
TENDER SPECIFICATION

TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760

FOR

**“Construction of all the Civil, Structural & Architectural works in
Main Plant area, Balance of Plant related buildings and
foundations including RCC Piling for 2 x 200 MW Tishreen Power
Plant Extension Project, Tishreen, Syria”**

PART I – TECHNICAL BID



Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)



ISO 9001, ISO 14001 and
OHSAS 18001 certified
company
SubContract and Purchase
Deptt.

Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)
Phone: 0091-0120-2416251 / 2515464 /
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Email: msd@bhelpsnr.co.in/sca@bhelpsnr.co.in

TENDER NO. TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760

IMPORTANT NOTE

PURCHASER OF THIS TENDER DOCUMENT IS ADVISED TO CHECK AND ENSURE COMPLETION OF ALL PAGES OF TENDER DOCUMENT AND REPORT ANY DISCREPANCY TIMELY FOR CORRECTIVE ACTION, IF ANY, TO THE ISSUING AUTHORITY BEFORE THE BIDS ARE SUBMITTED. ORIGINAL COPY OF TENDER DOCUMENT COMPLETE IN ALL RESPECTS MUST BE SUBMITTED BACK AS PART OF THE BID WITHOUT WHICH THE SAME IS LIABLE TO BE REJECTED BY BHEL.

THIS TENDER SPECIFICATION ISSUED TO:

M/S-----

Rev 00
6th July
2010

NOTICE INVITING TENDER

(Document No PS:MSX:NIT)

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	TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760
ii	Broad Scope of job	Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria
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>
f	Volume-II B & IIB-2	Detailed Technical Specifications (PE-TS-323-600-C005 (REV 00) VOL.-II B (Section-A,B,C,D) and PE-TS-323-600-C101 VOL.-II B-2). Bidders may kindly note that we are unable to host the Detailed Technical Specifications Section of this tender in BHEL web page, since the same are voluminous. This will be available in hard copy with us. Hence bidders are requested to obtain total tender specification from BHEL PSNR before submission of offer 'OR' bidders can make a request by e-mail by

		giving their mail ID so that these specifications, which are not available on web, can be sent by mail. These specifications are also available at BHEL, PSNR web site www.bhelpsnr.co.in under 'Tender Notification' and can be downloaded from this web site. Bidder who submits the incomplete bid will be disqualified from this tender.	
iv	Issue of Tender Documents	1. <u>Sale from BHEL PS Regional office at :</u> Start : 20 /11/ 10 , Time : 10.00 hrs (IST) Closes: 15/12/10 , Time : 12.00 hrs (IST) 2. From BHEL website (www.bhel.com) Tender documents can however be downloaded from website till due date of submission	Applicable
v	DUE DATE & TIME OF OFFER SUBMISSION	Date : 15/12/10, Time : 15.00 HRS(INDIAN STD TIME) Place : NOIDA(UP)--INDIA	Applicable
vi	OPENING OF TENDER	1/2 hour after the latest due date and time of Offer submission Notes: (1) In case the due date of opening of tender becomes a non-working day, tenders shall be opened on next working day at the same time. (2) Bidder may depute representative to witness the opening of tender	Applicable
vii	EMD AMOUNT	Rs.2,00,000/-	Not Applicable
viii	COST OF TENDER	Rs 2000/-.	Applicable/Not Applicable
ix	LAST DATE FOR SEEKING CLARIFICATION	Date: 10.12.2010 Along with soft version also, addressing to undersigned & to others as per contact address given below	Applicable
x	SCHEDULE OF Pre Bid Discussion (PBD)	Date : _ _ / _ _ / _ _ _ _ , Time : Place :	Applicable / Not applicable.
xi	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)	Shri J.M. Lyngdoh, IAS (Retd), Plot No. 144-145, Pragati Resort, Proddator Village & P.O- Shankarpally Road, Rangareddy Distt (A.P)- INDIA	Applicable/Not Applicable
xii	Latest updates	Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL webpage (www.bhel.com -->Tender Notifications →View Corrigendums) and not in the newspapers . Bidders to keep themselves updated with all such information	

- 2.0 The offer shall be submitted as per the instructions of tender document and as detailed in this NIT. Bidders to note specifically that all pages of tender document, including these NIT pages of this particular tender together with subsequent correspondences shall be submitted by them, duly signed & stamped on each page, as part of offer. Rates/Price including discounts/rebates, if any, mentioned anywhere/in any form in the techno-commercial offer other than the Price Bid, shall not be entertained.
- 3.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at Noida 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 Noida, 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 Noida. 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)
- 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 : TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760 NAME OF WORK : Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria PROJECT: 2X200 MW TISHREEN TPS, SYRIA 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: 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. i). In case of acceptance of the deviations, appropriate loading shall be done by BHEL ii). In case of unacceptable deviations, BHEL reserves the right to reject the tender	

iii.	Supporting documents/ annexure/ schedules/ drawing etc as required in line with Pre-Qualification criteria. It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact ph no, FAX no, etc.	
iv.	All Amendments/Correspondences/Corrigenda/Clarifications/Changes/ Errata etc pertinent to this NIT.	
v.	Integrity Pact Agreement (Duly signed by the authorized signatory)	If applicable
vi.	Duly filled-in annexures, formats etc as required under this Tender Specification/NIT	
vii.	Notice inviting Tender (NIT)	
viii.	Volume – I A : 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.	
xiv.	Volume- II B & Volume- II B 2- Technical Specifications (PE-TS-323-600-C005 (REV 00) VOL.-II B (Section-A,B,C,D) and PE-TS-323-600-C101 VOL.-II B-2).	

PART-I B		
	ENVELOPE – II superscribed as: PART-I (EMD/COST of TENDER) TENDER NO : NAME OF WORK : PROJECT: DUE DATE OF SUBMISSION: CONTAINING THE FOLLOWING:-	Not Applicable
i.	1. Earnest Money Deposit (EMD) in the form as indicated in this Tender OR Documentary evidence for 'One Time EMD' with the Power Sector Region of BHEL floating the Tender 2. Cost of Tender (Demand Draft or copy of Cash Receipt as the case may be)	Not applicable

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

	entered in words as well as figures)	
	OUTER COVER	
	<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.

Offer can also be sent through e-mail at following mail address. In such a case Both Part-I And Part-II of the offer should be sent and offer in two parts must reach before due date and time of submission. Part-II (Price Bid) should be sent as pass word protected. Pass Word shall be communicated by the bidder to the undersigned on the date of price bid opening. Original copy of the offer should be dispatched prior to due date of submission of offer.

Mail ID sca@bhelsnr.co.in / msd@bhelsnr.co.in

7.0 No Deviation with respect to tender clauses and no additional clauses/ suggestions/ in Techno-commercial bid/ Price bid shall normally 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: Shall not be applicable for this tender~~

~~Bidders capacity for executing the job under tender shall be assessed as per the following:~~

~~i. Assigning Weightages (A) for Similar Jobs Under Execution: Weightages shall be worked out and assigned based on the average number of Similar Works under execution including works yet to be commenced by the agency, in the following manner:~~

~~i). Number of Similar Jobs~~

- ~~a) No. of jobs in BHEL, PSER : Say 'J'~~
~~b) No. of jobs in BHEL, PSSR : Say 'K'~~
~~c) No. of jobs in BHEL, PSWR : Say 'L'~~
~~d) No. of jobs in BHEL, PSNR : Say 'M'~~
~~e) No. of jobs with other customers* : Say 'N' (*: Other than BHEL PSER, PSSR, PSWR & PSNR)~~
~~f) Average No. of Jobs is 'P' = (J+K+L+M+N) divided by 5~~

~~ii) Weightage "A" assigned to bidders based on Average Number of jobs "P":~~

- ~~a) If 'P' = 0-1, "A" will be equal to '3'~~
~~b) If 'P' = 2-3, "A" will be equal to '2'~~
~~c) If 'P' = 4-5, "A" will be equal to '1'~~
~~d) If 'P' is Above 5, "A" will be equal to '0'~~

II. ~~Weightage "B" for Quarterly Performance Reports of Vendors:~~ This shall be based on the averages of the net weighted score obtained by the bidder for the jobs under execution (excluding works not commenced) for the quarter previous to the last quarter reckoned from the date of latest due date of submission, in all four Regions i.e BHEL PSEER, PSSR, PSWR & PSNR, in the following manner:

i). ~~Ratings by Power Sector Region:~~

- a) ~~PS ER's Rating 'Rer' = $(X_1 + X_2 + \dots + X_n)$ divided by n~~
- b) ~~PS WR's Rating 'Rwr' = $(X_1 + X_2 + \dots + X_n)$ divided by n~~
- c) ~~PS SR's Rating 'Rsr' = $(X_1 + X_2 + \dots + X_n)$ divided by n~~
- d) ~~PS NR's Rating 'Rnr' = $(X_1 + X_2 + \dots + X_n)$ divided by n~~
- e) ~~Over all Power Sector Region Rating 'R_{BHEL}' = $(Rer + Rwr + Rsr + Rnr)$ divided by 4~~

~~(where " $X_1, X_2, X_3, \dots, X_n$ " is the net weighted score obtained by the bidder as per the "Evaluation of Contractor Performance (Quarterly)" against the various contracts 'n' under execution in the respective Region).~~

ii) ~~Weightage "B" assigned to bidders based on Overall Power Sector Rating (R_{BHEL}):~~

- a) ~~If R_{BHEL} is 80% and above, "B" will be equal to '6'~~
- b) ~~If R_{BHEL} is > 70% < 80%, "B" will be equal to '5'~~
- c) ~~If R_{BHEL} is > 60% < 70%, "B" will be equal to '4'~~
- d) ~~If R_{BHEL} is = < 60%, "B" will be equal to '0'~~

III. ~~Evaluation of Bidders capacity to execute the job under tender:~~ shall be based on the sum of scores obtained in 'A' and 'B', as below:

- a) ~~6 or above : Considered 'Qualified' for the job under tender~~
- b) ~~Less than 6: Considered 'NOT Qualified' for the job under tender~~

IV. ~~Explanatory note:~~

- a) ~~Similar work means Boiler or Turbine or Civil or Electrical or CI, etc irrespective of rating of Plant~~
- b) ~~Quarter shall be as per the quarter defined in the "Evaluation of Contractor performance (Quarterly)". For contracts where annexed Quarterly Evaluation performance was not part of the contract, 'Quarterly Performance Reports' previous to the last quarter reckoned from the date of latest due date of submission, given by the respective project site against the contract will be the basis for evaluation.~~
- c) ~~Vendors who are not executing any jobs presently in the Region and first timers to the Region, may be considered subject to satisfying all other tender conditions~~
- d) ~~'Under execution' shall mean works in progress upto Boiler Steam Blowing (for Boiler and Auxilliaries) or Synchronisation (for all other jobs including Civil) shall be considered.~~

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 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. No additional claim shall be entertained by BHEL in future, on account of non-acquaintance of above.

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 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 (xi) of 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 pre-qualification evaluation/ techno-commercial bids, approval/ acceptance of customer (as applicable), etc. and date of opening of price bids shall be intimated to only such bidders.
- 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) or specified otherwise in SCC of tender.
- 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. General Terms and Conditions of Reverse Auction (RA) & Authorization of representative who will participate in the online Reverse Auction process are as per format at Annexure- 4 & 5 (enclosed) .
- 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 In case Consortium Bidding is allowed as per Pre Qualifying Requirement, then Prime Bidder and Consortium Partner shall enter into Consortium Agreement. Validity period of Consortium Agreement shall be 6 months after which the same can be re validated.

'Stand alone' bidder cannot become a 'prime bidder' or a 'consortium bidder' in a consortium 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. .

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

27.0 Strike clauses/matter , wherever indicated means not applicable against this tender enquiry.

for BHARAT HEAVY ELECTRICALS LTD

SDGM/ SCT

Enclosure

01. Annexure-1: Pre Qualifying criteria.
02. Annexure-2: Check List .
- 03 Annexure-3: Pre-Bid Qualifying Requirement
- 04 Annexure-4: General Terms and Conditions of Reverse Auction (RA)
- 05 Annexure-5: Authorization of representative who will participate in the online Reverse Auction process.
- 06 Annexure-6: Format for compliance to Article 11
- 07 Integrity Pact Agreement format.

ANNEXURE - 1

PRE QUALIFYING CRITERIA

JOB	Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria
TENDER NO.	TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760

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
A	Submission of Integrity Pact duly signed (if applicable)	Applicable	
B	Assessment of Capacity of Bidder to execute the work as per sl no. 9 of NIT (if applicable)	Not Applicable for this tender. Shall be applicable for evaluation for the bids opened after 01.02.2011.	
C	Technical (Please see Annexure-3 of this document)	Applicable	
D 1	Financial TURNOVER (Please see Annexure-3 of this document)	Bidders to submit their turn over details for the last three financial years.	
2	NETWORTH Net worth of the Bidder based on the latest Audited Accounts as furnished for 'D1' above should be positive	Not Applicable	
3	PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three years defined in 'D1 above based on latest Audited Accounts.	Applicable	
E	Approval of Customer (if applicable) (Please see Annexure-3 of this document)	Applicable	

F	Consortium criteria (if applicable) (Please see Annexure-3 of this document)	Applicable	
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ANNEXURE - 2

CHECK LIST

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

1	Name and Address of the Tenderer		
2	Details about type of the Firm/Company		
3	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	
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE	
		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/Not Applicable	YES/NO
8	Copy of PAN Card	Applicable/Not Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable/Not Applicable	YES/NO
10	Integrity Pact	Applicable/Not Applicable	YES/NO
11	Declaration by Authorised Signatory	Applicable/Not Applicable	YES/NO
12	No Deviation Certificate	Applicable/Not Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions	Applicable/Not Applicable	YES/NO
14	Declaration for relation in BHEL	Applicable/Not Applicable	YES/NO
15	Non Disclosure Certificate	Applicable/Not Applicable	YES/NO
16	Bank Account Details for E-Payment	Applicable/Not Applicable	YES/NO
17	Capacity Evaluation of Bidder for current Tender	Applicable/Not Applicable	YES/NO
18	Tie Ups/Consortium Agreement are submitted as per format	Applicable/Not Applicable	YES/NO

19	Power of Attorney for Submission of Tender/Signing Contract Agreement	Applicable/Not Applicable	YES/NO
20	Analysis of Unit rates	Applicable/Not Applicable	YES/NO

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

DATE :

AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

ANNEXURE-3

PRE- QUALIFYING REQUIREMENTS

SL. NO.	CRITERIA
1.0	Tenderers should have an average annual turnover of minimum of Euro 9 Million or Equivalent based on the audited accounts of last three financial years (2007-08, 2008-09 & 2009-10). Bidders shall submit audited annual accounts (balance sheets and profit & loss account) in support of this.
1.1	PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three years defined in 1.0 above based on latest Audited Accounts.
2.0	Bidder should have executed 'Civil' or 'Civil & Structural' work in the construction of power / industrial / infrastructure projects during last 7 years, ending till due date of tender submission, value of which shall be either of following . (Relevant document in support of above shall be submitted.)
2.1	1 work of value not less than Euro 24 Million or Equivalent
	OR
2.2	2 Works Each of Value Not Less Than Euro 15 Million or Equivalent
	OR
2.3	3 Works Each of Value Not Less Than Euro 12 Million or Equivalent
	The equivalent value of works and turnover shall be arrived as per SBI TT Selling Rate as on the date of opening of Technical Bid.
3.0	Bidder should have executed / executing following jobs during last 7 years, as on the date of opening of Technical Bid. (Relevant document in support of above shall be submitted.)
3.1	Civil work in main power house including Steam Turbine (T G Deck) work for a unit of rating of 80 MW or above in any power station.
NOTE	The term executing at sl. No. 3.0 shall mean that for Sl. No. 3.1 above, a unit for which T G deck work has been completed.
4.0	Bidders should have executed, within the preceding seven (7) years period reckoned as on the date of bid opening, Power / Industrial / Infrastructure projects and should have achieved the following progress. (Relevant document in support of above shall be submitted.)
4.1	Concreting of 15,000 Cum in any one (1) year in one (1) or two (2) concurrently running contracts .
4.2	Installation of 10,000 running meters of cast-in-situ RCC bored piles of dia. 500 mm or varying length and diameter for equivalent volume of concrete in any consecutive six (6) months in one (1) or two (2) concurrently running contracts
	a) If the qualifying work is completed in the seven(7) year period specified above, even if it has been started earlier, the same will also be considered meeting the

	<p>qualifying requirements.</p> <p>b) The word “executed” means, tenderer should have achieved the progress specified above even if the total contract is not completed/closed.</p> <p>c) The one (1) year period means any continuous 12 months period. However, for concurrent works the same 12 months period shall be considered</p>
5.0	<u>Tie Up/ Joint Venture (JV) Arrangement</u>
5.1	The Tenderer should meet all the QR at SL NO. 1.0, 2.0, 3.0 & 4.0. However, the tenderer meeting criteria at 3.1 & 4.1 shall be allowed to have a tie up/ JV with another experienced associate for the works covered under QR SI No. 4.2 (i.e RCC Piling work) and for which he does not possess the requisite experience.
	OR
5.2	Otherwise tenderer meeting criteria at QR SI No. 4.1&4.2 (i.e RCC Piling Work and Concreting work) shall be allowed to have a tie up/ JV with another experienced associate for the works covered under QR SI No. 3.1 and for which he does not possess the requisite experience.
5.3	The tenderer should meet all other Technical QR criteria for which there is no tie up/ JV arrangement. Maximum one tie up/ JV shall be permitted. The tenderer (Lead Partner) shall submit documents in support of his experience and experience of his partner in line with all the Technical QRs. However, the tie up/ JV arrangement is subject to approval of BHEL. In such a case, the tenderer (Lead Partner) shall submit documents related to their Tie-up arrangement in Part-I bid (Technical Bid). The Lead Partner may be as per 5.1 or 5.2 meeting all the QR along with one associate. The composition of the Tie-up arrangement and role and responsibility of each constituent must be well defined and the document submitted shall clearly indicate who shall be the lead partner.
5.4	The Lead Partner should meet all Financial QR criteria given at SI No 1.0 and 2.0.
6.0	The Lead partner is required to enter into an Integrity Pact (I P) with BHEL against this tender / contract by signing and stamping all the pages of I P by authorized representative. Bidders, who do not comply with this requirement shall not be considered against this tender.
7.0	The Lead partner is required to submit unconditional compliance to ARTICLE 11 OF THE UNIFORM SYSTEM OF CONTRACTS LAW NO. (51), DECREE NO. 450 OF MINISTRY OF FINANCE, SYRIA ARAB REPUBLIC as per format given in the tender.
8.0	Bidder’s selection for this work is subject to approval of BHEL’s customer i.e M/s PEEGT

ANNEXURE-4

GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION (RA)

Against this enquiry for the subject item / system with detailed scope of supply as per our tender specification, **TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760** may resort to "REVERSE AUCTION PROCEDURE" i.e. **ONLINE BIDDING on INTERNET**.

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on Internet.
3. In case BHEL decides to conduct reverse auction, BHEL's service provider shall contact the vendor directly and impart them the training.
4. Business rules like event date, time, start price, bid decrement, extensions, etc. also will be communicated through service provider for compliance.
5. Vendors have to fax the compliance form in the prescribed (provided by service provider) before start of Reverse auction. Without this the vendor will not be eligible to participate in the event.
6. **Total Price quoted shall be inclusive of all taxes/duties including custom duty, as applicable at Yemen in line with the NIT conditions for the subject work in Euro , which is to be worked out as per the BOQ (Rate Schedule) given in tender enquiry and subsequent changes made, if any. EXCEL Sheet shall be provided, if applicable.**
7. Reverse auction will be conducted on schedule date & time.
8. At the end of reverse auction event, the lowest bidder value will be known on the network.
9. The lowest bidder has to fax the duly signed filled-in prescribed format as provided on case-to-case basis to BHEL through service provider after completion of event on the same day preferably.
10. Any variation between the on-line bid value and signed document will be considered as sabotaging the tender process and will invite disqualification of vender to conduct business with BHEL as per prevailing procedure.
11. In case BHEL decides not to go for Reverse auction procedure for this tender enquiry, the price bids and price impacts, if any already submitted and available with BHEL shall be opened as per BHEL standard practice.

ANNEXURE - 5

Authorization of representative who will participate in the on line Reverse Auction Process;

1	NAME & DESIGNATION OF OFFICIAL	
2	POSTAL ADDRESS (COMPLETE)	
3	TELEPHONE NOS. (LAND LINE & MOBILE BOTH)	
4	FAX NO.	
5	E-MAIL ADDRESS	
6	NAME OF PLACE/ STATE/ COUNTRY, WHEREFROM S/HE WILL PARTICIPATE IN THE REVERSE AUCTION	

ANNEXURE-6

**FORMAT FOR COMPLAINE TO ARTICLE 11 OF THE UNIFORM SYSTEM OF
CONTRACTS LAW NO. (51), DECREE NO. 450 OF MINISTRY OF FINANCE, SYRIA
ARAB REPUBLIC
(To be submitted in the bidder's letter head)**

REF:

Dt.

Bharat Heavy Electricals Limited

Power Sector – Northern Region,
Plot No. 25, Sector - 16A , Distt. Gautam Budh
Nagar, NOIDA – 201 301. INDIA

Sub: Compliance to Article 11 of the Uniform System of Contracts Law No. (51), Decree No. 450 of Ministry of Finance, Syria Arab Republic for the work “**Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria**”.

TENDER NO. BHEL/ NR/SCT/ TISHREEN-3&4/ MAIN CIVIL /760

Dear Sirs,

With reference to above, this is to certify that we comply to provisions of subject article as under:

- a) We are not prohibited from participation in tenders or from contracting with public entities, nor having a property under seizure in favour of public entities whether by way of reserve or executive seizure.
- b) We are registered in the commercial register, as we are Syrians or treated like Syrians.
- c) We are registered in one of the Chambers of Commerce or Industry or Agriculture or Tourism - as the case may be (for participants as a Syrian or treated like a Syrian).
- d) We are not convicted of a crime or a disgraceful act and reinstated.
- e) We are neither employed in a public entity nor members of an Executive Council of Local Administration specifically in the governorate to which we belong.
- f) We do neither own a factory or establishment or branch office in Israel, nor do we have subscription in any establishment or body in it. We are not a party to any contract for manufacture or assembly or license or technical assistance with any establishment or body or person in Israel. We are not practicing any such activity in Israel whether in person or through a mediator. We are not having any contribution whatsoever to support Israel or its war effort.

In case, any of the above statement is found to be incorrect during any stage of the contract, we agree to any action/ penalty imposed by BHEL/ PEEGT/ Government of Syria Arab Republic including termination of contract. We shall abide by all prevailing laws, rules and regulations in Syria Arab Republic pertaining to the execution of this contract.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at “BHEL House”, Siri Fort, New Delhi – 110049 (India) hereinafter referred to as “The Principal”, which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as “The Bidder/ Contractor” which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he / she is not legally entitled to, in

order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC/ PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

2.1.4 The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidders(s)/ Contractor(s) from the tender process or take action as per the separate “Guidelines for Suspension of Business Dealings with Suppliers/ Contractors” framed by the Principal.

Section 4 – Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

Section 5 – Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-contractors

- 6.1 The Bidder(s)/ Contractor(s) undertake(s) to demand from his sub-contractors a commitment consistent with this Integrity Pact. This commitment shall be taken only from those sub-contractors whose contract value is more than 20% of Bidder's/ Contractor's contract value with the Principal.
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 – Criminal Charges against violating Bidders/ Contractors /Sub-contractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 –Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or

take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.

8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

8.10 The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

9.1 This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.

9.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 – Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders/ contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

For & On behalf of the Principal
(Office Seal)

For & On behalf of the Bidder/ Contractor
(Office Seal)

Place-----

Date-----

Witness: _____
(Name & Address) _____

Witness: _____
(Name & Address) _____

Rev 00
6th JULY
2010

TECHNICAL CONDITIONS OF CONTRACT (TCC)

(Document No PS:MSX:TCC)

BHARAT HEAVY ELECTRICALS LIMITED



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TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I : Project Information

PROJECT SYNOPSIS

1. Name of the Owner : Public Establishment of Electricity for Generation and Transmission (PEEGT), Syrian Arab Republic
2. Address : PEEGT, Damascus, Syria.
3. Installed capacity : 2x200 MW in operation.
4. New Installation : 2X200 MW
5. Nearest Railway station : -
6. Nearest City : DAMASCUS- 50 KMS
7. Nearest Airport : DAMASCUS- 20 KMS
8. Altitude : 606.7 mtrs Above Sea Level
Seismic Force UBC 1997 Zone 3

Syrian Arab Republic is situated in the Middle East, at eastern end of the Mediterranean Sea, between Turkey and Lebanon. Its climate is hot and dry in summer. Hottest month is August. Its Cold and wet in winter with occasional snow. Wettest and coldest month is January. Coastal region has typical Mediterranean climate. Spring (March – April) and autumn (September - October) are very pleasant. Major Cities of Syria are Damascus (capital), Aleppo, Latakia and Homs. Main languages spoken are Arabic (official), Kurdish, Armenian, Aramaic, Circassian, French widely understood.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.0 GENERAL SCOPE OF WORK

2.1 This tender specification for the work of **“Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria”** covers construction of all the Civil , Miscellaneous Structural Steel & Architecture works related to Power Plant buildings & foundations which includes Foundations **(including Piling using Rotary Hydraulic Rigs and Pile cap)** , earth work ,TG Deck, plain & reinforced cement concrete, reinforcement, scaffolding, formwork, masonry work, floor finishes including dado & skirting, plastering, painting, roof finishes, doors / windows / ventilators / rolling shutters, internal & external plumbing, water supply, water proofing, drainage & sewerage, metal cladding, fencing, roads, M. S embedment , Underground Earthing etc. as well as including supply of all materials except those proposed to be supplied by BHEL, consumables, labour, Tools and plants, transportation and storage, sample testing etc. all complete as per BOQ, specifications and drawings for proper and successful execution of the job for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria.

2.2 The total **Main Civil, Structural & Architectural works in main plant area and BOPs related to buildings and foundations including RCC Piling work** under the scope of this tender as described below.

Covers all the Civil, Structural and Architectural Works as per **Rate Schedule Cum Bill Of Quantities (Price bid)**. Work under this package is generally related to the following area but not limited to buildings, civil structures, foundations mentioned below.

General Scope of Work

1.1. MAIN CIVIL

- 1.1.1. In plant Roads, Extension of Traffic area inside Power Plant Extension Area and Drains (storm, plant drains) in Plant Area
- 1.1.2. Site Grading and Levelling
- 1.1.3. Main Power House, Electrical Bays & Control Room

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

- 1.1.4. Boiler and Auxiliaries Foundations, Duct Foundation, Fan (GR,FD and ID) Foundations, Concrete paving (Transformer yard to Chimney)
- 1.1.5. RCC Piling work for Main Power House, Cooling Towers, RCC Chimney and other areas.
- 1.1.6. Transformer Yard including rails, fencing and oil water separator and oil pits
- 1.1.7. Fuel Oil Dyke Area, Pump House, Unloading Bay- Distillate and Residual Oil transfer and unloading pump stations.
- 1.1.8. Residual Oil Storage Tanks (6X20000 m3)
- 1.1.9. DG Building, DG Foundation
- 1.1.10. Compressor House
- 1.1.11. Air Washer Rooms
- 1.1.12. Fire Water Pump House
- 1.1.13. Raw Water System
- 1.1.14. Supports for Gas Delivery Piping System
- 1.1.15. Civil Works for Dry Cooling Towers, Cooling Tower Switchgear Rooms
- 1.1.16. Auxiliary Cooling Towers
- 1.1.17. Auxiliary Pumping Building
- 1.1.18. Extension of Fire Fighting Building
- 1.1.19. CW Pump House
- 1.1.20. Pipe and Cable trenches and Underground service Tunnels for Unit 3&4
- 1.1.21. Civil Works for all Below & above ground piping including CW pipe
- 1.1.22. Plumbing Works
- 1.1.23. Sewerage System for Collection and transfer upto terminal point at Existing plant
- 1.1.24. Civil Works for Heating Ventilation and Air Conditioning.
- 1.1.25. Auxiliary outdoor equipment foundations
- 1.1.26. Boundary Wall, Fences and Gates
- 1.1.27. Civil/Structural Works for transmission lines for interconnection between Generator Transformer to Customer GIS

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

1.1.28. Landscaping and Irrigation

1.1.29. Any other civil, structural, architectural work required from system point of view only will be provided.

The detailed scope of work & the technical requirements for work to be executed under this specification shall be as per Specifications PE-TS-323-600-C005 VOL.-II B (Section-A,B,C,D) and PE-TS-323-600-C101 VOL.-II B-2 enclosed with this tender document (Annexure-VI).

2.3 The scope of work will also include providing following at no additional cost:

- a) **Qualified Supervisors** for direct supervision of various civil works on behalf of BHEL. These Qualified Supervisors shall be provided **for Twenty Seven man-months** as per site conditions. **The supervisors shall possess a minimum qualification of a civil engineering diploma.** They shall be deployed in all area covered under various specifications as well as other related areas as may be deemed essential based upon work requirements, though not specified. These supervisors shall not be used by the Contractor for his works and shall be guided by BHEL Engineers to ensure smooth work progress as and when /where required /deployed.

In case contractor fails to provide above-mentioned Supervisors as desired by BHEL, the latter shall have the right to hire such services from other agencies at the risk and cost of the contractor. In case BHEL is not able to utilize the man months as per provision, a lump sum of SYP 50,000/- (SYP Fifty thousand only) per man month for the un-utilized man months will be recovered from the bills of the contractor.

- b) The contractor under this contract shall **provide services** of following manpower exclusively for use of BHEL:
- | | |
|----------------------------------|----------------------|
| i. Computer Operator – | 27 man months |
| ii. Skilled Manpower – | 27 man months |
| iii. UnSkilled Manpower – | 54 man months |

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

Persons so deployed shall have to work in extended hours whenever required. Workmen provided as per the above provisions shall be fully trained and experienced in the nature of work for which they are deployed.

In case contractor fails to provide above-mentioned manpower as desired by BHEL, the latter shall have the right to hire such services from other agencies at the risk and cost of the contractor. However, if BHEL does not utilize the man months as per above provision, fully or partly; recovery at the LS rate of SYP 35000/manmonth for Computer Operator, SYP 30000/manmonth for skilled worker and SYP 20000/manmonth for unskilled worker will be made from the final bill of the contractor.

- 2.4 The scope of work will also include such other related works although they may not be specifically mentioned in the above paragraph and all such incidental items not specified but reasonably implied and necessary for completion of the job as a whole all as desired and as directed by the engineer.

The detail scope of work covered above is not a comprehensive list of items of work involved. The detail scope of work may vary considerably depending on the actual construction requirements.

- 2.5 The work under this contract shall be carried out as per BOQ Cum Rate Schedule. In case the description / specifications as per BOQ are found to be incomplete Indian/Syrian/ASTM standard specifications shall be followed. Quantities mentioned in the rate schedules are approximating only and liable for variation due to change of scope of work / variation in schedule of quantities, changes in design etc. The tenderers shall undertake to execute actual quantities as per advice of BHEL Engineer and accordingly the final contract price shall be worked out on the basis of quantities actually erected at site and payments will also be regulated for the same. The quantities indicated against each item may vary to any extent and no compensation will be payable in variation of Individual quantity.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II : Scope of Works

2.6 ALSO INCLUDED IN THE SCOPE

Unless otherwise specified, the work to be provided by the contractor for the items mentioned in the "Bill of Quantities" shall include but not be limited to the following.

- a) Furnishing all labour, materials, supervision, construction plans, equipment, supplies, transport, to and from the site, fuel, electricity, compressed air, water, transit and storage insurance and all other incidental items and temporary works not shown on specified but reasonably implied or necessary for the proper completion, maintenance and handling over the works, except in accordance with the stipulations laid down in the contract documents and additional stipulations as may be provide by the engineer during the course of works.
- b) Furnishing samples of all materials required by the engineers for testing / inspection and approval for use in the works. The samples may be retained by the engineer for final incorporation in the works.
- c) Furnishing test reports for the products used or intended to be used, if called for the specifications or if so desired by the engineer.
- d) Giving all notices, paying all fees, taxes etc., in accordance with the general conditions of contract, that are required for all works including temporary works.
- e) Arranging manufacturer's supervision for items of work done as per manufacturer's specifications when so specified.
- f) Carrying out topographic survey of the work area and establish levels and coordinates at suitable intervals from existing grid levels and coordinates furnished by the owner established bench marks, setting out the locations and levels of proposed structures, constructions and marking of reference pillars and other identification works etc., The contractor shall provide the owner/BHEL such a assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used.
- g) Providing all incidental items not shown or specified but reasonably implied or necessary for the successful completion of the work in accordance with contract.

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	
1.1.0	ESTABLISHMENT			
1.1.1	FOR CONSTRUCTION PURPOSE:			
A	Open space for office	Yes		BHEL shall provide free of charge limited open space for office and store as and where made available by its customer
B	Open space for storage	Yes		
C	Construction of bidder's office, canteen and storage building including supply of materials and other services		Yes	
D	Bidder's all office equipments, office / store / canteen consumables		Yes	
E	Canteen facilities for the bidder's staff, supervisors and engineers etc		Yes	
F	Fire fighting equipments like buckets, extinguishers etc		Yes	
G	Fencing of storage area, office, canteen etc of the bidder		Yes	
1.1.2	FOR LIVING PURPOSES OF THE BIDDER			
A	Open space		Yes	Limited open space

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

SI.No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
B	Living accommodation		Yes	will be provided to the contractor, as and where made available by its customer
1.2.0	ELECTRICITY			
1.2.1	<u>Electricity For construction purposes</u> (to be specified whether chargeable or free)			On chargeable basis, if required by the contractor.
1.2.1.1	Nearest point source	Yes		The indicative charge for Construction Power shall be SYP 4.0/kwh. However, the actual charges and usage conditions shall be subject to change as per customer (PEEGT) instructions. In the initial stages , the Contractor shall have to deploy the DG sets for carrying out the tender works

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

SI.No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
1.2.1.2	Further distribution for the work to be done which include supply of materials and execution		Yes	
1.2.2	Electricity for the office, stores, canteen etc of the bidder which include:			Same as in 1.2.1
1.2.2.1	Distribution from single point including supply of materials and service		Yes	
1.2.2.2	Supply, installation and connection of material of energy meter including operation and maintenance		Yes	
1.2.2.3	Duties and deposits including statutory clearances for the above		Yes	
1.2.2.4	Living facilities for office use including charges		Yes	
1.2.2.5	Demobilization of the facilities after completion of works		Yes	
1.2.3	Electricity for living accommodation of the bidder's staff, engineers, supervisors etc on the above lines.		Yes	
1.3.0	WATER SUPPLY			
1.3.1	For construction purposes:			
1.3.1.1	Making the water available at single point	Yes		FREE OF COST
1.3.1.2	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	
1.3.2	<u>Water supply for bidder's office, stores, canteen etc</u>		Yes	
1.3.2.1	Making the water available at single point	Yes		
1.3.2.2	Further distribution as per the requirement of work including supply of materials and execution		Yes	
1.4.0	LIGHTING			
1.4.1	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	
1.4.2	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	
1.4.3	Providing the necessary consumables like bulbs, switches, etc during the course of construction		Yes	
1.4.4	Lighting for the living purposes of the bidder at the colony / quarters		Yes	
1.5.0	COMMUNICATION FACILITIES FOR SITE OPERATIONS OF THE BIDDER			

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

SI.No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
1.5.1	Telephone, fax, internet, intranet, e-mail etc		Yes	
1.6.0	COMPRESSED AIR SUPPLY			
1.6.1	Supply of Compressor and all other equipments required for compressor and compressed air system including pipes, valves, storage systems etc		Yes	
1.6.2	Installation of the above system and operation and maintenance of the same.		Yes	
1.6.3	Supply of the all the consumables for the above system during the contract period		Yes	

SI.No	Description	Scope / to be taken care by		Remarks
		BHEL	Bidder	
	CONSTRUCTION FACILITIES			
2.1.0	Engineering works for construction:			
2.1.1	Providing the construction drawings for all the equipments covered under this scope	Yes		
2.1.2	Drawings for construction methods	Yes	Yes	In consultation with BHEL

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

SI.No	Description CONSTRUCTION FACILITIES	Scope / to be taken care by		Remarks
		BHEL	Bidder	
2.1.3	As-built drawings – where ever deviations observed and executed and also based on the decisions taken at site– routing of small bore pipes		YES	"
2.1.4	Shipping lists etc for reference and planning the activities	Yes		"
2.1.5	Preparation of site construction schedules and other input requirements		Yes	"
2.1.6	Review of performance and revision of site construction schedules in order to achieve the end dates and other commitments	Yes	Yes	"
2.1.7	Weekly construction schedules based on SI No 2.1.5		Yes	"
2.1.8	Daily construction / work plan based on SI No 2.1.7		Yes	"
2.1.9	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	
2.1.10	Preparation of preassembly bay		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	
2.1.11	Laying of racks for gantry crane if provided by BHEL or brought by the contractor/bidder himself			NA

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

LIST OF TOOL & PLANTS TO BE DEPLOYED BY THE CONTRACTOR -

INDICATIVE LIST OF T & P TO BE ARRANGED BY THE CONTRACTOR AT HIS OWN COST

SL NO	EQUIPMENT	QTY
1	ROTARY HYDRAULIC PILING RIGS with Handling Cranes	8 NO
2	10/12 T HYDRA	10 NO
3	18/20 MT CRAWLER CRANE	4 NO
4	40 / 45 MT CRANE	2 NO
5	75 MT CRANE	1 NO
6	MIG MACHINE	10 NO
7	WELDING RECTIFIER/GENERATOR	40 NO
8	ULTRASONOGRAPHY TESTING MACHINE (for Structural steel work)	1 NO
9	RADIOGRAPHY SOURCE	1 NO
10	PNEUMATIC HAMMER	1 NO
11	15/20 MT TRAILORS WITH PULLING UNIT / TRACTOR – TRAILORS	3 NO
12	30/40 MT TRAILORS WITH PULLING UNIT / TRACTOR – TRAILORS	1 NO
13	FULLY AUTOMATIC PLC OPERATED BATCHING PLANT with Printing facility (MIN 40 CUM PER Hr)	1 NO

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

14	TRANSIT MIXERS (5/6/7 M3 capacity)	6 NO
15	TYRE MOUNTED STATIONARY TYPE LINE CONCRETE PUMPS WITH CONNECTING PIPES (MIN 30 M ³ / HR , 100 M VERTICAL PUMPING)	2 NO
16	TRUCK/TRAILOR MOUNTED CONCRETE PUMP WITH MIN. 70 MTRS BOOM CONCRETE PLACER	2 NOS.
17	HYD EXCAVATORS / POCLAINS / JCB	5 NO
18	DUMPERS	7 NO
19	DOZERS	2 NO
20	AIR COMPRESSORS	2 NO
21	PORTABLE / MINI BATCHING PLANT	2 NO
22	CONCRETE VIBRATORS	AS PER REQUIREMENT
23	SUBMERSIBLE PUMP (DIESEL / ELEC)	3 NO
24	Multi Stage Water Pump (for curing) upto 150 mtrs lift	1 no.
25	DE WATERING PUMP – 5/10/25 HP	3 NO
26	SLUDGE / SLURRY PUMP (DIESEL / ELEC)	3 NO
27	POWER DRIVEN EARTH RAMMER	2 NOS
28	PLATE COMPACTOR	2 NOS
29	VIBROMAX (Earth Compactor)	1 NOS
30	ROAD ROLLER	2 NOS

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

31	POWER WINCH (1.5/3T) WITH BUILDING HOIST	4 NOS
32	POWER WINCH-10 MT for Structural Erection	1 NO
33	REINFORCEMET CUTTING / BENDING MACHINE	5 NOS
34	MOTORISED MS PLATE BENDING MACHINE	1 NO
35	PIPE CUTTING MACHINE	1 NO
36	WATER TANKER WITH SPRINKLER	4 NOS
37	DG SET 125 kVA	AS PER REQUIREMENT
38	WELDING MACHINES	AS PER REQUIREMENT
39	HEATING OVEN	AS PER REQUIREMENT
40	PORTABLE OVENS	AS PER REQUIREMENT
41	PORTABLE LIGHTING MAST / LIGHTING SYSTEM	AS PER REQUIREMENT
42	PNUEMATIC JACK HAMMER	AS PER REQUIREMENT
43	PLY SHUTTERING BOARD WITH ADEQUATE SUPPORTING STRUCTURE	AS PER REQUIREMENT
44	ALL SCAFFOLDING MATERIALS	AS PER REQUIREMENT
45	SLIP FORM EQUIPMENT including hydraulic spare pump, 10%	1 SET

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

	spare jack, epoxy painted MS Shutter, passenger lift with safety devices, hanging platform for inside and outside, safety ropes, etc complete	
46	CEMENT STORAGE SHED OF MIN 400 MT CAPACITY	1 NOS

NOTES:

- 1 The above list specifies only major T&P (may not be complete to be deployed by the contractor). All additional / other tools and plants including trucks & devices, tackles, machines, measuring instruments etc. in good and safe working conditions which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price. **Contractor has to mobilize / maintain adequate numbers of equipments for meeting the Concreting and Structural Fabrication and Erection**
- 2 Other terms and conditions regarding above items please also refer clause for T&P/IMTEs).
- 3 All the tools and plants required for this scope of work, except the Tools & Plants provided by BHEL are to be arranged by the contractor within the quoted rates. The list is suggestive in nature. Any additional T & P required to be arranged by the contractor.
- 4 IF ABOVE MENTIONED T&P ARE NOT DEPLOYED IN SPECIFIED TIME BHEL WILL CHARGE TO CONTRACTOR CURRENT MARKET RATE + 30 % OVERHEADS FOR NON AVAILABILITY OF T&P or levy a day wise penalty for non deployment for delayed deployment.
- 5 If work gets delayed due to non availability of T&P, BHEL reserves the right to get the work done at the risk and cost of contractor without prejudice to rights of BHEL as in GCC

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

B: INSPECTION, MEASURING AND TESTING EQUIPMENTS (IMTE's):

**INDICATIVE LIST OF IMTEs TO BE ARRANGED BY THE CONTRACTOR AT
HIS OWN COST**

SL NO	EQUIPMENT	QTY
1	TOTAL STATION	2 NO
2	THEODOLITE ONE SECOND ACCURACY	3 NO
3	AUTO LEVEL AND STAFF	2 NO
4	DUMPY LEVEL UPTO 350 MM	2 NO
5	AUTOMATIC COMPRESSION TESTING MACHINE(2000KN)	1 NO
6	CONSTRUCTION MATERIAL TEST EQUIPMENT	AS PER REQUIREMENT
7	CUBE MOULDS(150MM SIZE)	75 NOS
8	CONCRETE slump cone WITH TAMPING ROD	4 SET
9	SIEVES OF DIFFERENT SIZES FOR FINE & COARSE AGGREGATE TESTING (FULL SET)	1 SET
10	SIEVE SHAKER	1 NO
11	AGGREGATE IMPACT TEST MACHINE	AS PER REQUIREMENT
12	OVEN (CAPACITY 120LTR, RANGE – 250C)	1 NO
13	PHYSICAL BALANCE FOR LAB WORK	1 NO
14	MOISTURE CONTAINER(STEEL/ALUMINIUM)	5 NOS

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: T&Ps and MMEs to be deployed by Contractor

15	CORE CUTTER TEST APPARATUS	3 SETS
16	RAPID MOISTURE METER	2 NOS
17	VICAT APPARATUS WITH PLUNGERS FOR CEMENT TESTING	1 SET
18	CUBE MOULDS (70MM SIZE)	6 NOS

NOTES:

1. The above list specifies only major IMTEs (may not be complete to be deployed by the contractor). Contractor has to set up the field laboratory with facilities required for material & concrete testing. All additional / other IMTEs / measuring instruments etc. in good and safe working conditions which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price.
2. Other terms and conditions regarding above items please also refer clause for T&P/IMTEs).
3. All the tools and plants required for this scope of work, except the Tools & Plants provided by BHEL are to be arranged by the contractor within the quoted rates. The list is suggestive in nature. Any additional T & P required to be arranged by the contractor.
4. IF ABOVE MENTIONED T&P ARE NOT DEPLOYED IN SPECIFIED TIME BHEL WILL CHARGE TO CONTRACTOR CURRENT MARKET RATE + 30 % OVERHEADS FOR NON AVAILABILITY OF T&P or levy a day wise penalty for non deployment for delayed deployment.
5. If work gets delayed due to non availability of T&P, BHEL reserves the right to get the work done at the risk and cost of contractor without prejudice to rights of BHEL as in GCC

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

NA

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

TIME SCHEDULE

6.0 MOBILIZATION, TIME SCHEDULE, CONTRACT PERIOD AND GRACE PERIOD

6.1 INITIAL MOBILIZATION

After receipt of fax LOI, Contractor shall discuss with Project Manager / Construction Manager regarding initial mobilisation. Contractor shall mobilize necessary resources within 2 weeks of issue of fax letter of intent or as per the directive of Project Manager / Construction Manager. However, the actual date of start of work will be certified by BHEL Engineer after adequate mobilisation of materials, manpower and T&Ps by the contractor.

