

TENDER SPECIFICATION

NO: BHE/PW/PUR/PIVVG-CMT/1111

SUPPLYING & PLACING OF CHINA MOSAIC TILING OVER THE WATER PROOFING TREATMENT FOR ROOF SLAB OF ALL THE BUILDINGS OF MAIN PLANT AND BOP AREA

AT

2X350MW CCPP, GPPCL, PIPAVAV, GUJARAT.

TECHNICAL BID - VOLUME- I

TENDER SPECIFICATIONS CONSISTS OF:

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



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

CONTENTS			
Volume No	Description	Hosted in website bhel.com as files titled	No. of pages
NIL	Tender Specification Issue Details	(Part of <u>Vol-IA-1111</u>)	1
NIL	Notice Inviting Tender	(Part of <u>Vol-IA-1111</u>)	16
I-A	Technical Conditions of Contract	Vol-IA-1111	24
I-B	Special Conditions of Contract	Vol-IBCD-1111	47
I-C	General Conditions of Contract	(Part of <u>Vol-IBCD-1111</u>)	29
I-D	Forms & Procedures	(Part of <u>Vol-IBCD-1111</u>)	54
I-E	Specifications for floor finish & allied works	Vol-IE-1111	22
II	Price Bid Specification	Vol-II-1111	03

LEGEND:

- 1) Technical Specifications- VOL-I-E is a separate book issued with tender and it's a part of technical bid.
- 2) Price bid is issued as a separate hard copy booklet.

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AT

2X350MW CCPP, GPPCL, PIPAVAV, GUJARAT.

EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR TENDER SUBMISSION: Refer Notice Inviting Tender

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

M/s.

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PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

DY. GENERAL MANAGER (Purchase)
Place: Nagpur
Date:

1111

NOTICE INVITING TENDER

Bharat Heavy Electricals Limited



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

To,

Dear Sir/Madam

Sub: NOTICE INVITING TENDER

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

1.0 Salient Features of NIT

SL NO	ISSUE	DESCRIPTION	
i	TENDER NUMBER	BHE/PW/PUR/PIPVG-CMT/1111	
ii	Broad Scope of job	SUPPLYING & PLACING OF CHINA MOSAIC TILING OVER THE WATER PROOFING TREATMENT FOR ROOF SLAB OF ALL THE BUILDINGS OF MAIN PLANT AND BOP AREA AT 2X350MW CCPP, GPPCL, PIPAVAV, GUJARAT	
iii	DETAILS OF TENDER DOCUMENT		
a	Volume-IA	<i>Technical Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc</i>	<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</i>	<i>Applicable</i>
iv	Issue of Tender Documents	1. <u>Sale from BHEL PS Regional office at Start : 16/02/2013 Closes:25/02/2013</u> 2. From BHEL website (www.bhel.com) Tender documents can however be downloaded from website till due date of submission	<i>Applicable</i>
v	DUE DATE & TIME OF OFFER	Date : 26/02/2013 Time :15.00Hrs	<i>Applicable (Date & Time of submission</i>

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 6 of 42

	SUBMISSION	Place : BHEL OFFICE , NAGPUR	<i>given in covering letter)</i>
vi	OPENING OF TENDER	1 hours after the latest due date and time of Offer submission <i>Notes: (1) In case the due date of opening of tender becomes a non-working day, tenders shall be opened on next working day at the same time. (2) Bidder may depute representative to witness the opening of tender</i>	<i>Applicable</i>
vii	EMD AMOUNT	<i>Rs 2,00,000/- (Rupees Two Lakhs Only)</i>	<i>Applicable</i>
viii	COST OF TENDER	<i>Rs.2000/-</i>	<i>Applicable</i>
ix	LAST DATE FOR SEEKING CLARIFICATION	<i>Date: (Atleast 5 days before the due date of offer submission) Along with soft version also, addressing to undersigned & to others as per contact address given below</i>	<i>Applicable</i>
x	SCHEDULE OF Pre Bid Discussion (PBD)	<i>Date: Not applicable.</i>	<i>Not applicable.</i>
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	<i>Not Applicable</i>	<i>Not Applicable</i>
xii	Latest updates	<i>Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage (www.bhel.com -->Tender Notifications →View Corrigendums) and not in the newspapers. Bidders to keep themselves updated with all such information</i>	

- 2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly signed & stamped on each page, as part of offer. **Rates/Price including discounts/rebates, if any, mentioned anywhere/in any form in the techno-commercial offer other than the Price Bid, shall not be entertained.**
- 3.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at Nagpur issuing the Tender, along with techno-commercial offer. Bidder may also choose to deposit the Tender document cost by cash at the Cash Office as stated above against sl no iv of 1, on any working day; and in such case copy of Cash receipt is to be enclosed with the Techno Commercial offer. Sale of tender

