# भारत हेवी इलेक्ट्रिकल्स लिमिटेड (सार्वजनिक क्षेत्र का उपक्रम) Bharat Heavy Electricals Limited (A <u>Public Sector Undertaking</u>)



पावर सेक्टर- पश्चिमी क्षेत्र Power Sector-Western Region श्रीमोहिनी काम्पलेक्स, 345 किंग्सवे, नागपुर Shreemohini complex, 345 Kingsway Nagpur - 440 001 फोन / Phone 0712- 3048600, फैक्स FAX: 0712- 3048699 <u>www.bhelpswr.co.in</u>

BHEL PAN: AAACB4146P

# **TENDER**

# Volume - IA: Technical Bid

E - Tender No. 2401143 Date 01-02-2025 comprising of following:

Salient Details of NIT			
S. No.	Issue	Description	
		Framework agreement for detailed drawing preparation based on Input	
		design drawings provided by BHEL/PEM & ISG and getting approval	
1.	Job	from BHEL PEM, BHEL ISG /BHEL customer, Fabrication and supply of	
1.	Job	Steel Structures as per the approved detailed drawings (Procurement of	
		Raw Material including Steel is in the scope of Bidder) for 3x800 MW	
		PUNL Project Patratu.	
2.	E - Tender No	2401143	
3.	Details of Tender Document		
3.1	Volume _IA _ Technical_bid	NIT & Technical Conditions of contract	
3.2	Volume_IA_Technical_bid_Appendix-	Additional Terms &Condition	
5.2	I ( Part of Vol-IA)	Additional Terms decondition	
2.2	Volume _IA	To device Constitute	
3.2	_Technical_bid_Appendix-II	Technical Specification	
3.2	Volume _I B	General Conditions of the Contract (GCC)	
3.3	Volume _ I C	Techno-Comml - Compliance	
3.4	Volume _II	Price Bid	
		From BHEL website (www.bhel.com) and	
4	Issue of Tender Documents	https://eprocurebhel.co.in/nicgep/app	
4.		(Tender documents will be available for downloading from BHEL e-	
		Procurement website till due date of submission)	
		Date: 11-02-2025 Time: 14:00 hrs	
	Due Date Of Offer Submission	https://eprocurebhel.co.in/nicgep/app	
5.		Offer to be submitted in online only through e-procurement Portal.	
J.		(Bidders are requested to visit website to view corrigendum/ addenda/	
		amendments/ extension/ modification to PQ etc in the form of TCN	
		before submitting offer).	
6.	Opening of Tender	Date : 11-02-2025	

Tender No: 2401143 Desc: Structural Fabrication

		Salient Details of NIT
	(Techno-Commercial Bid)	Notes:  This tender being an e-tender, it shall be opened online only through the E-Procurement Portal. Participating bidders may witness the Opening online only.
7.	Cost of Tender	Not Applicable
8.	Bid Security Declaration	Bid Security Declaration is mandatorily required to be submitted by bidders
9.	Earnest Money Deposit (EMD)	Rs. 6,00,000/- (Rs. Six Lakh Only)
10.	Schedule Of Pre-Bid Discussion	Not Applicable
11.	Reverse Auction	Applicable
12.	Evaluation Currency	INR
13.	Last Date of Seeking Clarification	Along with soft version also, addressing to undersigned & to others as per contact address given below.  Bidders may consider to seek clarifications on the e-tender portal https://eprocurebhel.co.in/nicgep/app
14.	Integrity Pact & Details of Independent External Monitor (IEM)	As per <b>Annexure-1</b> (Integrity Pact),
15.	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 Corrigendum(s) & on e-tender portal https://eprocurebhel.co.in/nicgep/app and not in the newspapers. Bidders to keep themselves updated with all such information

1.0 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 digitally signed, 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. Unsolicited discounts received after opening of techno-commercial bids shall not be considered for evaluation.

2.0 Unless specifically stated otherwise, bidder shall remit cost of tender and courier charges if applicable, in the form of Demand Draft drawn in favour of Bharat Heavy Electricals Ltd, payable at Power Sector Regional HQ at Nagpur issuing the Tender. 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. Copy of Cash receipt or the proof of Demand Draft duly digitally uploaded with the Techno Commercial offer e-tender signed is to he on https://eprocurebhel.co.in/nicgep/app. However Original Demand Draft shall be sent to the officer inviting tender within a reasonable time failing which the offer is liable to be rejected. Sale of tender Documents shall not take place on National Holidays, holidays declared by Central or State Governments and BHEL PS HQ at \_\_\_\_ Sundays and second/last Saturdays.

# 3.0 <u>E-Procurement Portal Inputs</u>

## Procedure for Submission of Offer for E - Tender

Procedure for Submission of Tender is available in the "Bidder Manual for BHEL Bidders" at E-tender portal https://eprocurebhel.co.in/nicgep/app. Terms and conditions mentioned therein shall form integral part of the NIT and bidders shall abide by the same.

# i. Hardware and Software requirements for participating in e-tender

Please refer the website for the minimum system requirements and setting document for Bidders under the link: https://eprocurebhel.co.in/nicgep/app

# ii. Digital Signature

❖ To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website http://www.bhel.com/home.php→ Tender Notifications → Sample Checklist.

## iii. NIC portal Helpdesk Contacts

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002

0120-4200 462

 $0120 \text{-} 4001\ 005$ 

0120-6277 787

International bidders are requested to prefix 91 as country code

## **Email Support**

Address: A) For any Issues or Clarifications relating to the published tenders,

bidders are requested to contact the respective Tender Inviting Authority

Technical - <a href="mailto:support-eproc@nic.in">support-eproc@nic.in</a>

# iv. Note

i. Offers/tenders submitted in the E-tender portal shall only be considered for further evaluation. Offers sent by FAX / E-mail / any mode other than E-tender would not be entertained.

The Tenderers must submit their Tenders, as detailed below:

Tender No: 2401143 Desc: Structural Fabrication

- PART-I consisting of 'PART-I A (Techno Commercial Bid)' & 'PART-I B (EMD/COST of TENDER)'
- PART-II (Price Bid)

<u>SPECIAL NOTE:</u> All documents/ annexures to be submitted should be uploaded in respective places in the E-Tender portal as per the list mentioned given in this NIT. BHEL shall not be responsible for in-complete documents.

- 4.0 No Deviation with respect to tender clauses and no additional clauses/ suggestions/ clarification in Technocommercial bid/ Price bid shall normally be considered by BHEL. Bidders are requested to positively comply with the same.
- 5.0 BHEL reserve the right to accept or reject any or all offer without assigning any reasons thereof. BHEL also reserve 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). However, BHEL may communicate rejection to the unsuccessful bidder after award of work and acceptance by the successful bidder.
- 6.0 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.
- 7.0 For any clarification on the tender document, the bidder may seek the same in writing or through e-mail or **through**E-tender Portal, 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.
- 8.0 BHEL may decide holding of pre-bid discussion [PBD] with all intending bidders as per date indicated in the NIT. The bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Bidders shall plan their visit accordingly. The outcome of pre-bid discussion (PBD) shall also form part of tender.
- 9.0 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.
- 10.0 Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD, if any.
- 11.0 Bidders shall submit Integrity Pact Agreement (Duly digitally 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. Detail of Independent External Monitor (IEM) for the subject tender is furnished above.