Such resources shall be progressively augmented to match the schedule of milestones and commissioning.

6.2 COMMENCEMENT OF CONTRACT PERIOD AND TENTATIVE SCHEDULE

6.3 Entire work as detailed in tender specification **shall be completed within 27 months from the scheduled date of start of work** as per the programs / milestones indicated by BHEL . Contractor has to mobilise adequate resources to meet BHEL's commitments to their customer as indicated from time to time. **The Contractor is expected to mobilize additional resources to expedite the for achieving of target / milestone and compressing the schedule by one month within the quoted rates as per Rate Schedule, at no extra cost to BHEL. In the event the contractor fails to respond to these requirements, BHEL shall take appropriate actions to meet customer's commitments in line with the provisions of General Conditions of Contract.**

6.4 **The various major mile stone dates for Extension Unit-3&4 to be achieved as per the current status of contract, are as below:**

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

MILE STONES	MONTHS
PART I	
Release of LOI / Mobilisation Clearance	Zero Date
Concrete Mix Design Sample submission	1 st week from zero date
Mobilisation at site	15 Days from zero date

FOUNDATION WORKS(from zero date):

Readiness for Concreting/Test Piling	4 th week
Pile Testing	8 th -13 th week
Start of Job Piles	8 th week
Boiler Foundations#3 release	5 th Month
RCC Chimney piling Completion	8 th Month
Dry Cooling Tower # 3 Foundation Release	7 th Month
Aux. Cooling Tower # 3 Completion	13 th Month
PHB Column #3 Foundations release	7 th Month
PHB Column#3 Foundations Completion	10 th Month
Fan Foundations # 3 release	12 th Month
Duct Foundations # 3 release	13 th Month

MAIN PLANT CIVIL WORKS (from zero date):

TG Deck#3 release	11 th Month
Release of CCR for Equip Erection	15 th Month
Condenser Erection Release	12 th Month
Turbine Erection Release	12 th Month
Readiness of Switchgear room for Ern	15 th Month
Cable vault release for Erection	12 th Month
Station Transformer foundation Completion	15 th Month
Generator Transformer foundation Completion	15 th Month

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – VI: Time Schedule

Switch Yard Foundation Completion	15 th Month
CWPH Erection Release	16 th Month
BOP Building completion	12 th - 17 th Month
Aux Building Completion	16 th - 23 rd Month
Finishing works completion # 3	23 th Month

Detailed L2 /L3 will be submitted for approval by the successful bidder within 2 weeks of issue of LOI .

Note : for # 4 there shall be a gap of 3 months

5.6 In case due to reasons not attributable to the contractor, the work gets delayed and scheduled completion gets extended, time extension will be granted by BHEL but in no case over run compensation will be payable.

5.7 The work under the scope of this contract is deemed to be completed in all respects, only when all the works are carried out as per satisfaction of BHEL. The decision of BHEL on completion date shall be final and binding on the contractor.

In order to meet above schedule in general, and any other intermediate targets set, to meet customer/ project schedule requirements, contractor shall arrange & augment all necessary resources from time to time on the instructions of BHEL.

This project is a fast track project. Customer is making all out efforts to advance the project schedule. No extra payment whatsoever shall be paid on this account.

5.8 **CONTRACT PERIOD**

The contract period for completion of entire work under scope from the “**START OF CONTRACT PERIOD**” as specified earlier shall be as follows:

1) MAIN CIVIL WORKS 27 MONTHS

5.9 **CONSEQUENCE OF DELAY**

It may be noted that in the event delay in completion is attributable to the contractor and leads to imposition of penalty by BHEL's client, BHEL will impose LD on the contractor as detailed elsewhere in the tender.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Terms of Payment

7.0 TERMS OF PAYMENT

- 7.1 The 'Engineer' will certify regarding the actual work executed in the measurement books and bills, which shall be accepted by the contractor in measurement book.
- 7.2 Contractor shall submit bills for the work completed under the specification, once in a month detailing work done during the month. The format for billing shall be approved by BHEL before raising invoices.
- 7.3 Subject to any deduction, which BHEL may be authorised to make under the contract, the contractor on the certificate of the Engineer at site be entitled for payment as explained hereunder.

7.3.1 Interest bearing recoverable advance : Applicable as per Clause No. 2.13 of GCC.

7.3.2. PROGRESSIVE PAYMENT ON PRORATA BASIS

The Contractor shall be paid monthly running bill to restricted to 95% of the value of the work actually executed on site provided the work has been executed to the satisfaction of the Engineer. The Engineer may after a measured bill allow and certify payment to the contractor on the basis of abstract measurement bill submitted by the contractor. From this amount applicable recoveries such as advances, security deposit, taxes etc. would be made.

- 7.3.3 The balance 5% thus remaining shall be treated as 'Retention Amount' and the same and Final Bill payment shall be released as per terms specified in the General Conditions of Contract.

7.4 CURRENCY OF PAYMENT

The Running/Final Bill Payments shall be made as follows subject to Syrian Bank / Reserve Bank of India guidelines:

- 1.) 50% of the Net Payable Amount – in SYRIAN POUNDS (SYP)
- 2.) 50% of the Net Payable Amount – in EURO

The EURO-SYP exchange rate for RAB payments shall be taken as declared by Central Syrian bank on the last day of the month for which the Running Account Bill has been raised.

The conversion rate for Euro to SYP shall be the "Buying rate" of Central Syrian bank.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

8.0 TAXES & DUTIES

8.1 The bidder shall quote their rates in EURO inclusive of all expenses, taxes/ duties etc. {applicable outside Syrian Arab Republic (SAR) and local taxes and duties in Syria Arab Republic}. The Contractor shall be responsible for paying any and all Taxes/ Duties etc. assessed on the Contractor, its Sub-Contractor and Suppliers or their respective employees.

8.2 The bidder shall quote their rates inclusive of workers insurance expenses for this work (with the Establishment of Social Insurance at Syria Arab Republic).

Custom clearance shall be done by the contractor as per procedures prevailing at Syria Arab Republic.

- a) PEEGT will pay the custom duties for all materials and equipment **of the project** and which ultimately become the property of Customer/ gets consumed in the project for one time, while the Contractor will bear the custom duties in case of his compulsion to import some of them for more than one time due to defect or damage or any other reason.
- b) The materials that are available locally, like Cement, reinforced steel and wood, the Contractor will bear all custom duties, expenses and fees, in case of importing from out Syrian Arab Republic.

8.3 The above mentioned taxes, duties and expenses that are levied inside Syria Arab Republic and which will be borne by the contractor, will be applied according to the valid laws in Syria Arab Republic

8.4 RATE SCHEDULE

8.4.1 Contractor shall fully understand description and scope of work before quoting. The scope of work and responsibility of the contractor as mentioned under these specification shall be covered within the quoted / finally accepted rates.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VIII: Taxes and Other Duties

8.4.2 The tenderer shall quote the prices/rates for entire scope of work as per the rate schedule only, in part II price bid (Original). **Conditional price bids or price bids with any deviation / clarification etc. are liable to be rejected. No cutting / erasing / over writing shall be done.**

8.4.3 Contractor's total quoted price as per rate schedule will be taken as tentative only. The contractor undertakes to carryout actual quantities against each item as per project requirement and accordingly the final contract price shall be adjusted on the basis of quantities actually erected at site and payments will also be regulated for the same. The contractor confirms that unit rates quoted above takes care of such variation during execution stage.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX : Any other Special requirements

9.1 The contractor shall comply with following towards Social Accountability;

- (a) The contractor shall not employ any employee less than 15 years of age in pursuant to ILO convention. If any child labour were found to have been engaged , the Contractor shall be levied with expenses of bearing his education expenditure which will include stipend to substantiate appropriate education or employ any other member of family enabling to bear the child education expenditure.
- (b) The contractor shall not engage Forced/Bonded Labour.
- (c) The contractor shall maintain Health & safety requirement as stipulated in the Contract
- (d) The Contractor shall abide by UN convention w.r.t Human Rights and shall be liable for Discrimination/Corporal punishment for failure in meeting with relevant requirements.
- (e) The Contractor shall abide the requirement of Contract Labour Syrian guidelines for working hours.
- (f) The Contractor shall abide by the statutory requirement of Minimum Wages as per Syrian Rules and Regulations.
- (g) The Contractor shall arrange potable drinking water to its employees & workers.
- (h) Social Insurance participation : The contractor shall be subject to the labour law valid in the Syrian Arab Republic Concerning employment and misemployment of Syrian workers. He shall also be subject to legislation concerning social insurance valid in SAR, especially those related to work accedents and illness of profession as a result of work nature. He shall bear all insurance payments relating to that and also all payments of social insurance arising from the execution of the contract.

9.2 The customer PEEGT and / or their Consultant may depute their representative for checking and supervision of important stages of work. The contractor shall be required to provide all facilities for inspection of works at no extra cost to BHEL. Any defect in quality of work or deviations from drawings / specifications pointed out during such inspection shall be made good by the contractor in the same way as if pointed out by the BHEL Engineer, without any cost implication to BHEL.

9.3 INSTRUCTIONS TO TENDERERS

- 9.3.1 The tenderers are advised to physically visit the site and fully acquaint themselves with site conditions, transportation routes, various distances and the fact that other

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX : Any other Special requirements

contractors would be working in this area their structures are to be protected. The material brought and stacked for construction should not make hindrance to other contractors. Necessary precaution and arrangements including sprinkling of water during work as acceptable to BHEL for safety & security for the above have to be made by the contractor. No claim will be entertained by BHEL on ground of lack of knowledge and the contractor's rates shall be deemed to have taken this into account.

9.3.2 The contractor, in the event of this work awarded to him, shall establish an office at site and keep posted an authorised, responsible officer with valid Power of Attorney for the purpose of the contract. Any order or instructions of the 'BHEL Engineer' or his duly authorised representative, communicated to the contractor's representative at site office will be deemed to have been communicated to the contractor at his legal address.

9.3.3 Tenderers should fulfill the following pre-requisites, as envisaged in Article 11 of 'The Uniform System of Contracts Law No. (51), decree no. 450 of Ministry of Finance, Syria Arab Republic:

- a) They must not be prohibited participation in tenders or from contracting with public entities, nor having a property under seizure in favour of public entities whether by way of reserve or executive seizure.
- b) They must be registered in the commercial register if he is a Syrian or treated like a Syrian.
- c) They must be registered in one of the Chambers of Commerce or Industry or Agriculture or Tourism - as the case may be - if he is a Syrian or treated like a Syrian.
- d) They must not be convicted of a crime or a disgraceful act unless he has been reinstated.
- e) They must not be an employee in a public entity or a member of an Executive Council of Local Administration specifically in the governorate to which he belongs.
- f) They must not own a factory or establishment or branch office in Israel, nor must he have subscription in any establishment or body in it. He must not be a party to

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX : Any other Special requirements

any contract for manufacture or assembly or license or technical assistance with any establishment or body or person in Israel. He must not practice any such activity in Israel whether in person or through a mediator. He must not have any contribution whatsoever to supporting Israel or its war effort.

Tenderers are required to submit a certificate confirming the above, on their letter head as per Format given in Annexure-V of this tender.

The documents required as above must not be more than three years old.

9.4 MATERIALS

9.4.1 The contractor shall, at his own expenses (Inclusive of Taxes), provide **all materials** required for the work.

- Reinforcement Steel will be TMT/High Yield Strength Deformed steel bars of Grade B500 conforming to BS 4449/ASTM 706 G60/ Grade Fe-500D bars or equivalent.
- Mild Steel & Medium tensile steel bars will conform to relevant international standards
- OPC (Grade 43)/Special cement anti sulphur type for below ground RCC works as per BOQ of approved manufacturer will preferably be used.
- The Contractor will have to submit their design mix for different grades of Concrete, specifically regarding slump and Water Cement ratio and Specific Gravity of Materials brought to site as analysed in the laboratories. The design shall be used upon absolute volume method and theoretical consumption of Cement shall be worked out on this basis. For other than above designated mix Concrete items, the coefficients for consumption of cement shall be adopted as per standard practice.

9.4.2 All stores and materials to be provided by the Contractor shall be of the best kind in conformity with the specifications laid down in the contract or as per relevant Indian/Syrian/International standard and the Contractor shall, if requested by the **BHEL** Engineer, furnish proof to the satisfaction of **BHEL** Engineer that the materials

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX : Any other Special requirements

so comply. Especially specific arrangements for storage of aggregates for concrete under shade and regular water sprinkling arrangement for washing/temperature control of the aggregates shall be made by the contractor.

9.4.3 The Contractor shall, at his own expense and without delay, supply to the BHEL Engineer samples of materials proposed to be used in the works. The BHEL Engineer shall within seven days of supply of samples or within such further period as he may require will intimate to the Contractor in writing, whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the BHEL Engineer for his approval fresh samples complying with the specifications laid down in the Contract. Any delay in approval of samples (original or fresh ones) shall not make the contractor eligible for any compensation.

9.4.4 The **BHEL** Engineer shall have full powers for removal of any or all of the materials brought to site by the Contractor which are not in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials, the Engineer shall be at liberty to have them removed by other means. The **BHEL** Engineer shall have full powers to procure other proper material to be substituted for rejected materials and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means. All costs, which may attend upon such removal and / or substitution shall be borne by the Contractor.

9.4.5 The Contractor shall indemnify BHEL, its representatives or employees against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties or other charges which may be payable in respect of any article or material or part thereof included in the Contract. In the event of any claim being made or action being brought against BHEL or any agent, servant or employee of BHEL in respect of any such matters as aforesaid, the Contractor shall immediately be notified thereof, provided that such indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by BHEL but the Contractor shall pay any royalties or other charges

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-IX : Any other Special requirements

payable in respect of any such use, the amount so paid being reimbursed to the Contractor only if the use was the result of any drawings / specifications issued after submission of the tender.

9.4.6 The **BHEL** Engineer shall be entitled to have tests carried out as specified in the Contract for any materials supplied by the Contractor other than those for which, as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which the Engineer may require for the purpose. If no tests are specified in the Contract, and such tests are required by the Engineer, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only. The cost of materials consumed in tests shall be borne by the Contractor in all cases except when otherwise provided.

9.4.7 In addition, the Contractor shall perform / submit at his own cost such tests / samples as may be required by the **BHEL** Engineer out of the materials used by the company except for the costs of materials used in such tests/ samples.

9.4.8 After acceptance of the Contract, if Contractor desires **BHEL** to supply any other materials, such material may be supplied by **BHEL**, if available, at rates to be fixed by the **BHEL** Engineer along with prevailing **BHEL**'s overhead charges (current rate of 30%). **BHEL** reserves the right not to issue any material. The non issue of such material will not entitle the Contractor for any compensation whatsoever either in time or in cost.

9.4.9 Material required for the works, whether brought by the Contractor or supplied by **BHEL**, shall be stored by the Contractor only at places approved by the Engineer. Storage and safe custody of material shall be the responsibility of the contractor.

9.4.10 **BHEL**'s officials concerned with the Contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the works, either on the Site or at factory or workshop or other place(s) where such materials are assembled, fabricated, manufactured or at any place (s) where these are lying or from which these are being obtained and the Contractor shall give such facilities as may be required for such inspection and examination.

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9.4.11 All materials brought to the Site shall become and remain the property of BHEL and shall not be removed off the Site without the prior written approval of the Engineer. But whenever the Works are finally completed and advance, if any, in respect of any such material is fully recovered, the Contractor shall at his own expense forthwith remove from the Site all surplus material originally supplied by him and upon such removal, the same shall re-vest in and become the property of the Contractor.

9.4.12 It shall be the responsibility of the contractor to obtain prior approval of BHEL, regarding suppliers, type of electrodes etc. before procurement of welding electrodes. On receipt of electrodes at site these shall be subjected to inspection and approval by BHEL. The contractor shall inform BHEL details regarding type of electrodes, batch No., date of expiry etc. and produce test certificate for each lot / batch with correlation of batch/ lot no. with respective test certificate. No electrode will be allowed to be used without valid test certificate.

9.4.13 All charges on account of tax and other duties on material obtained for the works from any source shall be borne by the contractor.

9.4.14 The Contractor shall maintain good stores for storing the cement brought by him. The flooring of the storage house, the clearance of cement bags from the side walls. Etc., shall be as per the instructions of the Engineer-in-charge.

9.4.15 The cement stores shall be open for supervision and verification by the Engineer-in-charge or his authorised representative by any time when the Engineer-in-charge feels the need to do so.

9.5 EXECUTION OF WORK

9.5.1 The work shall be executed in a workman like manner and to the entire satisfaction of the Engineer and as per technical specification issued with tender, relevant standards & specifications as applicable. In case of conflict, the decision of the **BHEL** Engineer shall be final & binding.

9.5.2 The BHEL Engineer will communicate or confirm his instructions to the Contractor in respect of the execution of the work in a "Work Site Order Book" maintained at his office and the Contractor shall visit this office daily and

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shall confirm receipt of such instructions by signing the relevant entries in this book. Such entries will rank as order or notices in writing within the intent and meaning of these conditions.

9.6 SETTING OUT

9.6.1 All the works shall be set out to the true lines, grades and elevation indicated on the drawing. The contractor shall be responsible to locate and set out the works. Only one grid reference line and bench mark shall be made available for setting out the works under the contract. This reference lines shall be used as datum for the works under the contract and the contractor has to establish for his work area at available points horizontal and vertical control points. The contractor shall inform BHEL well in advance of the times & places at which he wishes to do work in the area allotted to him so that suitable datum points established by him are checked by BHEL / Customer to enable the contractor to proceed with the works. Any work done without being properly located may be removed and / or dismantled by BHEL / Customer at contractor's expenses.

9.6.2 The contractor shall at his own expense take all proper and responsible precautions to preserve and maintain these datum marks to its true position In the event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may be deemed necessary placed by BHEL / Customer at contractor's expenses.

9.7 SITE DRAINAGE

9.7.1 All water including sub-soil water which may accumulate on the Site during the progress of the works or in trenches and excavations, shall be removed by the contractor from the Site to the satisfaction of the Engineer. It will also be responsibility of the contractor to de-water all the foundation pits, trenches with suitable de-watering methods like, pumping out, well point system etc. considering the depth of water table at plant site. All such expenditure on de-watering shall be deemed to be included in quoted rates.

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9.8 UNCOVERING AND MAKING GOOD

9.8.1 The Contractor shall uncover any part of the Works and/or make openings in or through the same as the Engineer may from time to time direct for his verification and shall reinstate and make good such part to the satisfaction of the Engineer. If any such part has been covered up or put out of view after being approved by the Engineer and is subsequently found on uncovering to be executed in accordance with the Contract, the expenses of uncovering and / or making opening in or through, reinstating and making good the same shall be borne by BHEL. In any other case all such expenses shall be borne by the Contractor.

9.9 DISCREPANCIES AND ADJUSTMENT OF ERRORS

9.9.1 The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawings and figures dimensions in preference to scale and special conditions in preference to general conditions.

9.9.2 In case of discrepancies between schedule of quantities, the specification and / or the drawings, the following order of preference shall be observed.

- (a) Description in schedule of quantities.
- (b) Special conditions
- (c) Drawings
- (d) Technical Specifications
- (e) General conditions of contract

If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer shall be the deciding authority with regard to the document.

9.9.3 Any error in description, quantity in schedule of quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the

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whole or any part of the works comprised therein according to the drawings and specifications or from any of his obligations under the contract.

9.9.4 If neither drawing nor specification contain any mention of minor details of construction which in the opinion of the Engineer whose decision shall be final and conclusive, are reasonable and obviously and fairly intended for satisfactory completion of work, such details shall be provided by the contractor without any extra cost, as if they were specially mentioned and shall be deemed to be included in the **scope**.

9.10 MATERIAL OBTAINED FROM EXCAVATION

9.10.1 Materials of any kind obtained from excavation on the Site shall remain the property of BHEL / its client and shall be disposed of as the Engineer may direct, at no extra cost.

9.11 TREASURE , TROVE , FOSSILS etc.

9.11.1 All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site shall be the absolute property of BHEL / BHEL's client and the Contractor shall take reasonable precautions to prevent his workmen or any other person from removing or damaging any such article or thing, shall immediately upon discovery thereof and before removal acquaint the Engineer with such discovery and carryout the Engineer's directions as to the disposal of the same.

9.12 PROTECTION OF WORKS

9.12.1 Trees designated by the Engineer shall be protected from damage during the course of the Works and earth level within 1 meter of each such tree shall not be charged. Where necessary, such trees shall be protected by providing temporary fencing.

9.12.2 The contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary or required by the Engineer for

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the protection of the Works or for the safety and convenience of those employed on the Works or the public.

9.12.3 The contractor shall have total responsibility for protecting his works till it is finally taken over by the Engineer. No claim will be entertained by the Engineer for any damage or loss to the contractor's works and the contractor shall be responsible for the complete restoration of the damaged works to its original condition to comply with the specifications and drawings. Should any such damage to the contractor's works occur because of other party not under his supervision or control, the contractor shall make his claim directly with the party concerned. The contractor shall not cause any delay in the repair of such damaged works because of any delay in the resolution of such disputes. The contractor shall proceed to repair the work immediately and no cause thereof will be assigned pending resolution of such disputes.

9.13 RECORD FOR MATERIALS CONSUMED

9.13.1 The contractor shall maintain and furnish to the Engineer the record of materials consumed in the works for each activity. The statement showing the theoretical vis-à-vis actual consumption of specified materials, such as structural /reinforcement steel, cement, bitumen, lead, paint etc., shall be enclosed along with the running bills submitted by the contractor. Contractor has also to furnish the test results of the concrete cubes, bricks, stone aggregates and other materials used in the work as per IS specifications.

9.14 PROTECTION OF EMBEDMENTS, BOLTS ETC.

9.14.1 The contractor shall ensure proper protection to the satisfaction of the Engineer, of all bolts, inserts, embedments etc. from weather etc/ by greasing, rapping them with gunny bags or canvas or by any other means as directed by Engineer. Cost of such protections shall be deemed to be included in the rates quoted for the item.

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9.15 CLEARANCE OF SITE AND REPAIRS.

9.15.1 Contractor has to clear the site / area where mechanical and electrical erection work is to be commenced / or in progress. The contractor shall remove construction materials and equipment lying in the vicinity and causing obstruction in the erection work within 24 hrs. notice. In case, he fails to clear the site, this will be done at his risk & cost by BHEL.

9.16 QUALITY ASSURANCE

The contractor has to establish / arrange at site the field testing facilities for testing of civil construction materials and concrete cubes for ensuring the proper quality, grade and strength of the materials used in the construction in line with approved field quality check list of BHEL/ its client. Contractor has to submit detailed report for testing of all material used etc. All testing shall be done as per IS/BS/Syrian/ASTM/International code specifications/ BHEL's quality plan. If further test is required by the engineer to be carried from outside laboratory, the cost of the same shall be borne by the contractor.

9.17 COMPLETION OF WORK

9.17.1 The works shall be completed to the entire satisfaction of the Engineer and in accordance with the completion schedule as specified in the Contract, and all unused stores and materials, tools, plant, equipment, temporary buildings, site office, labour hutments and other things shall be removed and the site and work cleared of rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the Engineer at the Contractor's expenses.

9.17.2 BHEL shall have power to take over from the Contractor from time to time such sections of the work as have been completed to the satisfaction of the Engineer. Such work however shall not be treated as have been completed until the extra works are executed to the satisfaction of Engineer. The Guarantee period shall commence only after handing over of the entire works.

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9.17.3 The Engineer shall certify to the contractor the date on which the work is completed and the date thereof.

9.18 METHOD OF MEASUREMENT

9.18.1 Method of measurements if not specified in the tender, shall be as per relevant IS Codes / Syrian codes/International Codes.

9.19 DEVIATION

9.19.1 The Contractor shall not make any alteration in, addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Engineer in writing and incorporated in the Contract.

9.19.2 The Engineer may deviate, either by way of addition or deduction, from the work so described, provided that the Contract sum be not thereby varied on the whole by more than the percentage set out in the tender documents. The value of all additions and deductions shall be added to or deducted from the Contract sum. (Whenever the Engineer intends to exercise such a right his intentions shall specify the deviations which are to be made, the lumpsum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the (entire contract). Any objection by the contractor to any matter concerning the order shall be notified by him in writing to the Engineer within seven days from the date of such order, but under no circumstances shall the work be stopped (unless so ordered by the Engineer) owing to differences or controversy that may arise from such an objection. In the absence of such a notification of objection by the Contractor, he will be deemed to have accepted the order and the conditions stated therein.

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9.20 VALUATION OF DEVIATIONS

Rates for deviated items or new items of work shall be as follows :

- 9.20.1 If the rates for the additional, altered or substituted work are specified in the Contract for the work, the Contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the Contract for the work.
- 9.20.2 If the rates for the additional, altered or substituted work are not specifically provided in the Contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the Contract for the work.
- 9.20.3 If the rates for the altered, additional or substituted work cannot be determined in the manner specified in above clauses the rate for such part or parts will be determined by the Engineer on the basis of prevailing market rates when the work was done and the decision given in this behalf shall be final and binding on the Contractor. Rate analysis will be worked on Indian (CPWD)/International Standard manual of rate analysis as guidance.
- 9.20.4 If the rates for the altered, additional or substituted work cannot be determined in the manner specified in above clauses , then the contractor shall within 7 days of the date of receipt of order to carry out the work inform the Engineer of the rate at which it is his intention or charge for such class of work, supported by analysis of the rate or rates claimed, and the Engineer shall determine the rate or rates on the basis of prevailing market rates and pay the Contractor accordingly. However, the Engineer, by notice in writing, will be at liberty to cancel his order to carryout such class of work and arrange to carry it out in such manner as he may consider advisable. But under no circumstance the Contractor shall suspend the work on the plea of non-settlement of rates falling under the clause or claim any compensation on that account. Elements of profit, overheads, supervision and establishment charges will be taken as 15% over direct cost.

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10.1 COMPLIANCE TO REGULATIONS AND BYELAWS

10.1.1 Syrian laws and regulations: The contractor shall undertake to respect the regulations, laws and provisions valid in the Syria Arab Republic.

10.1.2 Legal references: "Unified Contracts Regulations" issued by law no. /51/ of 2004 and Book of General Conditions issued by decree no. /450/ of 2004 will be referred to for all conditions not stipulated in this contract and its annexures. In case all these texts are not sufficient, the Syrian Law will be considered the sole reference for this contract and for any dispute arising in connection with the execution of it.

10.1.3 **The Contract shall be governed by the applicable Laws of Syrian Govt. and the bidders to ensure considering latest Syrians Laws before quoting.** The Contractor shall undertake to respect the regulations, laws and provisions valid in the Syrian Arab Republic. The Legislation valid in Syrian Arab Republic shall be considered the sole legal reference to be applied for all what is not stipulated in the specifications of this NIT.

10.1.4 The Contractor shall conform to the provisions of any statute relating to the work and regulations and bylaws of any local authority and of any water and lighting Companies or Undertaking with whose system the work is proposed to be connected. He shall, before making any variation from the drawings or the specifications that may be necessitated for such connections give the Engineer, notice specifying the variation proposed to be made and the reasons therefore and shall not carryout any such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

10.1.5 The Contractor shall abide by "The Uniform System of Contracts Law No. (51) with decree no. 450 and decree no. 15 for 2001, General Notice of the Uniform system of Contracts, book of General Conditions for The Uniform System of Contract and its time to time amendments and any other laws applicable in Syria by Syrian Arab Republic, Ministry of finance". The copy of the same can be provided to bidder against specific request to

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BHEL at the address given in this NIT.

10.1.6 The Contractor shall ensure conformance in all respects with the provisions of all state and local laws, regulations or other laws in force in Syria or elsewhere including all regulations and by-laws of any local or other duly constituted authority within Syria or elsewhere which may be applicable to the performance of the Contract and the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works or any Temporary Works (which are herein referred to as "Laws"), and shall give all notices and pay all fees required to be given or paid thereby and shall keep BHEL and/ or its Customer (M/s PEEGT) indemnified against all penalties and liability of any kind for breach of any of the same.

10.1.7 The Contractor shall comply with all applicable Syria Government's safety and sanitary laws, transportation rules, regulations and ordinances, as well as the established safety rules and practices of BHEL's Customer (M/s PEEGT). The Contractor shall also provide insurance cover for his workmen throughout the contract period, under prevailing local Syrian Laws.

10.1.8 Temporary admission and temporary imports, if required, shall be done as per Article /18/ of PEEGT contract no. 480/EXT/PEEGT with BHEL.

10.2 FACILITIES TO BE PROVIDED BY BHEL / CONTRACTOR

10.2.1 BHEL shall provide free of charge limited open space for office and store as and where made available by its customer. It is the responsibility of the contractor to construct sheds, provide all utilities as a part of his scope of work.

Similarly , limited open space will be provided to the contractor, as and where made available by its customer, for building labour hutments and it will be the responsibility of the contractor to construct sheds, provide all utilities as a part of his scope of work.

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10.2.2 Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical facilities etc. as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him.

10.2.3 **Construction power, on chargeable basis, for Civil Works will be given at a nearest point by BHEL, if required by the contractor.** The indicative charge for Construction Power shall be SYP 4.0/kwh. However, the actual charges and usage conditions shall be subject to change as per customer (PEEGT) instructions. In the initial stages , the Contractor shall have to deploy the DG sets for carrying out the tender works. Energy Meter for electricity will have to be provided by the Contractor at his own cost. Further distribution of power / extension to the required point shall be done by contractor at his cost. All wiring must comply with local regulations and will be subject to Engineer's inspection and approval before connecting supply..

10.2.4 Provision of distribution lines of power from the central points to the required place with proper distribution boards observing the safety rules laid down by the authorities of the state shall be done by the contractor, supplying all the materials like cables, distribution board, switch boards, TPN, CBS, ELCBS/ MCCBS / Copper / Brass clamps, copper conductor, change over switches pipes etc. at his own cost. If any failure is caused in supply of the power and water, it is the responsibility of the contractor to make alternate arrangements at his cost. The contractor shall adjust his working shift / hours accordingly and deploy additional manpower if necessary so as to achieve the targets.

10.2.5 In case of power cuts / load shedding no compensation for idle labour or extension of time for completion of work will be given to contractor.

10.2.6 Adequate lighting facilities such as flood lamps, hand lamps and area lighting shall be arranged by the contractor at the site of construction, contractor's material storage area etc. within finally accepted rates.

10.2.7 No claim for damages will be entertained by the Company on account of interruptions of water supply or limitation of quantity of water as aforesaid or on account of the water

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so taken being not fit for construction purposes or on any other account in connection with such water supply.

10.2.8 **CONSTRUCTION WATER AND POTABLE WATER SOURCES SHALL BE GIVEN FREE OF COST AT A SINGLE LOCATION. Water has to be distributed by the Contractor at his own cost.** Contractor to satisfy himself that the water drawn by him is fit for construction / consumption and adequately treat such water at his cost when it is not found fit for the said purposes. Water Storage tanks of adequate capacity for construction purposes shall be constructed by the contractor at his own cost at specified location/locations for round the clock smooth execution of civil works.

10.2.9 The Contractor shall during the progress of the work, provide, erect and maintain at his own expenses all necessary temporary workshops, stores, consumables, offices, etc. required for the proper and efficient execution of the work. The planning, setting and erection of these buildings shall have the approval of the Engineer and the Contractor shall at all times keep them tidy and in a clean and sanitary condition to the entire satisfaction of the Engineer.

10.2.10 On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, same will be got done by the Engineer and expenses incurred shall be recovered from the contractor along with prevailing overhead. The decision of BHEL Engineer in this regard shall be final.

10.2.11 In case contractor is from India, BHEL will help in providing a letter (or arrange invitation letter from customer) for issuance of Visa for the persons of contractors by Syrian embassy. **However arrangement of Visa and its Fee etc shall be coordinated by contractors themselves (or their agents).**

10.2.12 All custom Formalities for taking **their** materials to Syria for this project and further taking it out from Syria after completion of work shall be arranged/completed by contractors (or their authorized representative)

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10.2.13 Other than Syrian Contractors can also work independently in Syria but shall get registered and shall open a branch/temporary office in Syria before start of their works. In case of JV, the subcontractor shall be Syrian and the foreign company should not have direct operations in Syria.

10.3 PRICE VARIATION

Prices shall remain firm throughout the contract period, including extended period, if any.

10.4 LIQUIDATED DAMAGES(LD)

The Contractor, for delay in completion of work execution contracted upon, shall bear a penalty of delay according to the following percentages even if it does not cause any harm for PEEGT/ BHEL. No intimation/review for such penalty shall be required.

- a) 0.2% (two per thousand) of the total value of the work for each week of delay of the first five weeks.
- b) 0.5% (five per thousand) of the total value of the work for each week of delay of the five weeks following the weeks subject of paragraph a).
- c) 1% (one per cent) of the total value of the work for each week of delay of the weeks following the weeks, subject of paragraph b).

The partial delay per week will be calculated on the basis of the number of days of delay divided by seven. The ceiling of the total penalty of delay for the work will not exceed 20% (Twenty Per Cent) of the total executed contract value. The delay after the completion period as per Clause 5.8 for respective parts (sub parts) shall be considered for this clause.

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10.5 OTHERS

- 10.5.1 Bidder's selection is subject to approval of BHEL's customer for this work i.e M/s PEEGT
- 10.5.2 The **Contractor shall guarantee** all equipment, materials and works subject of his obligation for a period of 12 months from the date of acceptance of work completion. The guarantee includes the supply of all pieces and parts that are impaired or damaged as a result of bad manufacturing, designing or execution as well as the abnormal wearing away during this period, free of charge. A new guarantee period equaling the same previous guarantee period, concerning the replaced pieces and parts shall be valid and shall start from the date of replacement/rectification. If an unseen defect hidden by the contractor is discovered after the end of guarantee period, the guarantee shall remain valid for one year from the date of discovering the defect or knowing it.

10.5.3 The responsibility toward others : The contractor will bear the responsibility of all damages which hurt others due to the execution of the contract works, and he is obliged to pay compensation of these damages according to the laws and regulations valid in Syrian Arab Republic. Where the damages have occurred, BHEL has the right to recourse upon him for any consequent obligations through clearing or any other procedure.

10.6 SECURITY DEPOSIT (SD)

- 10.6.1 The contractor shall submit Security Deposit in Euros within 15 days from the date of issue of LOI as per the General Conditions of Contract (GCC). For calculation purpose, SD as per GCC will be worked out in Euros based on the SBI TT selling rate prevailing on the date of technical bid opening. For conversion of any amount in this tender/contract from one currency to the other currency, wherever required, exchange rates as applicable on the date of technical bid opening shall be considered.
- 10.6.2 In case the contractor opts to furnish Bank Guarantee as a part of Security Deposit, the BG shall be issued as per the Performa enclosed in this tender and also that the BG should be issued preferably through any of the Schedule Banks in India. The BG may also be accepted from a Foreign Bank at the sole discretion of BHEL, provided the BG is duly endorsed by any of the Indian Schedule Banks.

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RATE SCHEDULE CUM BILL OF QUANTITIES

Construction of all the Civil, Structural & Architectural works in Main Plant area, Balance of Plant related buildings and foundations including RCC Piling for 2 x 200 MW Tishreen Power Plant Extension Project, Tishreen, Syria".