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 7 of 42

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	
	<p>ENVELOPE – I superscribed as : PART-I (TECHNO COMMERCIAL BID) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION:</p> <p>CONTAINING THE FOLLOWING:-</p>	
i.	Covering letter/Offer forwarding letter of Tenderer.	
ii.	<p>Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.</p> <p>Note:</p> <p>a. In case of any deviation, the same should be submitted separately for technical & commercial parts, indicating respective clauses of tender against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.</p> <p>b. BHEL reserves the right to accept/reject the deviations without assigning any reasons, and BHEL decision is final and binding.</p> <p style="padding-left: 20px;">i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL</p> <p style="padding-left: 20px;">ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender</p>	
iii.	<p>Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria.</p> <p>It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact ph no, FAX no, etc.</p>	
iv.	All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.	
v.	Integrity Pact Agreement (Duly signed by the authorized signatory)	If applicable

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 8 of 42

vi.	Duly filled-in annexures, formats etc as required under this Tender Specification/NIT	
vii.	Notice inviting Tender (NIT)	
viii.	Volume – I A : <u>Technical</u> Conditions of Contract (TCC) consisting of Scope of work, Technical Specification, Drawings, Procedures, Bill of Quantities, Terms of payment, etc	
ix.	Volume – I B : Special Conditions of Contract (SCC)	
x.	Volume – I C : General Conditions of Contract (GCC)	
xi.	Volume – I D : Forms & Procedures	
xii.	Volume – II (UNPRICED – without disclosing rates/price, but mentioning only 'QUOTED' or 'UNQUOTED' against each item	
xiii.	Any other details preferred by bidder with proper indexing.	

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

	PART-II	
	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	
	ENVELOPE-IV (MAIN ENVELOPE / OUTER ENVELOPE) superscribed as:	

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 9 of 42

	TECHNO-COMMERCIAL BID, PRICE BID & EMD TENDER NO: NAME OF WORK: PROJECT: DUE DATE OF SUBMISSION: CONTAINING THE FOLLOWING:	
i	<ul style="list-style-type: none">○ Envelopes I○ Envelopes II○ Envelopes III	

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

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

9.0 Assessment of Capacity of Bidders:

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'

- 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:
- a) $P_1, P_2, P_3, P_4, P_5, \dots P_N$ 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 $P_T = P_1 + P_2 + P_3 + P_4 + \dots P_N$)
 - b) 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 (ie $T_T = T_1 + T_2 + T_3 + T_4 + \dots T_N$)
 - c) 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 ' (ie $S_1 = S_{1-1} + S_{1-2} + S_{1-3} + S_{1-4} + S_{1-5} + \dots S_{1-N}$). 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 (ie ' $S_T = S_1 + S_2 + S_3 + S_4 + S_5 + \dots S_N$ ')
 - d) **Overall Performance Rating ' R_{BHEL} ' 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

= -----
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**

Sl no	Item Description	Details for all Regions							Total
		(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
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

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 11 of 42

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

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whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.

- 20.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 21.0 In case the bidder is an "Indian Agent of Foreign Principals", 'Agency agreement has to be submitted along with Bid, detailing the role of the agent along with the terms of payment for agency commission in INR, along with supporting documents.
- 22.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 23.0 Consortium Bidding (or Technical Tie up) shall be allowed only if specified in Pre Qualifying Requirement (PQR) criteria, and in such a case the following shall be complied with:
- 23.1 Prime Bidder and Consortium Partner or partners are required to enter into a consortium agreement with a validity period of six months initially. In case the consortium is awarded the contract, then the Consortium Agreement between the Prime Bidder and Consortium Partner or partners shall be extended till contractual completion period including extension periods if any applicable.
- 23.2 'Stand alone' bidder cannot become a **Prime Bidder' or a 'Consortium bidder' or 'Technical Tie up bidder' in a consortium (or Technical Tie up) bidding**. Prime bidder shall neither be a consortium partner to other prime bidder nor take any other consortium partners. However, consortium partner may enter into consortium agreement with other prime bidders. In case of non compliance, consortium bids of such Prime bidders will be rejected.
- 23.3 Number of partners for a consortium Bidding (or Technical Tie up) shall be as specified in the PQR
- 23.4 Prime Bidder shall be as specified in the Pre Qualification Requirement, else the bidder who has the major share of work
- 23.5 In order to be qualified for the tender, Prime Bidder and Consortium partner or partners shall satisfy (i) the Technical 'Pre Qualifying Requirements' specified for the respective package, (ii) "Assessment of Capacity of Bidder' as specified in clause 9.0
- 23.6 Prime Bidder shall comply with additional 'Technical' criteria of PQR as defined in 'Explanatory Notes for the PQR'
- 23.7 Prime Bidder shall comply with all other Pre Qualifying criteria for the Tender unless otherwise specified
- 23.8 In case customer approval is required, then Prime Bidder and Consortium Partner or partners shall have to be individually approved by Customer for being considered for the tender.
- 23.9 Prime Bidder shall be responsible for the overall execution of the contract
- 23.10 In case of award of job, Performance shall be evaluated for Prime Bidder and Consortium Partner or partners for their respective scope of work(s) as per prescribed formats
- 23.11 In case the Consortium partner or partners back out, their SDs shall be encashed by BHEL. In such a case, other consortium partner or partners meeting the PQR have to be engaged by the Prime Bidder, and if not, the respective work will be withdrawn and executed on risk and cost basis of the Prime Bidder. The new consortium partner or partners shall submit fresh SDs as applicable.