12.0 The Price Bids of only those bidders will be opened who will be qualified for the subject job on the basis of evaluation on pre-qualification criteria/ techno-commercial bids, approval/ acceptance of customer (as applicable), etc. BHEL's decision in this regard shall be final & binding. BHEL also reserve the right to reject bidder with unsatisfactory past performance in execution of a contract. BHEL reserves the right not to consider offers of parties under HOLD. BHEL's decision in this regard shall be final & binding.

13.0 Tenders must adhere to all volumes of tender and quote accordingly. Any terms & conditions not covered in SCC, will be governed by GCC.

# 14.0 Offer submitted by the bidder shall remain valid from the latest due date of offer submission to the entire period of Framework Agreement validity.

- 15.0 On submission of offer, further consideration will be subject to compliance to tender & qualifying requirement and customer's acceptance, as applicable.
- 16.0 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.
- 17.0 The bidders shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to tender.
- 18.0 The bidder shall submit/upload documents in support of possession of 'Qualifying Requirements' duly self-certified and stamped by the authorized signatory (through Digital Signature), as per the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.
- 19.0 The bidder may have to produce original document for verification if so decided by BHEL.
- 20.0 In the course of evaluation, if more than one bidder happens to be L-1, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders. In case more than one bidder happens to be the L-1 subsequent to soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their authorised representative(s). Ranking will be done accordingly. BHEL's decision shall be final and binding in such situations.

# 21.0 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. Price Bid Volume II
- c. Technical Conditions of Contract (TCC) Volume- I A (All parts)
- d. Notice Inviting Tender (NIT)
- e. Techno-Comml Compliance Volume I C
- f. General Conditions of Contract (GCC)

Tender No: 2401143 Desc: Structural Fabrication

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

For BHARAT HEAVY ELECTRICALS LTD (GM Pur)

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#### **IMPORTANT INFORMATIONS**

All correspondences regarding this tender shall be addressed to AGM / PURCHASE BHEL PSWR through BHEL e-procurement portal only. Following are the concerned BHEL officials to whom bidders can contact in case of any difficulty:

- 1. GM Purchase, Email id: dipeshpalit@bhel.in Ph: +91 712 2858633
- 2. Sr Manager Purchase, Email: biraj@bhel.in, Ph: +91 712 2858635
- 3. Sr Engineer Purchase, Email id: jayant@bhel.in, Ph: +91 712 2858635

# **Guidelines for Suspension of Business Dealings with Suppliers/ Contractors**

The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site.

# 1.0 Integrity commitment, performance of the contract and punitive action thereof:

# 1.1 Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

## 1.2 Commitment by Bidder/ Supplier/ Contractor:

- 1.2.1 The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.
- 1.2.2 The bidder/ supplier/ contractor 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 and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.
- 1.2.3 The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www. bhel.com and/or under applicable legal provisions.

# **Suspension of Business Dealings**

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

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The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site (www.bhel.com ---> Tender Notification - List of Banned Firms).

Abridged version of the extant 'Guidelines for suspension of business dealings with suppliers/ contractors' has been uploaded on www.bhel.com on "supplier registration page" at the following link: <a href="http://www.bhel.com/vender registration/pdf/Suspension guidelines adbridged.pdf">http://www.bhel.com/vender registration/pdf/Suspension guidelines adbridged.pdf</a>

# 4. All Statutory Requirements as applicable for these Projects shall be complied with

#### 5. BHEL Fraud Prevention Policy

"The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as so on as it comes to their notice."

6. The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to take part in future tenders of BHEL.

#### 7. Performance Bank Guarantee/Bank Guarantee

Wherever so required, the Supplier shall arrange to provide a Performance bank guarantee (PBG). The indigenous suppliers have to provide the PBG from any one of the Nationalized Banks, listed in the tender terms. However, the PBG shall be confirmed by any of the Bankers listed by us. The PBG shall guarantee the performance of the equipment / materials / items supplied and shall cover the guarantee period. The PBG shall have a claim period of 3 months in addition to the guarantee period. In the event of failure of the supplies made within the guarantee period, BHEL would encash the entire PBG. The PBG shall be for a value as cited in the tender document.

The supplier (/s) has to get the PBG format (pre-printed) from BHEL and get the same stamped by the Banker. Change of PBG terms either by the supplier's Banker or by the supplier, after servicing of the order is not acceptable. Similarly, PBG prepared by the supplier (typed by them) will also not be acceptable to BHEL. The pre-printed form issued by BHEL shall be used for making the PBG.

Acceptance of Bank Guarantee (BG) / Performance Bank Guarantee issued by:

a. Any of the BHEL consortium bank listed below:

SI.	Name of the bank
1	State Bank of India
2	Canara Bank
3	Axis Bank
4	Bank of Baroda
5	Central Bank
6	Citi Bank N.A.
7	Deutsche Bank **
8	Exim Bank
9	Federal Bank Limited
10	HDFC Bank Limited
11	Hongkong and Shanghai Banking Corporation Ltd
12	Indian Bank
13	ICICI Bank Limited
14	IDBI Bank Limited
15	IndusInd Bank Limited
16	Indian Overseas Bank
17	Kotak Mahindra Bank Limited
18	Punjab National Bank
19	RBL Bank Ltd.
20	Standard Chartered Bank
21	Union Bank of India
22	Yes Bank Limited

- b. Any public sector Bank (other than consortium banks) with a clause in the text of Bank Guarantee that it is enforceable at Nagpur, Maharashtra
- c. Any private sector banks, with a clause in the text of Bank Guarantee that it is enforceable by being presented at any branch of the bank
  - Note: "Bank Guarantees issued by Co-operative Banks are not acceptable".
- d. This PBG clause is a general clause and valid wherever BG (Bank Guarantee) / PBG (Performance Bank Guarantee) / CEBG (Contract Execution Bank Guarantee) is applicable
- e. List of banks may change from time to time, thus prior to submission of Bank Guarantee it is responsibility of successful bidder to get the confirmation of issuing Bank from BHEL

#### 8. Reverse Auction Terms & Conditions

> BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among the techno commercially qualified bidders.

> Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

#### 9. MSE Vendors:

Micro & Small Enterprises (MSE) is exempted from Payment of Tender Fees and Earnest Money deposit (EMD).