TENDER NO. BHEL/NR/SC/T/ISHREEN-3&4/ MAIN CIVIL /760

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
BILL OF QUANTITIES (BOQ) OF GENERAL CIVIL, STRUCTURAL & ARCHITECTURAL WORKS EXCEPT CHIMNEY								
100	EARTH WORK IN EXCAVATION, BACKFILLING AND DISPOSAL INCLUDING NECESSARY MEN/WOMEN, MATERIALS, EQUIPMENT, LOADING, TRANSPORTATION, UNLOADING, DEWATERING ETC AS PER SPECIFICATION, DRAWINGS AS PER RELEVANT SYRIAN/BS STANDARDS/SPECIFICATIONS APPROVED BY PEEGT/BHEL AND AS DIRECTED BY ENGINEER- IN-CHARGE FOR THE FOLLOWING.							
101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading/levelling of disposed materials etc all complete for following depths below ground level. (The payment for excavation under subheads below shall be made for the quantities excavated in that subhead only and each subhead includes lift upto ground level):							
a	Depth from ground level but not exceeding 2 m	CUM	92600	5000	97600			
b	Depth exceeding 2 m but not exceeding 4 m	CUM	72000		72000			
c	Depth exceeding 4 m but not exceeding 6 m	CUM	12500		12500			
102	Earth work in excavation in soft rock (rock without any recovery of excavated materials in the form of hard stone/boulder) including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading / levelling of disposed materials etc all complete for following depths below ground level. (The payment for excavation under subheads below shall be made for the quantities excavated in that subhead only and each subhead includes lift upto ground level):							
a	Depth from ground level but not exceeding 2 m	CUM	150		150			
b	Depth exceeding 2 m but not exceeding 4 m	CUM	1000		1000			
c	Depth exceeding 4 m but not exceeding 6 m	CUM	2000		2000			
103	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials from compulsorily excavated soil available within a lead upto 500m and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.							
a	Each layer compacted so as to achieve at least 95% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	10000		10000			
b	Each layer compacted so as to achieve at least 90% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	2500		2500			
c	Each layer compacted so as to achieve at least 85% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	3000		3000			
d	Each layer compacted so as to achieve at least 75% relative density in case of sandy soils as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	1250		1250			
104	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials directly from excavation and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.							
a	Each layer compacted so as to achieve at least 95% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM						
b	Each layer compacted so as to achieve at least 90% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	250		250			
c	Each layer compacted so as to achieve at least 85% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	200		200			
105	Extra over ST No. 101 to 103 for carriage of excavated earth/selected materials for every 1 km or part thereof beyond an initial lead of 500m.	CUM	90000	16335	106335			
106	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying borrowed soil, royalty (if any), watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.							
a	Each layer compacted so as to achieve at least 95% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	75000		75000			
b	Each layer compacted so as to achieve at least 90% maximum dry density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL.	CUM	21000		21000			
107	Supplying and filling sand upto any depth under floors, around foundations, plinths etc. in layers not exceeding 250 mm thickness and compacted so as to achieve at least 80% relative density as per relevant Syrian/BS Standards and/or approved by PEEGT/BHEL including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	2500		2500			
108	Filling in trenches, plinths, area paving and other underground structures with stone (63 mm down graded), in layers not exceeding 200 mm thickness including breaking of boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	7087		7087			
109	Filling in transformer pits etc. , with clean 40 mm nominal size stone aggregate etc. complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	125		125			
110	Bulldozing earth for grading of ground including removable of vegetation complete including disposal of debris upto 5 kms as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	1102		1102			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
					In figures	In figures	In words	IN EUROS
200	PROVIDING AND PLACING CONCRETE WORK INCLUDING LABOUR, MATERIALS, EQUIPMENT, HANDLING, BATCHING, TRANSPORTING, MIXING, PUMPING, PLACING, LEVELING, VIBRATING, COMPACTING, CURING, TESTING, CLEANING AND RENDERING THE EXPOSED SURFACE WITH CEMENT SAND MORTAR TO GIVE A SMOOTH AND EVEN SURFACE, PREPERATION OF SCHEME FOR CONCRETING, GETTING IT APPROVED BY ENGINEER, MAINTAINING AND SUBMITTING RECORDS OF CONCRETING (EXCLUDING COST OF CENTERING, SHUTTERING, CHEMICAL/MEMBRANE CURING AND REINFORCEMENT) ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/EQUIVALENT BS STANDARDS AND AS APPROVED BY PEEGT/BHEL FOR THE FOLLOWING:							
201	Providing and laying cement concrete of grade M7.5 (150mm Cube strength at 28 days) of standard mix 1:4:8 (1Cement: 4Sand: 8Coarse Aggregate) with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity), coarse sand and graded hard stone aggregate of 40 mm nominal size as mass concrete filling/levelling course etc at any level below finished floor level, any shape, position or thickness etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/ equivalent BS standards and/or as approved by PEEGT/BHEL.	CUM	1500		1500			
202	Providing and laying cement concrete of grade M10 (150mm Cube strength at 28 days) of standard mix 1:3:6 (1Cement: 3Sand: 6Coarse Aggregate) with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity), coarse sand and graded hard stone aggregate of 40 mm nominal size as PCC/lean concrete below Foundations/Plinth Beams, mud mat under foundation/floor/grade slab, etc at any level below finished floor level, any shape, position or thickness etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/ equivalent BS standards and/or as approved by PEEGT/BHEL.	CUM	6150		6150			
203	Providing and laying cement concrete of grade M20 (150mm Cube strength at 28 days) of standard mix 1:1.5:3 (1Cement: 1.5Sand: 3Coarse Aggregate) with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 40 mm nominal size as grade slabs, cable trenches, tunnels, under floors, paving, pipe encasing etc. at any level above/below finished floor level, any shape, position or thickness etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/ equivalent BS standards and/or as approved by PEEGT/BHEL.	CUM	3725		3725			
204	Providing and laying Design Mix cement concrete of grade M30 (150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer of approved make conforming to relevant BS standard to achieve required slump in concrete all complete as per specification & drawing and as approved by PEEGT/BHEL.	CUM	24850		24850			
205	Providing and laying Design Mix cement concrete of grade M30 (150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer of approved make conforming to relevant BS standard to achieve required slump in concrete all complete as per specification & drawing and as approved by PEEGT/BHEL.	CUM	3500		3500			
206	Providing and laying Design Mix cement concrete of grade M25 (150mm Cube strength at 28 days) as per Syrian code or C20/25 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer of approved make conforming to relevant BS standard to achieve required slump in concrete all complete as per specification & drawing and as approved by PEEGT/BHEL.	CUM	4000		4000			
207	Providing and laying Design Mix cement concrete of grade M30 (150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in Base Raft of T.G. Foundations, Machine foundations at all elevations below/above finished floor level except TG deck and top decks supported over vibration isolation system including addition of suitable plasticizer/ superplasticizer of approved make conforming to relevant BS standard to achieve a slump more than 125mm in concrete as per manufacturer's recommendation in any shape, position or thickness etc complete as per specification & drawing and as approved by PEEGT/BHEL.	CUM	5000		5000			
208	Providing and laying Design Mix cement concrete of grade M30 (150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in precast works like roof slabs/trench covers, fins, lintels, chajias, beams, columns, wall panels, facias etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transpoting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent precast units with M30 concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate (20/12.5/10 mm) all complete as per specification & drawing and as approved by PEEGT/BHEL.	CUM	1857		1857			
209	Providing and laying Design Mix cement concrete of grade M30 (150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in water retaining/conveying structures at any elevation below/above finished ground level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer of approved make conforming to relevant BS standard to achieve a slump more than 125 mm in concrete and conforming to limits of permeability as per as per specification all complete as per specification & drawing and as approved by PEEGT/BHEL.							
i)	Below Ground Level including providing with minimum two coats of bituminous painting of grade 65/25 @ 1.7 Kg/sqm for water/damp proofing conforming to relevant Syrian/BS standards and as approved by PEEGT/BHEL on soil face.	CUM	2473		2473			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
ii)	Above Ground Level	CUM	22		22			
210	Providing and laying Design Mix cement concrete of grade M35 (150mm Cube strength at 28 days) as per Syrian code or C30/37 as per BS8500 with moderate sulphate resisting cement (as per Syrian standard or BS standard of approved make & quantity) for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in top decks of all machine foundations supported on vibration isolation system (excluding supply and installation of vibration system) and top deck of TG foundation at all levels including addition of suitable plasticizer/superplasticizer of approved make conforming to relevant BS standard to achieve a slump more than 125 mm in concrete as per manufacturers recommendation, preparation of scheme for concreting, getting it approved by engineer, labour, materials, equipment, handling, batching, transporting, mixing, pumping, placing, leveling, vibrating, compacting, curing, testing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface, maintaining and submitting records of concreting, all complete as per specification, drawing and instructions of engineer, including UPV testing as directed by engineer in charge, rectification of the defects in concreting observed by ultra-sonic pulse velocity (UPV) testing by non shrink cement/epoxy grout (as approved) etc, but excluding formwork, staging, reinforcement, embedments and temperature control of concrete as per specification & drawing and as approved by PEEGT/BHEL. Payment terms - a) After casting 75% ; b) After receipt of ultrasonic test report - 25%.	Cum	1500		1500			
211	Extra over item 201 to 210 for using high sulphate resistant cement instead of moderate sulphate resistant cement.	Cum	5000		5000			
212	Extra over St. No. 205 to 210 for controlling of temperature of fresh concrete to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc., all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	1404		1404			
213	Extra over ST Nos. 205 to 209 for conducting UPV test for concrete at all levels including all equipments, making necessary arrangements, staging, submission of report etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	1000		1000			
214	Providing and encasing of structural steel member with concrete using coarse sand, nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately)							
i)	Cement concrete of grade M20 (150mm Cube strength at 28 days) of standard mix 1:1.5:3 (1Cement: 1.5Sand: 3Coarse Aggregate)	CUM	100		100			
ii)	Cement concrete of grade M25 (150mm Cube strength at 28 days) as per Syrian code or C20/25 as per BS8500	CUM	100		100			
215	Providing and laying screed concrete of grade M15 (150mm Cube strength at 28 days) of standard mix 1:2:4 (1Cement: 2Sand: 4Coarse Aggregate) using coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	533		533			
216	Providing and laying concrete of grade M15 (150mm Cube strength at 28 days) of standard mix 1:2:4 (1Cement: 2Sand: 4Coarse Aggregate) using coarse sand and graded hard stone aggregate of 20 mm nominal size in plinth protection, pipe encasing etc at any level above/below finished floor level, any shape, position or thickness all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/ equivalent BS standards and/or as approved by PEEGT/BHEL.	CUM	65		65			
217	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i)	Plain cement concrete of all grades	CUM	22		22			
ii)	Reinforced cement concrete of all grades	CUM	55		55			
218	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL but excluding cutting of reinforcement .	CUDM	700		700			
219	Extra over and above St No 218 for cutting of reinforcement , all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. Measurement shall be on the cross sectional area of reinforcement cut.	Sqcm	160		160			
220	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.	CUDM	25		25			
221	Providing and applying chemical/membrane curing compound of approved make where ever required as per manufacturer's specification and/or as approved by PEEGT/BHEL.	SQM	7500		7500			
300	SUPPLYING, FIXING AND REMOVING FORMWORK AT ANY ELEVATIONS FOR ALL STRUCTURES, POCKETS ETC., INCLUDING ALL LABOUR MATERIAL, SCAFFOLDINGS, CENTERING ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS & RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL FOR THE FOLLOWING:							
301	Supplying, fixing & removing fairface plywood form work with good quality water proof ply wood of required thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc. complete for exposed concrete works etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	53000		53000			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In figures	In words	IN EUROS
302	Supplying, fixing & removing fairface steel form work below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc. complete for exposed concrete works etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	26853		26853			
303	Supplying, fixing & removing fairface plywood form work with good quality water proof ply wood of required thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc. complete for all heights etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	24000		24000			
304	Supplying, fixing & removing fairface steel form work above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc. complete for all heights etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	2179		2179			
305	Supplying, fixing & removing fairface plywood formwork with good quality water proof ply wood of required thickness and smooth surface for TG superstructure-fairface (above TG raft level) etc. complete for all levels below & above finished floor level etc. including all staging design, drawing, providing with required supports, braces, walkways, struts, anchors etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	3155		3155			
306	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
a	Upto 150 mm depth	Each	50		50			
b	Pockets of depths more than 150mm and upto 300 mm depth	Each	75		75			
c	Pockets of depths more than 300mm and upto 600 mm depth	Each	200		200			
d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	200		200			
e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	30		30			
400	PROVIDING, STRAIGHTENING CUTTING, BENDING, PLACING IN POSITION AT ANY LEVEL, BINDING OF STEEL REINFORCEMENTS AND BINDING WIRE, LABOUR ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL FOR THE FOLLOWING:							
401	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements of diameter upto 12 mm of grade 250 as per BS:4482 in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	20		20			
402	Providing, straightening, cutting, bending, placing in position high yield strength steel reinforcements of grade B500B as per BS:4449 of diameter upto 32mm in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	4975		4975			
403	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements of diameter upto 12mm in blockwork including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	10		10			
404	Decoiling & Straightening reinforcement bars of grade B500 as per BS:4449 or Grade 250 as per BS:4482 for diameter upto 12mm for reinforcements supplied by BHEL including cost of labour, machine hiring, transportation to & from stores etc. for decoiling in required lengths all complete as per drawings, specifications, manufacturer's recommendations and/or as approved by PEEGT/BHEL.	MT	10		10			
500	PROVIDING, LAYING AND FIXING WATER PROOFING INCLUDING ALL LABOUR, MATERIAL, EQUIPMENT, HANDLING, MIXING, SCAFFOLDING, TRANSPORTING, TESTING ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING: (Contractor has to furnish a guarantee for material and workmanship for a minimum period of 20 years)							
502	Providing, laying & fixing light concrete over concrete roofs made of Borgani Sand and cement with minimum thickness of 80 mm with a minimum slope of 1:200 etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	11000		11000			
505	Providing, laying & fixing roof water proofing treatment using plastic paper (HDPE/Equivalent) of minimum thickness of 4mm etc. all complete including fixing, all materials, making groove in parapet wall, embedment in groove with Bitumen compound as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	11000		11000			
506	Providing, laying & fixing roof water proofing treatment using bitumen roofing (Aspal bitumen of suitable grade) of minimum 16mm thick, etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	11000		11000			
507	Providing & laying fine grained white gravel (minimum 5 mm thick) over Aspal bitumen layer for roof water proofing treatment all complete as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	11000		11000			
508	Providing, laying & fixing white roofing tiles of 5mm minimum thickness, etc. all complete for roof water proofing treatment as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	11000		11000			
509	Providing & laying three coats of bitumen painting and two layers of burlap for bathroom, toilet surface etc. all complete for proofing treatment as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	100		100			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY		RATE (IN EUROS)		AMOUNT
					In figures	In figures	In words	IN EUROS	
600	SUPPLYING, INSTALLATION, FILLING IN POSITIONS ETC. OF JOINT FILLER AND SEALING COMPOUND INCLUDING LABOUR, MATERIAL, EQUIPMENTS ETC. ALL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:								
601	Bitumin impregnated fibre board as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.								
	i) 12mm thick joints.	SQM	3		3				
	ii) 20mm thick joints.	SQM	13		13				
	iii) 25mm thick joints.	SQM	100		100				
	iv) 50mm thick joints.	SQM	26		26				
602	Hot applied bitumin sealing compound (Grade A) including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints at all levels including application of primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Kg	300		300				
603	Expansion joint - supplying & installation of pre-moulded joint filler in between equipment foundations, mat foundations, pile caps, walls, basement slabs etc. complete including labour, equipment and materials, sealing of joints including cost of sealing compound (polysulfide base sealant) etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for the following:								
	i) 25mm thick joints.	RM	500		500				
604	Expansion joint - supplying & installation of pre-moulded joint filler in between equipment foundations, mat foundations, pile caps, walls, basement slabs etc. complete including labour, equipment and materials, sealing of joints including cost of sealing compound (silicon base sealant) etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for the following:								
	i) 12mm thick joints.	RM	75		75				
	ii) 20mm thick joints.	RM	75		75				
700	PROVIDING, FABRICATING, TRANSPORTING, FIXING, ERECTING AND INSTALLING OF M.S. EMBEDMENTS AT ALL ELEVATIONS INCLUDING THE COST OF LABOUR, MATERIAL AND EQUIPMENT, SETTING MATERIAL IN CONCRETE, LAYOUT, SCAFFOLING, HANDLING AT SITE, CUTTING, FORMING, GRINDING, DRILLING, BOLTING, WELDING, RIVETTING, JOINTING, TESTING ETC. ALL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:								
701	Providing, fabricating, transporting, fixing, erecting and installing of Mild Steel Embedments, MS inserts, pipe sleeves, guide rails, angle pieces, foundation bolts, anchor bolts, rungs of various diameters, plates of dimensions as required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	300		300				
702	Same as above with BHEL supplied material free of cost including loading, transportation, unloading etc. all complete from BHEL store to plant site.	MT	25		25				
703	Providing, fabricating, transporting, fixing, erecting and installing of embedments, inserts, pipe sleeves, rails, guide rails angle pieces, anchor bolts of various diameters, plates of dimensions as required including cost of all labour, materials and equipment for fixing in position, scaffolding and setting in position, transportation from stores within the plant boundary to work spot, loading, unloading etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	125		125				
704	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation/anchor bolt assembly conforming to grade 1 of relevant Syrian/ equivalent BS code in concrete along with nuts, lock nuts (relevant Syrian/ equivalent BS code), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	57		57				
705	Supplying, fabricating, erecting and installing following items in concrete/blockwork for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.								
	i MS pipes of all diameters	Quintal	50		50				
	ii PVC pipes / conduits of all diameters	RM	50		50				
	iii UPVC pipes / conduits of all diameters	RM	50		50				
	iv Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below.								
	Upto 250 kg	Each	200		200				
	Beyond 250 Kg and upto 500 kg	Each	100		100				
	Beyond 500 Kg and upto 750 kg	Each	100		100				
	v Chemically fixed anchor fasteners of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:								
	Upto 250 kg	Each	100		100				
	Beyond 250 Kg and upto 500 kg	Each	50		50				
	Beyond 500 Kg and upto 750 kg	Each	50		50				
800	PROVIDING AND GROUTING OF STRUCTURES INCLUDING COST OF MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, TESTING, PERFORMING RELEVANT OPERATIONS, ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:								
801	Providing & grouting with cement slurry mix of approved ratio using pressure pump for water retaining concrete structures as per approved procedure including cost of nipples/ nozzles, cement, admixture, curing, pressure pumps, slurry agitator etc. all complete. Cost shall include fixing of nipples at minimum 500 mm centre to centre spacing, cutting of nipples after completing of grouting, making good of the nipple hole with appropriate non-shrink cement paste, water tightness test etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	22		22				

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (1 cement :1 sand) using non shrink admixture etc. all Complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	20		20			
803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	CUM	9		9			
804	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with ConbextraGP-1 or equivalent as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	32		32			
805	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 or equivalent as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	24		24			
900	PROVIDING, FITTING AND FIXING IN POSITION DOORS, WINDOWS, VENTILATORS, LOUVERS, ROOF VENTILATORS, ROLLING SHUTTERS, PARTIONS, FRAMING, KICK PLATES, STOPPERS ETC. COMPLETE AT ALL ELEVATION INCLUDING THE COST OF LABOUR, MATERIAL AND EQUIPMENT, LAYOUT, SCAFFOLING, HANDLING AT SITE, TESTING ETC. ALL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
901	Providing, fitting and fixing solid core flush door shutter as per relevant Syrian/BS standards and as approved by PEEGT/BHEL, 35 mm thick homogeneous water proof block board bonded with phenol formaldehyde synthetic resin conforming to relevant Syrian/BS standards and as approved by PEEGT/BHEL, 35X12 mm thick teak wood beading all around including preparation of working drawings, butt hinges, tower bolt, sliding bolt handles, knobs, door stoppers (all fitting shall be anodised aluminium color dyed), final synthetic paint over primer, screws etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	35		35			
902	Providing and fixing wooden frame made of best quality seasoned Canadian wood free from large or loose knots, cracks or other defects inclusive of sand paper smoothening, hold fasts, beading, primer including primer and finish painting / polishing with glossy finish laquer polish of high quality etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL with proper wood joinery, accurately set to required lines or levels and rigidly secured in place.	Cudm	1372		1372			
903	Providing, fitting and fixing panel door shutter with (35 mm thick, 150 mm wide vertical rail & 125 mm wide horizontal rail) Canadian wood shutter frame and (12 mm thick) interlocked panels of teakwood including beading, preparation of working drawings, godrej or equivalent make mortice lock with approved anodised fittings like door stopper,300mm long tower bolts,16x300mm long aldrops ,125mm long handles on both sides etc. brass butt hinges, sliding bolt ,knobs, (all fitting shall be anodised aluminium color dyed), screws, primer and finish painting / polishing with glossy finish laquer polish of high quality etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	28		28			
904	Providing and fixing hard wood frame made of approved quality seasoned wood free from large or loose knots, cracks or other defects inclusive of sand paper smoothening, hold fasts, beading, primer including final synthetic painting etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL with proper wood joinery, accurately set to required lines or levels and rigidly secured in place.	CUDM	455		455			
905	Providing and fixing steel single or double door shutters. Shutters shall be 45mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm c/c. Side, top, bottom edges of shutter shall be of pressed steel channels of 1.2mm thk voids to be filled with mineral wool (48 kg/cum density) including all fittings like tower bolts, handles, stoppers, aldrops etc. and painting with minimum 2 coats of synthetic enamel paint on primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	138		138			
906	Providing and fixing fire proof steel doors (single or double shutter) with panic devices shall be 45mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fittings, shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (64 kg/cum density) complete and shall be fire proof as per relevant Syrian/BS standards and as approved by PEEGT/BHEL, TAC requirements and as per specification. Minimum ratings shall be 2 Hrs.	SQM	115		115			
907	Providing and fixing anodised aluminium work of "Technal Type" of approved make for following with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make, anodised and electro color dyed to required shade (minimum anodic coating of grade AC15), fixed with rawl plugs, expansion fasteners, screws or with fixing clips, aluminium louvers, sliding/ fixed screens including security grills with necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-metallic protection etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	KG	19357		19357			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY		RATE (IN EUROS)		AMOUNT
					In figures	In figures	In words	IN EUROS	
	The work should include preparation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, with all fittings and fixtures (like tower bolts, concealed handles, door stopper with rubber shoes, 'L' drops, window stays etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/EPDM gasket, silicon sealant sealing, hermetically sealed double glazing in windows, ventilators, etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL (Glazing shall be paid separately).								
908	Providing and fixing of over head hydraulic door closers of approved make & quality all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	89			89			
909	Providing and fixing floor mounted Hydraulic door closer of approved make & quality all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	8			8			
910	Providing and fixing pressed steel frames fabricated from 1.4 mm thk gauge M.S sheet mortised, reinforced strikes, hold fasts, adjustable floor anchors, floor tiles/weather bars, painting with minimum 2 coats of synthetic enamel paint on primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	KG	1663			1663			
911	Providing and fixing in position rolling shutters of approved make, made of hot rolled double dipped galvanized steel laths or anodised aluminium strips interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs top cover, 3 coats of approved enamel paint etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL- Mechanically operated.	SQM	39			39			
912	Providing and fixing in position rolling shutters of approved make as per relevant Syrian/BS standards and as approved by PEEGT/BHEL, made of hot rolled double dipped galvanized steel laths or anodised aluminium strips interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs top cover, 3 coats of approved enamel paint etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL- Hand operated.	SQM	14			14			
913	Providing and fixing in position rolling shutters of approved make as per relevant Syrian/BS standards and as approved by PEEGT/BHEL, made of hot rolled double dipped galvanized steel laths/aluminium strips interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs top cover, 3 coats of approved enamel paint etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL- Electrically operated.	SQM	171			171			
914	Providing, fitting and fixing of glazing of superior (selected) quality, first grade class, at various elevations, where required, cleaning after fixing, gaskets, clips, hardware, with all labour and material etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.								
	i) 4 mm clear plain float glass	SQM	110			110			
	ii) 6 mm clear float glass	SQM	254			254			
	iii) 6 mm wired glass	SQM	637			637			
	iv) 6 mm thick polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges.	SQM	55			55			
	v) 4 mm ground glass	SQM	39			39			
	vi) Two nos. 6 mm thick clear toughened float glass hermetically sealed and separated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	83			83			
	vii) Two nos. 6 mm thick tinted toughened float glass hermetically sealed and separated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	28			28			
	viii) 6 mm thick toughened float glass	SQM	180			180			
	ix) One outer 6mm thick tinted heat-reflecting type float glass and one inner 6mm thick plain float glass hermetically sealed and separated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	441			441			
	x) 6 mm thick laminated glass	SQM	220			220			
915	Providing, fitting and fixing heavy duty minimum six lever mortised lock of godrej or equivalent make with handles or knobs to single and double leaf door (wooden/steel/aluminium) with duplicate set of keys and masterkeyed locks, openable from one side by the key and from the other side by the handle etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	47			47			
916	Providing and fixing PVC doors of sintex or equivalent make including all fitting & fixtures etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	88			88			
917	Supplying and fixing weather stripping of approved make and quality to doors etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	44			44			
1000	PROVIDING BLOCK WORKS IN CEMENT MORTAR IN WALLS, CHAMBERS ETC. INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, RAKING OUT JOINTS, CURING, SCAFFOLDING ETC. COMPLETE (EXCLUDING PLASTERING AND PAINTING) AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:								
1011	Providing and laying 350mm thick double wall block work in cement mortar 1:5 (1cement : 5 coarse sand) consisting of two layers of hollow concrete blocks 150mm thick each with 50mm air gap in between the layer for walls, chambers etc. at all heights, places and position above & below plinth level including raking out joints, curing, scaffolding, etc complete but excluding plastering and painting. Blocks should be factory made and of good quality with minimum crushing strength of 70 kg/cm2 etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standard and/or as approved by PEEGT/BHEL.	SQM	1500			1500			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
1012	Providing dovetail detailing in block works including anchoring of 2 nos.6mm reinforcement to columns at every fourth layer for double hollow concrete block walls etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	200		200			
1013	Providing and laying 200mm thick block work in cement mortar 1:5 (1cement : 5 coarse sand) for walls, chambers etc. at all heights, places and position above & below plinth level including raking out joints, curing, scaffolding, etc complete but excluding plastering and painting. Blocks should be factory made and of good quality with minimum crushing strength of 70 kg/cm2 etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standard and/or as approved by PEEGT/BHEL.	SQM	11525		11525			
1014	Providing dovetail detailing in block works including anchoring of 2 nos.6mm reinforcement to columns at every fourth layer for 200mm thick hollow concrete block walls etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	1500		1500			
1015	Providing and laying 150mm thick block work in cement mortar 1:5 (1cement : 5 coarse sand) for walls, chambers etc. at all heights, places and position above & below plinth level including raking out joints, curing, scaffolding, etc complete but excluding plastering and painting. Blocks should be factory made and of good quality with minimum crushing strength of 70 kg/cm2 etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standard and/or as approved by PEEGT/BHEL.	SQM	2425		2425			
1016	Providing dovetail detailing in block works including anchoring of 2 nos.6mm reinforcement to columns at every fourth layer for 100mm thick hollow concrete block walls etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	200		200			
1017	Providing, laying & fixing plastic sheet (HDPE/equivalent) of minimum thickness of 4mm etc. over blockwork with bitumen compound all complete including fixing, materials, wrapping over blockwork, complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	200		200			
1100	SUPPLYING, LAYING ETC. DAMP PROOF COURSE INCLUDING ALL MATERIALS LABOUR, SHUTTERING, CENTERING, CURING ETC., COMPLETE WITH THICKNESS AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1101	Providing Damp Proof Course 50mm thk. 1:1.5:3 concrete (10mm down aggregate) with 2% of approved admixture of water proofing compound. Hot bitumen of suitable grade @ 1.7kg/sqm shall be applied before & after the DPC etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	170		170			
1200	PROVIDING CEMENT MORTAR PLASTER/COAT INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ASSOCIATED OPERATIONS, SCAFFOLDING, CURING ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1201	Providing minimum 20mm thick plaster in multiple layers on concrete block walls, concrete walls, columns etc. in cement mortar 1:4 finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	15149		15149			
1202	Providing 12mm thick plaster on concrete block walls, concrete walls, columns etc. in cement mortar 1:4, finished to a smooth finish as per specification all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	2714		2714			
1204	Providing 12mm thick plaster in cement mortar 1:4 on walls, drains/culverts with a paste of neat cement @ 1kg/sqm and rubbed smooth with trowel etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	335		335			
1205	Providing "Tieroleit" dash coat on concrete block walls and projections for exterior finish over blockwork etc. including first coat of high cement content spray with trowel, curing, rough plaster of minimum thickness 15mm and final coat of pigmented white cement spray etc. all complete to give a permanent finish as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	17895		17895			
1206	Providing 6mm thick plaster on ceiling in cement mortar 1:3 finished to a smooth finish all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	10066		10066			
1207	Providing and making float coating (surface layer) with about 50mm thickness on walls, columns with 1:1:3(cement:powder:stone chips mortar) all complete to provide a permanent finish as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	418		418			
1208	Providing Plaster of Paris/white putty 2 mm thick punning over finished plaster surface and finished with smooth surface etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	10015		10015			
1209	Providing screed/grading plaster of average 20 mm thickness in ratio 1:4 nominal by volume including finishing smooth and even at all levels above or below grade level etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	6835		6835			
1210	Providing and making decorative interior plaster of heritage finish over existing plastered surface of all types and design on walls, ceilings, arcs, columns including finishing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	165		165			
1211	Forming groove of uniform size from 12X12 mm upto 20X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battens, repair of the edges of plaster panel and finishing the groove etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	110		110			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
1212	Providing drip course on plastered surface at all elevations for all type of work such as chajjas, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	257		257			
1213	Providing and laying encasement to box type steel beams at all levels with lath plaster 50 mm nominal thickness with cement plaster (1:4) over galvanised hexagonal chicken wire of 0.9 mm wire diameter and 19 mm mesh size as per relevant Syrian/BS standards and as approved by PEEGT/BHEL including all labour, materials, equipment, handling, transporting, mixing, placing, leveling, curing and cleaning, finishing the exposed surfaces etc including centering and shuttering etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.(rate shall include the cost of GI chicken wire mesh)	SQM	1813		1813			
1300	PROVIDING AND APPLYING FINISHES, PAINTING TO CONCRETE, PLASTERED SURFACES, BLOCK WORK, ETC. WITH SURFACE PREPARATION INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ALL ASSOCIATED OPERATIONS ETC. COMPLETE WITH PAINTS OF REPUTED BRAND LIKE HEMPEL/BURGER/ASIAN PAINTS OR EQUIVALENT APPROVED BY PEEGT/BHEL) AS PER DRAWINGS, SPECIFICATIONS AND/OR APPROVED BY PEEGT/BHEL FOR THE FOLLOWING:							
1301	Providing and applying two or more coats of oil bound destemper (Oil based) of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface including plaster of paris punning of minimum 2 mm etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	901		901			
1302	Providing and applying two or more coats of acrylic emulsion paint of approved brand like Hempel/equivalent, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface or plaster of paris punning etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	12282		12282			
1303	Providing and applying two or more coats of chemical resistant chlorinated rubber paint of approved brand and colour on horizontal surface, vertical surface & ceiling including preparation of surface to receive paint, over one coat of bitumen primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	50		50			
1304	Providing and applying two or more coats of chemical resistant epoxy paint of approved brand and colour on horizontal surface, vertical surface & ceiling including preparation of surface to receive paint, over one coat of bitumen primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	50		50			
1305	Providing and applying two or more coats of cement paint (for internal use) of approved brand and manufacture to give an even shade including priming coat etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	416		416			
1306	Providing and applying two or more coats of acid/alkali resistant paint of approved brand and colour to floors, walls and ceiling including preparation of surface to receive paint, providing and applying bitumen primer at all heights above or below grade level etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	1068		1068			
1307	Providing and applying two or more coats of oil resistant paints epoxy based and ammine cured, 150 micron over primer of approved grade and manufacture to give an even shade etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	408		408			
1308	Providing and applying Resin bonded granular textured finish, for external applications shall consist of granular textured paint/ Synthetic plaster composed of synthetic fibre and petroleum based chemical similar to RENOVO or equivalent of approved natural color/shade applied on cured and dried plaster surface. The final finish shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with poly sulfide sealant of matching color and shade etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.The make shall be approved by PEEGT/BHEL	SQM	3760		3760			
1309	Providing and applying two or more coats of water proof cement paint of approved make and color on exterior surface at all heights to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface or plaster of paris punning etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	2553		2553			
1310	Providing and applying two or more coats of weather paint of Asian make or approved equivalent make and color on exterior surface at all heights etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	230		230			
1400	FLOOR, WALL & CEILING FINISHES, DADO AND SKIRTING INCLUDING ALL MATERIALS, LABOUR, CURING, POLISHING, FINISHING, EXPANSION JOINTS, GROOVES, ETC. COMPLETE IN ALL RESPECTS AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1401	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick uniform graded treated iron particles in flooring. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	20000		20000			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
1402	Providing and laying flooring & skirting of minimum 7 mm thick vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer having water absorption less than 0.08%, complete including underbed of minimum 20mm thickness cement mortar 1:3 with neat cement slurry etc. all complete to make a total flooring thickness of 50mm as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards (EN13006/EN176) and/or as approved by PEEGT/BHEL. of following minimum thickness.	SQM	477		477			
1403	Providing & fixing Acid & Alkali resistant Tiles of minimum thickness 20 mm thick in flooring/Dado . The tiles shall be abrasion resistant and durable and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar durable, strong and chemical resistant epoxy mortar including pointing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	300		300			
1404	Providing & fixing Acid & Alkali resistant Tiles of minimum thickness 38 mm thick in flooring/Dado . The tiles shall be abrasion resistant and durable. The 6 mm thick potassium silicate mortar used for setting or for under bed shall be durable strong and chemical resistant epoxy mortar including pointing etc. after laying bitumen primer and 12 mm thick bitumastic etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	50		50			
1405	Providing and laying of PVC flooring & skirting of minimum thickness 3 mm anti static flexible tiles foxed with adhesive etc. etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	310		310			
1406	Providing and fixing approved chequered concrete tiles of minimum thickness of 22mm including under layer of 28mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) with approved fixing materials etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	200		200			
1407	Providing and fixing of approved glazed ceramic tiles of approved color and design of approved size 200x300mm / 300x300mm in dado projecting 6mm uniformly from adjacent plaster or wall finish. The mix for underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry including pigments, curing etc all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. Tile shall be of very good quality and approved make by PEEGT/BHEL and of thickness not less than 5mm.	SQM	100		100			
1408	Providing and laying polished italian marble of minimum 18mm thickness in flooring, concrete staircases, skirting, window & door periphery over minimum 20 mm thick underbed of 1 part cement and 4 parts coarse sand by weight mixed with sufficient water to form a stiff workable mass. The marble stone slabs laid over under-bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, making corners, granite polishing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	4331		4331			
1409	Providing Italian marble stone of minimum 12mm thickness in skirting/window edge wall lining projecting minimum 6mm from adjacent plaster etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	200		200			
1410	Providing and laying White/Black Natanz polished Granite stone of approved color and texture of minimum 18 mm thk in flooring over under bed of minimum 20mm thickness of 1 part cement and 4 parts coarse sand by weight mixed with sufficient water to form a stiff workable mass. The granite stone slabs/tiles is laid over pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	1200		1200			
1411	Providing and laying White/Black Natanz polished Granite stone of approved color and texture of minimum 12 mm thk in skirting, facia, slab top and dado including pigments, curing, grinding, granite polishing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	102		102			
1412	Providing and laying Red Yazd polished Granite stone of approved color and texture of minimum 12 mm thk in skirting, facia, slab top and dado including pigments, curing, grinding, granite polishing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	41		41			
1413	Providing and laying minimum 10 mm thk non-skid fully vitrified tiles of make 'MARBONITE' or 'FERRASTONE of BOSS Profile limited' or equivalent over 30 mm thick underbed of 1 part cement and 3 parts coarse sand by weight mixed with sufficient water, etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. laid in pattern of following sizes							
i)	400X400 mm	SQM	152		152			
ii)	600X600 mm	SQM	1312		1312			
1414	Providing and laying granite stone slab of minimum 18 mm thickness single piece for wash basin slab, wall of black or approved colour with making corners, cutting and opening etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	29		29			
1415	Providing and fixing dividing strips in joints of cast in situ floorings at various elevations, finishing, all labour, material etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i)	Glass strips 40 mm wide and minimum 6 mm thick.	RM	3186		3186			
ii)	Aluminium strips 40 mm wide and minimum 3 mm thick	RM	1800		1800			
1416	Providing and laying 50 mm thick anti skid precast interlocking concrete pavers of approved shape including minimum 40 mm thick sand underbed etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	47		47			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In figures	In words	IN EUROS
1417	Providing and fixing removable type flooring system consisting of fire resistant particle board of size 600X600X35 mm with 0.05 mm thick aluminium foil lining at bottom and with 2 mm thick anti static PVC topping including proprietary floor supporting system complete etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	105		105			
1500	PROVIDING AND ERECTING ROOFING/SIDE CLADDING INCLUDING FLASHINGS (NO SEPERATE PAYMENT SHALL BE PAID FOR FLASHINGS), LAPS, SCAFFOLDING HOOKS, WASHERS, CORNER PIECES, ETC. COST OF ALL MATERIAL, LABOUR, EQUIPMENT, CLEATS, SHEETING RUNNER, RAILS MILD STEEL WIND TIES (HORIZONTAL/VERTICAL) AND ANY OTHER STEEL WORKS ETC. AT ANY LEVEL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1501	Design, supply & erection of permanent colour coated (hot dip) thermally insulated double skin sandwiched metal roofing of approved color for roof on Truss/Purlin comprising of profiled external & internal sheet of minimum 0.7 mm BMT (Bare Metal Thickness) permanently color coated steel having minimum yield strength of 350 Mpa with zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing etc. all complete. The exposed face of the external sheet shall be permanently colour coated with Polyfluro Vinyl Coating (PVF2) of minimum dry film thickness (DFT) 20 microns over suitable primer and should fulfil the durability conditions as per relevant BS standard and as approved by PEEGT/BHEL. Inner face of the external sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The exposed surface of the inner sheet shall be permanently colour coated with silicon modified polyester paint of minimum dry film thickness (DFT) 20 microns over suitable primer and should fulfil the durability conditions as per relevant BS codes and as approved by PEEGT/BHEL. Other face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The insulated sandwich metal roofing shall be designed for unsupported span of minimum 1500mm C/c spacing of purlins with special male/female side laps, covers, flashings and siphoning feature to seal completely and prevent leakage. Insulation to be paid separately	SQM	6500		6500			
1502	Providing and fixing insulation in sandwich metal roofing with resin bonded mineral wool of 50 mm nominal thickness conforming to relevant BS standard including glueing, supporting over wire mesh, wrapping in black polythene, tying fixing etc. complete and as approved by PEEGT/BHEL.	SQM	6500		6500			
1503	Providing and fixing insulation in sandwich metal roofing with polyurethane foam of required thickness to fill the gap between metal sheets as per relevant BS standard including glueing, tying fixing etc. complete and as approved by PEEGT/BHEL.	SQM	6500		6500			
1504	Designing, providing and fixing External sheet of Permanent colour coated metal cladding with high strength tensile steel sheet 0.7mm bare metal thickness having minimum yield strength 350 MPa and zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing etc. all complete. The exposed face of the sheet shall be permanently colour coated with Polyfluro Vinyl Coating (PVF2) of minimum dry film thickness (DFT) 20 microns over suitable primer. Inner face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The permanent colour coated sheet shall meet the general requirements as per relevant BS standard and as approved by PEEGT/BHEL. The complete sandwich sheeting should be designed as per BS standard for runner spacing of minimum 1300mmC/c spacing.	SQM	8184		8184			
1505	Designing, providing and fixing Inner sheet of Permanent colour coated metal cladding with troughed M.S. sheets of 0.7mm bare metal thickness having minimum yield strength 250 MPa and zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides of both sheets including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing, concealed clips (including sub-girts of size 50X50X50 mm manufactured out of 16G GI 'Z' shape) to connect the external sheet (without penetrating the external sheet) etc. all complete. The exposed surface of the sheet shall be permanently colour coated with silicon modified polyester paint of minimum dry film thickness (DFT) 20 microns over suitable primer. Other face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The permanent colour coated sheet shall as per relevant BS standard and as approved by PEEGT/BHEL. The sheet shall be fixed at the rate not more than 1500mm center to center to hold the insulation and external sheeting.	SQM	9250		9250			
1506	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to relevant BS standard and as approved by PEEGT/BHEL. Mineral wool insulation should be provided including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations	SQM	9250		9250			
1507	Providing and fixing 50 mm thick insulation of rockwool of density 48 KG/cum conforming to relevant Syrian/BS standards and as approved by PEEGT/BHEL including wrapping in black polythene black supported over weld mesh 75X75X1.6 MM dia to hold in position as per manufacturers recommendations, all labour, material, scaffolding, equipment etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	1294		1294			
1508	Providing and installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips, all labour, material, scaffolding, equipment etc (but excluding cost of insulation) all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	717		717			
1509	Providing and fixing non metal opaque PVC sheet similar to ONDEX roofing or equivalent including all fixing accessories, labour material, scaffolding etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	65		65			
1600	PROVIDING AND FIXING FALSE CEILING INCLUDING SUPPLY OF CEILING MATERIAL, WORKING LAYOUT DRAWINGS AND DETAILS, SUSPENSION SYSTEM AND ALL OTHER MATERIALS REQUIRED FOR THE WORK INCLUDING MAKING RECESS FOR LIGHT FIXTURES, ALUMINIUM DIFUSERS, FIRE ALARMS ETC., POLISHING/PAINTINGS, LABOUR ETC., ALL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In figures	In words	IN EUROS
1601	Providing and fixing glass fibre reinforced gypsum plaster board (GRG) ceiling (having gypsum core mixed with glass fibre) system consisting of metal supporting grid system forming panels of specified size, suspended from RCC slab/structural steel or catwalkway grid above with 4 mm (minimum) galvanised wires (rods) with special height adjustment clips, including preparation of working drawing, providing openings for AC ducts, return air grills, light fixtures etc (but excluding the cost of catwalkway grid) all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i)	12.5 mm thick GRG board with galvanised light gauge steel load bearing supporting GI frame and finished flat (Seamless).	SQM	52		52			
ii)	12.5 mm thick GRG board in tile of 600mmX600mm with double web design, galvanised steel with prepainted steel capping of approved shade and color, supporting Tee frame (24mmX38mm).	SQM	23		23			
1602	Providing and fixing permanently colour coated aluminium false ceiling of approved colour and Luxalon 84 C or approved equivalent with corrosion resistant aluminium alloy panels of minimum thickness 0.5mm including 50mm thick mineral wool insulation(density 48 kg/cum) conforming to relevant BS Standard bound in polythene bags on top of panels. Additional hangers and height adjustment clips, frames/supports for false ceiling shall be provided and provisions for return air grills, light fixtures, A.C. ducts etc all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	1500		1500			
1603	Providing & fixing suitable M.S. channel (minimum MC 75) grid @1200 c/c maximum s above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.(SUITABLE STRUCTURAL PLATFORM GRID MADE UP OF MS CHANNELS / BEAMS / ANGLES shall also be provided above the False Ceiling level for movement of personnel to facilitate maintenance (Materials for structural platform grid made up of Ms Channels/ Beams / Angles shall be paid under SI Item No 2301.)	SQM	1500		1500			
1700	PROVIDING AND FIXING RAIN WATER DOWN TAKE PIPES INCLUDING 2 COATS OF APPROVED PAINT OVER A PRIMARY COAT, ALL SPECIALS AND ACCESSORIES ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1701	GI down take pipes of following diameter.							
i)	100 mm dia	RM	25		25			
ii)	150 mm dia	RM	50		50			
iii)	200 mm dia	RM	35		35			
1702	Cast Iron down take pipes of following diameter.							
i)	100 mm dia	RM	75		75			
ii)	150 mm dia	RM	1200		1200			
iii)	200 mm dia	RM	150		150			
1703	High Density Polyethylene Corrugated down take pipes of following diameter.							
i)	100 mm dia	RM	11		11			
ii)	150 mm dia	RM	180		180			
iii)	200 mm dia	RM	23		23			
1704	Providing and fixing 20mm thick Glass Fibered Sectional Pipe Coverings for insulation of all concealed rainwater pipes above ceilings in office areas, all insulation shall be protected by a jacket and shall be secured in place by aluminium bands etc. all complete as per specifications and relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	112		112			
1800	PROVIDING MISCELLANEOUS ITEMS INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ALL ASSOCIATED OPERATIONS ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
1801	Providing and fixing PVC water stops 225mm wide, 6 mm thick all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	159		159			
1802	Supplying and installation of 25mm thick vibration damping, resilient pads around foundation of vibrating equipment and other locations as directed by the Engineer-in-charge including cost of all materials labour equipment etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	29		29			
1803	Providing 50mm thick premix carpet surfacing laid to slope in two layers 30mm and 20mm respectively with 12mm and down broken stone chips mixed with 80/100 grade bitumen @ 52 Kg/Cu.M including compaction and cost of all material, labour etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	599		599			
1804	Providing 50mm thick anticorrosive layer laid to slope consisting of compacted crushed stone screenings, fine gravel, clean sand or similar material as directed by the Engineer, mixed in hot asphalt 10% by volume and rolled or compacted complete as per drawings and specifications, below fuel oil tanks and at such other places etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	599		599			
1805	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including aluminium screws, rawl plugs etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	42		42			
1806	Providing, laying and fixing transformer rails including guide rails in concrete including joining of rails. Anchoring lugs etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	39		39			
1807	Providing and fixing weep holes in Drains consisting of 100 mm dia LDPE pipe sleeves along with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening along with 300 X 300 mm sq., 300 mm deep, 40 mm aggregates to cover fabric mesh mouth etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	2000		2000			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
1808	Laying of earthing mats/rods including transportation from yard stores, loading, unloading, cutting to length, welding etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	114		114			
1811	Providing and fixing GI rungs in concrete/brick walls at all elevations including zinc coating of minimum 900 g/sqm all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	KG	765		765			
1813	Providing and fixing LDPE pipes in cable duct banks, openings in RCC work at all elevations of following sizes including cutting, fixing and levelling in position etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
	i) 100 mm dia	RM	600		600			
	ii) 150 mm dia	RM	450		450			
	iii) 200 mm dia	RM	450		450			
1814	Providing and fixing galvanised corrugated sheets on structural steel structure at all elevations including cutting, fixing and levelling in position etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	2000		2000			
1815	Providing and fixing HDPE - polyethylene 4 mm thick concrete protection in reservoir with studs at all elevations including cutting, fixing and levelling in position etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. The liner shall be installed before casting of concrete.	SQM	2500		2500			
2000	SUPPLYING & ERECTING FENCING AND GATES INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ALL ASSOCIATED OPERATIONS ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
2001	Supplying and erecting in position 2.4 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75 mm and galvanised concertina. The diameter of the steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. GI barbed wire fencing at top of chain link fencing shall be provided with 4 stands of height of 600 mm including all accessories etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	759		759			
2002	Supplying and fixing G.I. barbed wire in fencing including G.I clips etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	3		3			
2003	Supply, fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, ball bearing arrangements, castor wheels, anti corrosive synthetic enamel painting over two coats of primer etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. with 600mm high GI barbed wire fencing at top etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	MT	4		4			
2100	PROVIDING WATER SUPPLY INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ALL ASSOCIATED OPERATIONS ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
2101	Providing and fixing in position tested heavy duty type chromium plated brass long neck bib cocks including sockets, union, nut etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for 15mm nominal bore.	Each	58		58			
2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for 15mm nominal bore.	Each	28		28			
2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for 25mm nominal bore.	Each	11		11			
2104	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for 50mm nominal bore .	Each	7		7			
2105	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. and clamps including cutting and making good the walls etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (internal work) 15 mm nominal bore.	RM	142		142			
2106	Providing and fixing GI pipes of class B-Medium complete with GI fittings a clamps including cutting and making good the walls etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (internal work) 20 mm nominal bore.	RM	110		110			
2107	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. and clamps including cutting and making good the walls etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (internal work) 25 mm nominal bore (N.B).	RM	110		110			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
					In figures	In figures	In words	IN EUROS
2108	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. including trenching & refilling anti-corrosive paint etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (external work) 15mm nominal bore (N.B).	RM	71		71			
2109	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. including trenching & refilling anti-corrosive paint etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (external work) 20mm nominal bore (N.B).	RM	71		71			
2110	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. including trenching & refilling anti-corrosive paint etc. all complete as per drawings, specifications, and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (external work) 25mm nominal bore (N.B).	RM	71		71			
2111	Providing and fixing GI pipes of class B-Medium complete with GI sockets, unions, elbows, tees, nipples etc. including trenching & refilling anti-corrosive paint etc. all complete as per drawings, specifications and of Grohe/Equivalent make and as per relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. (external work) 50mm nominal bore (N.B).	RM	71		71			
2112	Providing and fixing of 5thk float glass mirror of approved size and make from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL. with CP screws as per specification.	Each	46		46			
2113	Providing and fixing 610mmx127mmx6mm thk clear glass with C.P Guard rails and mounted on C.P. brackets etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	46		46			
2114	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod towel rail (600X20mm) with C.P. brackets etc. including fittings of Grohe/equivalent, all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	12		12			
2115	Providing and fixing C.P. soap holder mounted with C.P. screws etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	46		46			
2116	Providing and fixing C.P. liquid soap dispenser. Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	46		46			
2117	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	13		13			
2118	Providing and fixing chromium plated brass shower rose with 15 or 20 mm inlet etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	6		6			
2119	Providing & fixing P.V.C. water tank (Syntex or equivalent) in position. The work to including making all necessary inlet & outlet pipes, fixture, ball cocks, valves at all heights and levels etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i)	2000 Litre capacity	Each	4		4			
ii)	5000 Litre capacity	Each	1		1			
2120	Providing and fixing approved stainless steel sink with integrated drainboard complete including painting the fittings, cutting and making good the wall where required as per specification. The work to be complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	2		2			
2121	Supplying & fabricating galvanised steel tank with 2.5 mm thk Galvanised steel plates and with Mild Steel stiffeners complete with all fitting and installations. The work to including making all necessary inlet & outlet pipes, fixture, ball cocks, valves at all heights and levels etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Kg	500		500			
2200	PROVIDING SANITARY WORKS INCLUDING COST OF ALL MATERIALS, LABOUR AND EQUIPMENT FOR HANDLING, EXECUTING, TESTING, PERFORMING ALL ASSOCIATED OPERATIONS ETC. COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
2201	Supply and fixing factory made, good quality glazed vitreous china Wash Basin of approved shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings etc. of approved brand including cutting and making good the walls where required etc all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i)	White	Each	40		40			
ii)	Colored	Each	6		6			
2202	Providing and fixing factory made, good quality vitreous china acid/alkali resistant laboratory sink of size 600x450x200mm with all chromium plated brass fixtures of Grohe or equivalent make, connection pipe with cutting and making good the walls where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	2		2			
2203	Providing and fixing stainless steel kitchen sink of size 610x510x200mm with all chromium plated brass fixtures of Grohe or equivalent make, connection pipe with cutting and making good the walls where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	12		12			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
2204	Providing and fixing factory made, siphon jet action, elongated bowl, white vitreous china, 40 mm top spud, flush valve with vacuum breaker and of good quality western type water closet with bidet of approved colour with valveless fittings, necessary C.P connections, all chromium plated brass fixtures of Grohe or equivalent make, with cutting and making good the walls where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i	Floor mounted	Each	1		1			
ii	Wall mounted	Each	1		1			
2205	Providing and fixing factory made, good quality Syrian type water closet of approved colour with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre glazed stone water flushing cistern with valveless fittings, necessary C.P connections, all chromium plated brass fixtures of Grohe or equivalent make, with cutting and making good the walls where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	5		5			
2206	Providing and fixing factory made, good quality eastern typewater closet, with trap, cast iron/china flush tank etc. with fixtures of Grohe/equivalent with all connections all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	20		20			
2207	Providing and fixing factory made, good quality white vitreous china washout urinals with 20 mm top spud, 50 mm outlet connection wall hung, flush valve/sensors, lead pipes, gratings, CP bottle traps and necessary C.P fittings, all chromium plated brass fixtures of Grohe or equivalent make, with cutting and making good the walls where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	35		35			
2208	Supply, laying and jointing factory made, good quality pvc pipes of standard manufacturers like Technobex/equivalent including bends, branches and all other necessary fittings, lead cocking, holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i	75mm dia pipes	RM	75		75			
ii	110mm dia pipes	RM	100		100			
iii	160mm dia pipes	RM	25		25			
iv	200mm dia pipes	RM	150		150			
2209	Supply, laying and jointing heavy duty cast iron pipes including bends, branches and all other necessary fittings, lead cocking, a coat of bitumenous paint, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.							
i	75mm dia pipes	RM	88		88			
ii	110mm dia pipes	RM	88		88			
iii	160mm dia pipes	RM	50		50			
iv	200mm dia pipes	RM	25		25			
2210	Providing, laying light duty non pressure RC pipes of kaheel or equivalent make with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for following diameters:							
i)	200mm	RM	50		50			
ii)	300mm	RM	50		50			
iii)	400mm	RM	80		80			
iv)	600mm	RM	100		100			
v)	800mm	RM	100		100			
v)	1000mm	RM	100		100			
2211	Providing and fixing C.I Manhole cover of size 600mmx450mm including frame from reputed manufacture etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	7		7			
2212	Providing and fixing circular heavy duty man hole cover of 600mm diameter with frame etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	1		1			
2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and watertight CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside) the weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for size 100x100mm P or S Type.	Each	5		5			
2214	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and watertight CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside) the weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for size 150x100mm P or S Type.	Each	2		2			
2215	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and watertight CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside) the weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL for size 150x150mm P or S Type.	Each	4		4			
2216	Providing and fixing C.I. floor traps with C.P jalli all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	58		58			
2217	Providing and installing approved brand single tap water cooler of 36L cooling capacity (effective cooling from 21 degree celsius to 10 degree celsius) all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	5		5			
2218	Providing and installing approved brand single tap water cooler of 50L cooling capacity all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	2		2			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
2219	Providing and fixing white vitreous urinal partitions all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	Each	22		22			
2400	PROVIDING ROAD WORK INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, MACHINERY ETC ALL COMPLETE AS PER DRAWINGS, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, RELEVANT SYRIAN/BS STANDARDS AND/OR AS APPROVED BY PEEGT/BHEL UNLESS SPECIFIED OTHERWISE FOR THE FOLLOWING:							
2401	Preparation of sub grade by excavating earth to required depth for all types of soil/rock, dressing to camber and consolidating the base including making good the undulation etc. and disposal of surplus earth within plant boundary etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM.	14400		14400			
2402	Providing, stacking and laying good quality sand as per Syrian practice for shoulder including watering, compaction with road roller to required camber etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM.	756		756			
2403	Providing & laying water bound macadam sub base course in layers of required thickness with crushed stone aggregates 90 to 40 mm down size, stone screening and blinding material including screening sorting, spreading to template and consolidation with road roller including carriage, spreading and consolidation of blinding material etc. complete to achieve 95% proctor density compaction etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM	6300		6300			
2404	Providing & laying base course in layers of required thickness with stone aggregate 60mm to 40mm size, stone screening with binding material including screening sorting, spreading to template and consolidation with road roller including carriage, spreading and consolidation of blinding material etc. complete to achieve 95% proctor density compaction. As per local practise, stone along with binding material can be brought from the natural deposits and compacted with layers to achieve 95% proctor density compaction etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	CUM.	6300		6300			
2405	Providing & laying bituminous pavement compacted base course of 80 mm with MC0 layer as per Syrian Standards with minimum density of 4 kg/cm2 including screening, sorting, spreading to template and consolidation with road roller including carriage, spreading, hot mix plant and consolidation of blinding material etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	19440		19440			
2406	Providing and laying bituminous pavement wearing course of 60 mm with RC layer with bitumen/asphalt in graded stone as per Syrian practice, minimum 5% by weight of gravel, of a suitable approved grade including scraping, cleaning with compressed air etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	19440		19440			
2407	Providing and laying paved concrete kerbstones of minimum grade M20 (150mm Cube strength at 28 days) of standard mix 1:1.5:3 (1Cement: 1.5Sand: 3Coarse Aggregate) with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) with 40 mm aggregate as sidewalks as per Syrian practice of a suitable approved grade including scraping, cleaning with compressed air etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	7560		7560			
2408	Providing and applying Tack coat of low viscosity liquid asphalt suitably sprinkled and of a suitable approved grade confirming to relevant Syrian/BS standards and as approved by PEEGT/BHEL as applicable @ 10 kg/10sqm for an untreated WBM surface including scraping, cleaning with compressed air etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	38880		38880			
2409	Providing and applying liquid seal coat comprising of an application of a layer of binder asphalt at the rate of 9.8kg/10sqm followed by a cover of stone chips at the rate of 0.09 cum/10sqm including rolling etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM.	38880		38880			
2410	Providing & laying Chamferred concrete kerbstones of minimum grade M20 (150mm Cube strength at 28 days) of standard mix 1:1.5:3 (1Cement: 1.5Sand: 3Coarse Aggregate) with moderate sulphate resisting cement (as per Syrian standrad or BS standard of approved make & quantity) with 40 mm aggregate and of shape as per detailed drawing including fixing in 13mm thk. cement mortar 1:2 in joints, finishing of joints with neat cement paste, making drainage opening where required etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	4800		4800			
2411	Providing & fixing perforated continuous strips made of cast iron or mild steel painted with bituminous paint including cutting, jointing etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	RM	900		900			
2412	Dismantling of existing road consisting of MCO layer and RC layer, kerb stone, preparing subgrade to receive new WBM including camber consolidation including disposal of debris within a lead of 1 Km etc. all complete as per drawings, specifications, manufacturer's recommendations, relevant Syrian/BS standards and/or as approved by PEEGT/BHEL.	SQM	500		500			
2500	PILING WORKS AS PER RELEVANT SYRIAN/BS STANDARDS/SPECIFICATIONS APPROVED BY PEEGT/BHEL:							
2501	Mobilisation of hydraulic rotary piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	EACH	8		8			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
2502	Installation of Bored cast-in-situ RCC vertical pile as per relevant Syrian/BS Standards and/or the specifications approved by PEEGT/BHEL with diameter and length as specified (length to be measured from pile cut-off level to the bottom of pile) using Design Mix cement concrete of grade M30(150mm Cube strength at 28 days) as per Syrian code or C25/30 as per BS8500 with moderate sulphate resisting cement (as per Syrian standard or BS standard of approved make & quantity) with 20 mm nominal size stone aggregates with a minimum cement content of 400Kg per cum of concrete including providing all materials (but excluding reinforcement steel for which measurement/payment shall be made separately), boring/drilling in all types of soil, providing bentonite slurry and/or casing for stabilization of pile bore, flushing of pile bore, cleaning, providing plasticizer wherever required, breaking pile head to cut off level and exposing pile reinforcement for embedment in pile cap etc including empty boring from ground level to pile cutoff level etc all complete as per specification, drawing and as directed by the engineer-in-charge for the following.							
a	Pile with 600 mm diameter and 17 m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 30T & Lateral Load Capacity as 10 T.	Each	150		150			
b	Pile with 600 mm diameter and 8m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 15T & Lateral Load Capacity as 10 T.	Each	700		700			
c	Pile with 900 mm diameter and 17 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	Each	500		500			
d	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	Each	45		45			
e	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	Each	45		45			
f	Pile with 900 mm diameter and 8 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	Each	1150		1150			
2503	Extra over ST. No. 2502 for pile length more than the specified lengths below cut off level for the following.							
a	Pile with 600 mm diameter and 17 m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 30T & Lateral Load Capacity as 10 T.	RM	75		75			
b	Pile with 600 mm diameter and 8m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 15T & Lateral Load Capacity as 10 T.	RM	350		350			
c	Pile with 900 mm diameter and 17 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	250		250			
d	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	15		15			
e	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	15		15			
f	Pile with 900 mm diameter and 8 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	575		575			
2504	Rebate on ST.No.2502 for pile length less than the specified lengths below cut off level for the following.							
a	Pile with 600 mm diameter and 17 m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 30T & Lateral Load Capacity as 10 T.	RM	35		35			
b	Pile with 600 mm diameter and 8m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 15T & Lateral Load Capacity as 10 T.	RM	175		175			
c	Pile with 900 mm diameter and 17 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	125		125			
d	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	15		15			
e	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	15		15			
f	Pile with 900 mm diameter and 8 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	285		285			
2505	Extra over ST.No.2502 for boring/drilling in rock for a length approximately 3 times the diameter of pile, cleaning the pile hole, concreting etc all complete for the following.							
a	Pile with 600 mm diameter and 17 m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 30T & Lateral Load Capacity as 10 T.	RM	270		270			
b	Pile with 600 mm diameter and 8m length below cut off level with safe vertical load capacity in Compression as 130 T, vertical load capacity in Tension as 15T & Lateral Load Capacity as 10 T.	RM	1260		1260			
c	Pile with 900 mm diameter and 17 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	1350		1350			
d	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 50T & Lateral Load Capacity as 20 T.	RM	122		122			
e	Pile with 900 mm diameter and 10 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	122		122			
f	Pile with 900 mm diameter and 8 m length below cut off level with Safe vertical load capacity in Compression as 250 T, vertical load capacity in Tension as 25T & Lateral Load Capacity as 20 T.	RM	3105		3105			
2506	Conducting initial load test upto a maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with relevant Syrian/BS Standards and/or the specifications approved by PEEGT/BHEL including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report but excluding the cost of installation of pile (installation of pile shall be paid separately) etc all complete as per specification, drawing and as directed by engineer in-charge for the following.							
a	For vertical compression test by cyclic load method							
i	For 600 mm diameter pile	Each	3		3			
ii	For 900 mm diameter pile	Each	7		7			