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- 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
 - h. VOL I -E

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.

PRE QUALIFYING CRITERIA

JOB	SUPPLYING & PLACING OF CHINA MOSAIC TILING OVER THE WATER PROOFING TREATMENT FOR ROOF SLAB OF ALL THE BUILDINGS OF MAIN PLANT AND BOP AREA AT 2X350MW CAPP, GPPCL, PIPAVAV, GUJARAT.
TENDER NO	BHE/PW/PUR/PIPVG-CMT/1111

SL NO	PRE QUALIFICATION CRITERIA	Bidders claim in respect of fulfilling the PQR Criteria	
		Name and Description of qualifying criteria (Bidder Should Fill Up the Details in this column for PQR)	Page no of supporting document of bidders offer
A	Submission of Integrity Pact duly signed (if applicable)	NOT APPLICABLE	
D	Assessment of Capacity of Bidder to execute the work as per sl no 9 of NIT (if applicable)	<u>APPLICABLE</u>	
B	<p><u>Technical</u></p> <p><u>B.1) Bidder must have, achieved/Executed any one of the following in last seven years as on the latest date of offer Submission.</u></p> <p>B.1.1) One Civil job consisting of Industrial building /Residential building / Industrial sheds/ Site office building of value of Rs.102.00 Lakhs or higher in a single Work Order.</p> <p style="text-align: center;">OR</p> <p>B.1.2) Two civil Jobs consisting of Industrial building /Residential building / Industrial sheds/ Site office building each of value Rs.63.5 Lakhs or higher .</p> <p style="text-align: center;">OR</p> <p>B.1.3) Three civil jobs consisting of Industrial building /Residential building / Industrial sheds/ Site office building each of value Rs.50.8 Lakhs or higher</p>		
C-1	<p><u>Financial TURNOVER</u></p> <p>Bidders must have achieved an average annual financial turnover (Audited) of Rs.38.50 Lakhs or more over last three Financial Years (FY) i.e. 2009-2010, 2010-2011, 2011-2012.</p>		
C-2	<p><u>NETWORTH (only in case of Companies)</u></p> <p>Net worth of the Bidder based on the latest Audited</p>		

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 17 of 42

	Accounts as furnished for 'C-1' above should be positive		
C-3	<u>PROFIT</u> 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.		
E	Approval of Customer (if applicable) Note: Names of bidders who stand qualified after compliance of criteria A to D shall be forwarded to customer for their approval. Price bid of only those bidders shall be opened who are approved by customer.	APPLICABLE	
F	Consortium criteria (if applicable)	NOT APPLICABLE	
<p>Explanatory Notes for QR 'A'</p> <ol style="list-style-type: none"> 1. The word 'executed' means the bidder should have achieved the criteria specified in the QR even if the total contract has not been completed or closed 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 annexure 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. 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 7. 'EXECUTED' means the Vendor should have achieved the criteria specified in the Technical criteria of PQR (as in 'B' above) even if the Contract has not been completed or closed 			

BIDDER SHALL SUBMIT ABOVE PRE-QUALIFICATION CRITERIA FORMAT, DULY FILLED-IN, SPECIFYING RESPECTIVE ANNEXURE NUMBER AGAINST EACH CRITERIA AND FURNISH RELEVANT DOCUMENT IN THE RESPECTIVE ANNEXURES IN THEIR OFFER along with copies of Work Orders, Work Completion certificates, Audited profit and Loss Account for the last three years and other related documents as per PQR & tender specification..

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: Please tick (√) whichever applicable:- ONE TIME EMD / ONLY FOR THIS TENDER	
		APPLICABILIT Y	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 submitted	Applicable	YES/NO
8	Copy of PAN Card submitted	Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable/N ot Applicable	YES/NO
10	Integrity Pact	Not Applicable	-----
11	Declaration by Authorised Signatory submitted	Applicable	YES/NO
12	No Deviation Certificate submitted	Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions submitted	Applicable	YES/NO
14	Declaration for relation in BHEL submitted	Applicable	YES/NO
15	Non Disclosure Certificate submitted	Applicable	YES/NO
16	Bank Account Details for E-Payment submitted	Applicable	YES/NO

**BHEL PSWR
Notice Inviting Tender**

Tender Specification No: BHE/PW/PUR/ PIPVG- CMT/1111

Page 19 of 42

17	Tie Ups / Consortium Agreement against this tender	Not Applicable for this tender	-----
18	Power of Attorney for Submission of Tender/Signing Contract Agreement submitted	Applicable	YES/NO
19	Analysis of Unit rates submitted	Applicable	YES/NO

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

**DATE:
SIGNATORY**

AUTHORISED
(With Name, Designation and Company seal)