**Definition of MSME:** - As per Gazette Notification no. S.O. 2119(E) dated 26.06.2020 issued by Ministry of MSME regarding change in definition of Micro, Small & Medium Enterprises (MSMEs) applicable w.e.f. 01.07.2020. According to the notification, following criterion is envisaged for definition of MSMEs:-

S. No.	Type of Enterprise	New Criterion/ Definition
1	Micro	a micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees
2	Small	a small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees
3	Medium	a medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees

The above shall be applicable to this tender and relevant documents (Udyam Registration Certificate) must be submitted to establish the MSME status by the bidder failing to which the bidder shall be considered on par with other non-MSME bidders.

#### 10. Earnest Money Deposit (EMD):

Refundable, Non-interest bearing Earnest Money Deposit (EMD) of **Rs.** 6,00,000/- (Rupees Six Lakh Only) is applicable for this Enquiry. Micro & Small Enterprises (MSE) is exempted from EMD. EMD can be deposited in any one of the following methods along with the technical bid, failing which bidder's offer is liable for rejection.

## **Modes of Deposit**

- Cash Deposit as permissible under the extant Income Tax Act (before tender opening)
- Banker's Cheque/ Pay Order/ Demand Draft, in favour of Bharat Heavy Electricals Ltd, payable at Nagpur (along with offer)
- ❖ Electronic Fund Transfer credited in BHEL PSWR, Nagpur account (before tender opening); Bank account details of BHEL PSWR is cited below for EMD remittance purpose

Name of the company	Bharat Heavy Electricals Ltd	
Address of the company	Shree Mohini Complex 345, Kingsway, Nagpur - 440001	

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Name of Bank	State Bank Of India
Name of Bank Branch and Branch Code	SBI, Nagpur Main Branch, Branch Code-00432
City	Nagpur
Account number	40227423158
Account type	Current A/C
IFSC code of the bank branch	SBIN0000432
MICR code of the bank branch	440002002

No other form of EMD remittance shall be acceptable to BHEL.

	Procedure for Earnest Money Deposit			
Mode	e of Submission	Proof of EMD along with the offer	Submission of EMD to BHEL PSWR	
*	DD/Pay Order	Scan Copy has to be uploaded in E-Portal	Original DD/ Pay Order to be couriered to BHEL PSWR, Nagpur before tender opening	
*	EFT	Receipt of Amount Transferred to BHEL Account		
*	Cash	Receipt of cash deposit at BHEL office		

Proof of Demand Draft/ Pay Order or receipt of Electronic Fund Transfer duly **digitally** signed is to be uploaded with the Techno Commercial offer **on e-tender portal** <a href="https://eprocurebhel.co.in/nicgep/app">https://eprocurebhel.co.in/nicgep/app</a>.

In case, bidder wishes to furnish EMD in Demand Draft/ Pay Order mode, Original Demand Draft/ Pay Order shall be sent to the officer inviting tender within a reasonable time failing which the offer is liable to be rejected.

EMD given by all unsuccessful Tenderers shall be refunded on acceptance of award / LOI/PO by successful Tenderer. The EMD of successful bidder shall be returned after submission of Performance Bank Guarantee (PBG) or Contract Execution Bank Guarantee (CEBG), as the case may be.

EMD by the Tenderer will be forfeited as per NIT conditions, if after opening and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.

EMD by the tenderer shall be withheld in case any action on the tenderer is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers/ contractors" and forfeited/ released based on the action as determined under these extant guidelines.

# 11. PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) CLAUSE:

\* "For this procurement, the local content to categorize a supplier as a Class I local supplier/ Class II local Supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT".

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❖ For subject tender, only Class-I local suppliers are eligible to bid in line with Cl. 3(a) of MII Circular No. P-45021/2/2017-PP (BE-II), Dated 16/09/2020 as there is sufficient Local capacity & Local competition.

❖ In case of subsequent order issued by nodal ministry, changing the definition of local content for items of the NIT, the same shall be applicable even if issued after issue of this NIT but before finalization of contract/ PO/ WO against this NIT. The local supplier at the time of tender, bidding or solicitation shall be required to provide Certification that as per the offered items they meet the requirement of Class-I Local supplier as per the provisions of PPP-MII order, revision dated 16.09.2020 of Govt. of India and relevant circulars issued by nodal ministry wrt. to above mentioned orders and shall give details of location at which local value addition is made.

Minimum 50% Local content required for MII compliance against this tender.

# 12. Restriction under rule 144(xi) of the General Financial Rules (GFRs)2017:

In compliance with order issued by "Department of Expenditure's (DoE) Public Procurement Division ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020, following restriction is hereby ordered under rule 144(xi) of the General Financial Rules (GFRs)2017:

Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

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# Format - I

(To be submitted in the bidder's letter head)

In-line with Department of Expenditure's (DoE) Public Procurement Division Order vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020

Tender Specification No:
Tender Description:
"I/ we have read the clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India. I/We hereby certify that I/ we the bidder < name of the
bidder> is / are
a) Not from such a country and eligible to be considered for this tender. OR
b) From such country, has been registered with the competent authority and eligible to be considered for this tender. (Evidence of valid registration by the competent authority shall be attached)
For and behalf of (Name of the bidder)
(Signature, date & seal of authorized representative of the bidder)

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# Format - II

# **Bid Security Declaration Form**

(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/Madam,
Sub: Bid Security Declaration
Ref: Tender Specification No:
Tender Description:
1. I/We Mr/ Ms authorised person to sign the bid documents for tender pertaining to the captioned scope do hereby declare that I/We have gone through the entire tender documents including terms and condition mentioned in the tender documents and undertake to comply with them.
2. I/We further declare that we will not withdraw our bid or modify our offer during the period of validity of the bid after the deadline for submission of such documents.
3. If I/we withdraw or modify the bids during the period of validity, or if I/We are awarded the contract and fail to sign the contract, if applicable or to submit security deposit as defined in the tender document/LOA, we will be suspended for the period of time as specified in the tender document from being eligible to submit bids/proposals to BHEL.
Signature of the Authorised Signatory (With Name, Designation and Company seal)
Place: Date:

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## Format - III

DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED  $04^{\text{TH}}$  JUNE, 2020 AND SUBSEQUENT ORDER(S)

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)
То,
(Write Name & Address of Officer of BHEL inviting the Tender)
Dear Sir,
<b>Sub</b> : Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).
Ref: 1) Tender Specification No: 2) All other pertinent issues till date
We hereby certify that the items/works/services offered by
there) has a local content of % and this meets the local content requirement for 'Class-I local supplier' / 'Class II local supplier' ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).
The details of the location(s) at which the local value addition is made are as follows:  1  2
3 4 
Thanking you, Yours faithfully,
(Signature, Date & Seal of Authorized Signatory of the Bidder)

\*\* - Strike out whichever is not applicable.