ST. NO	DESCRIPTION	UNIT	Main Plant	Levelling & Grading	TOTAL QTY	RATE (IN EUROS)		AMOUNT
						In figures	In words	IN EUROS
b	For lateral load test							
i	For 600 mm diameter pile	Each	3		3			
ii	For 900 mm diameter pile	Each	7		7			
c	For tension/uplift test							
i	For 600 mm diameter pile	Each	3		3			
ii	For 900 mm diameter pile	Each	7		7			
2507	Conducting routine load test on single job pile as specified in accordance with relevant Syrian/BS Standards and/or the specifications approved by PEEGT/BHEL including preparation of pile head for testing, necessary excavation, providing all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report etc but excluding the cost of installation of job pile complete as per specification, drawing and as directed by the engineer-in-charge for the following.							
a	For vertical compression test by maintained load method							
i	For 600 mm diameter pile	Each	9		9			
ii	For 900 mm diameter pile	Each	18		18			
b	For lateral load test							
i	For 600 mm diameter pile	Each	9		9			
ii	For 900 mm diameter pile	Each	18		18			
2508	Carrying out pile integrity test on 600mm/900mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile all complete as per specification and as directed by the engineer-in-charge.	Each	1295		1295			
LEVELLING AND GRADING CIVIL WORKS - BILL OF QUANTITY								
1	Earth work in stripping of top soil upto a minimum depth of 0.20 m below ground level so as to exclude all debris, grass, vegetation, bushes, trees having girth upto 300mm including roots and organic materials etc for levelling and grading including dressing to specified levels & grades and compacting the graded/stripped surface by manual/mechanical means, disposal of stripped materials within a lead upto 1km etc complete as per specification, drawing, relevant Syrian/British/equivalent international standards and/or as approved by PEEGT/BHEL.	SQM		66675	66675			
2	Earth work in filling for levelling and grading using approved quality of soil with compulsarily excavated earth available within a lead of 2km on prepared surface obtained by compacting with mechanical means including setting out, filling in horizontal layers not exceeding 250mm compacted thickness, spreading, sorting, breaking clods, re excavation if required, watering, compaction with proper moisture content so as to achieve atleast 95% of maximum dry density (modified Proctor density) as per Syrian/BS standards and or specifications approved by PEEGT/BHEL or equivalent international standards in case of cohesive soil/at least 85% relative density in case of cohesionless soil, dewatering (if required), testing, approaches, finishing to required lines, grades and slopes, levelling etc complete as per specification, drawing, relevant Syrian/British/equivalent international standards and/or as approved by PEEGT/BHEL.	CUM		5000	5000			
3	Earth work in filling for levelling and grading using borrowed soil (borrowed soil is to be arranged by the contractor at his own cost) on prepared surface obtained by compacting with mechanical means including setting out, filling in horizontal layers not exceeding 250mm compacted thickness, spreading, sorting, breaking clods, watering, compaction with proper moisture content so as to achieve atleast 95% of maximum dry density (Modified Proctor density) as per Syrian/BS standards and or specifications approved by PEEGT/BHEL or equivalent international standards, dewatering (if required), testing, approaches, finishing to required lines, grades and slopes, levelling etc complete as per specification, drawing, relevant Syrian/British/equivalent international standards and/or as approved by PEEGT/BHEL.	CUM		61675	61675			
						GRAND TOTAL		

NOTE: EVALUATION OF BIDS SHALL BE AS PER CLAUSE NO. 1.4 OF GCC

SEAL & SIGNATURE OF BIDDER

Rev 00
6th JULY
2010

SPECIAL CONDITIONS OF CONTRACT (SCC)

(Document No PS:MSX:SCC)

BHARAT HEAVY ELECTRICALS LIMITED



SPECIAL CONDITIONS OF CONTRACT (SCC)

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SPECIAL CONDITIONS OF CONTRACT (SCC)

Chapter - I : General Intent of Specifications

1.0	INTENT OF THE SPECIFICATION
1.1	The intent of this erection specification is to provide services for execution of the project according to most modern and proven techniques and codes. The omission of specific reference to any method, equipment or material necessary for the proper and efficient services towards installation of the plant shall not relieve the contractor of the responsibility of providing such services / facilities to complete the work or portion of work awarded to him. The quoted / accepted rates / price shall deem to be inclusive of all such contingencies.
1.2	The work shall conform to dimensions and tolerances given in various drawings and documents that will be provided during erection. If any portion of works is found to be defective in workmanship and not conforming to drawings / documents or other stipulations, the contractor shall dismantle and re-do the work duly replacing the defective materials at their own cost, failing which recoveries, as determined by BHEL, shall be effected from contractor's bills.
1.3	It is not the intent of this specification to specify herein all the details of erection and commissioning. However, the system shall conform in all respects to high standards of quality and workmanship for performing the required duties in a manner acceptable to purchaser who will interpret the meaning of drawings and specifications and shall be entitled to reject any work or material, which in his judgments is not in full accordance herewith.
1.4	The omission of specific reference to any fabrication / erection or other method, equipment or material necessary for proper and efficient working of the plant shall not relieve the tenderer of the responsibility of providing such facilities to complete the work at quoted rates. Any mismatch/ defect found due to mistake in fabrication / erection shall have to be rectified by the vendor free of cost. Inspection by BHEL/Customer does not relieve vendor of his responsibility of executing quality erection.
1.5	The work covered under this specification is of highly sophisticated nature, requiring the best quality workmanship, supervision, engineering and construction management. The contractor should ensure proper planning and successful and timely completion of the work to meet the overall project schedule. The contractor must deploy adequate quantity of tools & plants, modern / latest construction aids etc. He must also deploy adequate trained, qualified and experienced supervisory staff and skilled personnel.

SPECIAL CONDITIONS OF CONTRACT (SCC)

Chapter - I : General Intent of Specifications

1.6	Contractor shall erect and commission all the equipments and auxiliaries as per the sequence & methodology prescribed by BHEL depending upon the technical requirements. Availability of materials and fronts will decide this. BHEL Engineer's decision regarding correctness of the work and method of working shall be final and binding on the contractor. No claims for extra payment from the contractor will be entertained on the ground of deviation from the methods / sequence adopted in erection of similar sets elsewhere.
1.7	Following shall be the minimum responsibility of contractor and have to be provided within finally accepted rates / prices:
1.7.1	Provision as required of all types of labour, supervisors, engineers, watch and ward, tools & tackles, calibrated IMTEs (Inspection, measuring and testing equipment) as specified and otherwise required for the work, consumables for erection, testing and commissioning including material handling
1.7.2	Achieving Proper out-turn / Turn-over as per BHEL plan and commitment.
1.7.3	Completion of work as per BHEL Schedule
1.7.4	Good quality and accurate workmanship for proper performance of the equipment
1.7.5	Repair and rectification
1.7.6	Preservation / Re-conservation of all components during storage / erection / commissioning till handing over.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter - II : General Services to be rendered by the Bidder

2.0	GENERAL SERVICES TO BE RENDERED BY THE BIDDER
2.1	Services for construction, fabrication, equipment erection testing as well as trial run & commissioning of various equipment and accessories under the contract shall include but not be limited to the following:
2.2	Issuing materials from store/open yard from time to time for erection as per the construction programme. The Contractor shall be the custodian of all the materials issued till the plant/equipment is officially taken over by the owner / BHEL after complete erection any successful trial run & commissioning.
2.3	Transport of material to their respective places of erection and erection of the complete plant & equipment as supplied under this specification.
2.4	Trial run and commissioning of individual equipment / sub-systems to the satisfaction of Owner/BHEL.
2.5	Deployment of all skilled and unskilled manpower required for erection, supervision of erection, watch & ward, commissioning and other services to be rendered under this specification.
2.6	Deployment of all erection tools & tackle, construction machinery, transportation vehicles and all other implements in adequate number and size, appropriate for the erection work to be handled under scope of this specification except otherwise specified.
2.7	Supply of all consumables, eg welding electrodes, cleaning agents, diesel oil, lubricant etc as well as materials required for temporary supports, scaffolding etc as necessary for such erection work, unless specified other wise.
2.8	Providing support services for the contractor's erection staff eg construction of site offices, temporary stores, residential accommodation and transport to work site for erection personnel, watch and ward for security and safety of the materials under the Contractor's custody etc. as required.
2.9	Maintaining proper documentation of all the site activities undertaken by the Contractor as per the proforma mutually agreed with BHEL, Submission of monthly progress reports and any such document as and when desired by BHEL/owner, taking approval of all statutory authorities i.e Boiler Inspector, Factory Inspector, Inspector of Explosives etc , as applicable for respective portions of work fall under the jurisdiction of such statutes of laws.
2.10	Any other service, although not specifically called for but required for a contract of the size and nature indicated in the specification.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter - III : General Technical Requirements (Codes and Standards)

3.0	GENERAL TECHNICAL REQUIREMENTS (CODES AND STANDARDS)
3.1	Except where otherwise specified, the plant/equipment shall comply with the appropriate Indian Standard or an agreed internationally accepted Standard Specification as mentioned elsewhere in contract specifications, each incorporating the latest revisions at the time of tendering. Where no internationally accepted standard is applicable, the Bidder shall give all particulars and details as necessary, to enable BHEL to identify all of the plant/equipment in the same detail as would be possible had there been a Standard Specification.
3.2	Where the Bidder proposes alternative codes or standards he shall include in his tender one copy (in English) of each Standard Specification to which materials offered shall comply. In such case, the adopted alternative standard shall be equivalent or superior to the standards mentioned in the specification.
3.3	In the event of any conflict between the codes and standards referred above, and the requirements of this specification, the requirements which are more stringent shall govern.
3.4	Tools used during erection and commissioning shall not be accepted except with the specific approval of the Engineer.

SPECIAL CONDITIONS OF CONTRACT (SCC)

Chapter - IV : Obligations of Contractor

4.0	OBLIGATIONS OF CONTRACTOR
4.1	CONSUMABLES & OTHER ITEMS
4.1.1	The contractor shall provide within finally accepted price / rates, all consumables (excepting those indicated in BHEL scope) like welding electrodes (including alloy steel and stainless steel), filler wires, TIG filler wires (over & above as supplied by the unit along with the plant materials, which will be given free of cost to bidder), gases (inert, welding, cutting), soldering material, dye penetrants, radiography films, etc. Other erection consumables such as tapes, jointing compound, grease, mobile oil, M-seal, Araldite, petrol, CTC / other cleaning agents, grinding and cutting wheels are to be provided by the contractor. Steel, packers, shims, wooden planks, scaffolding materials hardware items etc required for temporary works such as supports, scaffoldings are to be arranged by the contractor. Sealing compounds, gaskets, gland packing, wooden/concrete sleepers, for temporary work, required for completion of work except those which are specifically supplied by manufacturing unit are also to be arranged by the contractor.
4.1.2	All the shims, gaskets and packing, which go finally as part of plant equipment, shall be supplied by BHEL free of cost.
4.1.3	It shall be the responsibility of the contractor to plan the activities and store sufficient quantity of consumables. Non-availability of any consumable materials or equivalent suggested by BHEL cannot be considered as reason for not attaining the required progress or for additional claim.
4.1.4	<u>TIG Filler wire for Boiler and Filler wires for Electrodes for P91/T91 piping:</u> These shall be supplied by BHEL free of cost as supplied by BHEL Manufacturing Units as part of regular supply. Required quantity as arrived at by calculation / standards will only be supplied. It would be the contractors' responsibility to account for the consumption of these filler wires. Additional consumption beyond standard / calculated quantity will be at cost recovery basis only unless and otherwise accounted for. Surplus quantity of TIG filler wire, if any, shall be properly stored and returned to BHEL stores.
4.1.5	It shall be the responsibility of the contractor to obtain prior approval of BHEL, regarding suppliers, type of electrodes etc before procurement of welding electrodes. On receipt of electrodes at site these shall be subjected to inspection and approval by BHEL. The contractor shall inform BHEL details regarding type of electrodes, batch number, date of expiry etc and produce test certificate for each lot / batch with correlation of batch / lot number with respective test certificate. No electrode without a valid test certificate will to be used.

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4.1.6	BHEL reserves the right to reject the use of any consumable including electrodes, gases, lubricants / special consumables if it is not found to be of the required standard / make / purity or when shelf life has expired. Contractor shall ensure display of shelf life on consumable wherever required and records maintained.
4.1.7	Storage of all consumables including welding electrodes shall be done as per requirement / instruction of the Engineer by the contractor at his cost.
4.1.8	In case of improper arrangement for procurement of any consumable, BHEL reserves the right to procure the same from any source and recover the cost from the Contractor's first subsequent bill at market value plus the departmental charges of BHEL from time to time. Postponement of such recovery is normally not permitted. The decision of Engineer in this regard shall be final and binding on the Contractor.
4.1.9	All lubricants and chemicals required for pre commissioning, commissioning, testing, preservation and lubricants for trial runs of the equipment shall be supplied by BHEL / BHEL's client. All services including labour and T&P will be provided by the contractor for handling, filling, emptying, refilling etc. The consumption of lubricants / chemicals shall be properly accounted for. Surplus material if any shall be properly stacked/tagged and returned to BHEL/ CUSTOMER stores at no extra cost to BHEL. BHEL reserves the right to recover costs for wastage by the contractor.
4.1.10	Transportation of oil drums, from stores, filling of oil for flushing, first filling, subsequent changeover if any, topping/making up till the unit is fully commissioned and handed over to customer is included in scope of this contract. The contractor shall have to return all the empty drums to BHEL / BHEL's client store at no extra cost. Any loss / damage to above drums shall be to contractor's account.
4.1.11	All charges on account of Octroi, terminal or sales taxes and other duties on materials obtained from any source for carrying out the works in the scope of the contractor shall be borne by the contractor.
4.2	TOOLS AND PLANTS / MEASURING AND MONITORING EQUIPMENT (MMEs)
4.2.1	T&Ps and MMEs to be provided by Contractor
4.2.1.1	All T&Ps and MMEs excepting those specifically indicated in BHEL scope are to be provided by the Contractor. Contractor has to make his own arrangement at his cost for completing the formalities (including arrangement of Road permits, if any) if required with Sales Tax/VAT authorities, for bringing their materials, plants and equipments at site for the execution of work under this contract.

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4.2.1.2	All suitable cranes, lifting and transport equipments for material handling at stores/yard/siding of BHEL/Customer are included in scope. BHEL's cranes will not be available for this purpose unless otherwise specifically permitted as per contract conditions
4.2.1.3	All T&Ps to be deployed by the contractor shall have the approval of BHEL Engineer with regard to brand, quality and specification.
4.2.1.4	Indicative list of Major T&Ps in the scope of Contractor are given in the Technical Conditions of Contract. Bidders to note that these are only indicative and as such all other T&P necessary for timely and satisfactory completion of work in scope shall be mobilized by Contractor
4.2.1.5	Timely deployment of adequate T&Ps is the responsibility of the contractor. The contractor shall be prepared to augment the T&P at short notice to match the planned programme and to achieve the milestones.
4.2.1.6	Contractor shall maintain and operate his tools and plants in such a way that major breakdowns are avoided. In the event of major breakdown, contractor shall make alternative arrangements expeditiously so that the progress of work is not hampered.
4.2.1.7	In the event of contractor failing to arrange the required tools, plants, machinery, equipment, material or non-availability of the same owing to breakdown, BHEL will make alternative arrangement at the risk and cost of the contractor. Decision of BHEL shall be final and binding on the contractor
4.2.1.8	The T&P to be arranged by the contractor shall be in proper working condition and their operation shall not lead to unsafe condition. The movements of cranes, and other equipment should be such that no damage / breakage occurs to foundations, other equipments, material, property and men. All arrangements for the movement of the T&P etc shall be the contractor's responsibility.
4.2.1.9	Use of welding generators/ rectifiers only shall be permitted for welding. Use of welding transformers will be subject to specific approval of BHEL engineer.
4.2.1.10	The contractor at his cost shall carry out periodical testing of his construction equipments. Test certificates shall be furnished to BHEL.
4.2.1.11	Contractor shall ensure deployment of serviced and healthy T&Ps including cranes, lifting tackles, wire ropes, manila ropes, winches and slings etc. History card and maintenance records for major T&Ps will be maintained by the contractor and will be made available to BHEL Engineer for inspection as and when required. Fitness certificate / Test Certificates of T&P shall have to be submitted before it is put in use. Identification for such T&Ps will be done as per BHEL Engineer's advice.

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	BHEL reserves the right to permit only new slings up to 20 mm and lifting tackles up to 3 MT capacities.
4.2.1.12	Contractor shall ensure deployment of reliable and calibrated MMEs (Inspection measuring and Monitoring equipment). The MMEs shall have test / calibration certificates from authorized / Government approved / accredited agencies traceable to National / International standards. Each MME shall have a label indicating calibration status i.e. date of calibration, calibration agency and due date for calibration. A list of such instruments deployed by contractor at site with its calibration status is to be submitted to BHEL Engineer for control.
4.2.1.13	Re-testing / re-calibration shall also be arranged at regular intervals during the period of use as advised by BHEL Engineer within the contract price. The contractor will also have alternate arrangements for such MME so that work does not suffer when the particular instrument is sent for calibration. If any MMEs not found fit for use, BHEL shall have the right to stop the use of such item. It will be necessary for the contractor to deploy proper item. Any readings taken by the defective instrument will be recalled and repeat the readings taken by that instrument with a proper one. In case he fails to do so, BHEL may deploy MMEs and retake the readings at contractor's cost.
4.2.1.14	BHEL shall have lien on all T&P, MMEs and other equipment of the contractor brought to the site for the purpose of erection, testing and commissioning. BHEL shall continue to hold the lien on all such items throughout the period of contract / extended period. The contractor and / or his sub-contractors, without the prior written approval of the Engineer, shall remove no material brought to the site.
4.2.1.15	The month wise T&P deployment plan to execute the work is to be submitted as per relevant format as per the instruction of BHEL. It shall be the contractor's responsibility to deploy the required T&P, for timely and successful completion of the job, to any extent.
4.2.2	Obligations in respect of T&Ps and MMEs provided by BHEL
4.2.2.1	T&P / MMEs being provided by BHEL to sub-contractor free of hire charges shall be shared by other subcontractors working for BHEL at site and the allotment done by BHEL Engineer shall be final and binding.
4.2.2.2	BHEL T&P will be issued in basic assembled condition. Additional loose components / sub-assemblies / attachments as and when necessary, will be issued by BHEL. Assembly of such additional loose components/sub-assemblies/ attachments is in contractor's scope.
4.2.2.3	In case of non-availability of the T&Ps to be provided by BHEL due to breakdown, major overhauls, distribution pattern or any other reason, the contractor shall plan /

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	amend / alter his activities to meet erection / commissioning targets in consultation with BHEL.
4.2.2.4	void
4.2.2.5	The contractor shall engage trained and experienced operators for the operation of BHEL's T&Ps. Their skill / performance will be checked by BHEL Engineer before they are allowed to operate the same. However checking of skills by BHEL does not absolve the contractor of his responsibilities for proper and safe handling of equipment, consistent good performance of operators and regular performance evaluation of operators.
4.2.2.6	<p>The day to day operation and maintenance of BHEL's T&Ps (Other than cranes) shall be carried out by contractor as per manufacturer's / BHEL's maintenance schedule at his cost. The contractor shall arrange, at his own cost, trained operators, fuel and other consumables for their operation. BHEL shall arrange all spares needed for upkeep of major T&Ps provided like Huck Bolting Machine*, DG Set, Induction Machine and Hydraulic Test pumps. The contractor has to arrange for fixing of the spares; supervision in specialized cases will be provided by BHEL. For upkeep of all other T&Ps supplied by BHEL, spares shall be arranged by the Contractor. BHEL supplied T&Ps shall be maintained in good working condition during the entire period of use. T&Ps in defective / damaged condition shall be rectified promptly to the full satisfaction of BHEL engineer. Contractor shall maintain records for maintenance of major T&Ps. These shall be made available for Inspection whenever required. In case of any lapses on the part of the contractor, BHEL at its own discretion shall get the servicing / repair of equipment done at the risk and cost of the contractor along with BHEL overheads. Further, if there are breakdowns / damages due to negligence of the contractor, the complete service / repair charges and cost of all the spares damaged with BHEL overheads shall be recovered from contractor's RA bills.</p> <p>*: for operation and maintenance of ESP Huck bolting machine, BHEL shall provide the basic power rig and hose. Balance toolings ie Guns, chuck jaws etc are to be arranged by contractor.</p>
4.2.2.7	void
4.2.2.8	Increasing / shortening of the crane boom to suit work requirements shall have to be arranged by the indenting contractor at his cost including restoration to a state as directed by BHEL. All necessary manpower tools, support, consumables, illumination etc. will have to be arranged by contractor at his cost. If required,

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	contractor has to return the crane with original boom.
4.2.2.9	The area and infrastructure development of the area to be carried out by the customer. However in construction projects of this magnitude it is possible that all the areas / approaches may not be ready. In such cases backfilling of approaches where ever necessary, consolidation of ground and arrangement of sleepers / sand bag filling etc for safe operation / movement of equipment including cranes / trailers etc shall be the responsibility of the contractor at his cost. No compensation on this account shall be payable.
4.2.2.10	In the event of contractor not using and maintaining BHEL T&Ps according to BHEL's instructions. BHEL will have the right to withdraw such item without any notice and no claim in this regard shall be entertained and contractor shall be responsible for delay in execution on this account.
4.2.2.11	The contractor shall furnish regular utilization report of the BHEL T&Ps, as per requirement of BHEL.
4.2.2.12	Any loss / damage to any part of BHEL T&Ps and MMEs shall be to the contractor's account and any expenditure on these accounts by BHEL will be recovered from the contractor's bill in case the contractor fails to make good the loss.
4.2.2.13	It shall be responsibility of the contractor to take delivery of T&Ps and MMEs from stores or place of use by other contractor at project site, transport the same to site and return the same to BHEL store / place as intimated by Engineer in project site in good working conditions after use.
4.2.2.14	The contractor shall return BHEL T&Ps and MMEs issued to him in good working condition as and when desired by BHEL (on completion or reduction of workload). If contractor delays return of T&P and MME, hire charges as applicable shall be levied by BHEL from time, it was requisitioned till the time of actual return. T&Ps and MMEs returned in damaged / unserviceable condition shall be got repaired by BHEL at its own discretion and entire cost of repair with BHEL overheads shall be recovered from the contractor.
4.2.2.15	Replacement cost including BHEL overheads in respect of irreparable / completely damaged / non return of T&Ps and MMEs shall be recovered from the contractor's running / final bills

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4.2.2.16	Obligations in respect of Cranes provided by BHEL
a)	BHEL will make available the cranes (as per Technical Conditions of Contract) free of charge to the contractor on sharing basis mainly for the purposes enumerated/indicated therein. BHEL cranes have to be shared with other agencies / contractors of BHEL. The allocation of cranes shall be the discretion of BHEL engineer, which shall be binding on the contractor.
b)	BHEL Cranes may be initially issued in basic assembled condition. Any alteration/addition like boom reduction / extension, assembly of components/sub-assemblies needed for modulating the capacity/reach/other features of cranes and restoration to the state as directed by BHEL shall be the contractor's responsibility.
c)	<p>In case the BHEL cranes are not covered under AMC of BHEL, then the day-to-day upkeep and running maintenance like filling / topping up of lubricants, changing filters, etc including repair of self starter and dynamo of these cranes shall be the responsibility of the contractor. If on checking it is found that the same is not followed, BHEL will exercise its right to get the job/works done at the risk and cost of contractor.</p> <p>In case BHEL cranes are covered under AMC awarded by BHEL, then the day-to-day upkeep and running maintenance as described above are excluded from scope. However any additional helpers if any required during Preventive/Breakdown Maintenance, Assembly/disassembly shall be provided by contractor at no extra cost.</p> <p>BHEL may also provided cranes through crane hiring agencies in which case the day to day upkeep and running maintenance shall be excluded from scope of contractor.</p>
d)	Minor consumables like cotton cloth, cotton waste, etc is to be supplied by Contractor. All spares and lubricants/grease is excluded from scope. Contractor to give the requirements of these items well in advance in case the cranes provided by BHEL are BHEL owned cranes.
e)	Unless otherwise specified, trained operators for BHEL owned cranes shall be provided by the contractor. These operators should possess valid license for heavy vehicle.
f)	BHEL cranes will be withdrawn for regular and capital maintenance as per the respective schedule of maintenance. As far as possible such schedules will be intimated to the contractor in advance and may be adjusted depending on the work requirements at site. However no claim whatsoever will be entertained on account

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	of non-availability of cranes.
g)	Where the services of the cranes provided by BHEL are to be shared by other agencies/ contractors of BHEL, the contractor's responsibilities defined above will also be apportioned accordingly to the beneficiary agency. Working arrangements in this regard will be done at site by BHEL engineer and in any case his decision shall be final and binding.
h)	Major breakdowns will be attended to by BHEL. However, in case of breakdowns or damages due to negligence of the contractor, the complete service/repair charges including cost of spares shall be to the account of the contractor, along with BHEL overheads.
4.2.2.17	Obligations in respect of Construction Lift/Elevators provided by BHEL
a)	The total erection including commissioning, maintenance, statutory clearances shall be included in scope of work. Supervision by the original equipment supplier or their authorized agency shall be arranged for by BHEL, in case found necessary.
b)	All day to day and routine maintenance and checking is to be carried out by the contractor as per the recommendations of the supplier. He should periodically check the brakes and carry out the all works to ensure the safety of all those using the lift/elevator. BHEL shall arrange spares required for upkeep of Construction lift/elevator
c)	The construction lift/elevator should never be overloaded as this can lead to serious accidents. Ensuring all safety aspects in operation of the lift shall be the responsibility of the contractor. Erection of all the required number of landing platforms is included in scope. Landing platforms are to be provided with proper barricades and hand railings.
d)	After completion of contractual scope of work or as per BHEL advice, the temporary elevator/lift shall be dismantled and handed over to BHEL neatly identified/tagged. Temporary structures/platforms etc erected for the elevators/lifts are also to be dismantled and materials to be returned to stores as applicable. The construction and dismantling of the foundations required for the construction/elevator lifts is included in the scope of the contractor.

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Chapter – V : Responsibilities of Contractor in respect of Labour, Supervisory Staff, etc.

5.0	RESPONSIBILITIES OF CONTRACTOR IN RESPECT OF LABOUR, SUPERVISORY STAFF, ETC.
5.1	Refer relevant clauses of General Conditions of Contract (GCC) also in this regard
5.2	The contractor shall deploy all the necessary skilled/semiskilled/ unskilled labour including highly skilled workmen etc. These workmen should have previous experience on similar job. They shall hold valid certificates wherever necessary. BHEL reserves the right to insist on removal of any employee of the contractor at any time if he is found to be unsuitable and the contractor shall forthwith remove him.
5.3	Contractor shall also comply with the requirements of local authorities/ project authorities calling for police verification of antecedents of the workmen, staff etc.
5.4	It is the responsibility of the contractor to engage his workmen in shifts and or on overtime basis for achieving the targets set by BHEL. This target may be set to suit BHEL's commitments to its customer or to advance date of completion of events or due to other reasons. The decision of BHEL in regard to setting the erection and commissioning targets will be final and binding on the contractor.
5.5	Contractor shall provide at different elevation suitable arrangement for urinal and drinking water facility with necessary plumbing & disposal arrangement including construction of septic tank. These installations shall be maintained in hygienic condition at all times.
5.6	The Contractor in the event of engaging 10 or more workmen, shall obtain Independent license under the Contract labour (Regulation and Abolition) Act 1970 from the concerned authorities based on Form V issued by the Principal Employer/Customer. In order to issue Form V by Customer, Contractor shall fulfill all Statutory requirements like Insurance Policy, PF Code/PF Account number etc as per the requirement of BHEL/Customer
5.7	Contractor shall deduct the necessary amount towards Provident Fund and contribute equal amount as per Government of India laws. This amount will be deposited regularly to the provident Fund Commissioner. BHEL/Customer may insist for submission of the account code duly certified by PF Commissioner
5.8	Contractor may also be required to comply with provisions of ESI Act in vogue if applicable and submit evidence to BHEL.
5.9	BHEL / customer may insist for witnessing the regular payment to the labour. They may also like to verify the relevant records for compliance with statutory requirements. Contractor shall enable such facilities to BHEL / Customer.

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Chapter – V : Responsibilities of Contractor in respect of Labour, Supervisory Staff, etc.

5.10	Contractor shall deploy only qualified and experienced engineers/ supervisors. They shall have professional approach in executing the work.
5.11	The contractor's supervisory staff shall execute the work in the most professional manner in the stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. They shall be responsible to ensure that the assembly and workmanship conform to dimensions and tolerances given in the drawings/instructions given by BHEL engineer from time to time.
5.12	The supervisory staff employed by the contractor shall ensure proper outturn of work and discipline on the part of the labour put on the job by the contractor. Also in general they should see that the works are carried out in a safe and proper manner and in coordination with other labour and staff employed directly by BHEL or other contractors of BHEL or BHEL's client.
5.13	It is the responsibility of the contractor to arrange gate pass for all his employees, T&P etc for entering the project premises. 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 passes. Where permitted, by customer / BHEL, to work beyond normal working hours, the contractor shall arrange necessary work permits for working beyond normal working hours.
5.14	The actual deployment will of Labour and Engineer/supervision staff shall be so as to satisfy the erection and commissioning targets set by BHEL. If at any time, it is found that the contractor is not in a position to deploy the required engineers/supervisors/workmen due to any reason, BHEL shall have the option to make alternate arrangements at the contractor's risk and cost. The expenditure incurred along with BHEL overheads thereon shall be recovered from the contractor
5.15	Contractor shall not deploy women labour at night.