1111

TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS LIMITED



TECHNICAL CONDITIONS OF CONTRACT (TCC) CONTENTS

Sl. No.	DESCRIPTION	CHAPTER	NO. OF PAGES
Volume-IA	Part-I: Contract specific details		
1	Project Information	Chapter-I	2
2	Scope of Works and Technical Specifications	Chapter-II	4
3	Facilities in the scope of Contractor/BHEL (Scope Matrix)	Chapter-III	6
4	T&Ps and MMEs to be deployed by Contractor	Chapter-IV	1
5	T&Ps and MMEs to be deployed by BHEL on sharing basis	Chapter-V	1
6	Time Schedule	Chapter-VI	1
7	Terms of Payment	Chapter-VII	2
8	Taxes and other Duties	Chapter-VIII	3
9	Tender Drawings and Standard Technical Specification For Floor Finish and Allied Works (ATTACHMENT NO. OF PAGES 22)	Chapter-IX	2

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I: Project Information

1.0	Project Information
1.1	<p><u>INTRODUCTION</u></p> <p>GSPC PIPAVAV POWER CO. Ltd. is going to install 2x350MW Gas Based Combined Cycle Power Plant (CCPP) at Pipavav Distt. Amreli (Gujarat). The entire work of this project have been awarded to BHEL on total turn-key basis (EPC Contract) comprising of Design, Engineering, Manufacturing, Supply, transportation, Unloading, Storage, erection, testing, Commissioning with Auxiliaries and ancillaries including civil & structural and land grading works and handing over the plant in phased manner within 33 months from zero date/ 29/03/2008.</p> <p>The plant is located at a distance of 375 Km from Ahmadabad city of Gujarat state on the State Highway NH-34 running between Rajula and Jafrabad. Contractor is advised to visit the site and appraise himself about the conditions of the site and infrastructure available in the area for fulfilling their commitment under the contract.</p> <p style="text-align: center;"><u>APPROACH TO SITE</u></p> <p>Location:</p> <p>In Amreli District of Gujarat State, Latitude 71° 16' N / Longitude 20° 54' E</p> <p>The site is a PIPAVAV Plant of GSPC in Amreli District of State of Gujarat.</p> <p>Power Station Site: 3 Meter above MSL, Graded Level Elevation above mean see level (MSL)</p> <p>Nearest Railway Station: Rajula</p> <p>Nearest Town: Rajula Town (16km)</p> <p>Nearest Airport: Diu (80 kms) / Ahmadabad (375kms by road)</p> <p>Nearest Seaport: Pipavav (35 kms)</p> <p>Access by Road: PIPAVAV is connected by road from State Highway NH 34 running between Rajula and Jafrabad.</p> <p>1. Owner: GSPC PIPAVAV POWER COMPANY Ltd (GPPCL)</p> <p>2. Project Title: 2X351.43 MW PIPAVAV CCPP</p> <p>3. Location: Village: Kovaya Near pipavav Taluka: Rajula, Distt: Amreli, Gujarat, India</p> <p>4. Nearest Railway Station : Rajula</p> <p>5. Ambient Air Temperature:</p> <p style="margin-left: 40px;">a. Highest ever temperature recorded (Dry Bulb): 43 deg.C</p> <p style="margin-left: 40px;">b. Lowest ever temperature recorded (Dry Bulb) : 10 deg.C</p> <p style="margin-left: 40px;">c. Maximum Daily Average (Dry Bulb) : 33 deg C</p>

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

	<p>d. Average Mean temperature (Dry Bulb) : 33 deg C (For CCPP Performance)</p> <p>e. Average Mean temperature (Wet Bulb) : 28 deg C (For CCPP Performance)</p> <p>f. Average Mean temperature (Wet Bulb) : 28.5 deg C (For Cooling Tower Performance)</p> <p>g. Design Ambient for Electrical Equipment : 50 deg C</p> <p>6. Relative Humidity</p> <p>a. Maximum: 89%</p> <p>b. Minimum: 10%</p> <p>c. Average: 70%</p> <p>7. Rainfall</p> <p>a. Annual Average – 1050 mm in the period June to October. Maximum intensity of rainfall; 150 mm/hr continuously maximum rainfall in a day – 400mm.</p> <p>8. Wind Data : 16.5 km/hr</p> <p>9. Seismic Zone - Zone III as per IS: 1893-2005 (Part – IV)</p> <p>10. Ambient Air Quality - The site is located close to Kovaya village and is bordering Birla group Cement plant and colony .This area is classified under semi-urban area.</p>
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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

2.0 Scope of Work

2.0.1 The work consists of:

Supplying & Placing of 25mm Thick China mosaic tiling, under layer of 19 mm compacted thickness in cement mortar (1:3) and top layer 6mm thick with china mosaic tile laid over the slurry made with white cement to fix and surface examined and cleaned, joints flush pointed with white cement and cured for 7 days by keeping it wet etc., complete and finished in all respect at all levels & location inside the GPPC Pipavav plant. For detail specification refer **STANDARD TECHNICAL SPECIFICATION FOR FLOOR FINISH AND ALLIED WORKS, VOLUME-II B, SECTION D, SUBSECTION D12, CLAUSE 2.02.04 and other relevant clause.**

The scope covers all civil, finishing work of China Mosaic Tiling for the water proofing treatment for roof slab of all the buildings of main plant and BOP area.

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

2.1 Responsibility of the Contractor

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

All the materials etc. shall be supplied by the contractor as per the specification mentioned in the tender/Indian standard specification. The contractor is required to quote their rates inclusive of cost of all materials, labour, scaffolding from outside of the buildings for access to labour & materials etc. BHEL reserves the right to inspect and reject any material not found satisfactory.