#### Note:

- 1. Bidders to note that above format Duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
- 2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
- **3.** In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

# <u>Format – IV</u> <u>Undertaking for Indian Bidders</u>

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

Γο,
(Write Name & Address of Officer of BHEL inviting the Tender)
Dear Sir/Madam,
Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS
Ref: Tender Specification No:
declare that, I/We am/are not under insolvency resolution process or liquidation or Bankruptcy Code Proceedings (IBC) as on date, by NCLT or any adjudicating authority/authorities, which will render us ineligible for participation in this tender.
Sign. of the Authorised Signatory (With Name, Designation and Company seal)
Place:
Date:

Tender No: 2401143 Desc: Structural Fabrication

# Format - V DECLARATION

	DEC	<u>CLARATION</u>	
		Date	e:
То			
	BHEL,		
Email:			
Sub:	Details of related firms and their area of ac	tivities	
Door Sir	/ Madam		
Jear Sir,	/ Madam,		
Please fi	nd below details of firms owned by our family me	embers that are doing business/registered	for same item with
3HEL,	(NA, if not applicable).		
1	Material Category/ Work Description		
	Name of Firm		
	Address of Firm		
	Nature of Business		
	Name of Family Member		
	Relationship		
2	Material Category/ Work Description		
	Name of Firm		
	Address of Firm		
	Nature of Business		
	Name of Family Member		
	Relationship		
Note:		d I agree for penal action from BHEL	in co
inforn	nation furnished is found to be false.		
			Regards,
			(
		From:	M/s
		Supplier Code:	
		Supplier Code.	

Tender No: 2401143 Desc: Structural Fabrication

# Format - VI

# <u>Declaration for prevention/elimination of suspected cartel formation between suppliers</u>

(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/Madam,
Sub: Declaration for prevention/elimination of suspected cartel formation between suppliers
Ref: Tender Specification No:
I/We hereby declare that I/We will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s).
This applies in particular to prices, specifications, certifications, subsidiary contract, submission or non-submission of bids of any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
Sign. of the Authorised Signatory (With Name, Designation and Company seal)
Place: Date:

# I. Pre-Qualification Criteria (PQR)

Bidder shall essentially meet all the Qualifying Requirements cited below:

A	<ul> <li>A.1 Bidder must have executed Structure Fabrication work of at least 400 MT for any industrial projects (thermal power plant, chemical plant, steel plants, railway, refineries) within last Seven years from the latest date of technical bid opening.</li> <li>Towards above, bidder must submit the following:         <ul> <li>Purchase/Work orders and proof of delivery/supply of fabricated structural material of at least 400 MT in last seven years from the latest date of technical bid opening.</li> <li>Factory Registration Certificate / Factory License</li> </ul> </li> </ul>
В	Financial Turnover  Bidders must have achieved an average annual financial turnover (Audited) of <b>Rs. 4 Crore</b> or more, over the last three Financial Years (FY) i.e. 2020-2021, 2021-22 and 2022-2023'.
С	Submission of Integrity Pact duly signed (IP)  The IP as enclosed with the tender document is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in bidding. In other words, entering into this pact would be a preliminary qualification.
D	<ul> <li>Customer Approval</li> <li>Credentials of the bidders meeting the Pre-Qualifying requirements and techno-commercially qualified shall be forwarded to customer for their approval</li> <li>The Price Bid of bidders who are approved by customer shall be opened and considered for further evaluation.</li> </ul>

# **Explanatory Notes for POR**

- 1. 'Supplying' in QR A means bidder should have delivered the Fabricated structures. Bidder shall submit the relevant documents against the above PQRs inclusive of Purchase order (wherein PO no., date, etc. is legible) along with proof of supply (i.e. Completion Certificate/ Copy of Invoices / LR Copies/ Store Receipt Vouchers/ Payment Advice etc.) in the respective attachments in their offer in support of PQR. The word 'Contract' referred in Technical PQR may be Rate contract/Framework Agreement/Purchase Order/Work Order.
- 2. Bidders against which Risk & Cost has been imposed by PSWR Nagpur shall not be eligible to qualify for this tender.
  - 3. Bidder shall necessarily submit the following details in the given formats:
    - i. Duly Filled Vendor's Proposal and Evaluation Report (Refer TCC Appendix -I, Annexure-4: P4F1R0)
    - ii. Duly Filled Vendor Questionnaire. (Refer TCC Appendix –I, Annexure-5: P4F2R0)
    - iii. Factory Registration Certificate/ Factory License

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- iv. Overall Organization Chart with Manpower details (Design, Manufacturing, Quality etc.)
- v. Supply reference list indicating similar product supply order reference no., customer name, rating of product, date /year of supply, date / year of commissioning.
- vi. List of Manufacturing Equipment available with vendor.
- vii. List of Testing Equipment available with vendor.
- viii. Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any.
- ix. Details of Outsourced Manufacturing Processes, if any.
- x. Quality control exercised during receipt, in-process & final inspection
- xi. Bidder's factory shall have facilities as per Annexure-A (refer Vol- IA). Supporting documents submitted against this shall adhere to naming philosophy as per Annexure-A only. BHEL/NTPC may carry out shop/factory assessment, if necessary.
- 4. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against Financial Turnover QR above along with all annexures
- 5. In case of audited Financial statements have not been submitted for all the three years as indicated against Financial Turnover QR above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e. total divided by three
- 6. If financial statements are not required to be audited statutorily, then instead of audited financial statements, financial statements are required to be certified by Chartered Accountant
- 7. Consortium bidding is not allowed.
- 8. After satisfactory fulfillment of all the above criteria/requirement, offer shall be considered for further evaluation as per NIT and all other terms of the tender.
- 9. Bidder must not be under Bankruptcy Code Proceedings (IBC) by NCLT or under Liquidation / BIFR, which will render him ineligible for participation in this tender, and shall submit undertaking to this effect.
- 10. Credentials furnished by the bidder against "PRE QUALIFYING CRITERIA" shall be verified from the issuing authority for its authenticity. In case, any credential (s) is/are found to be spurious, offer of the bidder is liable to be rejected and BHEL reserves the right to initiate any further action as per its internal guidelines.
- 11. Relaxation in Pre-Qualifying Requirement (PQR) for Micro and Small Enterprises (MSE's) and Startups:
  - a) **Financial Pre Qualifying Requirement (PQR) including Turnover**: The financial pre-qualifying requirements is relaxed by 50% of the original Pre –Qualifying Requirement specified in the tender.
  - b) Other Pre-Qualifying requirements such as Machineries, BIS, or any form of licenses or customer approval or requirements other than stated in **(b)** above, shall remain the same for all bidders.
  - c) Definition of Startup shall be in line with Gazette Notification No DL 33004/99 dated 19.02.2019 and subsequent amendments, if any.

# II. Techno - Commercial Terms and Conditions:

1. Total Tendered Quantity: 1500 MT (± 30%)

# 2. Ordering Philosophy:

- \* The subject tender consists of Three Package i.e. Package A, Package-B & Package-C
- ❖ L-1 Bidder shall be awarded Package-A with acceptable L-1 rate. Bidder shall quote for Package A only as per Price-Bid.
- ❖ BHEL reserve the right to award Package B and Package C, BHEL shall not be obligated to award the entire Packages.

