly assigned identification numbers and indicated in the relevant space in the Appendix.**
- 4. Bidders shall furnish appropriate supporting documents duly furnishing cross-reference in the Appendices.**
- 5. In case of insufficient space in the Appendix, bidder shall use additional sheets in order to furnish complete information.**

APPENDIX-1

TECHNICAL DETAILS OF OFFERED TOWER CRANE			
SN	DESCRIPTION	AS BEING OFFERED BY BIDDER	SUPPORTING DOCUMENT REFERENCE
1	NAME OF CRANE MANUFACTURER		
2	TOWER CRANE MODEL NO.		
3	MFG SL. NO. OF CRANE		
4	CRANE VERSION: CROSS BASE FOUNDATION, FLAT TOP MODEL WITH PROVIDING OF ALL MATERIALS FOR TOWER CRANE AS SCOPE OF WORK WITH PROVIDING OF ALL MATERIALS FOR TOWER CRANE AS SCOPE OF WORK.		
5	MAXIMUM RATED CAPACITY IN METRIC TONNES		
6	MINIMUM WORKING HEIGHT		
7	MIN. WORKING RADIUS		
8	LOAD CRITERIA: TIP LOAD AT 55 METER JIB RADIUS		
9	LOAD CRITERIA: CRITICAL LOAD AT THE CENTRE OF JIB RADIUS		
10	TOWER TYPE		
11	MECHANISM		
12	SAFETY DEVICES REQUIRED : I) LOAD LIMITER II) HEIGHT LIMITER III) SLEW LIMITER IV) TROLLEY BRAKE		
13	JIB TYPE		
14	PROTECTIVE FACILITIES WITH THE CRANE		
15	ELECTRICAL POWER REQUIREMENT TO OPERATE THE CRANE WHICH SHALL BE PROVIDED BY BHEL ON CHARGEABLE BASIS		

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

TECHNICAL DETAILS OF OFFERED TOWER CRANE			
SN	DESCRIPTION	AS BEING OFFERED BY BIDDER	SUPPORTING DOCUMENT REFERENCE
16	MINIMUM FREE STANDING HEIGHT OF THE CRANE AND EXTERNAL ANCHORING DETAILS		
17	WIND SPEED LIMITATION		
18	FURNISH COMPLETE DESIGN DETAIL OF FOUNDATION DESIGN & DRGS. AND OTHER TECHNICAL INPUTS. VENDOR SHALL HAVE TO CARRY OUT ALL RELATED WORKS REQUIRED FOR CROSS BASE FOUNDATION AND ERECTION OF CRANE WITH PROVIDING OF ALL MATERIALS FOR TOWER CRANE AND ASSEMBLY AT SITE TILL OPERATION AND MAINTENANCE AS SCOPE OF WORK.		
19	COPY OF LATEST TEST CERTIFICATE		
20	CRANE LOAD CAPACITY CHART ENCLOSED		
21	CRANE PRODUCT CATALOGUE ENCLOSED		
22	DETAILS OF SAFETY FEATURES IN THE OFFERED CRANE		
2	CERTIFICATION OF "SAFE CONSTRUCTION EQUIPMENT" OF THE OFFERED CRANE FROM ANY REGULATORY AUTHORITY		
23	DIMENSION OF CRANE IN OPERABLE CONDITION (WITH SKETCH/DRAWING/PHOTOGRAPH)		
24	PRESENT LOCATION OF ENGAGEMENT OF THE OFFERED CRANE WITH CONTACT TELEPHONE NUMBERS AND ADDRESS		
25	SCHEDULE FOR DEPLOYMENT AT BHEL PROJECT SITE AS PER TENDER SPECIFICATION		
26	DEPLOYMENT HISTORY OF OFFERED CRANE IN LAST FIVE YEARS (INDICATING NAMES OF THE CUSTOMERS IN NEXT COLUMN, AND ENCLOSE COPY OF ORDERS	07-08 08-09	A) B)

Bharat Heavy Electricals Limited : PSWR : Nagpur
Tender Specs. No. **BHE/PW/PUR/DHJOI-CRH/1055/OJ**

TECHNICAL DETAILS OF OFFERED TOWER CRANE			
SN	DESCRIPTION	AS BEING OFFERED BY BIDDER	SUPPORTING DOCUMENT REFERENCE
	AND COMPLETION CERTIFICATE AS REF DOCUMENTS	09-10 10-11 11-12	C) D) E)

SIGNATURE OF BIDDER WITH SEAL