2.1.1 Contractor shall submit periodical reports in respect of following aspects of operation:

- 1) Consumption of construction power
 - 2) Manpower reports
 - 3) Daily and Monthly Progress reports
 - 4) Field calibration reports
- BHEL at site will inform formats for these reports.

2.1.2

It is the responsibility of the contractor to arrange gate pass for all his employees, T&P etc. Necessary coordination with customer officials is the responsibility of the contractor. Contractor to follow all the procedures laid down by the customer for making gate

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

passes. Where permitted, by customer/ BHEL, to work beyond normal working hours, the contractor shall arrange necessary work permit for working beyond normal working hours

2.2 General

2.2.1

During execution of the job, it is very essential that proper and adequate inspection should be made constantly by the contractor to maintain quality of workmanship and to ensure that deviations from BHEL drawings not exceed the permissible limits, which shall be approved by BHEL. The contractor shall submit test reports of all materials being procured by them for the job and also offer for inspection by BHEL. All the testing charges shall be borne by the contractor. BHEL engineer shall carry out the inspection of quality of material being purchased/arranged, quality/composition of materials used during construction work and workmanship. Decision of BHEL engineer shall be binding on the contractor.

2.2.2

Contractor shall furnish the **manufacturers test certificate** for the china Mosaic Tile & White cement and cement procured by them. Apart from this all the field test shall be arranged by contractor for cement, coarse & fine aggregates either at site or nearby Field Quality Lab. approved by BHEL if so desired by BHEL's engineer. All the expenses in these regards shall be borne by contractor.

Contractor shall procure china Mosaic Tile & White cement and cement from reputed manufacturer & approval for the same shall be obtained from BHEL well in advance before ordering for the materials.

2.2.3

The contractor shall visit the site and ascertain the local conditions, entry and traffic restrictions, all obstructions in the area.

2.2.4

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

2.2.5

The work though not specifically mentioned either in the drawings or in the tender specification but are needed to complete the work as per site requirement & instruction of Engineer are also in the scope of this contract & to be erected to the entire satisfaction, for which the payment shall be released as per the respective item rate of **Rate Schedule. If the item is not available in the rate schedule the rate shall be derived as per CPWD- DSR-2012 rate schedule latest version with applicable escalation.**

2.2.6

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

The contractor shall provide and maintain at his own cost all T & P for carry out the work.

2.2.7

The detailed tentative drawings and specifications for the following works will form part of the tender documents. BHEL reserves the right to modify/alter the tender drawings, if necessary during the actual execution at site.

2.2.8

Standard specifications for various items of work for China Mosaic Tiling as per the relevant IS-codes (latest edition) shall be applicable for this work. The work has to be executed as per standard specification and drawings to the satisfaction of BHEL. However, the Drawings/ Sketches mentioned under **Chapter IX** are to be read along with specifications.

2.3

These drawings are indicative and strictly for tendering purpose, only meant to give an idea to tenderers about nature of job, height of the various buildings etc. Contractor shall ensure/ascertain the stability, safety of the said work. Any modification/variation from the said drawings, if necessary as suggested by the contractor will have to be approved by BHEL in writing.

2.4

Good workmanship is an essential requirement for compliance with the rules in the code. The work shall be carried out under the direct supervision of a person holding a valid certificate of competency issued by the government concerned for the type of work involved.

2.5

Draw Construction Power & Water from Customer's given Point at one location inside the plant including all materials.

2.6 Field Quality Assurance:

The contractor shall be responsible for day-to-day quality checks of cement mortar and other building materials during the progress of work. All quality records and log sheets shall be maintained as per the requirement of BHEL/BHEL'S customer and as per field quality plan approved by **BHEL/GPPCL**. For this, contractor shall either establish their own field quality lab or have tie-up with approved lab by BHEL in/outside of the plant if so required by BHEL.

2.7 Procurement of Materials by Successful Contractors and Testing:

- a) Material required for the entire job like China mosaic tiles, cement, sand, aggregates and all other material required for the completion of entire scope have to be arranged

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works and Technical Specifications

by the contractor. BHEL reserves the right to reject any material not found satisfactory.

- b) Contractor shall produce manufacturer's test certificate for cement for every batch of manufacturing along with each consignment brought to the site. Cement shall be procured from fresh stock only. Apart from the above, it shall be the responsibility of contractor to get the testing of cement, or any other materials procured from outside laboratory approved by **BHEL/ BHEL's customer** to ascertain the quality if insisted by BHEL/BHEL's customer.
- c) Rate quoted shall be inclusive of all such contingencies and no additional payment shall be made on this account. For this purpose, sample shall be collected at site in presence of BHEL/BHEL customer's representative. The variation in price of all the plant materials supplied by the contractor shall be subject to the relevant price variation clause.