BHEL reserves the right to split order between L-1 and other qualified bidders as per following methodology shown below

# **Ordering Philosophy: Scenario-1**

Steps	1	2	3	4			
Total Tendered Quantity : 1500 ± 30%							
Manner of Splitting	600 ± 30%	500 ± 30%	400 ± 30%				
			For remaining 400				
		Next bidder in the	± 30% quantity				
		order of price	next bidder in the	If Step 2 and/or			
		competitiveness	order of Price	Step 3 in the			
		(i.e. L-2, L-3 and	Competitiveness	Scenario-1 gets			
Quantity Awarded to	L-1	hence forth) shall	(i.e. L-3, L-4 and	failed, Scenario –			
		be given an	hence forth) shall	2 or 3 will be			
		opportunity to	be given an	applicable, as the			
		match awarded L-	opportunity to	case may be.			
		1 rate	match awarded L –				
			1 rate				

# Ordering Philosophy: Scenario-2

Steps	1	2	3				
Total Tendered Quantity : 1500 ± 30%							
Manner of Splitting	800 ± 30%	700 ± 30%					
Quantity Awarded to	L-1	For remaining <b>700 ± 30%</b> quantity next bidder in the order of price competitiveness (i.e. L-2, L-3 and hence forth) shall be given an opportunity to match awarded L-1 rate	If <b>Step 2</b> in the Scenario-2 gets failed, Scenario – 3 will be applicable.				

# Ordering Philosophy: Scenario-3

Step	1	2
Manner of Splitting	100%	
Quantity Awarded	1500 ± 30%	
Quantity Awarded to	L-1	If scenario 1 and 2 gets failed, Scenario – 3 will be applicable.

- Quantity Variation limit: ±30% of awarded quantities.
- ❖ The above quantities are tentative and may vary, BHEL reserves the right for allocation of tonnage to the agencies as per requirements.
- ❖ As the supply of fabricated structures against subject tender will be executed as per BHEL requirement of "as and when requirement basis" thus no compensation shall be given to the Fabricator; even in case the final executed quantity is below 30% of awarded quantities wrt Framework Work Agreement quantity as well as Sub PO quantity.
- This is a framework agreement contract and not a firm order contract. Consequently, BHEL shall not be obligated to award the entire rate contract quantity. Awards will be issued within the contract period based on BHEL's project requirements. The agencies shall not be entitled to any compensation for non-award of Sub Purchase Orders (Sub POs) under the framework agreement.
- ❖ Issuance of the Sub PO against awarded framework agreement is on BHEL desecrations and agencies are bounded for BHEL decision. Any dispute & claim or compensation will not be admissible.
- 3. Tenders beyond the scheduled due date & time cannot be submitted by the bidders in the e-procurement portal.
- 4. Offer must be submitted in **Two-Part Bid only** i.e. techno-commercial bid and price bid separately. Single bid offer shall be liable for rejection.
- 5. No Consortium bidding is allowed for the subject tender.
- 6. Part offer shall be rejected i.e. bidder must quote for the total quantity as per Enquiry.
- 7. **Price:** Bidders shall quote the prices in Volume II Price Bid section in the E-portal.

# 8. Evaluation criteria:

- i. Price bids of the techno-commercially acceptable offers shall be opened for Price Evaluation.
- ii. Tenders will be evaluated on the basis of delivered cost, i.e. total cost to the BHEL, taking into consideration loadings, if any, and all available financial advantages, including those available from Owner, taxation authorities etc. (i.e. Credit of GST)
- 9. **Delivery Terms:** Suppliers shall quote the rates on F.O.R. Destination basis only. Offers other than F.O.R. Destination Basis will not be accepted by BHEL. Destination is 3 **X 800 MW PVUNL Patratu Site Jharkhand**.
- 10. Quantity Variation: ±30%.
- 11. **Weighment:** BHEL or BHEL approved third party weighment shall be final and payment will be done accordingly.

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12. Transit Insurance: Transit insurance from supplier's works/warehouse to BHEL site stores shall be arranged by

BHEL. Upon dispatch of material supplier has to immediately intimate underwriter of BHEL failing which transit

loss if any would be borne by supplier.

13. Payment Terms: As per TCC

14. For any deviation sought in Payment terms by bidder w.r.t. payment term, following loading shall be followed

during evaluation of price bids:

Base rate of State Bank of India (SBI) (as applicable on the date of bid opening; Techno-commercial bid

opening in case of two part bids) + 6%; shall be considered for loading for the period of relaxation sought by

bidders.

15. Liquidated Damages/Penalty:

LD shall be 0.5% of basic value of the undelivered portion per week of delay or part thereof subject to a maximum

of 10% of the total contract value (i.e. excluding elements of taxes).

For this purpose, the period of delay shall be the delay attributable to the Fabricator for the completion of work

as per contract. Contract Value for this purpose, shall be the final executed value exclusive of Extra Works executed

on Man-day rate basis, Supplementary/Additional Items.

16. In case bidder is not accepting the penalty clause for delayed supply, the offer of bidder shall be loaded to the

extent to which it is not agreed by the bidder during price bid evaluation.

17. MSE Purchase preference as per Cl. N. 33 of Vol-IB-GCC shall not be applicable against this tender enquiry.

18. Bidder should have valid PAN. Relevant document in support of above shall be submitted.

19. **GeM Seller ID**:

Bidder participating in the subject tender is requested to get registered in "Government e-Marketplace" (GeM). This

is one of the pre-requisite criterion for the Order Placement. GeM Seller ID shall be provided in the document

"VolICCheckList2201094".

20. **Short Closure**: BHEL may short close the contract at any stage without assigning any reasons.

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# III. Instructions for filling the Price Bid

- 1. Freight, Packaging and Forwarding charges is in the scope of Fabricator.
- 2. Transit Insurance is in the scope of BHEL.
- 3. Prices to be quoted in INR only (Volume-II). Price bids shall be duly filled and digitally signed.
- 4. Bidder must quote the price elements mentioned in price schedule, if any element left blank shall be construed as the price is included in all-inclusive F.O.R. price.
- 5. Bidder shall fill the rates only in the Price format given by BHEL in Volume II. Other papers or documents along with the price bid inscribing the rates of material shall be liable for rejection.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