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SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter – VI: Material Handling, Storage & preservation

6.0	MATERIAL HANDLING, STORAGE AND PRESERVATION ETC
6.1	MATERIAL HANDLING AND STORAGE
6.1.1	All the equipments/materials furnished under this contract shall be received from the project stores, sheds / storage yards and transported to pre-assembly area / erection site and stored in the storage spaces in a manner so that they are easily retrievable till the contractor erects them. While drawing/lifting material from BHEL / customer stores, the contractor shall ensure that the balance / other materials are stacked back immediately. No claim is admissible on this account
6.1.2	While BHEL will endeavor to store / stack / identify materials properly in their open / close / semi closed / tarpaulins covered storage yard / shed, it shall be contractor's responsibility to assist BHEL in identifying materials well in time for erection. They should take the delivery of the same, following the procedure indicated by BHEL, and transport the material safely to pre-assembly yard / erection site in time, according to program.
6.1.3	The contractor shall take delivery of components, equipment / consumables from storage area after getting the approval of BHEL Engineer on standard indent forms.
6.1.4	The contractor shall identify and deploy necessary Engineers / supervisors / workmen for the above work in sufficient number as may be needed by BHEL, for areas covering their scope.
6.1.5	All the equipment shall be handled very carefully to prevent any damage or loss. No untested wire ropes / slings etc. shall be used for unloading / handling. The equipment shall be properly protected to prevent damage either to the equipment or to the floor where they are stored. The equipment from the stores shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at site.
6.1.6	Contractor shall ensure that while lifting slings shall be put over the points indicated on the equipment or as indicated in the manufacturer's drawings. Slings / shackles of proper size shall be used for all lifting and rigging purposes. All care shall be taken to safe guard the equipment against any damage. Dragging of piping / valves should be avoided. In case of any damage the cost shall be covered from the contractor.
6.1.7	Approach road conditions from the stores / yards to the erection site may not be equipped and ideal for smooth transportation of the equipment. Contractor

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Chapter – VI: Material Handling, Storage & preservation

	may have to be adequately prepared to transport the materials under the above circumstances without any extra cost. . The contractor may familiar himself with soil conditions at site.
6.1.8	Contractor shall be responsible for examining all the plant and materials issued to him and notify the Engineer immediately of any damage, shortage, discrepancy etc before they are moved out of the stores / storage area. The contractor shall be solely responsible for any shortages or damages in transit, handling, storage and erection of the equipment once received by him. As the erection work will be spread in different areas / locations of the project, contractor has to arrange sufficient number of watch / ward personal to avoid any pilferage of material
6.1.9	The contractor shall maintain an accurate and exhaustive record detailing out the list of all equipment received by him for the purpose of erection and keep such record open for the inspection of the engineer at any time.
6.1.10	All the material in the custody of contractor and stored in the open or dusty locations must be covered with suitable weather proof / fire retardant covering material wherever applicable and shall be blocked up on raised level above ground. All covering materials including blocks and sleeper shall be arranged by the contractor at his cost.
6.1.11	If the material belonging to the contractor are stored in area other than those earmarked for his operation the engineer will have the right to get it moved to the area earmarked for the contractor at the contractors risk and cost.
6.1.12	The contractor shall be responsible for making suitable indoor storage facilities to store all equipment (drawn by the contractor from BHEL / customer stores), which require indoor storage till the time of their installation. The Engineer will direct the contractor in this regard, which item in his opinion will require indoor storage, and the contractor shall comply with Engineer's decision.
6.1.13	The contractor shall ensure that all surplus / damaged / scrap / unused material, packing wood / containers/ special transporting frames etc are returned to BHEL at a place in project area identified by the Engineer. The contractor will maintain an account for all items received and returned to BHEL. Any shortage in returning such items shall be chargeable to the contractor except allowable wastage for packing wood only.
6.1.14	The contractor shall hand over all parts / materials remaining extra over the normal requirement with proper identification tags to the stores as directed by the concerned BHEL engineer.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter – VI: Material Handling, Storage & preservation

6.1.15	The contractor shall ensure that all the packing materials and protective devices installed on equipment during transit and storage are removed before installation.
6.1.16	It shall be the responsibility of the contractor to keep the work / storage areas in neat, tidy and working conditions. All surplus/unusable packing and other materials shall be removed and deposited at location(s) specified by BHEL within the project premises. If required weighing of the same within the project premises will have to be carried out.
6.2	PRESERVATION OF COMPONENTS
6.2.1	After taking delivery from BHEL / customer's stores, plant materials storage shall be subjected to the following protection besides other provisions indicated in these specifications elsewhere.
6.2.1.1	Items stored outdoors shall be stacked up at least six inches (6") off the ground. Items should not be stored in a low lying area where water logging is a possibility. Contractor should have sufficient numbers of wooden / concrete / steel sleepers for the job.
6.2.1.2	Motors, valves, electrical equipment, control equipment and instruments, and special or precision items requiring special care, etc shall be stored indoors. Motor windings shall be kept dry by use of external heat or space heaters.
6.2.1.3	Bearings and other wearing surfaces of plant materials shall be protected against corrosion and kept clean and should be regularly monitored.
6.2.1.4	Insulation materials shall be stored indoors or otherwise protected against getting wet/ damaged, using suitable measures and should be protected from direct rain.
6.2.2	It shall be the responsibility of the contractor to apply preservatives / touch up paints (primer) on equipment handled and erected by him till such time of final painting. It shall be contractor's responsibility to arrange for required paints (primer), thinners, labour, scaffolding materials, cleaning materials like wire brush, emery sheets, etc, cleaning of surface and provide one coat of preservatives / paints (primer) from time to time as decided by BHEL engineer. The accepted rate shall include this work also. It is to be noted that such painting may have to be done as and when required till such time the final painting is carried out.
6.2.3	The contractor shall effectively protect the finished work from action of weather and from damage or defacement and shall cover the finished parts then and there for their protection.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter – VI: Material Handling, Storage & preservation

6.2.4	Any failure on the part of contractor to carry out works according to above clauses will entail BHEL to carry out the job from any other party and recover the cost from contractor.
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SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter – VII: Drawings and documents

7.0	DRAWINGS AND DOCUMENTS
7.1	The detailed drawings, specifications available with BHEL engineers will be made available to the contractor during execution of work at site. The contractor will also ensure availability of all drawings / documents at work place.
7.2	Necessary drawings to carry out the erection work will be furnished to the contractor by BHEL on loan, which shall be returned to BHEL Engineer at site after completion of work. Contractor shall ensure safe storage and quick retrieval of these documents.
7.3	The contractor shall maintain a record of all drawings and documents available with him in a register as per format given by BHEL Engineer. Contractor shall ensure use of pertinent drawings / data / documents and removal of obsolete ones from work place and returning to BHEL.
7.4	The data furnished in various annexure enclosed with this tender specification are only approximate and for guidance. However, the change in the design and in the quantity may occur as is usual in any such large scale of work. The contractors quoted rates shall be inclusive of the above factor
7.5	Should any error or ambiguity be discovered in the specification or information the contractor shall forthwith bring the same to the notice of BHEL before commencement of work. BHEL's interpretation in such cases shall be final and binding on the contractor.
7.6	Deviation from design dimensions should not exceed permissible limit. The contractor shall not correct or alter any dimension / details, without specific approval of BHEL.

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Chapter – VIII: Inspection and Quality

8.0	INSPECTION AND QUALITY
8.1	Inspection, Quality Assurance, Quality Control
8.1.1	Preparation of quality assurance log sheets and protocols with customer/consultants/statutory authority, welding logs, NDE records, testing & calibration records and other quality control and quality assurance documentation as per BHEL engineer's instructions, is within the scope of work/specification. These records shall be submitted to BHEL/customer for approval from time to time.
8.1.2	The protocols between contractor and customer/ BHEL shall be made prior to installation for correctness of foundations, materials, procedures, at each stage of installation, generally as per the requirement of customer/ BHEL. This is necessary to ensure elimination of errors or keeping them within tolerable limits and to avoid accumulation and multiplication of errors.
8.1.3	<p>A daily log book should be maintained by every supervisor/engineer of contractor on the job in duplicate (one for BHEL and one for contractor) for detailing and incorporating alignment/clearance / centering / leveling readings and inspection details of various equipments etc.</p> <p>High pressure welding details like serial number of weld joints, welders name, date of welding, details of repair, heat treatment etc. will be documented in welding log as per BHEL Engineer's instructions.</p> <p>Record of radiography containing details like serial number of weld joints, date of radiography, repairs, if any, re shots etc shall also be maintained as per BHEL Engineer's instructions.</p> <p>Record of heat treatments performed shall be maintained as prescribed by BHEL</p>
8.1.4	The performance of welders will be reviewed from time to time as per the BHEL standards. Welders' performance record shall be furnished periodically furnished for scrutiny of BHEL's Engineer. Corrective action as informed by BHEL shall be taken in respect of those welders not conforming to these standards. This may include removal/ discontinuance of concerned welder(s). Contractor shall arrange for the alternate welders immediately
8.1.5	All the welders shall carry identity cards as per the proforma prescribed by BHEL/Customer/Consultant. Only welders duly authorized by BHEL/customer/consultant shall be engaged on the work.

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8.1.6	Contractor shall provide all the Measuring Monitoring Equipments (MMEs) required for completion of the work satisfactorily. These MMEs shall be of brand, quality and accuracy specified by BHEL Engineer and should have necessary calibration and other certificates as per the requirement of BHEL Engineer. Decision of BHEL Engineer regarding acceptance or otherwise of the measuring instruments/gauges/tools for the work under this specification, is final and binding on the contractor. BHEL may give an indicative list of MMEs required for this work and to be made available by the contractor. The list will be reviewed by BHEL and the contractor shall meet any augmentation needed wherever required.
8.1.7	It is the responsibility of the contractor to prove the accuracy of the testing/measuring/calibrating equipments brought by him based on the periodicity of calibration as called for in the BHEL's quality assurance standards/BHEL Engineer's instructions.
8.1.8	Any re-laying or re-termination of cables/re-erection of instruments/recalibration of instruments etc. required due to contractor's mistake or design requirement and found at any stage inspection, shall be carried out by the contractor at no extra cost.
8.1.9	BHEL, Power Sector Regions (PSNR/PSE/PSWR/PSSR) have already been accredited with ISO 9001 certification and as such this work is subject to various audits to meet ISO 9001 requirements. One particular aspect which needs special mention is about arrangement of calibration of instruments by the contractor. Contractor shall ensure deployment of reliable and calibrated MMEs (Measuring and Monitoring Equipments). The MMEs shall have test / calibration certificates from authorised / Government approved / Accredited agencies traceable to National / International Standards. Re-testing / re-calibration shall also be arranged at regular intervals during the period of use as advised by BHEL Engineer within the contract price. The contractor will also have alternate arrangements for such MMEs so that work does not suffer when the particular equipment / instrument is sent for calibration. Also if any MMEs not found fit for use, BHEL shall have the right to stop the use of such item and instruct the contractor to deploy proper item and recall ie repeat the readings taken by that instrument, failing which BHEL may deploy MME and retake the readings at Contractor's cost.
8.1.10	Re-work necessitated on account of use of invalid MMEs shall be entirely to the contractor's account. He shall be responsible to take all corrective actions,

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	including resource augmentation if any, as specified by BHEL to make-up for the loss of time.
8.1.11	In the courses of erection, it may become necessary to carry repeated checks of the work with instruments recently calibrated, re-calibrated. BHEL may counter/ finally check the measurements with their own MMEs. Contractor shall render all assistance in conduct of such counter/final measurements.
8.1.12	Total Quality is the watchword of the work and Contractor shall strive to achieve the Quality Standards, procedures laid down by BHEL. He shall follow all the instructions as per BHEL drawings and Quality Standards.
8.2	Stage Inspection By FES/QA Engineers
8.2.1	Apart from day-to-day inspection by BHEL Engineers stationed at Site and Customer's Engineers, stage inspection of equipments under erection and commissioning at various stages shall also be conducted by teams of Engineers from Field Engineering Services of BHEL's Manufacturing Units, Quality Assurance teams from Field Quality Assurance, Unit/Factory Quality Assurance and Commissioning Engineers from Technical Services etc. Contractor shall arrange all labour, tools and tackles etc along with proper access for such stage inspections free of cost.
8.2.2	Any modifications suggested by BHEL FES and QA Engineers' team shall be carried out. Claims of contractor, if any, shall be dealt as per Section 13, and provided such modifications have not arisen for reasons attributable to the contractor.
8.3	Statutory Inspection of Work
8.3.1	<p>The work to be executed under these specifications has to be offered for inspection, at appropriate stages of work completion, to various statutory authorities for compliance with applicable regulations.</p> <p>The work related statutory inspections, if applicable, as per Syrian Laws. though not limited to, are as under:</p> <ol style="list-style-type: none"> 1) Inspectorate of Steam Boilers and Smoke Nuisance 2) Electrical Inspector 3) Factory Inspector, Labour Commissioner, PF Commissioner and other authority connected to this project work <p>The scope includes getting the approvals from the statutory authorities, which</p>

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	includes arranging for inspection visits of statutory authority periodically as per BHEL Engineer's instructions, arranging materials/documents for ground inspection, taking rub outs for the pressure parts to be offered for inspection, submitting co-related inspection reports, documents, radiographs etc and following up the matter with them. Contractor shall also make all arrangements for offering the Products / Systems for inspection at location, as applicable, to the concerned authority.
8.3.2	Contractor should be qualified to execute pressure parts & piping work coming under the purview of IBR, for which he should register himself with CIB of state concerned. contractor also should be aware of the latest IBR regulations and Electricity Act, including the amendments thereof.
8.3.3	Contractor shall comply with 'Qualification Tests for welders engaged in welding of Boilers and Steam Pipes under Construction, Erection and Fabrication at Site in India and in repairing Boilers and steam pipes by welding' in line with Chapter XIII of Indian Boiler Regulations 1950, for testing his welders / men / workers, including all associated fees, procedures, required instruments and equipments and their calibration there of. It shall be contractor's responsibility to obtain approval of Statutory Authorities, wherever applicable, for the conducting of any work which comes under the purview of these authorities, at his cost.
8.3.4	The following fees shall be excluded from scope of Contractor: 1. Registration Fee as per Regulation 385 of Chapter IX of Indian Boiler Regulations 1950 2. Fees for inspection of Boiler at the site of Construction as per Regulation 395 A, sl no 4 of Chapter IX of Indian Boiler Regulations 1950 However all other fees like visit fees charged by the Boiler Inspector and other arrangements for his visit or visits till satisfactory completion of work, shall be included in scope of Contractor
8.4	The Quality Management System of BHEL, Power Sector Regions (PSNR/PSER/PSWR/PSSR) have already been certified and accredited under ISO 9002 standards in this regard. The basic philosophy of the Quality Management System is to define the organizational responsibility, work as per documented procedures, verify the output with respect to acceptance norms, identify the non-conforming product/ procedure and take corrective action for

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	removal of non-conformance specifying the steps for avoiding recurrence of such non-conformities, & maintain the relevant quality records. The non conformities are to be identified through the conduct of periodical audit of implementation of quality systems at various locations/stages of work. Suppliers/vendors of various products/services contributing in the work are also considered as part of the quality management system. .as such the contractor is expected not only to conform to the quality management system of BHEL but also it is desirable that they themselves are accredited under any quality management system standard.
8.5	Field Quality Assurance
8.5.1	Contractor shall carry out all activities conforming to the approved Field Quality Plan (FQP) as revised from time to time. Total quality shall be the watchword of the work and contractor shall strive to achieve the quality standards, procedures laid down by BHEL. He shall follow all the instructions as per BHEL drawings and quality standards. Contractor shall provide the services of quality assurance engineer as per the relevant clauses.

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9.0	<p>OCCUPATIONAL HEALTH, SAFETY & ENVIRONMENT MANAGEMENT/ QUALITY ASSURANCE PROGRAMME : BHEL, Power Sector Regions (PSNR/ER/WR/SR) are each certified for ISO 9001. Quality of work to customer's satisfaction and fulfillment of system requirements are the essence of ISO 9001 certification. BHEL, PS Regions have HSE certification (ISO 14001 & OHSAS 18001) and therefore Contractor also shall organise/ plan/ perform all their activities to meet with the applicable requirements of these standards.</p>
9.1	<p>HSE (Health, safety & Environment): Contractor will comply with HSE (Health, safety & Environment) requirements of BHEL. HSE requirements in brief, are given below :-</p>
9.1.1	<p>Contractor will nominate one of their qualified and experienced employees as Safety Officer, who will be responsible for all HSE related issues of contractors work area. Safety Officer will have authority to stop any activity, in case he observes that the activity is not being carried out in safe manner. He will conduct surprise inspection as well as periodic inspection/drill (at least once in a month) and submit such reports to BHEL. He will conduct periodic meetings with supervisors of different working groups and explain HSE issues and use of PPEs to them. Reports of such meetings will be submitted to BHEL. Contractor will develop suitable work procedures based upon HSE guidelines and OCPs and implement it. Such work procedures will consist of Area of work, T&P Details, Work Procedure, PPE requirements etc.</p> <p>Contractor should highlight the requirement of safety to staff and labour through daily tool box meeting before start of the days job</p>
9.1.2	<p>The contractor shall ensure that proper job specific health check-up is done by medical professional for their employees during initial mobilization and thereafter if there is any change of job.</p>
9.1.3	<p>Following personnel protective equipments (PPEs), in adequate numbers, will be made available at site & their regular use by all concerned will be ensured :-</p> <ul style="list-style-type: none"> - HELMET - SAFETY GOGGLES & WELDING FACE SHIELDS - SAFETY BELTS AND PROTECTIVE NET FOR WORKING AT HEIGHT - SAFETY SHOES - EAR PLUG - ANY OTHER SAFETY EQUIPMENT REQUIRED FOR SAFE COMPLETION OF THE WORK

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9.1.4	Providing appropriate First Aid facilities for prompt treatment of injuries and illness at work place. Arranging training to contractor workmen/ employees for giving first aid.
9.1.5	Arranging ambulance in case of any emergency situation .
9.1.6	Identification of nearest hospital and health check-up of workmen/employees
9.1.7	Providing filtered drinking water at work place in cool container.
9.1.8	Providing Canteen, Rest Room, Washing facilities to the contracted employees as per provisions of Contract Labour Regulation Act 1970 (Chapter V).
9.1.9	Providing appropriate fire fighting equipment at designated work place and nominate a fire officer/warden adequately trained for his job.
9.1.10	Identification of nearest fire station and display contact telephone nos. / person's name around work places for cases of emergencies .
9.1.11	Providing adequate no. of 24 V sources and ensure that no hand lamps are operating at voltage level above 24 Volts.
9.1.12	Fulfilling safety requirements at all power tapping points.
9.1.13	Red & White caution tape of proper width(1.5 to 2 inch) to be used for cordoning unsafe area such as open trench, excavation area etc.
9.1.14	Providing contractors company logo on cloths /uniform/ proper identity cards with photographs, for correct identification of people working at project site .
9.1.15	High/ Low pressure welders to be identified with separate colour clothings. No welders will be deployed without passing appropriate tests and holding valid welding certificates. Approved welding procedure should be displayed at work place.
9.1.16	Displaying safe handling procedures for all chemicals such as lube oil, acid, alkali, sealing compounds etc , at work place .
9.1.17	All scaffolding/ platforms should be made from materials of appropriate quality/grade so that these are safe for use. It should be certified/declared safe for use by an experienced contractor person, before any scaffolding/platform is used.
9.1.18	All T&Ps/ MMEs should be of reputed brand/appropriate quality & must have valid test/calibration certificates bearing endorsement from competent authority of BHEL.
9.1.19	Ensure that the regulatory requirement of excessive weight limit (to carry/lift/ move weights beyond prescribed limits) for male and female workers are complied with.
9.1.20	Safety slogan, Safety/ Caution boards , wherever required to be displayed in consultation with BHEL.

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9.1.21	Take suitable measures for waste management and environment related laws/legislation as a part of normal construction activities. Compliance with the legal requirements on storage/ disposal of paint drums (including the empty ones), Lubricant containers, Chemical Containers, and transportation and storage of hazardous chemicals will be strictly maintained. Ensure proper cleanliness of work place, housekeeping and waste management (including proper waste disposal) on daily basis.
9.1.22	It is imperative on the part of the contractor to join and effectively contribute in joint measures such as tree plantation, environment protection, contributing towards social upliftment, conversion of packing woods to school furniture, keeping good relation with local populace etc.
9.1.23	The contractor shall carry out periodic air and water quality check and illumination level checking in his area of work place and take suitable control measure.
9.1.24	The Contractor is required to provide proper safety net systems where ever the hazard of fall from height is present as per instruction of BHEL Engineer. The safety nets shall be fire resistant, duly tested and shall be of ISI Mark and the nets shall be located as per site requirements to arrest or to reduce the consequences of a possible fall of persons working at different heights.
9.1.25	<p>All applicable OCPs (Operational control procedures) will be followed by contractor as per BHEL instructions. This will be done as part of normal scope of work. List of such OCPs is given below . In case any other OCP is found to be applicable during the execution of work at site, then contractor will follow this as well, within quoted rate. These OCPs (applicable ones) will be made available to contractor during work execution at site. However for reference purpose, these are kept with Safety Officer of BHEL at the Power Sector Regional HQ, or available in downloadable format in the website, which may be refereed by contractor, if they so desire.</p> <ul style="list-style-type: none"> ■ OCP for safe handling of chemicals ■ OCP for Electrical safety ■ OCP for energy conservation ■ OCP for safe welding and gas cutting operation ■ OCP for fire safety ■ OCP for safety in use of hand tools ■ OCP for first aid ■ OCP for food safety at canteen ■ OCP for safety in use of cranes ■ OCP for storage and handing of gas cylinders

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■	OCP for manual arc welding
■	OCP for safe use of helmets
■	OCP for good house keeping
■	OCP for working at height
■	OCP for safe excavation
■	OCP for safe filling of Hydrogen in cylinder
■	OCP for illumination
■	OCP for handling and erection of heavy metals
■	OCP for safe acid cleaning
■	OCP for safe alkali boil out
■	OCP for safe oil flushing
■	OCP for steam blowing
■	OCP for safe working in confined area
■	OCP for safe operation of passenger lift, material hoists & cages
■	OCP for Vehicle maintenance
■	OCP for safe radiography
■	OCP for waste disposal
■	OCP for working at night
■	OCP for blasting
■	OCP for DG Set
■	OCP for handling & storage of mineral wool
■	OCP for drilling, reaming and grinding(machining) etc.
■	OCP for hydraulic test
■	OCP for spray insulation
■	OCP for trial run of rotary equipment
■	OCP for stress relieving
■	OCP for material preservation
■	OCP for cable laying/tray work
■	OCP for electrical maintenance
■	OCP for transformer charging
■	OCP for safe handling of battery system
■	OCP for computer operation
■	OCP for storage in open yard
■	OCP for sanitary maintenance
■	OCP for batching
■	OCP for piling rig operation
■	OCP for gas distribution test

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	<ul style="list-style-type: none"> ■ OCP for cleaning of hotwell / deaerator ■ OCP for electro-resistance heating ■ OCP for compressor operation ■ OCP for O&M of control of AC plant & system ■ OCP for air compressor ■ OCP for passivation ■ OCP for Safe EDTA Cleaning ■ OCP for Safe Chemical cleaning of Pre boiler system ■ OCP for Safe Boiler Light up ■ OCP for Safe Rolling and Synchronisation ■ OCP for Safe Loading of Unit
9.2	<p>SAFETY AND CLEANLINESS :</p> <p>The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per discretion of BHEL or its authorised officials (Site Construction Manager) to prevent loss of human lives, injuries, to personnel engaged and damage to property. Before commencing the work, the contractor shall submit a "Safety Plan" to the above authorised BHEL official and obtain approval on the same. The safety plan shall indicate in detail the measures that would be taken by the contractor to ensure safety of men, equipment, materials and environment during execution of the work. This will also include an organization structure, role and responsibilities of the concerned key personnel, the safety practices that will be followed, PPEs deployed, plan for handling critical activities and emergencies.</p>
9.3	<p>If the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions issued by the authorised BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor.</p>
9.4	<p>During the course of construction, alternation or repairs, scrap with protruding nail, sharp edge etc and all other debris shall be kept clean from working areas, passage, ways and stairs in and around site.</p>
9.5	<p>Combustible scrap and debris shall be removed at regular intervals during the course of execution. Safe means shall be provided to facilitate such removal. The combustible scrap should be stored in safe place away from the plant materials to avoid fire accidents. The area shall be chosen in consultation with the Engineer and to be cordoned off.</p>
9.6	<p>Rigging equipment for materials handling shall be inspected prior to use in each shift and as necessary during its use to ensure that it is safe. Defective</p>

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	rigging equipment will be removed from service.
9.7	Rigging equipment shall not be loaded in excess of its recommended safe working load. Rigging equipment, when not in use, shall be removed from the original work area so as not to present a hazard to employees.
9.8	Contractor shall notify the engineer, of his intention to bring on to site any equipment or any container, with liquid or gaseous fuel or other substance which may create a hazard. The Engineer shall have the right to prescribe the condition under which such equipment or container may be handled and used during the performance of the works and the contractor shall strictly adhere to such instructions. The Engineer shall have the right to inspect any construction tool and to forbid its use, if in his opinion it is unsafe. No claim due to such prohibition will be entertained.
9.9	Where it is necessary to provide and/or store petroleum products or petroleum mixture & explosives, the contractor shall be responsible for carrying out such provision / storage in accordance with the rules & regulations laid down in the relevant petroleum act, explosive act and petroleum and carbide of calcium manual, published by the chief inspector of explosives of India. All such storage shall have prior approval if necessary from the chief inspector of explosives or any other statutory authority. The contractor shall be responsible for obtaining the same.
9.10	Cylinders shall be moved by tilting and rolling them on their bottom edges. They shall not be intentionally dragged, struck or permitted to strike each other violently.
9.11	When cylinders are transported by powered vehicle they shall be secured in a vertical position.
9.12	All workmen of the contractor working on construction area shall wear safety shoes, hand gloves, safety helmets and safety belt as applicable. The contractor shall provide to its workforce and ensure the use of following personnel protective equipment as found necessary and as directed by BHEL.
9.12.1	Safety Helmets conforming to IS-2965 : 1984 or equivalent International Standard.
9.12.2	Safety Belts conforming to IS-3521:1983 or equivalent International Standard.
9.12.3	Safety Shoes conforming to IS-1989 : 1978 or equivalent International Standard.

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9.12.4	Eye and face protection devices conforming to IS – 8620 : 1977 & IS – 8950 : 1978 or equivalent International Standard. .
9.12.5	Hand and body protection devices conforming to IS – 2575 : 1975 and IS – 6994 : 1973, IS – 8907 : 1970 & 8619 : 1977 or equivalent International Standard.
9.13	The contractor shall insure his workmen against all accidents and the policy shall be presented to BHEL Engineer on demand. Other wise, BHEL will arrange the same and the expenditure towards this will be debited to the contractor. In case of a fatal or disabling injury accident to any person at construction site due to lapses by the contractor, the victim and/or his/her dependants 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 contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependence before imposing any such penalty. Appropriate enquiry shall be held by BHEL giving opportunity to the contractor for presenting his case. Above safety conditions are not exhaustive but gives an idea for the contractor and contractor shall adhere to all safety precaution given by the Engineer at site.
9.14	The contractor shall arrange at his cost adequate lighting facilities e.g. flood lighting, hand lamps, area lighting etc. at various levels for safe and proper working operations during night hours at the work spot as well as at the pre-assembly area.
9.15	The contractor shall be responsible for provision of all the safety notices and safety equipment as enjoined on him by the application of relevant statutory regulation / provisions and/or as called upon by BHEL from time to time. He shall be held responsible for any violation of statutory regulations (local, state or central) and BHEL instruction that may endanger safety of men, equipment and material.
9.16	The contractor shall provide temporary fencing wherever required as a safety measure against accident and damage to properties. Suitable caution notices shall be displayed where access to any part is found to be unsafe and hazardous.
9.17	Contractor shall ensure safety of all the workmen, material and equipment either belonging to him or to others working at site. He shall observe safety rules and codes applied by BHEL without exception.

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9.18	It will be the responsibility of the contractor to ensure safe lifting of the equipment, taking due precaution to avoid any accident and damage to other equipment and personnel. All requisite tests and inspection of handling equipment, tools & tackle shall be periodically done by the contractor. Defective equipment shall be removed from service. Any equipment shall not be loaded in excess of its recommended safe working load.
9.19	The contractor shall provide necessary first aid facilities for all his employees, representatives and workmen at site and BHEL shall have no obligation in this regard. The first aid boxes should be placed at various elevations so as to make them available within the reach and at the quickest possible time. The contractor should conduct periodical first –aid classes to keep his supervisor and Engineers properly trained for attending to any emergency.
9.20	All the contractor's supervisory personnel and sufficient number of workers shall be trained for fire protection systems. Enough number of such trained personnel must be available during the tenure of contract. Contractor should nominate his supervisor to coordinate and implement the safety measures.
9.21	Contractor shall provide enough fire protecting equipment of the types and numbers at his office, stores, temporary structure in labour colony etc. Such fire protection equipment shall be easy and kept open at all times. The fire extinguishers shall be properly refilled and kept ready which should be certified at periodic intervals. The date of changing should be marked on the Cylinders. All other fire safety measures as laid down in the "codes for fire safety at construction site" issued by safety coordinator of BHEL shall be followed. Non-compliance of the above requirement under fire protection shall in no way relieve the contractor of any of his responsibility and liabilities to fire accident occurring either to his materials or equipment or those of others.
9.22	The contractor shall at his cost, remove from vicinity of work at least once each day all combustible waste, scrap, painting materials, rubbish, unused or other materials and deposit them in places specified by BHEL to keep the work site clear and tidy. Use of undercoated canvas paper, corrugated paper, fabricated carton, plastic or other flammable materials shall be restricted to the minimum and promptly removed.
9.23	The contractor shall not use any hand lamp energized by Electric power with supply voltage of more than 24 volts in confined spaces like inside water boxes, turbine casings, condensers etc.
9.24	All portable electric tools used by the contractor shall have safe plugging

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	system to source of power and be appropriately earthed. Only electricians licensed by appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works.
9.25	In case of any delay in 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 the payments due to the contractor, after notifying the contractor suitably.
9.26	Valve protection caps shall be kept in place and secured.
9.27	The contractor shall be responsible for the safe storage and handling of his radio-active sources as per BARC/ Syrian rules and regulations.
9.28	Tarpaulin being inflammable should not be used (instead, only non infusible covering materials shall be used) as protective cover while preheating, welding, stress relieving etc. at site.
9.29	If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given 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 instruction regarding safety issued by BHEL, 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 7 days indicating the steps that would be taken by BHEL.
9.30	If the contractor succeeds in carrying out its job in time with out any fatal or disabling injury accident and without any damage to property BHEL may, at its sole discretion, favorably consider to reward the contractor suitably for the performance.
9.31	The contractor shall carefully follow the safety requirement of BHEL/ the purchaser with the regard to voltages used in critical areas.
9.32	The contractor shall use only properly insulated and armored cables which conform to the requirement of Indian Electricity Act and Rules for all wiring, electrical applications at site. BHEL reserves the right to replace any unsafe electrical installations, wiring, cabling etc. at the cost of the contractor. All electrical appliances used in the work shall be in good working condition and shall be properly earthed. No maintenance work shall be carried out on live equipment. The contractor shall maintain adequate number of qualified electricians to maintain his temporary electrical installations.

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9.33	The contractor shall arrange adequate number of persons specifically for clearing any debris and for house keeping of the erection area including restacking of components in the erection areas.
9.34	In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover the cost of such damages from the contractor after holding an appropriate enquiry.
9.35	The contractor shall submit report of all accidents, fires and property damage etc to the Engineer immediately after such occurrence, but in any case not later than 24 hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. In addition periodic reports on safety shall also be submitted by the contractor to BHEL from time to time as prescribed by the Engineer.
9.36	Before commencing the work, the contractor shall appoint/nominate a responsible person to supervise implementation of all safety measures and liaison with his counterpart of BHEL.
9.37	Suitable scaffolds shall be provided for workman for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration of work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made of steel. The steps shall have a minimum width of 45 cm and a maximum rise of 30 cm. Suitable handholds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than ¼ horizontal and 1 vertical.
9.38	Scaffolding or staging more than 3.6 m above the ground floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly bolted, braced or otherwise secured, at least 90 cm above the floor or platform of such scaffolding or staging and extending along the entire length of the out side and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from savor, from swaying, from the building or structure.
9.39	Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform gangways provided is more than 3.6 m above ground level or floor level, they shall be closely boarded and shall have adequate width which shall not be less than 750 mm and be suitably fenced as described above.

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9.40	Every opening in the floor or a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm.
9.41	Wherever there are open excavation in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.
9.42	Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m in the length while the width between side rails in rung ladder shall in no case be less than app. 29.2 cm for ladder upto and including 3 m in length. For longer ladders this width shall be increased at least ¼" for each additional foot of length.
9.43	A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to Construction.
9.44	All personnel of the Contactor working within the plant site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal worker shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
9.45	Adequate precautions shall be taken to prevent danger for electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.
9.46	All trenches, four feet or more in depth, shall at all times be supplied with at least one ladder for each 30 m in length or fraction thereof. The ladder shall be extended from bottom of the trench to at least 90 cm above the surface of the ground. Sides of the trenches which are 1.50 m or more in depth shall be stepped back to give suitable slope or securely held by timer bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
9.47	The Contactor shall take all measures at the sites of the work to protect all persons from accidents and shall be bound to bear the expenses of defense of every suit, action or other proceeding at law that may be brought by any persons for injury sustained or death owing to neglect of the above precautions and to pay any such persons such compensation or which may with the consent of the Contractor be paid to compromise any claim by any such person should such claim proceeding be filed against BHEL, the Contractor hereby agrees to

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-IX:HSE & OHSAS

	indemnify BHEL against the same.
9.48	Before any demolition work is commenced and also during the process of the work the following shall be ensured:
9.48.1	All roads and open areas adjacent to the work site shall either be closed or suitably protected.
9.48.2	No electric cable or apparatus which is liable to be a source of danger nor a cable or an apparatus used by the operator shall remain electrically charged.
9.48.3	All practical steps shall be taken to prevent danger to persons employed from the risks of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render them unsafe.
9.49	All necessary personnel safety equipment as considered adequate by the Engineer should be kept available for the use of the persons employed in the Site and maintained in a condition suitable for immediate use and the Contactor should take adequate steps to ensure proper use of equipment by those concerned.
9.49.1	Workers employed on mixing asphalted materials, cement and lime mortars shall be provided with protective foot wear and protective goggles.
9.49.2	Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.
9.49.3	Those engaged in welding works shall be provided with welder's protective eyesight lids.
9.49.4	Stone breakers shall be provided with protective goggles and protective clothing and seated sufficient to safe intervals.
9.49.5	Where workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into manhole, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
9.49.6	The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-IX:HSE & OHSAS

9.49.6.1	No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
9.49.6.2	Suitably face masks should be supplied for use by the workers where paints are applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
9.49.6.3	Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
9.50	When the work is being done near any place where there is risk of drowning all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
9.51	Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safe guards. Hoisting appliance should be provided with such means as will reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installations which are already energized, insulting mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductor of electricity.
9.52	All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near the places of work.
9.53	The contractor shall maintain and ensure necessary safety measures as required for inspection and tests HV test, Pneumatic test, Hydraulic test, Spring test, Bend test etc as applicable, to enable. inspection Agency for performing Inspection. If any test equipment is found not complying with proper safety requirements then the Inspection Agency may withhold inspection, till such time the desired safety requirements are met.
9.54	The Contractor shall notify BHEL of his intention to bring to site any equipment or material which may create hazard. BHEL shall have the right to prescribe the conditions under which such equipment or materials may be handled and the contractor shall adhere to such instructions. BHEL may prohibit the use of any construction machinery, which according to him is unsafe. No claim for

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-IX:HSE & OHSAS

	compensation due to such prohibition will be entertained by BHEL.													
9.55	All safety precautions shall be taken for welding and cutting operations as per IS-818. All safety precautions shall be taken for foundation and other excavation marks as per IS-3764.													
9.56	These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent, place at work spot. The persons responsible for compliance of the safety code shall be named therein by the Contractor.													
9.57	To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangement made by the contract shall be open to inspection by the Engineer of the Engineer's Representative.													
9.58	Keeping the work area clean/ free from debris, removed scaffoldings, scraps, insulation/sheeting wastage /cut pieces, temporary structures, packing woods etc. will be in the scope of the contractor. Such cleanings has to be done by contractor within quoted rate, on daily basis by an identified group. If such activity is not carried out by contractor / BHEL is not satisfied, then BHEL may get it done by other agency and actual cost alongwith BHEL overheads will be deducted from contractor's bill. Such decisions of BHEL shall be binding on the contractor.													
9.59	Notwithstanding the above clauses there is nothing to exit the Contractor from the operations of any other Act or Rule in force in area of work in this respect. Provided always that all safety measures apart from those specifically provided in this agreement which are brought to the notice of the Contractor from time to time by the Engineer shall be complied by the Contractor. Provided further that all consequences, damages, or losses arising by reason of any safety code shall be met with by the Contractor.													
9.60	<p><u>NON COMPLIANCE:-</u> NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND BHEL HAS RIGHT TO IMPOSE FINES ON THE CONTRACTOR AS UNDER <u>for every instance of violation noticed:</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">SN</th> <th style="width: 70%;">Violation of Safety Norms</th> <th style="width: 20%;">Fine (in SYP)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">01</td> <td>Not Wearing Safety Helmet</td> <td style="text-align: center;">50/-</td> </tr> <tr> <td style="text-align: center;">02.</td> <td>Not wearing Safety Belt</td> <td style="text-align: center;">100/-</td> </tr> <tr> <td style="text-align: center;">03.</td> <td>Grinding Without Goggles</td> <td style="text-align: center;">50/-</td> </tr> </tbody> </table>		SN	Violation of Safety Norms	Fine (in SYP)	01	Not Wearing Safety Helmet	50/-	02.	Not wearing Safety Belt	100/-	03.	Grinding Without Goggles	50/-
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SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-IX:HSE & OHSAS

	04.	Not using 24 V Supply For Internal Work	500/-
	05.	Electrical Plugs Not used for hand Machine	100/-
	06.	Not Slings 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/-
	14.	Accident Resulting in Partial Loss in Earning Capacity	25,000/- per victim
	15.	Fatal Accident/Accidents Resulting in total loss in Earning Capacity	1,00,000/ - per victim
	<p>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 utilized 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.</p>		
9.61	<p><u>CITATION:</u>-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</p>		
9.62	<p><u>MEMORANDUM OF UNDERSTANDING</u> After Award Of Work, Contractors Are Required To Enter Into A Memorandum Of Understanding As Given Below:</p> <p style="text-align: center;"><u>Memorandum of Understanding</u></p> <p>➤ BHEL, Power Sector _____ Region is committed to Health, Safety and Environment Policy (EHS Policy).</p>		

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-IX:HSE & OHSAS

- M/s _____ do hereby also commit to the same EHS Policy while executing the Contract Number _____
- M/s _____ shall ensure that safe work practices not limited to the above 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:

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-X: RA Bill Payments

10.0	RA Bill Payments
10.1	The contractor shall submit his monthly RA bills with all the details required by BHEL on specified date every month covering progress of work in all respects and areas for the previous calendar month.
10.2	Mode of payment and measurement of work completed shall be as per relevant clauses of General Conditions of Contract
10.3	Release of payment in each running bill including PVC Bills will be restricted to 95% of the value of work admitted as per stages of progressive pro rata payments.
10.4	The 5% thus remaining shall be treated as 'Retention Amount' and shall be released as per terms specified in the General Conditions of Contract.
10.5	The payment for running bills will normally be released within 30 days of submission of running bill complete in all respects with all documents. It is the responsibility of the contractor to make his own arrangements for making timely payments towards labour wages, statutory payments, outstanding dues etc and other dues in the meanwhile.
10.6	BHEL shall release payment through Electronic Fund Transfer (EFT)/RTGS. In order to implement this system, Contractor to furnish details pertaining to his Bank Accounts where proceeds will be transferred through BHEL's banker, as per prescribed formats: Note: BHEL may also choose to release payment by other alternative modes as applicable
10.7	Paying Authority shall be the Construction Manager of the Site. Any change in the paying Authority shall be intimated to the Contactor accordingly.

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-XI : Performance Monitoring

11.0	Performance Monitoring										
11.1	Performance of the contractor is monitored through various reports/reviews and shall be jointly evaluated every quarter as per prescribed formats. Based on the net weighted score obtained, Contractors shall be rated 'Good' or 'Satisfactory' or 'Unsatisfactory'										
11.2	Annual performance (Financial Year wise) and Over all Performance (for the Contract) shall be based on the averages of Quarterly net weighted scores.										
11.3	<p>In case Annual/Quarterly performance is found 'Unsatisfactory', BHEL reserves the right to put on hold such Contractors as given below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sl No</th> <th style="width: 50%;">Performance status</th> <th style="width: 40%;">Type of suspension</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>'Unsatisfactory' in the Annual performance in the last Financial Year (if the agency is executing only one job in the Region)</td> <td>Hold for a period of six months for similar Work</td> </tr> <tr> <td style="text-align: center;">2</td> <td>'Unsatisfactory' in the Annual performance in the last Financial Year or in the 'Overall' Performances, for 2 or more Works/Contracts being executed by the Contractor in the Region</td> <td>Hold for a period of six months for similar Works for which performance is 'Unsatisfactory'.</td> </tr> </tbody> </table> <p>Note: If there is any conflict between the "Overall" performance and the latest "Annual" performance, then the 'Overall' performance shall prevail. However, BHEL reserves the right on the decision of 'Hold', in case of consistent 'Annual' improvement notwithstanding the vendors 'Overall' performance being unsatisfactory.</p>		Sl No	Performance status	Type of suspension	1	'Unsatisfactory' in the Annual performance in the last Financial Year (if the agency is executing only one job in the Region)	Hold for a period of six months for similar Work	2	'Unsatisfactory' in the Annual performance in the last Financial Year or in the 'Overall' Performances, for 2 or more Works/Contracts being executed by the Contractor in the Region	Hold for a period of six months for similar Works for which performance is 'Unsatisfactory'.
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SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-XII: Suspension of Business Dealings

12.0	Suspension of Business dealings
12.1	BHEL reserves the right to take action against contractors who fail to perform or indulge in malpractices, by suspending business dealings with them.
12.2	Suspension could be in the form of 'Hold', 'De-listing' or 'Banning' a contractor.
12.3	<p>A bidder may be put on HOLD for a period of 6 months, for future tenders for specific works on the basis of one or more of the following reasons:</p> <ul style="list-style-type: none"> a) Bidder does not honour his own offer or any of its conditions within the validity period. b) Bidder fails to respond against three consecutive enquires of BHEL. c) After placement of order, Bidder fails to execute a contract. d) Bidder fails to settle sundry debt account, for which he is legitimately liable, within one year of its occurrence. e) Bidder's performance rating falls below 60% in specific category (more fully described in chapter 'Performance Monitoring') f) Bidder works are under strike/ lockout for a long period.
12.4	<p>A Bidder may be de-listed from the list of registered Bidders of the region for a period of 1 year on the basis of one or more of the following reasons:-</p> <ul style="list-style-type: none"> a) Bidder tampers with tendering procedure affecting ordering process or commits any misconduct which is contrary to business ethics. b) Bidder has substituted, damaged, failed to return, short returned or unauthorizedly disposed off materials/ documents/ drawings/ tools etc of BHEL. c) Bidder no longer has the technical staff, equipment, financial resources etc. required to execute the orders/ contracts.
12.5	<p>A Bidder can be banned from doing any business with all Units of BHEL for a period of 3 years on the basis of one or more of the following reasons:</p> <ul style="list-style-type: none"> a) Bidder is found to be responsible for submitting fake/ false/ forged documents, certificates, or information prejudicial to BHEL's interest. b) In spite of warnings, the Bidder persistently violates or circumvents the provisions of labour laws/ regulations/ rules and other statutory requirements. c) Bidder is found to be involved in cartel formation

SPECIAL CONDITIONS OF CONTRACT (SCC)
Chapter-XII: Suspension of Business Dealings

	<p>d) The Bidder has indulged in malpractices or misconduct such as bribery, corruption and fraud, pilferage etc which are contrary to business ethics.</p> <p>e) The Bidder is found guilty by any court of law for criminal activity/offences involving moral turpitude in relation to business dealings.</p> <p>f) The Bidder is declared bankrupt, insolvent, has wound up or been dissolved; i.e ceases to exist for all practical purposes.</p> <p>g) Bidder is found to have obtained Official Company information/documentation by questionable means.</p> <p>h) Communication is received from the administrative Ministry of BHEL to ban the Bidder from business dealings.</p>
12.6	Contracts already entered with a contractor before the date of issue of order of 'HOLD' or 'DE-LISTING' shall not be affected.
12.7	All existing contracts with a 'BANNED' contractor shall normally be short closed
12.8	Once the order for suspension is passed, existing offers/new offers of the contractor shall not be entertained
12.9	The above guidelines are not exhaustive but enunciate broad principles governing action against contractors

General Conditions of Contract

(Common for Power Sector Regions)

2010

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CHAPTER -1

1. GENERAL INSTRUCTION TO TENDERERS

1.1. DESPATCH INSTRUCTION

- i) The General Conditions of Contract form part of the Tender specifications. **All pages of the tender documents shall be duly signed, stamped and submitted along with the offer in token of complete acceptance thereof.** The information furnished shall be complete by itself. The tenderer is required to furnish all the details and other documents as required in the following pages
- ii) Tenderers are advised to study all the tender documents carefully. Any submission of tender by the tenderer shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. Should the tenderers have any doubt about the meaning of any portion of the Tender Specification or find discrepancies or omissions in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, the scope of work etc., he shall at once, contact the authority inviting the tender well in time (so as not to affect last date of submission) for clarification before the submission of the tender. Tenderer's request for clarifications shall be with reference to Sections and Clause numbers given in the tender documents. The specifications and terms and conditions shall be deemed to have been accepted by the tenderer in his offer. Non compliance with any of the requirements and instructions of the tender enquiry may result in the rejection of the tender.
- iii) Integrity pact (IP) shall be applicable for all tenders / contracts if indicated in NIT. This integrity pact shall be issued as part of the Tender documents and shall be returned by the bidder along with Techno-commercial bid duly filled, signed and stamped by the authorized signatory who signs the bid. Only those vendors / bidders who have entered into such an IP with BHEL shall be considered qualified to participate in the bidding. Entering into this pact shall be a preliminary qualification.