2.8 Note:

Bidders are requested to specifically note the following:

- a) *All the buildings have been completed at site by BHEL's other contractor and water proofing (elastomeric membrane) over the building roof slab is under progress. Contractor has to take utmost care/precaution while fixing the china mosaic tiles over the membrane so that no damage occurs/takes place. Preparation of cement mortar for bedding and direct placing of building materials, tiles etc. over the slab already having water proofing membrane shall not be allowed. Contractor has to cover the entire area with polythene sheet before movement of labour and tile fixing activity. Only required materials on daily basis shall be lifted over the slab progressively. Any damage occurs due to negligence shall be the responsibility of contractor and shall be repaired at their own cost or else shall be recovered from contractor. Bidders are requested to have pre-bid visit/ inspection of site to make them fully acquainted with the site situation & nature of job. No claim shall be entertained at later date on account of non-familiarization of site condition. Bidders may fix up their site visit in consultation with construction manager BHEL site office PIPAVAV. Name, address & contact point of site is as below:*

(CONSTRUCTION MANAGER) – Mr. KJ Prabhu, Mob. No. 09427002226
BHEL SITE OFFICE – 2X350 MW CCPP PIPAVAV

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

Sl. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.1	ESTABLISHMENT			
3.1.1	FOR CONSTRUCTION PURPOSE:			
a	Open space for office (as per availability)	Yes		Location will be finalized after joint survey with owner
b	Open space for storage (as per availability)	Yes		Location will be finalized after joint survey with owner
c	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
d	Bidder's all office equipment's, office / store / canteen consumables		Yes	
e	Canteen facilities for the bidder's staff, supervisors and engineers etc.		Yes	
f	Firefighting equipment's like buckets, extinguishers etc.		Yes	
g	Fencing of storage area, office, canteen etc. of the bidder		Yes	
3.1.2	FOR LIVING PURPOSES OF THE BIDDER			
a	Open space for labour colony (as per availability)		Yes	Contractor has to make his own arrangements for space, shelter and transportation of labors as per their requirement.
b	Labour Colony with internal roads, sanitation, complying with statutory requirements		Yes	

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

Sl. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.2.0	PART I ELECTRICITY			
3.2.1	Electricity for construction purposes 3 Phase 415/440 V (To be specified whether chargeable or free)			
a	Single point source	Yes		Free. At a distance of 500m from site (distance is only estimated, It may vary up to any extent depending on site condition). In case of power failure due to maintenance or any reason, contractor shall have to arrange the same at his own expenses through DG set etc. to ensure progress of work.
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.2	Electricity for the office, stores, canteen etc. of the bidder (to be specified whether chargeable or free)			Free at an available distance. In case of non-availability of power due to any reason from customer point, contractor shall have to arrange the same at his own expenses through DG set.

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

Sl. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	PART I			
a	Single point source	Yes		
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc.		Yes	Contractor has to make his own arrangement.
a	Single point source		Yes	
b	Further distribution including all materials, Energy Meter, Protection devices and its service		Yes	
c	Duties and deposits including statutory clearances if applicable		Yes	
3.3.0	WATER SUPPLY			
3.3.1	For construction purposes: (to be specified whether chargeable or free)			
a	Making the water available at single point	Yes		Free, At a distance of 500M from site. In Case Of non-availability of construction water due to Maintenance or any reason from customer point, contractor shall have to arrange construction water at his own expenses.
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	

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

Sl. No.	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
3.3.2	<u>Water supply for bidder's office, stores, canteen etc.</u>			
a	Making the water available at single point	Yes		Free, At a distance of 500M from site. In Case of non-availability of construction water due to Maintenance or any reason from customer point, contractor shall have to arrange construction water at his own expenses.
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.3.3	<u>Water supply for Living Purpose</u>			Contractor has to make his own arrangement.
a	Making the water available at single point		Yes	
b	Further distribution as per the requirement of work including supply of materials and execution		Yes	
3.4.0	LIGHTING			
a	For construction work (supply of all the necessary materials) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
b	For construction work (execution of the lighting work/ arrangements) 1. At office/storage area 2. At the preassembly area 3. At the construction site /area		Yes	
c	Providing the necessary consumables like bulbs, switches, etc during the course of project work		Yes	

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

Sl. No.	Description PART I	Scope / to be taken care by		Remarks
		BHEL	Bidder	
d	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
3.5.0	COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER			
a	Téléphone, fax, internet, intranet, e-mail etc.		Yes	
3.6.0	COMPRESSED AIR wherever required for the work		Yes	
3.7.0	Demobilization of all the above facilities		YES	
3.8.0	TRANSPORTATION			
a	For site personnel of the bidder		Yes	
b	For bidder's equipment's and consumables (T&P, Consumables etc.)		Yes	

Sl. No.	Description PART II	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	3.9.0 ERECTION FACILITIES			
3.9.1	Engineering works for construction:			NOT APPLICABLE
a	Providing the erection/constructions drawings for all the equipment's covered under this scope	Yes		For Details PI refer Chapter-IX-
b	Drawings for construction methods	Yes	Yes	In consultation with BHEL
c	As-built drawings – where ever deviations observed and executed and also based on the decisions taken at site- example – routing of small bore pipes		Yes	Changes are to be marked in drawing & handover to BHEL on completion of work.