BHARAT HEAVY ELECTRICALS
LIMITED



Sl no	Description	Chapter	No. of
31 110	Description	Chapter	Pages
Volume-IA	Part-I: contract specific details		
1	Project information	Chapter-I	
2	Scope of works	Chapter-II	
3	Facilities in the scope of contractor/BHEL (scope matrix)	Chapter-III	
4	T&Ps and MME'S to be deployed by contractor	Chapter-IV	
5	T&Ps and MME'S to be deployed by BHEL on sharing basis	Chapter-V	
6	Time schedule	Chapter-VI	
7	Terms of payment	Chapter-VII	
8	Taxes and other duties	Chapter-VIII	
9	Painting	Chapter-IX	
10	Welding, radiography, NDT, PWHT	Chapter-XI	
11	Preservation & protection of component	Chapter-XII	
12	Tentative requirement for FACTORY	Annexure-A	
13	Price Breakup & Weightages	Annexure-B	
14	Appendix - I		
14.1	Integrity pact (IP)	Annexure-1	
14.2	Bank guarantee (BGs)	Annexure-2	
14.3	Price variation clause (PVC)	Annexure-3	
14.4	Vendor's Evaluation cum Proposal Report(P4F1R0)	Annexure-4	
14.5	Vendor Questionnaire (P4F2R0)	Annexure-5	
15	Appendix - II		
15.1	Volume _IA _Technical_bid_Appendix-II_Part_I	Additional Technical Specification	
15.2	Volume _IA _Technical_bid_Appendix-II_Part_II	Special Terms and conditions	

# 2.1 Scope of work

Salient Details of NIT						
S. No.	S. No. Issue Description					
		Framework agreement for Detailed drawing preparation based on Input				
		design drawings provided by BHEL/PEM & ISG and getting approval from				
	Job	BHEL PEM, BHEL ISG /BHEL customer, Fabrication and supply of Steel				
1.		Structures as per the approved detailed drawings (Procurement of Raw				
		Material including Steel is in the scope of Bidder) for 3x800 MW PUNL				
		Project Patratu.				
2.	E - Tender No	2401143				

The work to be carried out under the scope of these specifications is broadly as under:

Frame work agreement for detailed drawing preparation based on Input design drawings provided by BHEL/PEM & ISG and getting approval from BHEL PEM, BHEL ISG /BHEL customer, Fabrication and supply of Steel Structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) of various ongoing sites of the BHEL.

S. No.	Description of Material  Framework Agreement for detailed drawing preparation based on Input design drawings provided by BHEL/PEM & ISG and getting approval from BHEL PEM, BHEL ISG /BHEL customer ,Fabrication and supply of Steel Structures as per the approved detailed drawings .(Procurement of Raw Material including Steel is in the scope of Bidder) of various ongoing sites of the BHEL	Pkg details	Unit	Quantity
2	Supply of shop fabricated structural steel of grade E350/E250 in rolled section / built up section / combination of both (shop connections (factory fabricated) will be welded type and field connections will generally be bolted type unless otherwise specified) conforming to IS:2062 and technical specification, pipes conforming to IS:1161/IS:1239, monorails, stays, ladders, etc. in columns, beams, gantry girders, bunkers, silo supporting structures, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, etc., including blast cleaning, providing and applying primer, providing and applying intermediate & finish coats of paint as per specification (This item rate is inclusive of blast cleaning and providing & applying primer coats, providing & applying intermediate coats of paint, providing and applying finish coats of paint, connection design & preparation of fabrication drgs, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment(weight of welds not payable.), including, assembly, edge preparation, , testing of welders, inspection of welds, visual inspection, non-destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, rectification wherever if required (at no extra cost to BHEL), dismantling and removal of all temporary structures (weight of temporary structures not payable) etc. all complete as per technical specification. Including appointment of a drawing detailing agency, approved by BHEL, for detailed drawings preparation and approval of	Pkg-A	MT	600
3	Preparation of detail drawings on the basis of the Design drawings in Tekla model, preparation of marking list, shipping list, connection details, bolt details, BOM preparation ,		МТ	600

4	Supply of shop fabricated structural steel of grade E350/E250 in rolled section / built up section / combination of both (shop connections (factory fabricated) will be welded type and field connections will generally be bolted type unless otherwise specified) conforming to IS:2062 and technical specification, pipes conforming to IS:1161/IS:1239, monorails, stays, ladders, etc. in columns, beams, gantry girders, bunkers, silo supporting structures, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, etc., including blast cleaning, providing and applying primer, providing and applying intermediate & finish coats of paint as per specification (This item rate is inclusive of blast cleaning and providing & applying primer coats, providing & applying intermediate coats of paint, providing and applying finish coats of paint, connection design & preparation of fabrication drgs, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment(weight of welds not payable.), including, assembly, edge preparation, testing of welders, inspection of welds, visual inspection, non-destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, rectification wherever if required (at no extra cost to BHEL), dismantling and removal of all temporary structures (weight of temporary structures not payable) etc. all complete as per technical specification. Including appointment of a drawing detailing agency, approved by BHEL, for detailed drawings preparation and approval of fa	Pkg-B	MT	500
5	Preparation of detail drawings on the basis of the Design drawings in Tekla model, preparation of marking list, shipping list, connection details, bolt details, BOM preparation,		MT	500
6	Supply of shop fabricated structural steel of grade E350/E250 in rolled section / built up section / combination of both (shop connections (factory fabricated) will be welded type and field connections will generally be bolted type unless otherwise specified) conforming to IS:2062 and technical specification, pipes conforming to IS:1161/IS:1239, monorails, stays, ladders, etc. in columns, beams, gantry girders, bunkers, silo supporting structures, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, etc., including blast cleaning, providing and applying primer, providing and applying intermediate & finish coats of paint as per specification (This item rate is inclusive of blast cleaning and providing & applying primer coats, providing & applying intermediate coats of paint, providing and applying finish coats of paint, connection design & preparation of fabrication drgs, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment(weight of welds not payable.), including, assembly, edge preparation, , testing of welders, inspection of welds, visual inspection, non-destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, rectification wherever if required (at no extra cost to BHEL), dismantling and removal of all temporary structures (weight of temporary structures not payable) etc. all complete as per technical specification. Including appointment of a drawing detailing agency, approved by BHEL, for detailed drawings preparation and approval of	Pkg-C	MT	400
7	Preparation of detail drawings on the basis of the Design drawings in tekla model, preparation of marking list, shipping list, connection details, bolt details, BOM preparation ,obtaining the approval form the BHEL engineering sections (PEM/ISG)		МТ	400

Note: All Materials shall be procured from the NTPC/BHEL'S CUSTOMER approved sources only. List enclosed separately

- a. Above quantities are tentative and may vary, BHEL reserves the rights for allocation of tonnage to the agencies as per requirements.
- b. Quantity Variation limit: ±30%.

Procurement of required raw Material for the fabrication job for the scope i.e. Chq. Plates/MS plates, Flats/beams/ channel/, angles etc. (rolled sections), etc. have to be arranged by the bidder within his quoted price and all required material to be sourced only from NTPC/BHEL'S CUSTOMER approved suppliers for Patartu Projects.