1.2. SUBMISSION OF TENDERS

- 1.2.1 The tenderers must submit their tenders to Officer inviting tender as per instructions in the NIT
- 1.2.2 Tenders submitted by post shall be sent by 'REGISTERED POST ACKNOWLEDGEMENT DUE / by COURIER' and shall be posted with due allowance for any postal/courier delays. BHEL takes no responsibility for delay, loss or non-receipt of tenders sent by post/courier. **The tenders received after the specified time of their submission are treated as 'Late Tenders' and shall not be considered under any circumstances.** Offers received by Fax/Email/Internet shall be considered as per terms of NIT.
- 1.2.3 Tenders shall be opened by authorised Officer of BHEL at his office at the time and date as specified in the NIT, in the presence of such of those tenderers or their authorised representatives who may be present

- 1.2.4 Tenderers whose bids are found techno commercially qualified shall be informed the date and time of opening of the Price Bids and such Tenderers may depute their representatives to witness the opening of the price bids. BHEL's decision in this regard shall be final and binding.
- 1.2.5 Before submission of Offer, the tenderers are advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour, means of transport and access to Site, accommodation, etc. No claim will be entertained later on the grounds of lack of knowledge of any of these conditions.
- 1.3. LANGUAGE**
- 1.3.1 The tenderer shall quote the rates in English language and international numerals. These rates shall be entered in figures as well as in words. For the purpose of the tenders, the metric system of units shall be used.
- 1.3.2 All entries in the tender shall either be typed or written legibly in ink. Erasing and over-writing is not permitted and may render such tenders liable for rejection. All cancellations and insertions shall be duly attested by the tenderer.
- 1.4 PRICE DISCREPANCY:**
- 1.4.1 **Conventional (Manual) Price Bid opening :** In the case of price bid opening without resorting to Reverse Auction, if there are differences between the rates given by the tenderer in words and figures or in amount worked out by him, the following procedure for evaluation and award shall be followed:
- i) When there is a difference between the rates in figures and in words, the rates which corresponds to the amounts worked out by the contractor, shall be taken as correct
 - ii) When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figure or in words, then the rate quoted by the contractor in words shall be taken as correct
 - iii) When the rate quoted by the contractor in figures and words tallies but the amount is not worked out correctly, the rate quoted by the contractor shall be taken as correct and not the amount.
 - iv) In case of lumpsum price, if there is any difference between the amount in figures and in words, the amount quoted by the bidder in words shall be taken as correct.
 - v) In case of omission in quoting any rate for one or more items, the evaluation shall be done considering the highest quoted rate obtained against the respective items by other tenderers for the subject tender. If the tenderer becomes L-1, the notional rates for the omission items shall be the lowest rates quoted for the respective items by the other tenderers against the respective omission items for the subject job and the 'Total quoted price (loaded for omissions)' shall be arrived at. However the overall price remaining the same as quoted originally, the rates for all the items in the 'Total quoted price (loaded for omissions)' shall be reduced item wise in proportion to the ratio of 'Original' total price and the 'Total quoted price (loaded for omissions)'".
- 1.4.2 **Reverse Auction:** In case of Reverse Auction, the successful bidder shall undertake to execute the work as per overall price offered by him during the Reverse Auction process. In case of omission of rates, the procedure shall be as per 'Guidelines for Reverse Auction' enclosed.
- 1.5. QUALIFICATION OF TENDERERS**
- i) Only tenderers who have previous experience in the work of the nature and description detailed in the Notice Inviting Tender and/or tender specification are expected to quote for this work duly detailing their experience along with offer.

- ii) Offers from tenderers who do not have proven and established experience in the field shall not be considered
- iii) Offers from tenderers who are under suspension (banned) by any Unit/Region/Division of BHEL shall not be considered.
- iv) Offers from tenderers who do not comply with the latest guidelines of Ministry/Commissions of Govt of India shall not be considered.

1.6. EVALUATION OF BIDS

- i) Technical Bids submitted by the tenderer will be opened first and evaluated for fulfilling the Pre Qualification criteria and other conditions in NIT/Tender documents, based on documentary evidences submitted along with the offer
- ii) In case the same qualifying experience is claimed by more than one agency, then the agency who has executed the work as per documentary evidence submitted shall only be qualified. Scope of qualifying work should be totally with the agency who has executed and in case it is only labour+consumables without T&P, then the responsibility of execution is assigned to the first agency and not to the agency who has executed only as labour supply contractor. Further, BHEL reserves the right to ask for further proofs including submission of TDS certificates for the said job
- iii) In case the qualifying experience is claimed by private organizations based on Work Order and completion certificates from another private organization, BHEL reserves the right to ask for further proofs including submission of TDS certificates for the said job
- iv) Assessing Bidder Capacity for executing the current tender shall be as per Notice Inviting Tender
- v) Price Bids of shortlisted bidders shall only be opened either through the conventional price bid opening or through electronic Reverse Auction, at the discretion of BHEL
- vi) Price Bids of unqualified bidders shall not be opened. Reasons for rejection shall be intimated in due course after issue of LOI/LOA to successful bidder and receipt of unqualified acceptance from the successful bidder
- vii) Bidders are advised to also refer to clause no 2.9.4 regarding evaluation of their performance in ongoing projects for the current tender

1.7. DATA TO BE ENCLOSED

Full information shall be given by the tenderer in respect of the following. Non-submission of this information may lead to rejection of the offer.

~~i) **INCOME TAX PERMANENT ACCOUNT NUMBER**~~

~~Certified copies of Permanent Account Numbers as allotted by Income Tax Department for the Company/Firm/Individual Partners, etc. shall be furnished along with tender.~~

ii) ORGANIZATION CHART

The organization chart of the tenderer's organization, including the names, addresses and contact information of the Directors/Partners shall be furnished along with the offer.

- iii) An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor

iv) IN CASE OF INDIVIDUAL TENDERER:

His / her full name, address and place & nature of business.

v) IN CASE OF PARTNERSHIP FIRM

The names of all the partners and their addresses, A copy of the partnership deed/instrument of partnership duly certified by the Notary Public shall be enclosed.

vi) **IN CASE OF COMPANIES:**

- a. Date and place of registration including date of commencement certificate in case of Public Companies (certified copies of Memorandum and articles of Association are also to be furnished).
- b. Nature of business carried on by the Company and the provisions of the Memorandum relating thereof.

1.8 **AUTHORISATION AND ATTESTATION**

Tenders shall be signed by a person duly authorized/empowered to do so. An attested copy of the Power of Attorney, in case the tender is signed by an individual other than the sole proprietor shall be submitted along with the tenders

1.9 ~~EARNEST MONEY DEPOSIT~~

1.9.1 ~~Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the manner described herein.~~

- ~~i) EMD shall be furnished along with the offer in full as per the amount indicated in the Special Conditions of Contract / NIT~~
- ~~ii) EMD is to be paid in cash (as permissible under Income Tax Act), Pay order or Demand Draft in favour of 'Bharat Heavy Electricals Limited' and payable at Regional HQ issuing the tender.~~
- ~~iii) No other form of EMD remittance shall be acceptable to BHEL~~
- ~~iv) Bidder may opt to deposit "One Time EMD" of Rs. 2.0 lakhs (Rupees Two lakhs only) with BHEL:Power Sector Northern Region HQ issuing the tender, which will enable them to participate in all the future tender enquiries in respect of Erection and Commissioning services issued from the respective office. Interested bidders may clearly send their consent for converting the present EMD into a "One Time EMD" in their offer.~~
 - ~~• Note : The 'One Time EMD' cannot be withdrawn by the tenderers within 3 years from the date of deposit, under any circumstances. The Tenderer who wishes to withdraw after three years will not be allowed to submit 'One Time EMD' again.~~
- ~~v) Bidders who have already deposited such "One Time EMD" of Rs. 2.00 lakh are exempted from submission of EMD for this tender. However a copy of 'One Time EMD' certificate issued by BHEL PSNR HQ issuing the tender shall be enclosed along with the offer.~~

1.9.2 ~~EMD by the bidder will be forfeited as per Tender Documents if~~

- ~~i) After opening the tender, the bidder revokes his tender within the validity period or increases his earlier quoted rates.~~
- ~~ii) The bidder does not commence the work within the period as per LOI/Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.~~

1.9.3 ~~EMD shall not carry any interest.~~

1.9.4 ~~In the case of unsuccessful bidders, the Earnest Money will be refunded to them within a reasonable time after acceptance of award by successful tenderer.~~

1.10 **SECURITY DEPOSIT**

1.10.1 Upon acceptance of Tender, the successful Tenderer should deposit the required amount of Security

Deposit for satisfactory completion of work, as per the rates given below:

SN	Contract Value	Security Deposit Amount
1	Up to Rs. 10 lakhs	10% of Contract Value
2	Above Rs. 10 lakhs upto Rs.50 lakhs	1 lakh + 7.5% of the Contract Value exceeding Rs. 10 lakhs.
3	Above Rs. 50 lakhs	Rs 4 lakhs + 5% of the Contract Value exceeding Rs. 50 lakhs.

NOTE: The conversion rate from INR to EURO shall be the exchange rate of State Bank of India (SBI TT selling rate) as prevailing on the date of technical bid opening.

1.10.2 The security Deposit should be furnished before start of the work by the contractor.

1.10.3 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order / Demand Draft in favour of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
- v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Security Deposit shall be in the prescribed formats
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited in any form as prescribed before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful bidder can be converted and adjusted against the cash portion of Security Deposit excepting for such bidders who have remitted One Time EMD.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

1.10.4 The Security Deposit shall not carry any interest.

1.10.5 In case the value of work exceeds / reduces from the awarded / accepted value, the Security Deposit shall be correspondingly enhanced / reduced as given below:

- i) The enhanced part of the Security Deposit shall be immediately deposited by the Contractor or adjusted against payments due to the Contractor.
- ii) There will be no reduction in Security Deposit value in case of variation in contract value upto the lower limit specified in Quantity variation clause. In case of reduction of contract value beyond the lower limit specified in Quantity Variation clause, then the Security Deposit shall be re adjusted in proportion.
- iii) In case of reduction, the reduced Contract value shall be certified by BHEL Construction Manager

after ascertaining / freezing of BOQ / Drawings from the Design / Engineering Centre. The reduced Security Deposit value can only be considered after taking into account the adequacy of the securities held by BHEL to meet the liabilities of the contractor for the contract, and the performance of the contract in general. **In such cases, the revised value of Security Deposit shall be worked out only after execution of not less than the lower limit of the revised scope of work/contract value as per quantity variation clause, and as certified by Construction Manager. This reduction in value of Security Deposit shall not entitle the contractor to any amendment of Contract and shall be operated at the discretion of BHEL**

iv) Contract value for the purpose of operating the reduced/increased value of Security Deposit due to Quantity Variation, shall be exclusive of Price Variation Clause, Over Run Compensation and Extra works done on manday rates.

1.10.6 The validity of Bank Guarantees towards Security Deposit shall be initially upto the completion period as stipulated in the Letter of Intent/Award + 3 months, and the same shall be kept valid by proper renewal till the acceptance of Final Bills of the Contractor, by BHEL

1.10.7 BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the Contractor's failure to fulfill any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit against any claims of other contracts with BHEL.

1.11 RETURN OF SECURITY DEPOSIT

Security Deposit shall be refunded/Bank Guarantee(s) released to the Contractor along with the 'Final Bill' after deducting all expenses / other amounts due to BHEL under the contract / other contracts entered into with them by BHEL.

1.12 BANK GUARANTEES

Where ever Bank Guarantees are to be furnished/submitted by the contractor, the following shall be complied with

- i) Bank Guarantees shall be from Scheduled Banks / Public Financial Institutions as defined in the Companies Act.
- ii) The Bank Guarantees shall be as per prescribed formats.
- iii) It is the responsibility of the bidder to get the Bank Guarantees revalidated/extended for the required period (subject to a minimum period of six months), as per the advice of BHEL Site Engineer / Construction Manager. BHEL shall not be liable for issue of any reminders regarding expiry of the Bank Guarantees.
- iv) In case extension/further extensions of any Bank Guarantees are not required, the bidders shall ensure that the same is explicitly endorsed by the Construction Manager and submitted to the Regional HQ issuing the LOI/LOA.
- v) In case the Bank Guarantees are not extended before the expiry date, BHEL reserves the right to invoke the same by informing the concerned Bank in writing, without any advance notice/communication to the concerned bidder.
- vi) Bidders to note that any corrections to Bank Guarantees shall be done by the issuing Bank, only through an amendment in an appropriate non judicial stamp paper.
- vii) The Original Bank Guarantee shall be sent directly by the Bank to BHEL under Registered Post (Acknowledgement Due), addressed to the Subcontracting Department of the respective Region.

1.13 VALIDITY OF OFFER

The rates in the Tender shall be kept open for acceptance for a minimum period of **SIX MONTHS** from latest due date of offer submission (including extension, if any) . In case BHEL (Bharat Heavy Electricals Ltd) calls for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer which shall be binding on the tenderers.

1.14 EXECUTION OF CONTRACT AGREEMENT

The successful tenderer's responsibility under this contract commences from the date of issue of the Letter of Intent by Bharat Heavy Electricals Limited. The Tenderer shall submit an unqualified acceptance to the Letter of Intent/Award within the period stipulated therein.

The successful tenderer shall be required to execute an agreement in the prescribed form, with BHEL, within a reasonable time after the acceptance of the Letter of Intent/Award, and in any case before releasing the first running bill. The contract agreement shall be signed by a person duly authorized/empowered by the tenderer. The expenses for preparation of agreement document shall be borne by BHEL

1.15 REJECTION OF TENDER AND OTHER CONDITIONS

1.15.1 The acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:-

- a. To reject any or all of the tenders.
- b. To split up the work amongst two or more tenderers as per NIT
- c. To award the work in part if specified in NIT
- d. In case of either of the contingencies stated in (b) and (c) above, the time for completion as stipulated in the tender shall be applicable.

1.15.2 Conditional tenders, unsolicited tenders, tenders which are incomplete or not in the form specified or defective or have been materially altered or not in accordance with the tender conditions, specifications etc., are liable to be rejected.

1.15.3 Tenders are liable to be rejected in case of unsatisfactory performance of the tenderer with BHEL, or tenderer under suspension (hold/banning /delisted) by any unit / region / division of BHEL or tenderers who do not comply with the latest guidelines of Ministry/Commissions of Govt of India. BHEL reserves the right to reject a bidder in case it is observed that they are overloaded and may not be in a position to execute this job as per the required schedule in line with clause no. 9.0 of the 'NIT'. The decision of BHEL will be final in this regard.

1.15.4 If a tenderer who is a proprietor expires after the submission of his tender or after the acceptance of his tender, BHEL may at their discretion, cancel such tender. If a partner of a firm expires after the submission of tender or after the acceptance of the tender, BHEL may then cancel such tender at their discretion, unless the firm retains its character.

- 1.15.5 BHEL will not be bound by any Power of Attorney granted by changes in the composition of the firm made subsequent to the execution of the contract. They may, however, recognise such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
- 1.15.6 If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract if awarded and forfeit the Earnest Money/Security Deposit/any other money due.
- 1.15.7 Canvassing in any form in connection with the tenders submitted by the Tenderer shall make his offer liable to rejection.
- 1.15.8 In case the Proprietor, Partner or Director of the Company/Firm submitting the Tender, has any relative or relation employed in BHEL, the authority inviting the Tender shall be informed of the fact as per specified format, along with the Offer. Failing to do so, BHEL may, at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money/Security Deposit.
- 1.15.9 The successful tenderer should not sub-contract part or complete work detailed in the tender specification undertaken by him without written permission of BHEL's Construction Manager/Site Incharge. The tenderer is solely responsible to BHEL for the work awarded to him.
- 1.15.10 The Tender submitted by a techno commercially qualified tenderer shall become the property of BHEL who shall be under no obligation to return the same to the bidder. However unopened price bids and late tenders shall be returned to the bidders
- 1.15.11 Unsolicited discount received after the due date and time of Bid Submission shall not be considered for evaluation. However, if the party who has submitted the unsolicited discount/rebate becomes the L-I party, then the awarded price i.e contract value shall be worked out after considering the discount so offered.
- 1.15.12 BHEL shall not be liable for any expenses incurred by the bidder in the preparation of the tender irrespective of whether the tender is accepted or not.

CHAPTER-2

2.1 **DEFINITION:** The following terms shall have the meaning hereby assigned to them except where the context otherwise requires

- i) BHEL shall mean Bharat Heavy Electricals Limited (of the respective Power Sector Region inviting the Tender), a company registered under Indian Companies Act 1956, with its Registered Office at BHEL HOUSE, SIRI FORT, NEW DELHI – 110 049, or its Power Sector Regional Offices or its Authorised Officers or its Site Engineers or other employees authorised to deal with any matters with which these persons are concerned on its behalf.
- ii) "EXECUTIVE DIRECTOR" or 'GROUP GENERAL MANAGER' or "GENERAL MANAGER (Incharge)" or "GENERAL MANAGER" shall mean the Officer in Administrative charge of the respective Power Sector Region.
- iii) "COMPETENT AUTHORITY" shall mean Executive Director or Group General Manager or General Manager (Incharge) or General Manager or BHEL Officers who are empowered to act on behalf of the Executive Director or General Manager (Incharge) or General Manager of BHEL.
- iv) "ENGINEER" or "ENGINEER IN CHARGE" shall mean an Officer of BHEL as may be duly appointed and authorized by BHEL to act as "Engineer" on his behalf for the purpose of the Contract, to perform the duty set forth in this General Conditions of Contract and other Contract documents. The term also includes 'CONSTRUCTION MANAGER' or 'SITE INCHARGE' as well as Officers at Site or at the Headquarters of the respective Power Sector Regions.
- v) "SITE" shall mean the places or place at which the plants/equipments are to be erected and services are to be performed as per the specification of this Tender.
- vi) "CLIENT OF BHEL" or "CUSTOMER" shall mean the project authorities with whom BHEL has entered into a contract for supply of equipments or provision of services.
- vii) "CONTRACTOR" shall mean the successful Bidder/Tenderer who is awarded the Contract and shall include the Contractor's successors, heirs, executors, administrators and permitted assigns.
- viii) "CONTRACT" or "CONTRACT DOCUMENT" shall mean and include the Agreement of Work Order, the accepted appendices of Rates, Schedules, Quantities if any, General Conditions of Contract, Special Conditions of Contract, Instructions to the Tenderers, Drawings, Technical Specifications, the Special Specifications if any, the Tender documents, subsequent amendments mutually agreed upon and the Letter of Intent/Acceptance issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or subsequent letters shall not form part of the contract unless, specifically accepted in writing by BHEL in the Letter of Intent/Award and incorporated in the agreement.
- ix) "GENERAL CONDITIONS OF CONTRACT" shall mean the 'Instructions to Tenderers' and 'General Conditions of Contract' pertaining to the work for which above tenders have been called for.
- x) "TENDER SPECIFICATION" or "TENDER" or "TENDER DOCUMENTS" shall mean General Conditions, Common Conditions, Special Conditions, Price Bid, Rate Schedule, Technical

	Specifications, Appendices, Annexures, Corrigendums, Amendments, Forms, procedures, Site information, etc and drawings/documents pertaining to the work for which the tenderers are required to submit their offers. Individual specification number will be assigned to each Tender Specification.
xi)	"LETTER OF INTENT" shall mean the intimation by a Letter/Fax/email to the tenderer that the tender has been accepted in accordance with provisions contained in the letter. The responsibility of the contractor commences from the date of issue of this letter and all terms and conditions of the contract are applicable from this date.
xii)	"COMPLETION TIME" shall mean the period by 'date/month' specified in the 'Letter of Intent/Award' or date mutually agreed upon for handing over of the intended scope of work, the erected equipment/plant which are found acceptable by the Engineer, being of required standard and conforming to the specifications of the Contract.
xiii)	"PLANT" shall mean and connote the entire assembly of the plant and equipments covered by the contract.
xiv)	"EQUIPMENT" shall mean equipment, machineries, materials, structural, electricals and other components of the plant covered by the contract.
xv)	"TESTS" shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL, in order to ascertain the quality, workmanship, performance and efficiency of the contractor or part thereof.
xvi)	"APPROVED", "DIRECTED" or "INSTRUCTED" shall mean approved, directed or instructed by BHEL.
xvii)	"WORK or CONTRACT WORK" shall mean and include supply of all categories of labour, specified consumables, tools and tackles and Plants required for complete and satisfactory site transportation, handling, stacking, storing, erecting, testing and commissioning of the equipments to the entire satisfaction of BHEL.
xviii)	"SINGULAR AND PLURALS ETC" words carrying singular number shall also include plural and vice versa, where the context so requires. Words imparting the masculine Gender shall be taken to include the feminine Gender and words imparting persons shall include any Company or Associations or Body of Individuals, whether incorporated or not.
xix)	"HEADING" – The heading in these General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken as instructions thereof or of the contract.
xx)	"MONTH" shall mean calendar month unless otherwise specified in the Tender.
xxi)	Day' or 'Days' unless herein otherwise expressly defined shall mean calendar day or days of twenty four (24) hours each. A week shall mean continuous period of seven (7) days.
xxii)	"COMMISSIONING" shall mean the synchronisation testing and achieving functional operation of the Equipment with associated system after all initial adjustments, trials, cleaning, re-assembly required at site if any, have been completed and Equipment with associated system is

	ready for taking into service.
xxiii)	"WRITING" shall include any manuscript type written or hand written or printed statement or electronically transmitted messages, under the signature or seal or transmittal of BHEL.
xxiv)	"TEMPORARY WORK" shall mean all temporary works for every kind required in or for the execution, completion, maintenance of the work.
xxv)	'CONTRACT PRICE' or 'CONTRACT VALUE' shall mean the sum mentioned in the LOI/LOA/Contract Agreement subject to such additions thereto or deductions there from as may be made under provisions hereinafter contained
xxvi)	"COMMENCEMENT DATE" or "START DATE" shall mean the commencement/start of work at Site as per terms defined in the Tenderl
xxvii)	"SHORT CLOSING" or "FORE CLOSING" of Contract shall mean the premature closing of Contract, for reasons not attributable to the contractor and mutually agreed between BHEL and the contractor
xxviii)	"TERMINATION" of Contract shall mean the pre mature closing of contract due to reasons as mentioned in the contract
xxix)	"DE MOBILISATION" shall mean the temporary winding up of Site establishment by Contractor leading to suspension of works temporarily for reasons not attributable to the contractor
xxx)	"RE MOBILISATION" shall mean the resumption of work with all resources required for the work after demobilization.
2.2	<p style="text-align: center;">LAW GOVERNING THE CONTRACT AND COURT JURISDICTION</p> <p>The contract shall be governed by the Law for the time being in force in the Republic of India. The Civil Court having original Civil Jurisdiction at Delhi for PSNR, at Kolkata for PSER, at Nagpur for PSWR and at Chennai for PSSR, shall alone have exclusive jurisdiction in regard to all claims in respect of the Contract. No other Civil Court shall have jurisdiction in case of any dispute, under this contract</p>
2.3	<p style="text-align: center;">ISSUE OF NOTICE</p> <p>2.3.1 <u>Service of notice on contractor</u> Any notice to be given to the Contractor under the terms of the contract shall be served by sending the same by Registered Post / Speed Post to or leaving the same at the Contractor's last known address of the principal place of business (or in the event of the contractor being a company, to or at its Registered Office). In case of change of address, the notice shall be served at changed address as notified in writing by the Contractor to BHEL. Such posting or leaving of the notice shall be deemed to be good service of such notice and the time mentioned to the condition for doing any act after notice shall be reckoned from the date so mentioned in such notice.</p> <p>2.3.2 <u>Service of notice on BHEL</u> Any notice to be given to BHEL in-charge/Region under the terms of the Contract shall be served by sending the same by post to or leaving the same at BHEL address or changed address as notified in writing by BHEL to the Contractor.</p>
2.4	<p style="text-align: center;">USE OF LAND</p> <p>No land belonging to BHEL or their Customer under temporary possession of BHEL shall be occupied by the contractor without written permission of BHEL.</p>

2.5 COMMENCEMENT OF WORK

- 2.5.1 The contractor shall commence the work as per the time indicated in the Letter of Intent from BHEL and shall proceed with the same with due expedition without delay.
- 2.5.2 If the contractor fails to start the work within stipulated time as per LOI or as intimated by BHEL, then BHEL at its sole discretion will have the right to cancel the contract. The Earnest Money and/or Security Deposit with BHEL will stand forfeited without any further reference to him without prejudice to any and all of BHEL's other rights and remedies in this regard.
- 2.5.3 All the work shall be carried out under the direction and to the satisfaction of BHEL.

2.6 MEASUREMENT OF WORK AND MODE OF PAYMENT:

- 2.6.1 All payments due to the contractors shall be made by e mode only, unless otherwise found operationally difficult for reasons to be recorded in writing
- 2.6.2 For progress running bill payments: - The Contractor shall present detailed measurement sheets in triplicate, duly indicating all relevant details based on technical documents and connected drawings for work done during the month/period under various categories in line with terms of payment as per contract. The basis of arriving at the quantities, weights shall be relevant documents and drawings released by BHEL. These measurement sheets shall be prepared jointly with BHEL Engineers and signed by both the parties.
- 2.6.3 These measurement sheets will be checked by BHEL Engineer and quantities and percentage eligible for payment under various groups shall be decided by BHEL Engineer. The abstract of quantities and percentage so arrived at based on the terms of payment shall be entered in Measurement Book and signed by both the parties.
- 2.6.4 Based on the above quantities, contractor shall prepare the bills in prescribed format and work out the financial value. These will be entered in Measurement Book and signed by both the parties. Payment shall be made by BHEL after effecting the recoveries due from the contractor.
- 2.6.5 All recoveries due from the contractor for the month/period shall be effected in full from the corresponding running bills unless specific approval from the competent authorities is obtained to the contrary.
- 2.6.6 Measurement shall be restricted to that portion of work for which it is required to ascertain the financial liability of BHEL under this contract.
- 2.6.7 The measurement shall be taken jointly by persons duly authorized on the part of BHEL and by the Contractor.
- 2.6.8 The Contractor shall bear the expenditure involved if any, in making the measurements and testing of materials to be used/used in the work. The contractor shall, without extra charges, provide all the assistance with appliances and other things necessary for measurement.
- 2.6.9 If at any time due to any reason whatsoever, it becomes necessary to re-measure the work done in full or in part, the expenses towards such re measurements shall be borne by the contractor unless such re measurements are warranted solely for reasons not attributable to contractor.

- 2.6.10 Passing of bills covered by such measurements does not amount to acceptance of the completion of the work measured. Any left out work has to be completed, if pointed out at a later date by BHEL.
- 2.6.11 Final measurement bill shall be prepared in the final bill format prescribed for the purpose based on the certificate issued by BHEL Engineer that entire works as stipulated in tender specification has been completed in all respects to the entire satisfaction of BHEL. Contractor shall give unqualified "No Claim" Certificate. All the tools and tackles loaned to him should be returned in satisfactory condition to BHEL. The abstract of final quantities and financial values shall also be entered in the Measurement Books and signed by both parties to the contract. The Final Bill shall be prepared and paid within a reasonable time after completion of work.
- 2.7 RIGHTS OF BHEL**
BHEL reserves the following rights in respect of this contract during the original contract period or its extensions if any, as per the provisions of the contract, without entitling the contractor for any compensation.
- 2.7.1 To withdraw any portion of work and/or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through other agencies to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergent reasons/ BHEL's obligation to its customer.
- 2.7.2 To terminate the contract or get any part of the work done through other agency or deploy BHEL's own/hired/otherwise arranged resources , at the risk and cost of the contractor after due notice of a period of two weeks by BHEL, in the event of:-
- i) Contractor's continued poor progress
 - ii) Withdrawal from or abandonment of the work before completion of the work
 - iii) Contractor's inability to progress the work for completion as stipulated in the contract
 - iv) Poor quality of work
 - v) Corrupt act of Contractor
 - vi) Insolvency of the Contractor
 - vii) Persistent disregard to the instructions of BHEL
 - viii) Assignment, transfer, sub-letting of contract without BHEL's written permission
 - ix) Non fulfillment of any contractual obligations
 - x) In the opinion of BHEL, the contractor is overloaded and is not in a position to execute the job as per required schedule
- 2.7.3 To meet the expenses including BHEL overheads of 30% & Liquidated damage/penalties arising out of "Risk & Cost" as explained above under Sl.No. 2.7.2. BHEL shall recover the amount from any money due from Contractor, from any money due to the Contractor including Security Deposit or by forfeiting any T&P or material of the contractor under this contract or any other contract of BHEL or by any other means or any combination thereof
- 2.7.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customer are terminated for any reason, as per mutual agreement.
- 2.7.5 To effect recovery from any amounts due to the contractor under this or any other contract or in any other form, the moneys BHEL is statutorily forced to pay to anybody, due to contractor's failure

to fulfill any of his obligations. BHEL shall levy overheads of 15% on all such payments.

2.7.6 While every endeavour will be made by BHEL to this end, they cannot guarantee uninterrupted work due to conditions beyond their control. The Contractor will not be normally entitled for any compensation/extra payment on this account unless otherwise specified elsewhere in the contract.

2.7.7 In case the execution of works comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than two months, due to reasons not attributable to the contractor and other than Force Majeure conditions, BHEL may consider permitting the contractor to de mobilize forthwith and re mobilize at an agreed future date. Cost of such demobilization/remobilization shall be mutually agreed. ORC in such cases shall not be applicable for the period between the period of demobilization and re mobilisation. The duration of contract/time extension shall accordingly get modified suitably. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.

2.7.8 In the unforeseen event of inordinate delay in receipt of materials, drawings, fronts, etc, due to which inordinate discontinuity of work is anticipated, BHEL at its discretion may consider contractor's request to short close the contract, provided that the balance works are minor vis a vis the scope of work envisaged as per the contract. At the point of requesting for short closure, contractor shall establish that he has completed all works possible of completion and he is not able to proceed with the balance works due to constraints beyond his control. In such a case, the estimated value of the unexecuted portion of work as mutually agreed, shall however be reduced from the final contract value. Final Contract value for this purpose shall mean executed contract value plus value of unexecuted portion of work as per rate schedule.

~~2.7.9 **LIQUIDATED DAMAGES/PENALTY**~~

~~If the contractor fails to maintain the required progress of work which results in delay in the completion of the work as per the contractual completion period, BHEL shall have the right to impose Liquidated Damage/Penalty at the rate of 0.5% of the contract value, per week of delay or part thereof subject to a maximum of 10% of the contract value. For this purpose, the period of delay shall be the delay attributable to the Contractor for the completion of work as per contract. Contract Value for this purpose, shall be the final executed value exclusive of ORC, Extra Works executed on Manday rate basis, Supplementary/Additional Items and PVC.~~

2.8 RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF LOCAL LAWS, EMPLOYMENT OF WORKERS ETC.

The following are the responsibilities of the contractor in respect of observance of local laws, employment of personnel, payment of taxes etc. The subcontractor shall fully indemnify BHEL against any claims of whatsoever nature arising due to the failure of the contractor in discharging any of his responsibilities hereunder:

2.8.1 As far as possible, Unskilled Workers shall be engaged from the local areas in which the work is being executed.

2.8.2 The contractor at all times during the continuance of this contract shall, in all his dealings with local labour for the time being employed on or in connection with the work, have due regard to all local festivals and religious and other customs.

- ~~2.8.3 The contractor shall comply with all applicable State and Central Laws, Statutory Rules, Regulations etc. such as Payment of Wages Act, Minimum Wages Act, Workmen Compensation Act, Employer's Liability Act, Industrial Disputes Act, Employers Provident Act, Employees State Insurance Scheme, Contract Labour (Regulation and Abolition) Act 1970, Payment of Bonus & Gratuity Act and other Acts, Rules and Regulations for labour as may be enacted by the Government during the tenure of the Contract and having force or jurisdiction at Site. The Contractor shall also give to the local Governing Body, Police and other relevant Authorities all such notices as may be required by the Law.~~
- ~~2.8.4 The contractor shall obtain independent License under the Contract Labour (Regulations and Abolition Act, 1970) as required from the concerned Authorities based on the certificate (Form V) issued by the Principal Employer/Customer~~
- 2.8.5 The contractor shall pay all taxes, fees, license charges, deposits, duties, tolls, royalties, commission or other charges which may be leviable on account of his operations in executing the contract.
- 2.8.6 While BHEL would pay the inspection fees and Registration fees of Boiler/Electrical Inspectorate, all other arrangements for site visits periodically by the Inspectorate to site, Inspection certificate etc. will have to be made by contractor. However, BHEL will not make any payment to the Inspectorate in connection with contractor's Welders/Electricians qualification tests etc.
- 2.8.7 Contractor shall be responsible for provision of Health and Sanitary arrangements (more particularly described in Contract Labour Regulation & Abolition Act), Safety precautions etc. as may be required for safe and satisfactory execution of contract.
- 2.8.8 The contractor shall be responsible for proper accommodation including adequate medical facilities for personnel employed by him.
- 2.8.9 The contractor shall be responsible for the proper behavior and observance of all regulations by the staff employed by him.
- 2.8.10 The contractor shall ensure that no damage is caused to any person/property of other parties working at site. If any such damage is caused, it is responsibility of the contractor to make good the losses or compensate for the same.
- 2.8.11 All the properties/equipments/components of BHEL/their Client loaned with or without deposit to the contractor in connection with the contract shall remain properties of BHEL/their Client.
- 2.8.12 The contractor shall use such properties for the purpose of execution of this contract. All such properties/equipments/components shall be deemed to be in good condition when received by the contractor unless he notifies within 48 hours to the contrary. The contractor shall return them in good condition as and when required by BHEL/their Client. In case of non-return, loss, damage, repairs etc, the cost thereof as may be fixed by BHEL Engineer will be recovered from the contractor
- 2.8.13 In case the contractor is required to undertake any work outside the scope of this contract, the rates payable shall be those mutually agreed upon if the item rates are not mentioned in existing contract

- 2.8.14 Any delay in completion of works/or non achievement of periodical targets due to the reasons attributable to the contractor, the same may have to be compensated by the contractor either by increasing manpower and resources or by working extra hours and/or by working more than one shift. All these are to be carried out by the contractor at no extra cost.
- 2.8.15 The contractor shall arrange, coordinate his work in such a manner as to cause no hindrance to other agencies working in the same premises.
- 2.8.16 All safety rules and codes applied by the Client/BHEL at site shall be observed by the contractor without exception. The contractor shall be responsible for the safety of the equipment/material and works to be performed by him and shall maintain all light, fencing guards, slings etc. or other protection necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the Engineer with a view to prevent pilferage, accidents, fire hazards. Due precautions shall be taken against fire hazards and atmospheric conditions. Suitable number of Clerical staff, watch and ward, store keepers to take care of equipment/materials and construction tools and tackles shall be posted at site by the contractor till the completion of work under this contract.
- The contractor shall arrange for such safety devices as are necessary for such type of work and carry out the requisite site tests of handling equipment, lifting tools, tackles etc. as per prescribed standards and practices.
- Contractor has to ensure the implementation of Health, Safety and Environment (HSE) requirements as per directions given by BHEL/Customer. The contractor has to assist in HSE audit by BHEL/Customer and submit compliance Report. The contractor has to generate and submit record/reports as per HSE plan/activities as per instruction of BHEL/Customer
- 2.8.17 The contractor will be directly responsible for payment of wages to his workmen. A pay roll sheet giving all the payments given to the workers and duly signed by the contractor's representative should be furnished to BHEL site for record purpose, if so called for.
- 2.8.18 In case of any class of work for which there is no such specification as laid down in the contract, such work shall be carried out in accordance with the instructions and requirements of the Engineer.
- 2.8.19 Also, no idle charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour and Tools & Plants being rendered idle due to any reason at any time.
- 2.8.20 The contractor shall take all reasonable care to protect the materials and work till such time the plant/equipment has been taken over by BHEL or their Client whichever is earlier.
- 2.8.21 The contractor shall not stop the work or abandon the site for whatsoever reason of dispute, excepting force majeure conditions. All such problems/disputes shall be separately discussed and settled without affecting the progress of work. Such stoppage or abandonment shall be treated as breach of contract and dealt with accordingly
- 2.8.22 The contractor shall keep the area of work clean and shall remove the debris etc. while executing day-to-day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places specified by the Engineer. The contractor will also demolish all the hutments,

sheds, offices, etc. constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be done by the Engineer and the expenses recovered from the contractor.

2.8.23 The contractor shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and timely execution shall be the essence of this contract. The contractor shall be responsible to ensure that the quality, assembly and workmanship conform to the dimensions and clearance given in the drawings and/ or as per the instructions of the Engineer.

2.8.24 The Contractor to note that some of BHEL's T&Ps/MMDs may not be insured. The Contractor will take necessary precautions and due care to protect the same while in his custody from any damage/ loss till the same is handed over back to BHEL. In case the damage / loss is due to carelessness/ negligence on the part of the contractor, the Contractor is liable to get them repair/ replaced immediately and in case of his failure to do so within a reasonable time, BHEL will reserve the right to recover the loss from the contractor.

2.9 PROGRESS MONITORING, MONTHLY REVIEW AND PERFORMANCE EVALUATION

2.9.1 A detailed plan/programme for completion of the contractual scope of work as per the time schedule given in the contract shall be jointly agreed between BHEL and Contractor, before commencement of work . The above programme shall be supported by monthwise deployment of resources viz Manpower, T&P, Consumables, etc. Progress will be reviewed periodically (Daily/Weekly/Monthly) vis a vis this jointly agreed programme. The Contractor shall submit periodical progress reports (Daily/Weekly/Monthly) and other reports/information including manpower, consumables, T&P mobilization etc as desired by BHEL.

2.9.2 Monthly progress review between BHEL and Contractor shall be based on the agreed programme as above, availability of inputs/fronts etc, and constraints if any, as per prescribed formats. Manpower, T&P and consumable reports as per prescribed formats shall be submitted by contractor every month. Release of RA Bills shall be contingent upon certification by BHEL Site Engineer of the availability of the above prescribed formats duly filled in and signed.

2.9.3 The burden of proof that the causes leading to any shortfall is not due to any reasons attributable to the contractor is on the contractor himself. The monthly progress review shall record shortfalls attributable to (i) Contractor, (ii) Force Majeure Conditions, and (iii) BHEL

2.9.4 Quarterly 'Evaluation of Contractor Performance' shall be assessed as per prescribed formats and shall form the basis for 'Annual/Overall Performance Evaluation' of the Contractor. These shall also be used for Evaluation of Bids for future tenders.

2.10 TIME OF COMPLETION

2.10.1 The time schedule shall be as prescribed in the Contract. The time for completion shall be reckoned from the date of commencement of work at Site as certified by BHEL Engineers

2.10.2 The entire work shall be completed by the contractor within the time schedule or within such extended periods of time as may be allowed by BHEL under clause 2.11

2.11 EXTENSION OF TIME FOR COMPLETION

2.11.1 If the completion of work as detailed in the scope of work gets delayed beyond the contract period, the contractor shall request for an extension of the contract and BHEL at its discretion may extend the Contract.

2.11.2 Based on the monthly reviews jointly signed, the works balance at the end of original contract period less the backlog attributable to the contractor shall be quantified, and the number of months of 'Time extension' required for completion of the same shall be jointly worked out. Within this

period of 'Time extension', the contractor is bound to complete the portion of backlog attributable to the contractor. Any further 'Time extension' or 'Time extensions' at the end of the previous extension shall be worked out similarly.

- 2.11.3 However if any 'Time extension' is granted to the contractor to facilitate continuation of work and completion of contract, due to backlog attributable to the contractor alone, then it shall be without prejudice to the rights of BHEL to impose penalty/LD for the delays attributable to the contractor, in addition to any other actions BHEL may wish to take at the risk and cost of contractor.
- 2.11.4 A joint programme shall be drawn for the balance amount of work to be completed during the period of 'Time Extension', along with matching resources (with weightages) to be deployed by the contractor as per specified format. Review of the programme and record of shortfall shall be done every month of the 'Time extension' period in the same manner as is done for the regular contract period.
- 2.11.5 During the period of 'Time extension', contractor shall maintain their resources as per mutually agreed program
- 2.11.6 At the end of total work completion as certified by BHEL Engineer, and upon analysis of the total delay, the portion of time extensions attributable to (i) Contractor, (ii) Force majeure conditions, and (iii) BHEL, shall be worked out and shall be considered to be exhausted in the same order. The total period of time extensions shall be the sum of (i), (ii) and (iii) above and shall be equal to period between the scheduled date of completion and the actual date of completion of contract. LD shall be imposed/levied for the portion of time extensions attributable to contractor and recoverable from the dues payable to the contractor.

2.12 OVERRUN COMPENSATION

- 2.12.1 Over Run Compensation (ORC) is payable by way of rate revisions for periods beyond original contract period subject to the following terms and conditions.
- 2.12.2 Rates shall be increased by 10% for the first twelve months of one or more extensions beyond original contract period. For the next twelve months of further extensions if any, rates shall be increased as above by 10% over the previous twelve months, and similarly for each subsequent twelve months extension.
- 2.12.3 The amount of increase payable per month due to rate revisions is subject to a minimum of **SYP** 1,00,000/- per month and a maximum of **SYP** 10,00,000/- per month.
- 2.12.4 Should there be any 'Time extension' for reasons attributable only to the contractor, then the work shall be executed by the contractor at the rates applicable for the period the work was planned
- 2.12.5 Payment of ORC shall be regulated as follows:
- i) Contractor is entitled to Over Run Compensation (ORC) only for the portion of backlog attributable to BHEL.
 - ii) 50% of the compensation as per clause 2.12.3 is allocated for deployment of resources agreed as per the joint programme drawn vide 2.11.4. Payment shall however be based on the actual deployment of resources for the month as certified by BHEL, as per weightages assigned therein
 - iii) 50% of the compensation as per clause 2.12.3, is allocated for achieving of planned progress agreed as per the joint programme drawn vide 2.11.4. Payment shall be on pro rata basis for actual achieved quantities
 - iv) Total Over Run Compensation shall be limited to 10% of the executed contract value as certified in Final Bill. For this purpose executed contract value excludes PVC, ORC, Supplementary/Additional Items and Extra Works done on Manday rate basis
- 2.12.6 Contractor shall not be entitled for any Over Run Compensation (ORC) for the portion of backlog

attributable to the contractor. Such works shall be executed at the rates applicable for the period the work was planned

2.13 INTEREST BEARING RECOVERABLE ADVANCES

2.13.1 Normally no advance is payable to the contractor. However, advance payment in exceptional circumstances shall be interest bearing and secured through an equivalent Bank Guarantee and shall be limited to a maximum of 5% of contract value.

2.13.2 In exceptional circumstances, with due justification, Competent Authority of BHEL is empowered to approve proposals for payment of additional interim interest bearing advance against matching Bank Guarantee, for resource augmentation towards expediting work for project implementation.

2.13.3 Payment and recovery of Interest Bearing Recoverable advance shall be at the sole discretion of BHEL and shall not be a subject matter of arbitration.