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

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter – IV: T&Ps AND MME TO BE DEPLOYED BY CONTRACTOR

A: TOOL & PLANTS

SN	DESCRIPTION																																	
1	<p>(a) T &Ps for Civil works</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SL</th> <th style="text-align: center;">Major T&P items</th> <th style="text-align: center;">Qty.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Grinding machine</td> <td style="text-align: center;">05 Nos.</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Tile cutting Machine</td> <td style="text-align: center;">10 Nos.</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>15t/20t tractor & trailer</td> <td style="text-align: center;">02No.</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Concrete mixer Machine for cement mortar mixing</td> <td style="text-align: center;">02 Nos.</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Water Tanker</td> <td style="text-align: center;">01 No.</td> </tr> <tr> <td style="text-align: center;">6.</td> <td>Curing / dewatering pump – 1.5 / 2 HP</td> <td style="text-align: center;">03Nos.</td> </tr> <tr> <td style="text-align: center;">7.</td> <td>Electrical winches/ hoist</td> <td style="text-align: center;">3 Nos.</td> </tr> <tr> <td style="text-align: center;">8.</td> <td>Cables, Halogens, Bulbs Etc. For Area Illumination</td> <td style="text-align: center;">As per requirement</td> </tr> <tr> <td style="text-align: center;">9.</td> <td>Computer (window XP) with printing & CD writing facility</td> <td style="text-align: center;">1set</td> </tr> <tr> <td style="text-align: center;">10.</td> <td>Communication facilities – landline, WAN, mobile, fax etc.</td> <td style="text-align: center;">As per requirement</td> </tr> </tbody> </table> <p>Bidder must submit T&P deployment plan inclusive of above T&Ps.</p>	SL	Major T&P items	Qty.	1.	Grinding machine	05 Nos.	2.	Tile cutting Machine	10 Nos.	3.	15t/20t tractor & trailer	02No.	4.	Concrete mixer Machine for cement mortar mixing	02 Nos.	5.	Water Tanker	01 No.	6.	Curing / dewatering pump – 1.5 / 2 HP	03Nos.	7.	Electrical winches/ hoist	3 Nos.	8.	Cables, Halogens, Bulbs Etc. For Area Illumination	As per requirement	9.	Computer (window XP) with printing & CD writing facility	1set	10.	Communication facilities – landline, WAN, mobile, fax etc.	As per requirement
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B: MEASURING AND MONITORING DEVICES (MMD):

AS PER REQUIREMENT TO BE FINALIZED AT SITE.

NOTE:

This above list is only indicative and neither exhaustive nor limiting. Quantities indicated above are only the minimum required. Contractor shall deploy all necessary T&P to meet the schedules & as prescribed by BHEL engineer and required for completion of work whether it is mentioned above or not.

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

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

6.1 TIME SCHEDULE & MOBILIZATION

6.1.1 INITIAL MOBILIZATION AND TENTATIVE SCHEDULE

Contractor shall reach site, make his site establishment and be ready to commence the work within two weeks from the date of fax Letter of Intent or as per directions of Construction Manager/ Project Manager of BHEL.

The contractor has to subsequently augment his resources in such a manner that the entire works are completed within the contract period of **5 (FIVE)** months in a manner required by BHEL to match with the project schedule.

THE OVERALL CONTRACT PERIOD SHALL BE 5 (FIVE) MONTHS.

6.1.2

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

The contractor shall reach site and establish his site office and mobilize necessary resources in such a way that all the works are completed within time schedule as per contract.

DATE OF START OF WORK SHALL BE THE DATE ON WHICH FIRST CLEAR AREA IS HANDED OVER BY BHEL FOR COMMENCEMENT OF WORK.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

7.00 TERMS OF PAYMENT

7.0.1

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

7.0.2

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

7.0.3

Payments to Contractors are made as per GCC Clause No.2.23

Release of payment in each running bill will be restricted to 95% of the value of work admitted.

The 5% retention amount shall be released as per GCC clause no. 2.22. The workmanship guarantee period for this contract shall be 12 months from the date of completion of entire work as certified by BHEL

The item rate for Supply and Placing of China mosaic tiles shall be further bifurcated as under for pro-rata payment:

Item No. (1):

(a)	On Supply and verification of Tiles (Qty. in Sqm.) at site by BHEL with submission of test reports as per requirement – 50% of Item rate
(b)	On completion of placing/ fixing – 40%
(c)	On final inspection, cleaning and handing over – 10% However at every stage, payment shall be restricted to 95% as per Clause 7.0.3

7.0.4 EXTRA WORK

As Per GCC Clause No.2.15

7.0.5 SUPPLEMENTARY ITEMS

As Per GCC Clause No.2.16.2

7.0.6 QUANTITY VARIATION

As per GCC Clause No. 2.14 (Quantity Variation) 2.14.1

TECHNICAL CONDITIONS OF CONTRACT (TCC)
Chapter-VII: Terms of Payment

7.0.7 PRICE VARIATION COMPENSATION

GCC Clause No. 2.17 for PVC shall be applicable for this contract.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

TAXES, DUTIES, LEVIES

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

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

8.1.1

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

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

8.1.2 Service Tax & Cess on Service Tax

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

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

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

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

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

8.1.3 VAT (Sales Tax /WCT)

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

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

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

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

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

8.2 'Enabling Works'

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

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

8.3 New Taxes/Levies

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

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

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

8.4 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.