- 2.2 Trial Pre assembly activity will be at bidder shop or at site as required by BHEL/NTPC/BHEL'S CUSTOMER by using bidders T&P in his own cost, no separate cost will be paid for Trial Pre assembly activity. Bidders may quote considering all such hidden activity as extra in their rate price. BHEL/NTPC/BHEL'S CUSTOMER may visit for inspecting the Trial Pre assembly activity
- 2.3 BHEL/NTPC/BHEL'S CUSTOMER may visit fabrication shop for checking eligibility/competency of shop. Approval from NTPC/BHEL'S CUSTOMER is required before start the fabrication job. In any discrepancy bidder shall be complied as per BHEL/NTPC/BHEL'S CUSTOMER requirement at any stage of job.
- **2.4 Supply of finished materials at site** as per approved BOM/approved Detailed Drawings of scope of supply work consisting of following:
- 2.5 **Fabrication**, welding, destructive, non-destructive and any other tests as per approved QP / NTPC/BHEL'S CUSTOMER/ BHEL requirement.
- 2.6 Painting as per NTPC/BHEL'S CUSTOMER Specifications.
- 2.7 Straightening, making cutting plan, cutting, bending, rolling, grinding, drilling, bolting, temporary pre assembly- full length column height (Trial assembly), edge preparation, post heating, testing of welders, inspection of welds, visual inspection, non-destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing as per erection scheme.
- 2.8 Preassembly of columns (2-3 pieces of 12M Length each column or as per drawings), **Trial assembly** of finished material at bidder's works / factory as per BHEL instructions / approved drawings.

- 2.9 Delivering finished products from works / factory to NTPC/BHEL'S CUSTOMER project site as per **BOQ** of rate schedule specification, drawings and instructions of the Engineer.
- 2.10 Fabrication as per approved BOM / detailed Drawings and Application of Paint as per specification and Transportation till site (FOR destination basis). (Supply/ procurement of all required materials including structural steel from NTPC/BHEL'S CUSTOMER approved vendor shall be in the scope of Agency).
- 2.11 Delivering finished fabricated products from factory to Project site as per BOQ of rate schedule, specification, drawings and instructions of the Engineer. Fabrication as per approved BOM / detailed Drawings and Application of Paint as per specification and Transportation till site (FOR destination basis). For material to be supplied by agency, unloading of material at site shall be in the scope of BHEL. BHEL shall unload the material in 48-72 hrs from the time of entry of trailer in the plant premises. In case the supplied material is not being unloaded within 72 hrs., for the reason not attributable to fabricator/transporter, agency shall be entitled for demurrage charges.
  - a) Demurrage charges for Truck shall be Rs. 1000/days.
  - b) Demurrage charges for all types of Trailers shall be Rs. 2000/days.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works

2.12 **Specific for Detailed Drawing Preparation:** 

Successful bidder to engage detailer as per following scope: -

1. Agency has to prepare the detailed drawings on the basis of the GA Design drawing provided by the BHEL.

2. Fabricating agency has to hire the detailer agencies and submit the credentials of the drawing detailer

agencies to BHEL for review & approval. Only approved agency to be engaged for drawing detailing work.

3. Detailed scope associated with drawing detailing is as follows:

a. Preparation and checking of 3D model of bolted structure in latest licensed version of TEKLA

b. Design & Preparation and checking of bolted connection details of structure.

c. Preparation and checking of detailed fabrication drawings of bolted structure in latest version of TEKLA.

Drawing should contain Detailed BOM separately for each DU. Bolt summary should also be provided in

each drawing.

d. Preparation of consolidated BOM, consolidated fasteners summary in EXCEL format, as per the formats

requested by BHEL.

e. Scope of work includes the Built-up columns, Roof girders, Floor beams & bracings, Wall Beams,

Cladding, staircases, platforms, Elevator, pump houses, Silo & Silo structures, transfer points, Equipment

handling structures, tanks, BOP structures etc Cable trays & Pipe Racks, pipe conveyors, belt conveyors,

Duct & duct supporting structures, Tanks, control rooms, sheds, workshops, structural buildings etc.

f. ALL feedbacks or corrections suggested by the approving authority shall be implemented by the vendor

until the drawings are approved.

g. It is the detailing vendor responsibility to ensure completeness and correctness of drawing in all

respects before the fabrication and erection of structure without any commercial implications.

h. If any GA drawing revised, agency has to do the required changes in detailed drawings without any

additional cost to BHEL.

i. Agency has to share the all connection details drawings to BHEL.

j. Agency has to submit the shipping list with DU/Mark Nos.

k. Fabricating Agency will share the unpriced PO copy of the detailer agency to BHEL.

# 2.13 Contents of detailed drawing to be prepared by the vendor.

- a. Fabrication details with all required views. Grid Marks to be shown.
- b. Detail views of all items.
- c. Erection and Shop welding symbols as indicated in input drawing.
- d. Bolt opening Dimensions should be given with respect to working point.
- e. Table for fasteners with size Grade and Quantity.
- f. BOM as per formats shall be given by BHEL during execution stage.
- g. It should contain net weight of raw materials used.
- h. Erection mark should be assigned as per standard Grid nomenclature for easy identification. Each erection mark should be assigned with a DU number.
- i. DU number should be such that it indicates the site erection sequence.
- j. BOM should contain details separately for each erection mark.
- k. Drawing numbers shall be as per the format specified by BHEL, which will be communicated along with PO.
- l. Wherever critical to quality requirement is there, the same should be indicated with a box encircling letter "C".
- m. Plate cutting, rolling plan and Transportation stiffener shall be provided (wherever required).
- n. If the detailed engineering has been done in more than a single drawing sheet, each drawing should have the reference to other drawing sheets.
- o. Fabrication and erection Notes are to be clearly indicated in the drawing.
- p. All drawings should indicate the reference of erection drawing number and GA/RFC drawing number.

# 2.14 <u>CONNECTION DESIGN</u>

- 2.13.1 Detailed report showing design details of all connections shall be provided along with detailed drawings for approval.
- 2.13.2 Connection design report should be complete in all aspects and include design of splice plate thickness, gusset plate thickness, No. of bolts, Bolt size, Weld length and weld size etc.
- 2.13.3 Connection design will be done as per IS 800 : 2007 or equivalent standard.

# 2.14 FINAL STRUCTURE REPORT

- 2.14.1 Report should be provided in Excel Format for each structure separately as per latest formats shared by BHEL.
- 2.14.2 It should contain DU/Erection mark list, showing Net weight, quantity required, drawing number, Transport limits (LxBxH), Quality category, Surface area.
- 2.14.3 Complete BOM of all fabrication drawings in one sheet.
- 2.14.4 Total raw material summary.
- 2.14.5 Complete Fasteners of all fabrication drawings.
- 2.14.6 Total Fasteners summary.

#### 2.15 Deliverables from Vendor:

- 2.15.1 Submission of 3D model.
- 2.15.2 Submission of proof of checking of 3D model.
- 2.15.3 Submission of Detailed fabrication drawings.
- 2.15.4 Submission of Detailed connection design report for all connections.
- 2.15.5 Submission of Final Structure Report.
- 2.15.6 Submission of revised/corrected final drawings after BHEL feedback.
- 2.15.7 All above data should be transferred through digital mode.
- 2.15.8 The detailer engaged by the fabricator shall/may be required to visit BHEL PEM/ISG office at Noida/Bengaluru for discussion review of submitted drawings for expeditious approval. The visit shall be as per requirement (at least monthly once). All expenses for such visit shall be included in Price/Rate Quoted.