2.13.4 The rate of interest applicable for the above advances shall be the prime lending rate of State Bank of India prevailing at the time of disbursement of the advance + 2%, and such rate will remain fixed till the total advance amount is recovered

2.13.5 Unadjusted amount of advances paid shall not exceed 5% of the total contract value at any point of time. Recovery of advances shall be made progressively from each Running Bill such that the advance amounts paid along with the interest is fully recovered by the time the contractor's billing reaches 80% of contract value.

2.13.6 Recovery rate per month shall be the sum of:

- a. 10% of Running Bill amount
- b. Simple interest up to the date of RA Bill on the outstanding Principle amount/amounts

2.13.7 Contractor to submit Bank Guarantee as per prescribed formats for each of the advance and shall be valid for at least one year or the recovery duration or the balance contract period which ever is later. In case the recovery of dues does not get completed within the aforesaid BG period, the contractor shall renew the BG or submit fresh BG for the outstanding amount and the remaining recovery period.

2.13.8 BHEL is entitled to make recovery of the entire outstanding amount in case the contractor fails to comply with the BG requirement

2.14 QUANTITY VARIATION

2.14.1 The quoted rates shall remain firm irrespective of any variations in the individual quantities. No compensation becomes payable in case the variation of the final executed contract value is within the limits of Plus (+) or Minus (-) 15% of awarded contract value

2.14.2 Compensation due to variation of final executed value in excess of the limits defined in clause above, shall be as follows:

- i) In case the finally executed contract value reduces below the lower limit of Contract Value due to quantity variation specified above, the contractor will be eligible for compensation @ 15% of the difference between the lower limit of the contract value and the actual executed value.
- ii) In case the finally executed contract value increases above the upper limit of Contract Value due to quantity variation specified above, there will be no revision in the rates within the contract period.

2.15 **EXTRA WORKS**

- 2.15.1 All rectifications/modifications, revamping, and reworks required for any reasons not due to the fault of the contractor, or needed due to any change in deviation from drawings and design of equipments, operation/maintenance requirements, mismatching, or due to damages in transit, storage and erection/commissioning, and other allied works which are not very specifically indicated in the drawings, but are found essential for satisfactory completion of the work, will be considered as extra works.
- 2.15.2 Extra works arising on account of the contractor's fault, irrespective of time consumed in rectification of the damage/loss, will have to be carried out by the contractor free of cost. Under such circumstances, any material and consumable required for this purpose will also have to be arranged by the contractor at his cost.
- 2.15.3 All the extra work should be carried out by a separately identifiable gang, without affecting routine activities. Daily log sheets in the pro-forma prescribed by BHEL should be maintained and shall be signed by the contractor's representative and BHEL engineer. No claim for extra work will be considered/entertained in the absence of the said supporting documents i.e. daily log sheets. Signing of log sheets by BHEL engineer does not necessarily mean the acceptance of such works as extra works.
- 2.15.4 BHEL retains the right to award or not to award any of the major repair/rework/modification/rectification/fabrication works to the contractor, at their discretion without assigning any reason for the same
- 2.15.5 After eligibility of extra works is established and finally accepted by BHEL engineer/designer, payment will be released on competent authority's approval at the following rate.

MAN-HOUR RATE FOR ELIGIBLE EXTRA WORKS: Single composite average labour man-hour rate, including overtime if any, supervision, use of tools and tackles and other site expenses and incidentals, consumables for carrying out any major rework/repairs/rectification/modification/fabrication as certified by site as may arise during the course of erection, testing, commissioning or extra works arising out of transit, storage and erection damages, payment, if found due will be at Euro 1.00 (One)- per man hour.

- 2.15.6 The above composite labour man hour rate towards extra works shall remain firm and not subject to any variation during execution of the work. PVC will not be applicable for extra works. Rate revision, Over Run Charges/compensation etc will not be applicable due to extra works.

~~2.15.7 **Extra Works for Civil Packages** shall be regulated as follows~~

- ~~i) Rates for Extra Works arising due to (1) non availability of BOQ (Rate Schedule), OR (2) change in Specifications of materials/works (3) rectification/modification/dismantling & re erecting etc due to no fault of Contractor, shall be in the order of the following:~~
- ~~a) Item rates are to be derived from similar nature of items in the BOQ (Rate Schedule) with applicable escalation derived from All India Consumer Price Index for Whole Sale Commodities.~~
- ~~b) As per CPWD DSR 2007 (or latest edition) with applicable escalation derived from All India Consumer price Index for Whole Sale Commodities, OR, Notification issued by the office of CPWD for 'Cost Index' in that Region where the project is being executed, whichever is less~~

- c) ~~Item rates are to be worked out on the basis of prevailing market rates mutually agreed between BHEL and Contractor, plus 15% towards Contractor's overheads and profit.~~
- ii) ~~PVC and ORC will not be applicable for (i) above.~~

2.16 SUPPLEMENTARY ITEMS

2.16.1 For NON Civil Works

~~Supplementary items are items/works required for completion of entire work but not specified in the scope of work. Subject to certification of such items/works as supplementary items by BHEL Engineer, rates shall be derived on the basis of any one of the following on mutual agreement:~~

- i) ~~Based on percentage breakup/rates indicated for similar/nearby items~~
- ii) ~~In case (i) above does not exist, then BHEL/site may derive the percentage breakup/rates to suit the type of work~~

2.16.2 For Civil Works

- i) ~~Rates for Supplementary Works/Additional Works arising out due to additions/alterations in the original scope of works as per contract subject to certification of BHEL Engineer shall be worked out as under:~~

- a) ~~Item rates which are available in existing BOQ (Rate Schedule) shall be operated with applicable escalation derived from All India Consumer Price Index for Whole Sale Commodities~~
- b) ~~Items of works which are not available in existing BOQ shall be operated as an 'Extra Works' and rate shall be derived as per clause no 2.15.7~~

- ii) ~~Execution of Supplementary Works/Additional Works through the Contractor shall be at the sole discretion of BHEL, and shall be considered as part of executed contract value for the purpose of Quantity Variation as per clause 2.14~~

- iii) ~~BHEL Engineer's decision regarding fixing the rate as above is final and binding on the contractor.~~
- iv) ~~PVC and ORC will not be applicable for (i) above.~~

2.17 PRICE VARIATION COMPENSATION

2.17.1 ~~In order to take care of variation in cost of execution of work on either side, due to variation in the index of LABOUR, HIGH SPEED DIESEL OIL, ELECTRODE, CEMENT, STEEL, MATERIALS, Price Variation Formula as described herein shall be applicable~~

2.17.2 ~~85% component of Contract Value shall be permitted to be adjusted for variation in various relevant indices during execution of work. The remaining 15% shall be treated as fixed component~~

2.17.3 ~~The basis for calculation of price variation in each category, their component, Base Index, shall be as under:~~

SL NO.	CATEGORY	BASE INDEX	COMPONENT (K)				
			CIVIL PACKAGES (See Note A/B/C)			MECHANICAL PACKAGES	LABOUR ORIENTED PACKAGES (See Note D)
			A	B**	C		
i)	LABOUR (ALL CATEGORIES)	MONTHLY ALL INDIA AVERAGE CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS' published by Labour Bureau, Ministry of Labour and Employment, Government of India. (Website: labourbureau.nic.in)	40	25	30	65	80

ii)	HIGH SPEED DIESEL OIL	Name of Commodity : HSD OIL Type : INDIVIDUAL COMMODITY (See Note F)	5	3	5	5	5
iii)	ELECTRODE	Name of Commodity : ELECTRODES Type: INDIVIDUAL COMMODITY (See Note F)				15	
iv)	CEMENT	Name of Commodity : CEMENT Type: INDIVIDUAL COMMODITY (See Note F)		20	30		
v)	STRUCTURAL AND REINFORCEMENT STEEL	Name of Commodity : a1. IRON & STEEL Type: GROUP ITEM (See Note F)		25			
vi)	MATERIALS (Other than Cement & Steel)	Name of Commodity: ALL COMMODITIES Type: GROUP ITEM (See Note F)	40	12	20		

Note: A) Cement & Steel : Free Issue (BHEL Scope)

— B) Cement & Steel : In Contractor Scope (**: unless otherwise specified in Special Conditions of Contract (SCC))

— C) Cement in Contractor Scope, and Steel is Free Issue (BHEL Scope)

— D) Predominantly 'Labour Oriented' packages include Material Handling & Management, Insulation, Painting, Electrical and CI or a combination thereof, which are separately tendered and awarded

— E) For Composite packages (i.e. Civil+Mechanical+Electrical/CI or Civil+Mechanical or Mechanical+Electrical/CI), the components for various categories shall be as per respective packages

— F) As per the 'MONTHLY WHOLE SALE PRICE INDEX' for the respective Commodity and Type, published by Office of Economic Adviser, Ministry of Commerce and Industry, Government of India. (Website : www.eaindustry.nic.in)

2.17.4 ~~Payment/recovery due to variation in index shall be determined on the basis of the following notional formula without any initial absorption, in respect of the identified components viz LABOUR, HIGH SPEED DIESEL, ELECTRODE, CEMENT, STEEL, MATERIALS~~

$$P = K \times R \times \frac{(X_N - X_0)}{X_0}$$

Where

P = Amount to be paid/recovered due to variation in the Index for Labour, Electrode, High Speed Diesel Oil, Cement, Steel and Materials

K = Percentage component applicable for Labour, Electrode, High Speed Diesel Oil, Cement, Steel and Materials

R = Value of work done for the billing month (Excluding Taxes and Duties if payable extra)

X_N = Revised Index No for Labour, Electrode, High Speed Diesel Oil, Cement, Steel and Materials for the billing month under consideration

X₀ = Index no for Labour, Electrode, High Speed Diesel Oil, Cement, Steel and Materials as on the Base date.

2.17.5 ~~Base date shall be calendar month of the latest date of submission of Tender.~~

2.17.6 ~~PVC shall not be payable for the ORC amount, Supplementary/Additional Items, Extra works executed on manday rates basis.~~

2.17.7 ~~The contractor shall furnish necessary monthly bulletins for the necessary indices from the relevant websites along with his Bills.~~

2.17.8 ~~The contractor will be required to raise the bills for price variation payments on a monthly basis along with the running bills irrespective of the fact whether any increase/decrease in the index for relevant categories has taken place or not. In case there is delay in publication of bulletins (final figure), the provisional values as published can be considered for payments and arrears shall be~~

~~paid/recovered on getting the final values.~~

~~2.17.9 PVC shall be applicable for the entire original contract period plus the extended period. However the Total Quantum of Price Variation amount payable/recoverable shall be regulated as follows:-~~

- ~~iii) For the portion of backlog attributable to the contractor, the PVC will be based on the average of the indices for the period of the original contract period.~~
- ~~iv) For the period of Force Majeure, the PVC will be limited to the indices applicable at the beginning of the force majeure period.~~
- ~~v) For the portion of backlog attributable to BHEL, the PVC will be as per the indices applicable for the respective months~~
- ~~vi) The total amount of PVC shall be limited to 20% of executed contract value. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items, Extra works executed on manday rates basis.~~

2.18 INSURANCE

2.18.1 BHEL/their customer shall arrange for insuring the materials/properties of BHEL/customer covering the risks during transit, storage, erection and commissioning.

2.18.2 It is the sole responsibility of the contractor to insure his materials, equipments, workmen, etc. against accidents and injury while at work and to pay compensation, if any, to workmen as per Workmen's compensation Act. The work will be carried out in a protected area and all the rules and regulations of the client /BHEL in the area of project which are in force from time to time will have to be followed by the contractor.

2.18.3 If due to negligence and or non-observation of safety and other precautions by the contractors, any accident/injury occurs to the property / manpower belong to third party, the contractor shall have to pay necessary compensation and other expense, if so decided by the appropriate authorities.

2.18.4 The contractor will take necessary precautions and due care to protect the material, while in his custody from any damage/ loss due to theft or otherwise till the same is taken over by BHEL or customer. For lodging / processing of insurance claim the contractor will submit necessary documents. BHEL will recover the loss including the deductible franchise from the contractor, in case the damage / loss is due to carelessness / negligence on the part of the contractor. In case of any theft of material under contractor's custody, matter shall be reported to police by the contractor immediately and copy of FIR and subsequently police investigation report shall be submitted to BHEL for taking up with insurance. However this will not relieve the contractor of his contractual obligation for the material in his custody.

2.19 STRIKES & LOCKOUT

2.19.1 The contractor will be fully responsible for all disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the Contractor resorting to lockout and if the strike or lockout declared is not settled within a period of one month, BHEL shall have the right to get the work executed through any other agencies and the cost so incurred by BHEL shall be deducted from the Contractor's bills.

2.19.2 For all purposes whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL

2.20 FORCE MAJEURE

The following shall amount to Force Majeure:-

- 2.20.1 Acts of God, act of any Government, War, Sabotage, Riots, Civil commotion, Police action, Revolution, Flood, Fire, Cyclones, Earth quake and Epidemic and other similar causes over which the contractor has no control.
- 2.20.2 If the contractor suffers delay in the due execution of the contractual obligation due to delays caused by force majeure as defined above, the agreed time of completion of the job covered by this contract or the obligations of the contractor shall be extended by a period of time equal to period of delay, provided that on the occurrence of any such contingency, the contractor immediately reports to BHEL in writing the causes of delay and the contractor shall not be eligible for any compensation.

2.21 ARBITRATION & RECONCILIATION

- 2.21.1 In case amicable settlement is not reached in the event of any dispute or difference arising out of the execution of the Contract or the respective rights and liabilities of the parties or in relation to interpretation of any provision by the Contractor in any manner touching upon the Contract, such dispute or difference shall (except as to any matters, the decision of which is specifically provided for therein) be referred to the sole arbitration of the arbitrator appointed by BHEL/In charge(Region).

The award of the Arbitrator shall be binding upon the parties to the dispute

Subject as aforesaid, the provisions of Arbitration and Reconciliation Act 1996 (India) or statutory modifications or re enactments thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. The venue of the arbitration shall be the place from which the contract is issued or such other place as the Arbitrator at his discretion may determine

- 2.21.2 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable :

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred to by either party to the arbitration of one of the arbitrators in the department of public enterprises. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties hereto finally and conclusively.

- 2.21.3 The cost of arbitration shall be borne equally by the parties.

- 2.21.4 Work under the contract shall be continued during the arbitration proceedings

2.22 RETENTION AMOUNT

2.22.1 Retention Amount shall be 5% of executed contract value and shall be recovered at the rate of 5% from each Running Bill admitted, including PVC Bills. Retention amount shall always be retained in cash and shall not be released against BG under any circumstance.

2.22.2 Refund of Retention Amount shall be as follows.

- i) 50% of retention amount along with 'Final Bill'
- ii) Balance 50% of retention amount shall be retained towards 'Performance Guarantee for Workmanship' and shall become refundable after expiry of Guarantee period, provided all the defects noticed during the guarantee period have been rectified to the satisfaction of BHEL Site Engineer/BHEL Construction Manager, and after deducting all expenses/other amounts due to BHEL under the contract/other contracts entered into by BHEL with them. Bank Guarantees are not acceptable towards this portion of retention

2.23 PAYMENTS

Payments to Contractors are made in any one of the following forms

2.23.1 Running Account Bills (RA Bills)

- iii) These are for interim payments when the contracts are in progress. The bills for such interim payments are to be prepared by Contractor in prescribed formats (RA Bill forms).
- iv) Payments shall be made according to the extent of work done as per measurements taken up to the end of the calendar month and in line with the terms of payments described in the Tender documents
- v) Recoveries on account of electricity, water, statutory deductions, etc are made as per terms of contract
- vi) Full rates for the work done shall be allowed only if the quantum of work has been done as per the specifications stipulated in the contract. If the work is not executed as per the stipulated specifications, BHEL may ask the contractor to re do the work according to the required specifications, without any extra cost. However, where this is not considered necessary 'OR' where the part work is done due to factors like non-availability of material to be supplied by BHEL 'OR' non availability of fronts 'OR' non availability of drawings, fraction payment against full rate, as is considered reasonable, may be allowed with due regard for the work remaining to be done. BHEL decision in this regard will be final and binding on the contractor.
- vii) In order to facilitate part payment, BHEL Site Engineer at his discretion may further split the contracted rates/percentages to suit site conditions, cash flow requirements according to the progress of work

2.23.2 Final Bill

'Final Bill' is used for final payment on closing of Running Account for works or for single payment after completion of works. 'Final Bill' shall be submitted as per prescribed format after completion of works as per scope and upon material reconciliation, along with the following.

- iii) 'No Claim Certificate' by contractor
- iv) Clearance certificates where ever applicable viz Clearance Certificates from Customer, various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department, etc
- v) Indemnity bond as per prescribed format

BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL

2.24	PERFORMANCE GUARANTEE FOR WORKMANSHIP
2.24.1	Even though the work will be carried out under the supervision of BHEL Engineers the Contractor will be responsible for the quality of the workmanship and shall guarantee the work done for a period of twelve months from the date of commencement of guarantee period as defined in Special Conditions of Contract, for good workmanship and shall rectify free of cost all defects due to faulty erection detected during the guarantee period. In the event of the Contractor failing to repair the defective works within the time specified by the Engineer, BHEL may proceed to undertake the repairs of such defective works at the Contractor's risk and cost, without prejudice to any other rights and recover the same from the Guarantee money.
2.24.2	BHEL shall release the guarantee money subject to the following i) Contractor has submitted 'Final Bill' ii) Guarantee period as per contract has expired iii) Contractor has furnished 'No Claim Certificate' in specified format iv) BHEL Site Engineer/Construction Manager has furnished the 'No Demand Certificate' in specified format v) Contractor has carried out the works required to be carried out by him during the period of Guarantee and all expenses incurred by BHEL on carrying out such works is included for adjustment from the Guarantee money refundable.
2.25	CLOSING OF CONTRACTS The Contract shall be considered completed and closed upon completion of all contractual obligations and settlement of Final Bill or completion of Guarantee period whichever is later. Upon closing of Contract, BHEL shall issue a completion certificate as per standard format, based on specific request of Contractor.
2.26	REVERSE AUCTION: BHEL reserves the right to go for Reverse Auction for Price Bid Opening by BHEL appointed service provider, instead of opening the submitted sealed price bid in the conventional way. The Business Rules for Reverse Auction shall be as per BHEL guidelines issued from time to time.
2.27	SUSPENSION OF BUSINESS DEALINGS BHEL reserves the right to take action against Contractors who either fail to perform or Tenderers/Contractor who indulge in malpractices, by suspending business dealings with them in line with BHEL guidelines issued from time to time.
2.28	OTHER ISSUES
2.28.1	Value of Non judicial Stamp Paper for Bank Guarantees and for Contract Agreement shall be not less than Rs 100/- unless otherwise required under relevant statutes.
2.28.2	In case of any conflict between the General Conditions of Contract and Special Conditions of Contract, provisions contained in the Special Conditions of Contract shall prevail.
2.28.3	Unless otherwise specified in NIT, offers from consortium/JVs shall not be considered.
2.28.4	BHEL may not insist for signing of Contract Agreements in respect of low value and short time period contracts like providing services for Hot water flushing, Chemical Cleaning, Transportation, etc

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2010

FORMS & PROCEDURES

(Document No. PS:MSX:F&P)

BHARAT HEAVY ELECTRICALS LIMITED



FORMS & PROCEDURES

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1.3	No Deviation Certificate	F-3 (Rev 00)	01
1.4	Declaration confirming knowledge about Site Conditions	F-4 (Rev 00)	01
1.5	Declaration for relation in BHEL	F-5 (Rev 00)	01
1.6	Non Disclosure Certificate	F-6 (Rev 00)	01
1.7	Bank Account Details for E-Payment	F-7 (Rev 00)	01
1.8	Form for seeking clarifications	F-8 (Rev 00)	01
1.9	Capacity Evaluation of Bidder for current Tender	F-9 (Rev 00)	01
1.10	Contract Agreement	F-10 (Rev 00)	04
1.11	Bank Guarantee for Security Deposit	F-11 (Rev 00)	02
1.12	Bank Guarantee for Interest Bearing Refundable Advance	F-12 (Rev 00)	03
1.13	Extension of Validity of Bank Guarantee	F-13 (Rev 00)	01
1.14	Monthly Plan & Review with Contractors	F-14 (Rev 00)	04
1.15	Guidelines for Evaluation of Contractor Performance	F-15 (Rev 00)	##
1.16	Evaluation of Contractor Performance (Quarterly)	F-16 (Rev 00)	04
1.17	Evaluation of Contractor Performance (Annual)	F-17 (Rev 00)	01
1.18	Evaluation of Contractor Performance for the Contract (Overall)	F-18 (Rev 00)	01
1.19	Milestone Completion Certificate	F-19 (Rev 00)	01

FORMS & PROCEDURES

SN	Description	Form No	No. of Pages
1.20	Completion Certificate	F-20 (Rev 00)	01
1.21	Indemnity Bond	F-21 (Rev 00)	02
1.22	Consortium Agreement	F-22 (Rev 00)	03
1.23	Refund of Security Deposit	F-23 (Rev 00)	01
1.24	Refund of Guarantee Money	F-24 (WAM-11)	02
1.25	Power of Attorney for Submission of Tender/Signing Contract Agreement	F-25 (Rev 00)	01
1.26	Analysis of Unit Rates Quoted	F-26 (Rev 00)	01
1.27	RA Bill Format	WAM-6	09
1.28	Final Bill Submission format with No Claim Certificate and No Demand Certificate	WAM-7	12
1.29			
1.30			
2.0	Procedures		
2.1	Procedure and Business Rules for Reverse Auction	As per Company Policy	
2.2	Integrity Pact	As per Company Policy	
3.0	Customer specific procedures		
3.1			

: will be released later

OFFER FORWARDING LETTER / TENDER SUBMISSION LETTER
(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

Offer Reference No:.....

Date:.....

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : Submission of Offer against Tender Specification No:

I/We hereby offer to carry out the work detailed in the Tender Specification issued by Bharat Heavy Electricals Limited, Power Sector-....., in accordance with the terms and conditions thereof.

I/We have carefully perused the following listed documents connected with the above work and agree to abide by the same.

1. Amendments/Clarifications/Corrigenda/Errata/etc issued in respect of the Tender documents by BHEL
2. Notice Inviting Tender (NIT)
3. Price Bid
4. Technical Conditions of Contract
5. Special Conditions of Contract
6. General Conditions of Contract
7. Forms and Procedures

Should our Offer be accepted by BHEL for Award, I/we further agree to furnish 'Security Deposit' for the work as provided for in the Tender Conditions within the stipulated time as may be indicated by BHEL.

I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

I/We have deposited/depositing herewith the requisite Earnest Money Deposit (EMD) as per details furnished in the Check List.

Authorised Representative of Bidder

Signature :

Name :

Address :

Place:

Date:

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **Declaration by Authorised Signatory**

Ref : 1) NIT/Tender Specification No:,

2) All other pertinent issues till date

I/We, hereby certify that all the information and data furnished by me with regard to the above Tender Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.

I further certify that I am authorised to represent on behalf of my Company/Firm for the above mentioned tender and a valid Power of Attorney to this effect is also enclosed.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Date:

Enclosed : Power of Attorney

NO DEVIATION CERTIFICATE

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **No Deviation Certificate**

Ref : 1) NIT/Tender Specification No:,
2) All other pertinent issues till date

We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred NIT/Tender Specification.

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to Tender Conditions, Integrity Pact (if applicable) and acceptance to Reverse Auctioning process.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

DECLARATION CONFIRMING KNOWLEDGE ABOUT SITE CONDITIONS

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **Declaration confirming knowledge about Site conditions**

Ref : 1) NIT/Tender Specification No:,

2) All other pertinent issues till date

I/We, _____ hereby declare and confirm that we have visited the Project Site as referred in BHEL Tender Specifications and acquired full knowledge and information about the Site conditions including Wage structure, Industrial Climate, the Law & Order and other conditions prevalent at and around the Site. We further confirm that the above information is true and correct and we shall not raise any claim of any nature due to lack of knowledge of Site conditions.

I/We, hereby offer to carry out work as detailed in above mentioned Tender Specification, in accordance with Terms & Conditions thereof.

Yours faithfully,

(Signature, Date & Seal of Authorized
Representative of the Bidder)

Date :

Place:

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **Declaration for relation in BHEL**

Ref : 1) NIT/Tender Specification No:

I/We hereby submit the following information pertaining to relation/relatives of Proprieter/Partner(s)/Director(s) employed in BHEL

Tick(√) any one as applicable:

1. The Proprieter, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

OR

2. The Proprieter, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:

(i)

(ii)

Signature of the Authorised Signatory

Note:

1. Attach separate sheet, if necessary.
2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.

NON DISCLOSURE CERTIFICATE

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

I/We understand that BHEL PS-NR is committed to Information Security Management System as per their Information Security Policy.

Hence, I/We M/s.....
who are submitting offer for providing services to BHEL PS-NR against
Tender Specification No: _____,
hereby undertake to comply with the following in line with Information
Security Policy of BHEL PS-NR, NOIDA

- To maintain confidentiality of documents & information which shall be used during the execution of the Contract.

- The documents & information shall not be revealed to or shared with third party which shall not be in the business interest of BHEL PS-NR.

(Signature, date & seal of Authorized
Signatory of the bidder)

Date:

BANK ACCOUNT DETAILS FOR E-PAYMENT

(To be given on Letter head of the Company /Firm of Bidder, and **ENDORSED (SIGNED & STAMPED) BY THE BANK** to enable BHEL release payments through Electronic Fund Transfer (EFT/RTGS))

1. Beneficiary Name :
2. Beneficiary Account No. :
3. Bank Name & Branch :
4. City/Place :
5. 9 digit MICR Code of Bank Branch :
6. IFSC Code of Bank Branch :
7. Beneficiary E-mail ID :
(for payment confirmation)

NOTE: In case Bank endorsed certificate regarding above has already been submitted earlier, Kindly submit photocopy of the same

FORMAT FOR SEEKING CLARIFICATION

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **Request for Clarification**Ref : 1) NIT/Tender Specification No:,
2) All other pertinent issues till date

Sl no.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's clarification
1				
2				
3				
4				
5				
6				

Yours faithfully,

(Signature, date & seal of Authorized Representative of the Bidder)

CAPACITY EVALUATION OF BIDDERS FOR CURRENT TENDER

SL NO.	DESCRIPTION OF WORK (Similar to Tendered Scope)	WORK ORDER REF & DATE	CONTRACT VALUE (Rs. LACS)	CUSTOMER NAME & ADDRESS	CURRENT STATUS OF THE JOB ALONG WITH LATEST MILE STONE COMPLETED	%AGE OF WORK COMPLETED	VALUE OF BALANCE WORK (Rs. Lacs)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

NOTES:

1. BIDDERS ARE REQUIRED TO FURNISH ALL THE JOBS OF SIMILAR NATURE WHICH THEY ARE EXECUTING (IN PROGRESS) AT THE TIME OF SUBMISSION OF TENDER, AS PER ABOVE FORMAT.

2. BIDDERS HEREBY UNDERTAKE THAT THEY HAVE FURNISHED THE DETAILS SOUGHT AS PER POINT NO. 1 IN TOTALITY AND THAT THE DETAILS FURNISHED IS COMPLETE IN ALL RESPECT.

3. BHEL WILL TAKE APPROPRIATE ACTION AS DEEMED FIT , IN CASE, IT IS FOUND AT A LATER DATE THAT THE CONTRACTOR HAD SUPPRESSED THE FACTS AND HAVE NOT FURNISHED THE CORRECT & COMPLETE INFORMATIONS.

DATE :
PLACE:

Signature

Name, Designation & Seal of Bidder

CONTRACT AGREEMENT

Form No: F-10 (Rev 00)

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Power Sector – Northern Region
NOIDA (UP)
INDIA

CONTRACT AGREEMENT

AGREEMENT NO. _____

NAME OF WORK	
NAME OF THE CONTRACTOR WITH FULL ADDRESS	
VALUE OF WORK AWARDED	
LETTER OF INTENT NO.	
TIME ALLOTTED FOR COMPLETING THE WORK (DATE OF COMPLETION)	

SIGNATURE OF CONTRACTOR

(SIGNATURE OF BHEL OFFICER)

CONTRACT AGREEMENT

THIS AGREEMENT MADE THIS _____ DAY OF _____ between BHARAT HEAVY ELECTRICALS LIMITED (A Government of India Enterprise) a Company incorporated under the Companies Act, 1956, having its Registered Office at BHEL House, Siri Fort New Delhi-110049 (herein after called BHEL) of the ONE PART.

AND

M/S _____
_____ (hereinafter called the 'Contractor') of the SECOND PART.

WHEREAS M/s -----state that they have acquired and possess extensive experience in the field of -----

And Whereas in response to an Invitation to Tender No. ----- issued by BHEL for execution of ----- the contractor submitted their offer No.-----dated -----And whereas BHEL has accepted the offer of the Contractor on terms and conditions specified in the Letter of Intent No.-----dated -----read with the references cited therein.

THIS AGREEMENT WITNESSES AND it is hereby agreed by and between the parties as follows:

1. That the contractor shall execute the work of -----and more particularly described in Tender Specification No -----including Drawings and Specifications (hereinafter called the said works) in accordance with and subject to terms and conditions contained in these presents, instructions to Tenderers, General Conditions of Contract, Special Conditions, Annexures, Letter of Intent dated ----- and such other instructions, Drawings, Specifications given to him from time to time by BHEL.
2. The Contractor is required to furnish to BHEL Security deposit in the form of cash/ approved securities/ Bank Guarantee valid upto ----- for a sum of Rs.----- towards satisfactory performance and completion of the Contract.
3. The Contractor has furnished a Bank Guarantee bearing no.-----dated -----for a sum of Rs.-----executed by ----- in favour of BHEL towards Security Deposit valid upto -----

OR

The Contractor has furnished to BHEL an initial Security Deposit of Rs.-----in the form of cash / approved Securities/ B.G No.----- dated ----- for Rs.-----executed by ----- in favour of BHEL valid upto ----- and has agreed for recovery of the balance security deposit by BHEL @ 10% of the value of work done from each running bill till the entire Security Deposit is recovered.

OR

The contractor has furnished to BHEL an initial Security Deposit of Rs.-----(Rs.-----vide Bank draft No.-----dated -----and by adjusting EMD of Rs.----- submitted vide Bank draft No.----- dt.-----) and has agreed for recovery of balance Security Deposit by BHEL @ 10% of the value of work done from each running bill till the entire security deposit is recovered.

4. The Contractor hereby agrees to extend the validity of the Bank Guarantee for such further period or periods as may be required by BHEL and if the Contractor fails to obtain such extension(s) from the Bank, the Contractor, shall pay forthwith or accept recovery of Rs.----- from the bills in one installment and the contractor further agrees that failure to extend the validity of the Bank Guarantee or failure to pay the aforesaid amount in the manner specified above shall constitute breach of contract. In addition to above, BHEL shall be entitled to take such action as deemed fit and proper for recovering the said sum of Rs.-----

OR

In case the contractor furnishes the bank guarantee at a later date the contractor hereby agrees to extend the validity of bank guarantee for such further period or periods as may be required by BHEL and if the contractor fails to obtain such extension(s) from the bank, the contractor shall pay forthwith or accept recovery of the amount of bank guarantee given in lieu of security deposit from the bills in one installment and the contractor further agrees that failure to extend the validity of bank guarantee or failure to pay the aforesaid amount in the manner specified above shall constitute breach of contract. In addition to above, BHEL shall be entitled to take such action as deemed fit and proper for recovering the said sum.

5. That in consideration of the payments to be made to the Contractor by BHEL in accordance with this Agreement the Contractor hereby covenants and undertakes with BHEL that they shall execute, construct, complete the works in conformity, in all respects, with the terms and conditions specified in this Agreement and the documents governing the same.
6. That the Contractor shall be deemed to have carefully examined this Agreement and the documents governing the same and also to have satisfied himself as to the nature and character of the Works to be executed by him.
7. That the Contractor shall carry out and complete the execution of the said works to the entire satisfaction of the Engineer or such other officer authorised by BHEL, within the agreed time schedule, the time of completion being the essence of the Contract.
8. That BHEL shall, after proper scrutiny of the bills submitted by the Contractor, pay to him during the progress of the said works such sum as determined by BHEL in accordance with this Agreement.
9. That this Agreement shall be deemed to have come into force from ----- the date on which the letter of intent has been issued to the Contractor.
10. That whenever under this contract or otherwise, any sum of money shall be recoverable from or payable by the Contractor, the same may be deducted in the manner as set out in the General Conditions of Contract or other conditions governing this Agreement.
11. That all charges on account of Octroi, Terminal and other taxes including sales tax or other duties on material obtained for execution of the said works shall be borne and paid by the Contractor.
12. That BHEL shall be entitled to deduct from the Contractor's running bills or otherwise Income Tax under Section 194 (C) of the Income Tax Act, 1961.
13. That BHEL shall be further entitled to recover from the running bills of the Contractor or otherwise such sum as may be determined by BHEL from time to time in respect of

CONTRACT AGREEMENT

Form No: F-10 (Rev 00)

consumables supplied by BHEL, hire charges for tools and plants issued (Where applicable) and any other dues owed by the Contractor.

14. That it is hereby agreed by and between the parties that non- exercise, forbearance or omission of any of the powers conferred on BHEL and /or any of its authorities will not in any manner constitute waiver of the conditions hereto contained in these presents and the liability of the Contractor with respect to compensation payable to BHEL or Contractor's obligations shall remain unaffected.

15. It is clearly understood by and between the parties that in the event of any conflict between the Letter of Intent and other documents governing this Agreement, the provisions in the Letter of Intent shall prevail.

16. The following documents

1. Invitation to Tender No-----
and the documents specified therein.

2. Contractor's Offer No-----
dated-----.

3. _____

4. _____

5. _____

6. Letter of Intent No_____ dated_____.

7. _____

shall also form part of and govern this Agreement.

IN WITNESS HEREOF, the parties hereto have respectively set their signatures in the presence of

WITNESS

1.

2.

(CONTRACTOR)
(to be signed by a person holding
a valid Power of Attorney)

WITNESS

1.

2.

(For and on behalf of BHEL)

BANK GUARANTEE FOR SECURITY DEPOSIT

B.G. NO.

Date

This deed of Guarantee made this ----- day of -----two thousand ---- by <Name and Address of Bank> hereinafter called the "The Guarantor" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns) in favour of M/s Bharat Heavy Electrical Limited (A Govt. of India Undertaking) a company incorporated under the Companies Act, 1956, having its registered office at BHEL House, Siri Fort, Asiad, New Delhi – 110049 through its unit at BHEL, Power Sector Northern Region, Sector-16-A, NOIDA -201301(UP) hereinafter called "The Company" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns)

WHEREAS < Contractor's Name and Address> (hereinafter referred to as the Contractor) have entered into a contract arising out of Letter of Intent no. < LOI REF & Date > (hereinafter referred to as "the contract") for < Name of Work > with the company.

AND WHEREAS the contract inter-alia provides that the contractor shall furnish to the company a sum of Rs.----- (Rupees-----) towards security deposit for due and faithful performance of the contract in the form and manner specified therein.

AND WHEREAS the contractor has approached the Guarantor and in consideration of the arrangement arrived at between the contractor and the Guarantor, the Guarantor has agreed to give the Guarantee as hereinafter mentioned in favour of the company.

The Guarantor do hereby guarantee to the company the due and faithful performance, observance or discharge of the Contract by the contractor and further unconditionally and irrevocably undertake to pay to the Company without demur and merely on a demand, to the extent of Rs.----- (Rupees-----) against any claim by the company on them for any loss, damage, costs, charges and expenses caused to or suffered by the company by reasons of the contractor making any default in the performance, observance or discharge of the terms, conditions, stipulations or undertakings or any of them as contained in the contract.

The decision of the company whether any default has occurred or has been committed by the contractor in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them as contained in the contract and / or as to the extent of loss, damage, costs, charges and expenses caused to or suffered by the company by reason of the contractor making any default in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them shall be conclusive and binding on the Guarantor irrespective of the fact whether the contractor admits or denies the default or questions the correctness of any demand made by the company in any Court, Tribunal or Arbitration proceedings or before any other Authority.

The company shall have the fullest liberty without affecting in any way the liability of the Guarantor under this Guarantee, from time to time to vary any of the terms and conditions of the contract or extend time of performance by the contractor or to postpone for any time and from time to time any of the powers exercisable by it against the contractor and either enforce or forebear from enforcing any of the terms and conditions governing the contract or securities available to the company and the Guarantor shall not be released from its liability under these presents by any exercise by the company of the liberty with reference to the matters aforesaid or by reasons of time being given to the contractor or any other forbearance, act or commission on the part of the company or any indulgence by the company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would, but for this provision have the effect of so releasing the Guarantor from its liability under this guarantee.

The Guarantor further agrees that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the contract and its claim satisfied or discharged and till the company certifies that the terms and conditions of the contract have been fully and properly carried out by the contractor and accordingly discharges this Guarantee, subject however, that the company shall have no claim under this Guarantee after ----- i.e. (the present date of validity of Bank Guarantee unless the date of validity of this Bank Guarantee is further extended from time to time, as the case may be) unless a notice of the claim under this Guarantee has been served on the Guarantor before the expiry of the said period in which case the same shall be enforceable against the Guarantor notwithstanding the fact that the same is enforced after the expiry of the said period.

BANK GUARANTEE FOR SECURITY DEPOSIT

The Guarantor undertakes not to revoke this Guarantee during the period it is in force except with the previous consent of the Company in writing and agrees that any liquidation or winding up or insolvency or dissolution or any change in the constitution of the contractor or the Guarantor shall not discharge the Guarantor's liability hereunder.

It shall not be necessary for the company to proceed against the contractor before proceeding against the Guarantor and the Guarantee herein contained shall be enforceable against them notwithstanding any security which the Company may have obtained or obtain from the Contractor shall at the time when proceedings are taken against the Guarantor hereunder be outstanding or unrealized.

Notwithstanding anything contained herein before, our liability under the Guarantee is restricted to Rs.----- - (Rupees-----). Our guarantee shall remain in force until -----, i.e. (the present date of validity of Bank Guarantee unless the date of validity of this Bank Guarantee is further extended from time to time) unless a claim or demand under this guarantee is made against us on or before ----- we shall be discharged from our liabilities under this Guarantee thereafter.

Any claim or dispute arising under the terms of this documents shall only be enforced or settled in the courts of at New Delhi/Delhi only.

The Guarantor hereby declares that it has power to execute this guarantee and the executant has full powers to do so on behalf of the Guarantor.

IN WITNESS whereof the ----- (Bank) has hereunto set and subscribed its hand the day, month and year first, above written.

(Name of the Bank)

Signed for and on behalf of the Bank
(Designation of the Authorized Person Signing the Guarantee)

(Signatory No.-----)

DATED:

SEAL

=====

Notes :

1. **Address of Power Sector Regions (inviting the Tender)** is as below:
 - PSNR : Bharat Heavy Electricals Limited, Power Sector Northern Region, HRDI & PSNR Complex, Plot No 25, Sector 16-A, Noida – 201 301 (Uttar Pradesh)
 - PSER : Bharat Heavy Electricals Limited, Power Sector Eastern Region, BHEL Bhawan, Plot No 9/1, DJ Block, Sector-II, Salt lake City, Kolkata – 700 091
 - PSWR: Bharat Heavy Electricals Limited, Power Sector Western Region, Shree Mohini Complex, 345 Kingsway, Nagpur 440 001
 - PSSR: Bharat Heavy Electricals Limited, Power Sector Southern Region, 690, Anna Salai, Nandanam, Chennai 600 035
2. **Name of place (for jurisdiction of Courts)** is as below:
 - PSNR : Delhi
 - PSER : Kolkata
 - PSWR: Nagpur
 - PSSR : Chennai
3. The BG shall be executed on non-judicial stamp papers of adequate value procured in the name of the Bank in the State where the Bank is located.
4. The BG is required to be sent by the executing Bank directly to BHEL at the address where tender is submitted / accepted under sealed cover.

BANK GUARANTEE FOR INTEREST BEARING REFUNDABLE ADVANCE

B.G. No.

Date

This deed of Guarantee made this _____ day of _____ two thousand _____ by < **Name and Address of Bank**> hereinafter called the "The Guarantor" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns) in favour of M/S Bharat Heavy Electricals Limited a Company incorporated under the Companies Act, 1956, having its registered office at BHEL House, Siri Fort, New Delhi - 110049 through its unit at BHEL, POWER SECTOR, Northern Region, Sector-16 A, NOIDA-201301 (UP) hereinafter called "The Company" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns).

WHEREAS M/s. _____ (hereinafter referred to as the Contractor) have entered into a Contract arising out of Letter of Intent no. _____ dtd _____ (hereinafter referred to as "the Contract") for the < **Name of work**> with the Company.

AND WHEREAS the Contract inter-alia provides that the Company will pay to the Contractor interest bearing advance of Rs. _____ (Rupees _____ only) on certain terms and conditions specified in the Contract subject to the Contractor furnishing a Bank Guarantee for Rs. _____ (Rupees _____ only) in favour of the Company.

AND WHEREAS the Company has agreed to accept a Bank Guarantee from a Bank to cover the said advance.

AND WHEREAS the Contractor has approached the Guarantor and in consideration of the arrangement arrived at between the Contractor and the Guarantor, the Guarantor has agreed to give the Guarantee as hereinafter mentioned in favour of the Company.

NOW THIS DEED WITNESSES AS FOLLOWS:-

- (1) In consideration of the Company having agreed to advance a sum of Rs. _____ (Rupees _____ only) to the Contractor, the Guarantor do hereby guarantee the due recovery by the Company of the said advance with interest thereon as provided according to the terms and conditions of the Contract. If the said Contractor fails to utilise the said advance for the purpose of the Contract and /or the said advance together with interest as aforesaid is not fully recovered by the Company the Guarantor do hereby unconditionally and irrevocably undertake to pay to the Company without demur and merely on a demand, to the extent of the said sum of Rs. _____ (Rupees _____ only) any claim made by the Company on them for the loss or damage caused to or suffered by the Company by reasons of the Company not being able to recover in full the advance with interest as aforesaid.

BANK GUARANTEE FOR INTEREST BEARING REFUNDABLE ADVANCE

- (2) The decision of the Company whether the Contractor has failed to utilise the said advance or any part thereof for the purpose of the Contract and / or as to the extent of loss or damage caused to or suffered by the Company by reason of the Company not being able to recover in full the said sum of Rs. _____ with interest if any shall be final and binding on the Guarantor, irrespective of the fact whether the Contractor admits or denies the default or questions the correctness of any demand made by the Company in any Court Tribunal or Arbitration proceedings or before any other Authority.
- (3) The Company shall have the fullest liberty without affecting in any way the liability of the Guarantor under this Guarantee, from time to time to vary any of the terms and conditions of the Contract or extend time of performance by the Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the Contractor and either enforce or forbear from enforcing any of the terms and conditions governing the Contract or securities available to the Company and the Guarantor shall not be released from its liability under these presents by any exercise by the Company of the liberty with reference to the matters aforesaid or by reasons of time being given to the Contractor or any other forbearance, act or commission on the part of the Company or any indulgence by the Company to the Contractor or of any other matter or thing whatsoever which under the law relating to sureties would, but for this provision have the effect of so releasing the Guarantor from its liability under this guarantee.
- (4) The Guarantor further agrees that the Guarantee herein contained shall remain in full force and effect during the period till the Company discharges this Guarantee, subject to however, that the Company shall have no claim under this Guarantee after _____ i.e. (the present date of validity of Bank Guarantee unless the date of validity of this Bank Guarantee is further extended from time to time, as the case may be) unless a notice of the claim under this Guarantee has been served on the Guarantor before the expiry of the said period in which case the same shall be enforceable against the Guarantor not withstanding the fact that the same is enforced after the expiry of the said period.
- (5) The Guarantor undertakes not to revoke this Guarantee during the period it is in force except with the previous consent of the Company in writing and agrees that any liquidation or winding up or insolvency or dissolution or any change in the constitution of the Contractor or the Guarantor shall not discharge the Guarantor's liability hereunder.
- (6) It shall not be necessary for the Company to proceed against the Contractor before proceeding against the Guarantor and the Guarantee herein contained shall be enforceable against them notwithstanding any security which the Company may have obtained or obtain from the Contractor shall at the time when proceedings are taken against the Guarantor hereunder be outstanding or unrealised.
- (7) Notwithstanding anything contained herein before, our liability under the Guarantee is restricted to Rs. _____ (Rupees _____). Our guarantee shall remain in force until _____, i.e. the present date of validity of Bank Guarantee unless the date of validity of this Bank Guarantee is further extended from time to time. Unless a claim or demand under this guarantee is made against us on or before-----, we shall be discharged from our liabilities under this Guarantee thereafter.