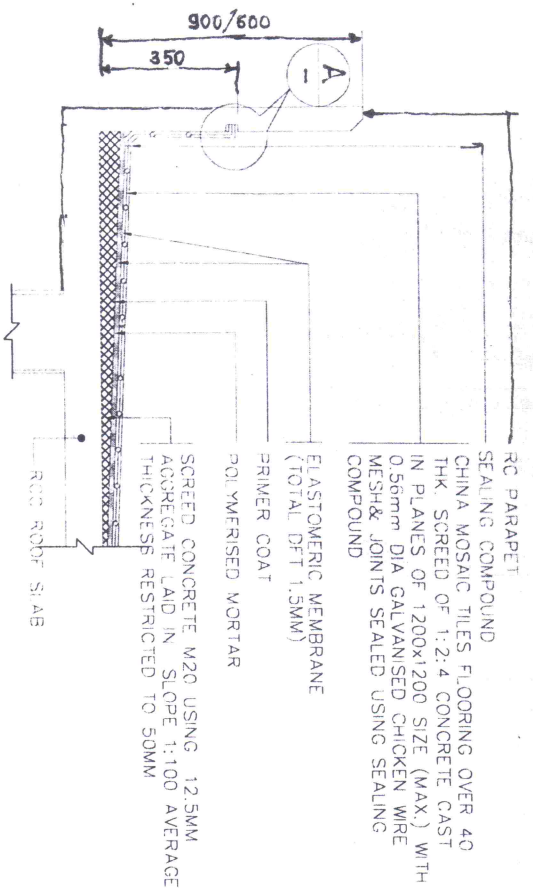
It shall be the absolute responsibility of the sub-contractor to make payment of all statutory payments & compensations to its workers including that is provided under the Workmen's Compensation Act, 1923

**SPECIAL CONDITIONS OF CONTRACT (SCC)
CHAPTER IX –DRAWINGS**

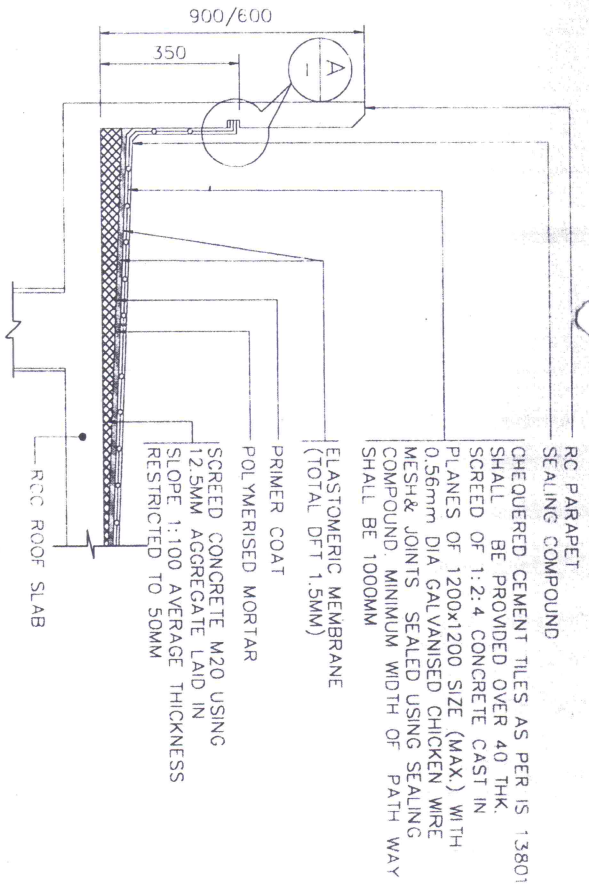
FOLLOWING DRAWINGS ARE ENCLOSED WITH THE TENDER:-

SL.NO	DRG. NO	TITLE
1	PE-DG-292-600-C004	Standard Details – General Architecture

For detail specification refer attachment **STANDARD TECHNICAL SPECIFICATION FOR FLOOR FINISH AND ALLIED WORKS, VOLUME- I E, SECTION D, SUBSECTION D12**



BUILTUP ROOF DETAILS
(GENERAL ROOF AREA)



BUILTUP ROOF DETAILS
(FOR PATH WAY AND FREQUENTLY
ACCESSED ROOF AREAS)

OWNER :

GSPC PIPAVAV POWER COMPANY LIMITED

OWNER'S CONSULTANT :

TCE Consulting Engineers Limited

PROJECT :

700 MW CCPP AT KOVAYA, PIPAVAV, GUJARAT

EPC CONTRACTOR :

BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR

FICHTNER Consulting Engineers
(India) Private Limited Chennai

DRN NO	REV	NAME	SGN	DATE	TITLE
PE-DG-292-600-C004	R2	DRN. NU		14.12.10	STANDARD DETAILS- GENERAL ARCHITECTURE
SH1 OF 1		CKD	MKK/GVR	14.12.10	
		APPD.	ST	14.12.10	
REVISIONS MARKED THUS					
					DRAWING CHANGE NOTICE
					DCN - 1