BANK GUARANTEE FOR INTEREST BEARING REFUNDABLE ADVANCE

- (8) Any claim or dispute arising under the terms of this document shall only be enforced or settled in the courts at New Delhi/Delhi only.
- (9) The Guarantor hereby declares that it has power to execute this Guarantee under its Memorandum and Articles of Association and the executant has full powers to do so on its behalf under the Power of Attorney dated _____ (To be incorporated by the Bank) granted to him by the proper authorities of the Guarantor.

IN WITNESS whereof the _____(Bank) has hereunto set and subscribed its hand the day, month and year first, above written.

(Name of the Bank)

Signed for and on behalf of the Bank
(Designation of the Authorized Person Signing the Guarantee)

(Signatory No.-----)

DATED:

SEAL

Notes :

1. **Address of Power Sector Regions (inviting the Tender)** is as below:
 - PSNR : Bharat Heavy Electricals Limited, Power Sector Northern Region, HRDI & PSNR Complex, Plot No 25, Sector 16-A, Noida-201301 (Uttar Pradesh)
 - PSER : Bharat Heavy Electricals Limited, Power Sector Eastern Region, BHEL Bhawan, Plot No 9/1, DJ Block, Sector-II, Salt lake City, Kolkata – 700 091
 - PSWR: Bharat Heavy Electricals Limited, Power Sector Western Region, Shree Mohini Complex, 345 Kingsway, Nagpur 440 001
 - PSSR: Bharat Heavy Electricals Limited, Power Sector Southern Region, 690, Anna Salai, Nandanam, Chennai 600 035
2. **Name of place (for jurisdiction of Courts)** is as below:
 - PSNR : Delhi
 - PSER : Kolkata
 - PSWR: Nagpur
 - PSSR : Chennai
3. The BG shall be executed on non-judicial stamp papers of adequate value procured in the name of the Bank in the State where the Bank is located.
4. The BG is required to be sent by the executing Bank directly to BHEL at the address where tender is submitted / accepted, under sealed cover.

FORM for EXTENSION OF VALIDITY OF BANK GUARANTEE

- 1. To be typed on non judicial Stamp Papers of value as applicable in the State of India from where the BG has been issued or the State of India where the BG shall be operated
- 2. The non judicial stamp papers shall be purchased in the name of the Party on whose behalf the BG is being issued or the BG issuing Bank

BANK GUARANTEE NO.:

Date:.....

To

(Write Designation and Address of Officer of BHEL inviting the Tender)

Dear Sir

Sub : Validity of Bank Guarantee No:..... Dated for
..... Rs in favour of yourself, expiry date
....., on account of M/s in respect of
Contract Number....., (herein after called the Original bank Guarantee)

At the request of M/s....., we Bank,
having its branch Office at and having Head office
at, do hereby extend our liability under the above mentioned Bank Guarantee
number..... dated for a further period ofMonths/years
from to expire on

Except as provided above, all other terms and conditions of the Original Bank Guarantee No
..... Dated..... shall remain unaltered and binding on us.

Kindly treat this extension as an integral part of the original Bank Guarantee to which it
would be attached.

Yours faithfully

Signature.....
Name & Designation.....
Power of Attorney/Signing Power No
Seal of Bank



PS- NR

MONTHLY PLAN & REVIEW WITH CONTRACTOR

Page 1 of 4

Name of Site		Contract No.	
		Name of Contractor	
Review for the month of		Brief Scope of work	
Date of Review			

PART- A PHYSICAL REVIEW

Sl.No	Description of work	Unit of Measurement	Original Plan (QTY Planned for the month as per joint review of previous month)	Last months shortfall (attributable to Contractor)	Total Planned for the month (including previous month backlog attributable to Contractor)	Achieved	Shortfall attributable to (in Qty)		REMARKS
			(a)	(b)	C=(a)+(b)		BHEL	Contractor	
		UOM	Phy.	Phy	Phy	Phy.	Phy.	Phy.	

Use separate sheets if necessary

BHEL
(Sign with name, designation and date)

CONTRACTOR
(Sign with name, designation and date)



PS- NR

MONTHLY PLAN & REVIEW WITH CONTRACTOR

Page 2 of 4

CONTRACT NO:

CONTRACTOR:

PART – B-1 REVIEW OF DEPLOYMENT OF MAJOR T&Ps

SUPPLIER SCOPE:-

SN.	MAJOR T&P TO BE DEPLOYED AS PER WORK PLANNED FOR THE MONTH	QTY.	DEPLOYMENT STATUS (ACTUAL DEPLOYED)	REMARKS (WORKS EFFECTED DUE TO NON- DEPLOYMENT OF T&Ps

BHEL SCOPE:-

BHEL
(Sign with name, designation and date)

CONTRACTOR
(Sign with name, designation and date)



PS- NR

**MONTHLY PLAN & REVIEW WITH
CONTRACTOR**

Page 3 of 4

CONTRACT NO:

CONTRACTOR:

PART – B-2 REVIEW OF DEPLOYMENT OF MANPOWER

SUPPLIER SCOPE:-

SNO.	AREA OF WORK	CATEGORY OF LABOUR	NO. OF LABOUR REQUIRED AS PER CATEGORY	DEPLOYED FOR THE PERIOD	REMARKS (WORKS AFFECTED DUE TO NON-AVAILABILITY OF LABOUR)

BHEL
(Sign with name, designation and date)

CONTRACTOR
(Sign with name, designation and date)



PS- NR

MONTHLY PLAN & REVIEW WITH CONTRACTOR

Page 4 of 4

CONTRACT No.:**Date of Report:**

PART C1 : PLAN FOR THE NEXT MONTH (PHYSICAL)

SL NO.	DESCRIPTION OF WORK (Area Wise)	PLANNED MT/ % / QTY (EXCLUDING SHORTFALLS ATTRIBUTABLE TO CONTRACTOR TILL DATE)	T&Ps REQUIRED	MANPOWER REQUIRED	REMARKS

NOTE: USE SEPARATE SHEETS, IF REQUIRED

PART C2: PLAN FOR THE NEXT MONTH (OTHERS)

SL NO.	DESCRIPTION OF WORK (Area Wise)	PLANNED MT/ % / QTY	T&Ps REQUIRED	MANPOWER REQUIRED	REMARKS

NOTE: USE SEPARATE SHEETS, IF REQUIRED

BHEL
(Sign with name, designation and date)

CONTRACTOR
(Sign with name, designation and date)



QUARTERLY EVALUATION OF OF CONTRACTOR PERFORMANCE

Page No 1 Of 4

NOTE: This evaluation should be done **EVERY QUARTER** * by the respective Regions for all Contracts under executions

* : March, June, September & December of every year

A	GENERAL	
1	Reporting Period	Quarter ending : Year :
2	Name of Site	
3	Name of Contractor	
4	Contract Number/LOI Number & Date	
5	Name of Work	
6	Contract Start Date	
	I. As per Contract	
	II. Actual Date of Start	
7	Completion Status (as on date)	
	I. Physical completion in %age	
	II. Running Bill amount paid in %age of Contract Value	
8	Scheduled Completion Time	
9	Actual Date of Completion	
10	Awarded Contract Value	
11	Final contract Value	
BHEL		Contractor
(Signature with Name, Designation & date)		(Signature with Name, Designation & date)



QUARTERLY EVALUATION OF CONTRACTOR PERFORMANCE

Page No 2 Of 4

		MAX SCORE	SCORE OBTAINED
1.0 QUALITY			
1.1	Amenability to Quality System	5	
1.2	Adherence to Quality Standards	5	
1.3	Preventing recurrence of Defects/Complaints	5	
1.4	Finishing and aesthetics	5	
1.5	Housekeeping	5	
1.6	Rating of Quality Officer for Quality Control of Job	5	
2.0 DELIVERY			
2.1	Achievements vis a vis Requirements/Commitments	5	
2.2	Timely Depoyment of Manpower	5	
2.3	Timely Depoyment of T&Ps and MMEs	5	
2.4	Timely arrangement of Consumables	5	
3.0 MANPOWER			
3.1	Experience and Job knowledge of Supervisory personnel	5	
3.2	Aptitude of supervisory Personnel (w.r.t. Attitude, Initiative, Leadership, Cooperativeness, etc.)	5	
3.3	Adequacy of Manpower (Work Force) deployed	5	
3.4	Competence of Manpower (Work Force) deployed	5	
4.0 T&P, IMTEs & CONSUMABLES			
4.1	Adequacy of T&P & MMEs as per Site requirement	5	
4.2	Condition of T&P & MMEs	5	
4.3	Ensuring Fitness & Calibration of T&P & MMEs	5	
4.4	Adequacy of Consumables as per Site requirement	5	
5.0 SITE INFRASTRUCTURE AND SERVICE			
5.1	Site Organization vis a vis Commitment	5	
5.2	Readiness to rectify Defects	5	
5.3	Providing support Documents and Records	5	
5.4	Speed of responce	5	
5.5	Cooperativeness in Delivering and Implementing Improvement Measures	5	
5.6	Approachability of Top Management during critical requirements and its cooperation	5	



QUARTERLY EVALUATION OF CONTRACTOR PERFORMANCE

Page No 3 Of 4

6.0 SITE FINANCE

6.1	Regularity in Payment to Staff and Workers	5	
6.2	Financing Site Operation	5	

7.0 HSE (Health Safety & Environment) & SA (Social Accountability)

7.1	Health & Safety Awareness among Employess	5	
7.2	Rating of Safety Supervisor on HSE Aspects		
7.2.1	Experience and Job knowledge of Safety Supervisor	5	
7.2.2	Rating of safety Supervisor for controlling Safety at Site	5	
7.3	Quality & Usage of Safety gadgets		
7.3.1	Personal Protective Equipments (PPE)	5	
7.3.2	Use of Safety Equipments & Safety in Equipments (Safety Net, Toeguard, Proper earthing, Fire-fighting Equipments etc.)	5	
7.4	Use of Safety Posters	5	
7.5	Compliance to Social Accountablity Norms	5	
7.6	Rating based on feed back of HSE & SA Audits	5	

8.0 OTHERS

8.1	Concern for Employees Welfare and Health (like First Aid)	5	
8.2	Compliance to Statutory Requirements, State and Local Laws/Regulations	5	
8.3	Tendency of taking undue advantage by interpreting Contract Clauses in their favour (Score 5 for no tendency)	5	
8.4	Understanding of Contract (Scope & Contract Clauses)	5	
8.5	Planning of Work Activities(Monthly/Weekly/Daily)	5	
8.6	Submission of Monthly/Weekly/daily Report	5	

BHEL
(Signature with Name, Designation & date)

Contractor
(Signature with Name, Designation & date)



QUARTERLY EVALUATION OF CONTRACTOR PERFORMANCE

SI No	Category	Max Score	Score obtained	Weightage factor	Weighted Score
1	Quality	30		0.4	
2	Delivery	20		0.75	
3	Manpower	20		0.6	
4	T&Ps, MMEs & Consumables	20		0.75	
5	Site Infrastructure & Service	30		0.4	
6	Site Finance	10		1.1	
7	HSE & SA	40		0.35	
8	Others	30		0.3	
9	Total Weighted Score				
10	Any detail which Construction Manager wants to share with Management				
11	Less Score for Accidents attributable to Contractor during the Reporting Period (Major at@3 Minor@1)				
a	Major Accidents-----Fatal,Permanent Disability, Major Damage to Equipment.				(-)
b	Minor Accidents ----- All others				(-)
12	Net Weighted Score (OUT OF 100):				
Overall Performance Evaluation :			Good / Satisfactory / Unsatisfactory		
Net Weighted Score					
80% and Above			- Good		
Between 60% To 80%			-Satisfactory		
60% and Below			-Unsatisfactory		
Dated:			Section Head/ Site Engineer		
Specific Recommendation of Construction Manager:					
			Construction Manager		
FOR SUB CONTRACT DEPTT.					
Dated			Head (S/C)		
GM/SCP					

Note: This summary evaluation sheet is to be sent to Contractor after every Evaluation



**ANNUAL EVALUATION OF CONTRACTOR
PERFORMANCE**
(EVALUATED FINANCIAL YEAR WISE AT HQ)

Page 1 of 1

1. **Contract No.:**
2. **Contractor:**
3. **Name of Site :**
4. **Reporting Period (Financial Year):**

Sl No	QUARTER	Net Weighted score
1	Quarter-I	
2	Quarter-II	
3	Quarter-III	
4	Quarter-IV	
5	Total for the 4 Quarters	
6	Average for the Year (Financial Year)	
7	Annual Evaluation of Contractor Performance (based on net weighted score)	<ul style="list-style-type: none"> ➤ 80% and above : Good ➤ Between 60% to 80% : Satisfactory ➤ 60% and below : Unsatisfactory

Comments if any:

Head/Subcontracts

Date:

General Manager/SCP



**OVERALL PERFORMANCE OF CONTRACTOR FOR THE
CONTRACT**
(EVALUATED CONTRACT WISE AT HQ)

Page 1 of 1

1. Contract No.:

2. Contractor:

3. Name of Site :

4. Reporting period (From : _____ To : _____)

SI No	FINANCIAL YEAR	QUARTER	Net Weighted score
1		Quarter-I	
		Quarter-II	
		Quarter-III	
		Quarter-IV	
2		Quarter-I	
		Quarter-II	
		Quarter-III	
		Quarter-IV	
3		Quarter-I	
		Quarter-II	
		Quarter-III	
		Quarter-IV	
4		Quarter-I	
		Quarter-II	
		Quarter-III	
		Quarter-IV	
5		Total for all the quarters	
6		Average for the all the Quarters (Contract Period)	
7		Overall Performance for the Contract (based on net weighted score)	➤ 80% and above : Good ➤ Between 60% to 80%: Satisfactory ➤ 60% and below : Unsatisfactory

Comments if any:**Head/Subcontracts****Date:****General Manager/SCP**

MILESTONE COMPLETION CERTIFICATE
(issued by BHEL on the specific request of Contractor)

Ref :

Date:

To,

(Name & address of Contractor)

Dear Sir,

References

1. Contract No:
2. Job Description:

This is to hereby confirm that the following Milestone Activity has been achieved in respect of the Contract /Job under reference

SI No	Milestone Activity	Remarks

This certificate is issued as per your request vide letter no
without any prejudice to the rights of BHEL in line with the terms and conditions of the
above referred Contract

Yours faithfully,

For and on behalf of Bharat Heavy Electricals Limited

Construction Manager/Head (Subcontracts)

CONTRACT COMPLETION CERTIFICATE
 (Issued by BHEL/HQ on the specific request of Contractor)

Ref :

Date:

To Whom so ever it may concern

1	DESCRIPTION OF WORK	
2	NAME AND ADDRESS OF THE CONTRACTOR	
3	CONTRACT NO	
4	CONTRACT VALUE	
5	LETTER OF INTENT NO & DATE	
6	CONTRACT PERIOD//CONTRACT DURATION	
7	FINAL EXECUTED VALUE	
8	PERFORMANCE	GOOD SATISFACTORY UNSATISFACTORY

This certificate is issued as per your request vide letter no
 without any prejudice to the rights of BHEL to use this certificate for evaluation of your offers for future tenders

Yours faithfully,

For and on behalf of Bharat Heavy Electricals Limited

Head (Subcontracts)

INDEMNITY BOND

(To be executed on a Non Judicial Stamp Paper of the requisite value as per Stamp Duty prevalent in the respective State)

This Indemnity Bond executed by <name of company> having their Registered Office at <xxxxxxxxxx> in favour of M/s Bharat Heavy Electricals Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at BHEL House, Siri Fort, Asiad, New Delhi - 110049 through its Unit at Power Sector-Northern Region, Sector-16-A, NOIDA-201301, Uttar Pradesh State (India). (Hereinafter referred to as the Company)

And whereas the Company has entered into a Contract with M/s xxxxxxxxx, the executants of this Deed (hereinafter referred to as the Contractor) as its contractor in respect of the work of "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx".

AND WHEREAS under the provisions of GCC further stipulates that the Contractor shall indemnify the Company against all claims of whatever nature arising during the course of execution of Contract including defects liability period of <xx Months > i.e till <xx xx xxxx>

Now this deed witness that in case the Company is made liable by any Authority including Court to pay any claim or compensation etc. in respect of all labourers or other matters at any stage under or relating to the Contract with the Contractor , the Contractor hereby covenants and agrees with the Company that they shall indemnify and reimburse the Company to the extent of such payments and for any fee, including litigation charges, lawyers' fees, etc, penalty or damages claimed against the Company by reason of the Contractor falling to comply with Central/States Laws, Rules etc, or his failure to comply with Contract (including all expenses and charges incurred by the Company).

The Contractor further indemnifies the Company for the amount which the Company may be liable to pay by way of penalty for not making deductions from the Bills of the Contractor towards such amount and depositing the same in the Government Treasury.

INDEMNITY BOND

(To be executed on a Non Judicial Stamp Paper of the requisite value as per Stamp Duty prevalent in the respective State)

The Contractor further agree that the Company shall be entitled to with hold and adjust the Security Deposit and/or with hold and adjust payment of Bills of Contractor pertaining to this Contract against any payment which the Company has made or is required to make for which the Contractor is liable under the Contract and that such amount can be withheld, adjusted by the Company till satisfactory and final settlement of all pending matters and the Contractor hereby gives his consent for the same.

The Contractor further agrees that the terms of indemnity shall survive the termination or completion of this contract.

The contractor further agrees that the liability of the contractor shall be extended on actual basis notwithstanding the limitations of liability clause, in respect of :

1. breach of terms of contract by the contractor
2. breach of laws by the contractor
3. breach of Intellectual property rights by the contractor
4. breach of confidentiality by the contractor

Nothing contained in this deed, shall be construed as absolving or limiting the liability of the Contractor under said Contract between the Company and the Contractor. That this Indemnity Bond is irrevocable and the condition of the bond is that the Contractor shall duly and punctually comply with the terms and the conditions of this deed and contractual provisions to the satisfaction of the Company.

In witness where of M/s xxxxxxxxxxxxxx these presents on the day, month and year first, above written at xxxxxxxx by the hand of its signatory Mr. xxxxxxxxxxxx.

Signed for and on behalf of
M/s xxxxxxxxxxxxxxxxxxxx

Witness:

1
2

TIE-UP/CONSORTIUM AGREEMENT

(To be executed on Rs. 50/- Non – Judicial Stamp Paper)

THIS AGREEMENT is made and executed on this _____ day of _____, by and between (1) M/s _____, (The First Party, i.e, the Bidder) a company incorporated under the Company's Act 1956, having its registered office at _____(herein after called the "Bidder", which expression shall include its' successors, administrators, executors and permitted assigns) and (2) M/s _____, (The Second Party, i.e, the associates), a company incorporated under the Company's Act 1956, having its registered office at _____ (herein after called the " Associates", which expression shall include its' successors, administrators, executors and permitted assigns).

WHEAEAS the Owner, Bharat Heavy Electricals Ltd, a Government of India Undertaking, proposes to issue / issued an NIT (herein after referred to as the said NIT) inviting bids from the individual Bidders for undertaking the work of _____, at _____ (herein after referred to as the said works).

WHEREAS the said NIT enables submission of a bid by a Consortium subject to fulfillment of the stipulations specified in the said NIT.

AND WHEREAS M/s _____ (The First Party, i.e, the Bidder) will submit its proposal in response to the aforesaid invitation to bid by the Owner for _____ as detailed in the Bid doc. no. < TENDER REF----->

AND WHEREAS M/s _____ (The First Party, i.e the Bidder) itself is meeting all the qualifying requirements except the qualifying requirements of _____ (as detailed in the NIT) and in order to fully meet the qualifying requirements of NIT, this tie-up agreement is being entered into with M/s _____ (The Second Party, the Associates) , who fully meet the balance part of the said works (_____).

WHEREAS the First Party and the Second Party are contractors engaged in the business of carrying out various items of works. WHEREAS the two parties have agreed to constitute themselves into a consortium for the purpose of carrying out the said works, and that the consortium will be continued till the completion of the works in all respects.

WHEREAS the parties have agreed to certain terms and conditions in this regard:

TIE-UP/CONSORTIUM AGREEMENT

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS :

1. First and Second parties hereby constitute themselves into a Consortium for the purpose of bidding and undertaking the said works pursuant to the said NIT as hereinafter stated.
2. The First Party will be the leader (Lead Partner) and will be responsible for the entire works.

TIE-UP AGREEMENT

3. The First Party shall undertake the following part(s) of work detailed in the NIT namely _____

4. The Second Party shall undertake the following part(s) of work detailed in the said NIT namely _____

5. The parties hereby declare and confirm that each of them will fulfill the required minimum qualifying requirements as prescribed in the said NIT for the works agreed to be undertaken by them as stated here-in-above.
6. It is also agreed between the parties hereto that all of them shall be individually and severally responsible for the completion of the said works as per the schedule. Further, if the Employer/Owner sustains any loss or damage on account of any breach of the Contracts, we the, Consortium partners individually and severally undertake to promptly indemnify and pay such losses / damages caused to the Employer/Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever.
7. The parties hereby agree and undertake that they shall provide adequate finances, suitable Tools, Plants, Tractors, Trailers, other transportation equipment, other Tools & Plants, Measuring & Monitoring Equipments (MMEs), Men and Machinery etc. for the proper and effective execution of the works to be undertaken by them as specified here-in-above.
8. It is agreed interse between the parties hereto that all the consequences liabilities etc., arising out of any default in the due execution of the said works shall be borne by the party in default, that is by party in whose area of works default has occurred, provided however, so far as M/s Bharat Heavy Electricals Limited is concerned, all the parties shall be liable jointly and severally.

TIE-UP/CONSORTIUM AGREEMENT

IN WITNESS HEREOF the parties above named have signed this agreement on the day month and year first above written at _____(Place) .

WITNESS For
1. NAME (FIRST PARTY)
2. OFFICIAL ADDRESS

WITNESS For
1. NAME (SECOND PARTY)
2. OFFICIAL ADDRESS

[The successful bidder shall have to execute the " JOINT DEED OF UNDERTAKING " in the format to be made available by BHEL at the time of awarding].

REFUND OF SECURITY DEPOSIT

To,

The Construction Manager
BHEL Site Office

Dear Sir,

Sub : Refund of Security Deposit

Ref : Contract No:

Work:.....

I/We have submitted Final Bill in respect of the above Contract/Work vide our letter no:..... dated In line with Tender conditions (GCC clause no 1.11), kindly arrange to release/refund the Security Deposit along with Final Bill payments.

The details of Security Deposit are as below:

- 1. Cash Portion :
- 2. BG Portion :

Thanking You

Date: _____

Authorised representative of Contractor

To be filled up by BHEL

- 1. Security Deposit to be refunded:
 - a. Cash Portion:
 - b. BG Portion :
- 2. Less
 - a. Amount spent by BHEL on behalf of Contractor:
 - b. Payments made by BHEL on behalf of Contractor:
 - c. Other recoveries for Services etc
 - d. Any other recoveries
 - e. Total of 'a' to 'd':
- 3. Net Amount to be released (1-2) :
- 4. Certified that
 - a. The payment recommended for release is in order and there are no demands other than those included in the claim outstanding from the Contractor
 - b. Contract Guarantee period of Months commenced wef : _____
 - c. All objections raised so far have been settled
 - d. A note for refund of Security Deposit has been made in the Measurement Book

Signature of BHEL Engineer

Construction Manager

Date:-----

REFUND OF GUARANTEE MONEY

**BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR, NORTHERN REGION**

Ref No:

Date:

1. Name and Address of Contractor :
2. Contract Agreement/LOI No :
3. Date of Contract Agreement/LOI :
4. Name of the Work undertaken :
5. Date of commencement of the Work :
6. Date of Completion of the Work :
7. Period of Maintenance :
(Guarantee Period)
8. Date on which the Final Bill was paid :
9. Last date of making good the defect :
during Maintenance Period
10. Expenditure incurred by BHEL during :
Maintenance Period, if any, recoverable
11. Date on which Guarantee Money refund:
falls due as per Contract
12. Amount of Guarantee Money to be refunded:
13. Less Amounts recoverable (with details)
 - a. Amount spent by BHEL on maintenance :
 - b. Payments made by BHEL on behalf of Contractor:
 - c. Court dues/penalties/compensation :
 - d. Other recoveries for Services, etc :
 - e. Total of 'a' to 'd' :
14. Net Amount recommended for release (12-13) :

Signature of BHEL Engineer

Date: _____

REFUND OF GUARANTEE MONEY

**BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR, NORTHERN REGION**

CERTIFICATE TO BE FURNISHED BY THE CONTRACTOR

I/We have no claim or demand outstanding against BHEL _____, for the work done or for labour or material supplied or any other account arising out of or connected with the Contract Agreement/LOI (No _____ dated _____) and the payment of this bill shall be in full and final settlement of all my/our claims and demands including the 'Deposits' of the Contract Agreement/LOI referred to.

Signature of Contractor

Date:

CERTIFICATE TO BE FURNISHED BY SENIOR ENGINEER/CONSTRUCTION MANAGER

1. Certified that
 - a. The payment recommended for release is in order and there are no demands other than those included in the claim outstanding from the Contractor
 - b. Maintenance period (Contract Guarantee period) is over and the Contractor has carried out the works required to be carried out by him during the period of maintenance (Guarantee) to our satisfaction, and all expenses incurred by the Company on carrying out such works have been included for adjustment
 - c. All objections raised so far have been settled
 - d. A note for refund of Guarantee Amount has been made in the Measurement Book and Contract Agreement/Work Order

Signature of BHEL Engineer

Construction Manager

Date:-----

FOR USE IN ACCOUNTS DEPARTMENT

Passed for Rs _____ (Rupees _____ only)

Accountant

Accounts Officer

ACKNOWLEDGE BY THE CONTRACTOR

Received Rs _____ in full and final settlement of my/our claim

Signature of Contractor

Date:

POWER OF ATTORNEY for SUBMISSION OF TENDER/SIGNING CONTRACT AGREEMENT

(To be typed on non judicial Stamp Papers of appropriate value as applicable and Notarised)

KNOW ALL MEN BY THESE PRESENTS, that I/We do hereby make, nominate, constitute and appoint Mr , whose signature given below herewith to be true and lawful Attorney of M/s..... hereinafter called 'Company', for submitting Tender/entering into Contract and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s Bharat Heavy Electricals Ltd, Power Sector, Northern Region, NOIDA-201301 (UP), in connection with
..... vide Tender Specification No : _____, dated _____.

And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as may be lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect.

IN WITNESS WHEREOF the common seal of the company has been hereunto affixed in the manner hereinafter appearing on the document.

Dated at _____, this _____ day of _____

Director/CMD/Partner/Proprietor

Signature of Mr.....(Attorney)

Attested by: Director/CMD/Partner/Proprietor

Witness

Notary Public

ANALYSIS OF UNIT RATES QUOTED

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

Offer Reference No:.....

Date:.....

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : Analysis of Unit Rates Quoted

Ref : Tender Specification No:

Analysis of Unit Rates quoted by us in respect of above Tender is as detailed

SN	DESCRIPTION	% OF QUOTED RATE	REMARKS
01	SITE FACILITIES VIZ., ELECTRICITY, WATER OTHER INFRASTRUCTURE.		
02	SALARY AND WAGES + RETRENCHMENT BENEFITS		
03	CONSUMABLES		
04	T&P DEPRECIATION & MAINTENANCE		
05	ESTABLISHMENT & ADMINISTRATIVE EXPENSES		
06	OVERHEADS		
07	PROFIT		
	TOTAL	100%	

Yours faithfully,

(Signature, Date & Seal of Authorized Representative of the Bidder)

BHARAT HEAVY ELECTRICALS LIMITED

DIVISION.....

Running Account Bill

(Para 4.31.1 of Works Accounts Manual)

Name of the Contractor:

Name of the Work:

Sanctioned Estimate:

Code No:

Contract Agreement No :

Dated:

Departmental Bill no:

Division:

Date of written order to commence the work :

Date of commencement of the Work:

Due date of completion as per Agreement:

Date:

Sub-Division:

1. ACCOUNT OF WORK EXECUTED

On account payment for work not previously previously measured**			Item No of	Description of Work	Quantity as per agree- ment	Quantity executed up to date	Rate	Unit	Payment on the basis of actual measure- ment up to date	Quantity since last running account bill	Payment on the basis of actual measurement since last running account bill	Remarks
Total	since last	Total										
As per	running	up to										
Running	account	date										
Account	bill											
bill												
Rs.	Rs.	Rs.					Rs.	P.	Rs.	P.	Rs.	P.
1	2	3	4	5	6	7	8	9	10	11	12	13

* *1. Whenever payment is made on 'on account' basis without actual measurements the amount in whole rupees should be entered in columns 1 to 3 only and not in columns 7 to 12.

2. whenever there is an entry in column 12 on the basis of actual measurement, the whole of the amount previously paid without detailed measurement should be adjusted by a minus entry in column 2 equivalent to the amount shown in column 1, so that the total up to date in column 4 may become nil.

1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----

Total value of work done up to date (A) ...

Deduct value of work shown on the last Running Account Bill (B) ...

Net value of work done since last (C) ...

Rupees (in words)only.

II.MEMORANDUM OF PAYMENTS

		I		II	
		Rs.	P.	Rs.	P.
1.Total value of work actually measured as per Account No. I. Column 10	(A)	.....		.....
2.Total up to date 'on account' payment for work covered by approximate Or plan measurements as per Account No. I, Column 3	(B)	.....		.....
3.Total up to date secured advances on security of materials as per column 8 Of the enclosed Account (Form WAM 10)	(C)	.....		.....
4.Total up to date payments [(A) + (B) + (C)]	(D)	.....		.....
5.Total amount of payments already made as per Entry (D) of last Running Account Bill No..... Dated.....forwarde to the Accounts Office on	(E)				
6.Balance [(D)-(E)]		.....		
7.Payments now to be made:					
a) by cash/cheque			.....	
b) by deduction for value of materials supplied			.....	
c) by BHEL vide Annexure A attached			.....	
d) by deduction for hire of tools and plant vide Annexure B attached			.....	
e) by deduction for other charges vide Annexure C Attached			.....	
f)by deduction on account of security deposit			.....	
h) by deduction on account of Income Tax			.....	.....

Note: Amounts relating to items 4 to 6 above should be entered in column II and those relating to item 7 in column I. The amount shown against item 6 and the total of item 7 should agree with each other.

III.CERTIFICATE OF THE ENGINEER IN CHARGE

Form WAM 6 (contd...)

1. The measurements on which the entries in column 7 to 12 of Part I of this Bill (Account of work executed) are based were made by.....and are recorded at pages.....of
(Name and Designation)

Measurement Book No

2. Certified that the methods of measurement are correct and the work has been carried out in accordance with the terms and conditions, schedules, specifications and drawings etc, forming part of the contract agreement, subject to deviations included in the deviation statement (Annexure D).

3. Certified that in addition to and quite apart from the quantities of work actually executed as shown in column 10 of Part I, some work has actually been done in connection with several items and the value of the such work is, in no case, less than 'on account' payments as per column 3 of Part I, made or proposed to be made, for the convenience of the contractor in anticipation of, and subject to the results of, detailed measurement which will be made as soon as possible.

Signature of Contractor
Date:

Signature of Engineer in charge
Designation:
Date:

IV. CERTIFICATE OF THE SENIOR ENGINEER

1. Certified that measurements have been check measured to the prescribed extent byat site and also by the undersigned and the relevant entries have been intialled in the Measurement book. (vide pages.....)
(Name and Designation)

2. Certified that all the measurements recorded in the measurement book have been correctly billed for

3. Certified that all recoberable amounts in respect of materials tools and plant etc, and other charges have been correctly made vide

Annexures A to C attached.

Certified for payment * of Rs.....(Rupees.....only)

To be paid in cash/by cheque in the presence of

ALLOCATION

The expenditure is chargeable as under and to be included in the accounts for.....20.....

Ledger Head	Debit (Gross amount)	Credit (Deductions)
	Rs. P.	Rs. P.
Total		

* Here specify the net amount payable.

Signature of Senior Engineer
Date:

ANNEXURE A

Statement showing details of materials issued to the contractor Shri/M/s.....
 In respect of Contract Agreement NoDated.....

Sl. No.	Stores issue Voucher No. and date	Issue voucher No. and date allotted by stores to the SIV	Description of material issued to the contractor	Quantity issued	Quantity actually incorporated in the work	Whether recoverable from the contractor or supplied free	If recoverable from the contractor				R E M A R K S
							Rate at which recoverable	Amount recoverable	Amount recovered up to previous bill	Balance now recovered	
1	2	3	4	5	6	7	8	9	10	11	12
							Rs. P.	Rs. P.	Rs. P.	Rs. P.	

Total

Signature of contractor
Date:

Signature of Engineer in Charge
Date:

Signature of Senior Engineer
Date:

ANNEXURE B

Statement showing tools and plant issued to the contractor Shri/M/s.....
 In respect of Contract Agreement NoDated.....

Sl. No	Description of tools and plant issued	Period for which Issued	Rate at which recovery Is to be Made		Amount recover-able		Amount recovered upto previous bill		Balance now recovered		Remarks
			Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	
1	2	3	4	5	6	7	8				

Total

Signature of contractor
Date:

Signature of Engineer in Charge
Date:

Signature of Senior Engineer
Date:

ANNEXURE C

Statement showing details of other recoveries to be made from the contractor Shri/M/s.....
 In respect of Contract Agreement NoDated.....

Sl. No	Particulars	Unit	Quantity	Rate		Amount recover-able		Amount recovered upto pre-vious bill		Amount now recovered		Remarks
				Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	
1	2	3	4	5	6	7	8	9	10	11	12	13
1.												
2.												
3.												
4.												
5.												
6.	Empty containers not returned											
7.												
8.												
9.												
10.												
				Total		-----						

Signature of contractor
Date:

Signature of Engineer in Charge
Date:

Signature of Senior Engineer
Date:

ANNEXURE D

Name of the Contractor:

Contract Agreement No:

Name of the Work:

Date:

Sl. No.	Description of item	Unit	Quantity as per Agreement	Quantity as executed	Quantity further anticipated	Total quantity anticipated on completion	Rate as per agreement	
							Rs.	P.
1	2	3	4	5	6	7	8	

Rate as executed	Amount as per agreement	Amount as executed	Amount further anticipated	Total amount anticipated on completion	Difference				Reason for the deviation with authority, if any
					Excess		savings		
Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	16	
9	10	11	12	13	14	15	16		

Signature of Engineer in Charge

Date:

Signature of Senior Engineer

Date:

1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----

Total Value of Work Done up to date	(A)	
Deduct Value of work shown on the last running account bill	(B)	
Net value of work done since last running account bill	(C)	

Rupees (In Words).....Only

II MEMORANDUM OF PAYMENT

1	Total Value of work actually measured as per Account no I coloumn 10	(A)	Rs.	P
	Deduct amount of paym,ents already made as per last running account bill No Dated.....			
2	Forwarded to the Accounts Office on	(B)		
3	Payments now to be made { (A) - (B)}	(C)		
4	Deduct ammounts recoverable from the contractor on account of :	Rs		P
	a Material suplied by BHEL vide annexure A attached			
	b Hire of Tools & Plants vide Annexure B attached			
	c Other charges vide Annexure C attached			
	d Income Tax			
	Total deduction			
5	Balance			
6	Refund of 50% of security deposite on completion of work			
7	Net amount to be paid to the Contractor			

III. CERTIFICATE OF THE ENGINEER IN CHARGE

The measurement on which the entries in coulms 7 to 12 of Part I of this bill (Account of work executed) are based were made by

-
- 1 (Name and designation)
 - 2 A statement showing the quantities of stores issued to the contractor (whether free or on recovery basis) and their disposal is attached.

Date:

Signature of Engineer in charge
Designation

IV CERTIFICATE OF THE SENIOR ENGINEER

- 1 Certified that I have personally inspected the work and that the work has been physically completed on the due date in accordance with the terms and
 Certified that the measurements have been check measured to the prescribed extent by
 (Name & designation). And by the the undersigned at site and relevent entries have been initiated in the measurement book (vide
 2 pages.....)
- 3 Certified that the methods of measurement are correct
- 4 Certified that the measurements have been technically checked with reference to contract drawings, deviations etc
- 5 Certified that all the measurements recorded in the measurement book have been correctly billed for at the contract rates or approved rates.
- 6 Certified that all the recoverable amounts in respect of stores, tools and pallant, elwater, electricity charges etc, have been correctly made vide Annexures A
- 7 Certified that the issues of all stores as per statement atyatched (whether charged to the contractor or direct to the work) have been technically checked and

Certified for payment of * Rs (Rupees.....) (Only). To be paid in
 cash/by cheque in the presence of

ALLOCATION

The expenditure as under and to be included in the accounts for19

Ledger Head	Debit (Gross Amount)		Credit (Deduction)	
	Rs.	P	Rs.	P
.....
Total

* Here specify the net amount payable

Signature of Senior Engineer
 Date

V. ENTRIES TO BE MADE IN THE ACCOUNTS OFFICE

Account Bill no..... Dated

Entered in Journal book vide entry No.....Dated.....

Passed for.....Rs.....

Less Deductions.....Rs.....

(Rupees.....Only)

Payable to Shri/M/s..... by cheque/cash

Entered in contractors' Ledger no..... Page

ALLOCATION

Estimate No:

Name of the Work

Code No

Ledger Head	Debit		Credit
	(Gross Amount)		(Deduction)
	Rs	P	Rs
.....
Total

Assistant Accountant Accounts officer

Date: Date: Date:

VI. Received Rs.....(Rupees.....Only) in full and final settlement of all moneys due under this contract and I / we have no further claims of this contract.

Signature of Witness
Address

Revenue Stamp
Signature of Contractor
Date:

VII . ENTRIES TO BE MADE BY TREASURY SECTION

Cash book entry no and date :

Amount Paid Rs.....

Amount unpaid Rs.....

Total Rs.....

Signature of Cashier
Date:

ANNEXURE A
Part I

Statement showing details of material issued to the contractor Shri/M/s..... In respect of Contract Agreement/Work Order No..... Dated

SI No	Stores Issue voucher No and date	Issue voucher No and date allotted by stores to the SIV	description of material issued to the contractor	Quantity issued	Quantity incorporated in the work	Whether recoverable from the contractor or supplied free	Rate at which recoverable		If recoverable from contractor				Remarks		
							Rs	P	Amount Recoverable	upto previous bill	Amount recoverable	Balance Now recovered			
									Rs	P	Rs	P	Rs	P	
1	2	3	4	5	6	7	8	9	10		11				12

Total

Signature of Contractor
Date

Signature of Engineer in charge
Date

Signature of Senior Engineer
Date

ANNEXURE A
Part II

Statement showing details of material issued to the contractor Shri/M/s..... in respect of Contract Agreement/Work Order No..... Datedand not covered by the agreement

SI No	Stores Issue voucher No and date	Issue voucher No and date allotted by stores to the SIV	description of material issued to the contractor	Quantity issued	Quantity actually incorporated in the work	Issue Rate		Amount Recoverable		Amount recoverable upto previous bill		Balance Now recovered		Remarks
						Rs	P	Rs	P	Rs	P	Rs	P	
1	2	3	4	5	6	7	8	9	10	11				

Total

Add Departmental Charges

Add Sales Tax (wherever applicable)

Total

Signature of Contractor
Date

Signature of Engineer in charge
Date

Signature of Senior Engineer
Date

ANNEXURE B

Statement showing TOOLS & PLANTS issued to the contractor Shri/M/s..... in respect of Contract Agreement/Work Order No..... Datedand not covered by the agreement

SI No	Description of tools & plants issued	Period for which issued	Rate at which Recivry is to be made	Amount recoverabl e		Amount recoverable upto previous bill		Balance Now recovered		Remarks
				Rs	P	Rs	P	Rs	P	
1	2	3	4	5		6		7		8

Total

Signature of Contractor
Date

Signature of Engineer in charge
Date

Signature of Senior Engineer
Date

ANNEXURE C

showing detail of other recoveries to be made from the contractor Shri/M/s.....
 nent/Work Order No..... Dated.....

Sr.No	Particulars	Unit	Quantity	Rate Rs. P.	Amount recoverable Rs. P	Amount recovered upto previous bill Rs. P.	Amount now recovered Rs. P.	Remarks
1	2	3	4	5	6	7	8	9
	1 Water Charges							
	2 Electricity Charges							
	3 Seignorage Charges							
	4 Medical Charges							
	Cost of empty gunny bags and empty containers not 5 returned							
	6							
	7							
	8							
	9							
	10							
Total								

Signature of Contractor
Date

Signature of Engineer Incharge
Date

Signature of Sr. Engineer
Date

**ANNEXURE D -
DEVIATION STATEMENT :**

Name of the Contractor :

Contract Agreement/Work Order No. :

Name of the Work :

Date :

Sl. No.	Description of item	Unit	Quantity as per agreement	Quantity as executed	Rate as per agreement Rs. P.	Rate as executed Rs. P.	Amount as per agreement Rs. P.	Amount as executed Rs. P.	Difference		Reason for the deviation with authority, if any
									Excess	Savings	
1	2	3	4	5	6	7	8	9	10	11	12

Signature of Engineer in Charge

Date :

Signature of Senior Engineer

Date :

ANNEXURE E

Statement showing the consumption of materials issued to the contractor Shri/M/s.....
in respect of Contract Agreement/Work Order No..... Dated.....

Name of the Work :

ON RECOVERY BASIS

Sl. No.	Description of material	Unit	Quantity actually issued	Quantity actually incorporated in the work	Balance	Particulars of disposal of balance	Quantity to be issued as per approved data for work actually done	Variation in consumption (Difference between column 5 and 8)		Rate chargeable for excess/short consumption, if any	Amount recoverable for excess/short consumption, including materials not returned	
								More	Less		Rs. P.	Rs. P.
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Cement											
2.	Bricks											
3.	Wood.....											
4.	Asbestos Sheet											
5.	Iron Materials											
6.												
7.												
8.												
9.												
10.												

Signature of Contractor

Date :

Signature of Engineer in Charge

Date :

Signature of Senior Engineer

Date :

Note : 1. The quantities shown in columns 4 and 5 above should tally with those shown in columns 5 and 6 respectively of Annexure A (Part I and II).

2. Data statement of theoretical consumption should be attached in support of quantity specified in column 8.

ANNEXURE F

Statement showing detail of materials issued to the contractor Shri/M/s.....
 ct of Contract Agreement/Work Order No.....Dated.....

Name of work;

FREE OF COST

Sr.No	Stores issue voucher No.	Description of material	Unit	Quantity issued	Quantity required as per data	Quantity consumed in the work	Balance(If any)	Nature of disposal for the balance	Rate chargeable for material not returned Rs.P.	Amount recoverable for material not returned Rs. P	Remarks
1	2	3	4	5	6	7	8	9	10	11	12
Total											
Signature of Contractor Date				Signature of Engineer Incharge Date				Signature of Sr. Engineer Date			
Note:Data statement of theoretical consumption should be attached in support of the quantity specified in column 6											