# TECHNICAL CONDITIONS OF CONTRACT (TCC)

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# 2.16 **Specific for Fabrication and Supply Contract**

**2.16.1** Items covered under this contract shall be subjected to Inspection / Testing and Quality Surveillance. The BHEL Engineer or Engineer's representative shall at reasonable times, have access to vendor's works. Quality control records. All reasonable facilities required for carrying out the inspection and testing efficiently, shall be provided by the vendor, free of cost including proper Office space with

Desktop Computers/Laptop with Internet facility to BHEL/NTPC/BHEL'S CUSTOMER/Third Party

officials for routine Check-Up and during inspection.

- **2.16.2** The bidder shall abide fully by all the clauses of Shop inspection and tests covered in Technical Specification and Customer Technical specification. BHEL reserves the right to consider any stage of inspection / test as a "Hold Point", beyond which work shall not proceed without acceptance of that stage.
- **2.16.3** The minimum Inspection / Testing requirements shall conform to relevant codes / standards as well as Statutory Regulations applicable, whether or not specifically mentioned in the specification, in addition to those normally carried out by the vendor.
- 2.16.4 Unless the Inspection / Test is waived, the Engineer or Engineer's representative shall attend the Inspection / Test within 15 days of the date of receipt of notice from the vendor, failing which the vendor may proceed with the Inspection / Test and shall forward duly certified copies of the Inspection / Test Reports. After successful completion of the Inspection / Test or receipt of Vendor's Test reports mentioned above, the Engineer shall issue within 15 days, the acceptance certificate.
- **2.16.5** Wherever Customer / Consultant "Hold Points" are indicated in the approved Quality Plan an additional 10 days' notice shall be given for Inspection / Testing.
- 2.16.6 Before sending written notice to the Engineer or Engineer's representative, the Vendor's own inspection staff should have fully inspected / tested the item. If the visit of the Engineer or Engineer's representative proves to be futile on account of the item not being ready for inspection / Testing or the same being rejected to reasons which could otherwise, have been detected during Vendor's own Inspection / Test, the cost incurred by Engineer or Engineer's representative on such visits shall be borne by the vendor.
- **2.16.7** Approval or passing of Inspection / Test and thereby issue of the acceptance Certificates or waive of Inspection by the Engineer or Engineer's representative shall not relieve the vendor of his responsibilities and obligations under the contract and also shall not bind BHEL to accept the item

should it, on further tests after receipt at destination, erection / commissioning be found not complying with the Contract.

- **2.16.8** All necessary documents such as test reports, test certificates, test curves, stress relieving charts, radio graphic films and other non-destructive tests, copies of the welding procedure, welder qualification certificates and other documents in support of adherence to Quality plan shall be furnished to the Engineer or Engineer's representative. The Quality Assurance document consisting of certified copies of all of the above complied sequentially by the vendor shall be sent to BHEL prior to dispatch.
- **2.16.9** The vendor shall provide test pieces as required by Engineer or Engineer's representative to enable him to determine the Quality of Material supplied under the contract. If any test piece fails to comply with the requirements the inspection agency may reject the whole material represented by the test piece.
- **2.16.10** In the event of inspection revealing poor quality of goods, BHEL shall be at liberty to specify additional Inspection / Test, required ascertaining Vendor's compliance with the equipment specification.
- **2.16.11** All welding shall be carried out in accordance with applicable codes or approved equal. Welding procedure and Welder's qualification shall be got approved. Welding consumables shall be as per NTPC/BHEL'S CUSTOMER approved suppliers.
- **2.16.12** Approved methods of radiographic, ultrasonic or other non-destructive testing as applicable shall be used for the welding of critical components / assembly. All defects shall be rectified by the supplier at no extra cost.
- **2.16.13** If considered necessary by BHEL Engineer or Engineer's representative, multiple pre-assemblies shall be fully tested at Vendor's work prior to packing and dispatch to site.
- 2.16.14 None of the item shall be dispatched without the receipt of "Quality Surveillance Note" from the Inspection Agency as well as the written approval in the form of Material Dispatch Clearance Certificate (MDCC) unless specifically agreed.
- **2.16.15** Each separate piece of fabricated steelwork shall be distinctly mismatched/punch marked on all surfaces before delivery in accordance with the markings shown on approved erection drawings and shall bear such other marks as will further facilitate identification and erection. This will be duly verified at site during material receipt based on which MRC shall be prepared.

- **2.16.16** To address any mismatch during erection stage, the successful bidder shall deploy a technical person on continuous basis at site for proper co-ordination with various agencies so that problem is attended / rectified without any time gap.
- **2.16.17** Material Dispatch Clearance Certificate (MDCC) for Supply of Fabricated Structures to be issued by customer/BHEL before supply of finished material.
- 2.16.18 The affixing of Inspection Stamp on the item by the Engineer or Engineer's representative is for the purpose of identification only and shall not be considered as a token of acceptance.
- **2.16.19** The above conditions are equally applicable to the agency on which the vendor has sub ordered as it shall be construed as if the works are manufactured or assembled at Vendor's own premises of works
- **2.16.20** Separate storage area and Engineer shall be allotted by Bidder for BHEL contract.
  - **2.16.21** BHEL shall post own employees at the vendor premises for whom a proper Office space with Desktop Computers/Laptop with Internet facility, drinking water, toilet facility etc. shall be provided to BHEL employees (01Nos.) by successful Vendor for official use. Further, suitable transportation facility shall be arranged by vendor for the BHEL Resident engineer for "To and FRO" movement from residing Location from nearby city to Fabrication Location.

#### 2.17 SPECIFIC CONDITIONS FOR SUPPLY OF FABRICATED STRUCTURES

- 2.17.1 After receipt of Purchase Order, Bidder shall discuss with Project Manager / Construction Manager of BHEL regarding starting of structural fabrication job. On receipt of approval of detailed drawings, successful bidder will start fabrication job in customer approved "FABRICATION WORKSHOP / FACTORY" in line with approved drawings, specifications and quality plan. Bidder shall mobilize further resources at workshop as per requirement to commence the job of fabrication, testing, shot blasting, painting etc. to match schedule of the project.
- 2.17.2 The total quantity of steel required for the job will be calculated from the approved fabrication drawings including lugs. In case any such sectional weights are not available in the above documents, then BHEL Engineer instruction/Indian Standard Code recommendation shall be binding. BHEL reserves the right to reject any material not found satisfactory.

#### **2.17.3 QUALITY PLAN:**

- 1. The Quality Plan is a document, which presents in a tabular form the Quality control checks exercised by the vendor during the various stages of manufacture and dispatch in order to meet the requirements of this specification. This plan details, step by step, the operations, components and characteristics being controlled, method of exercising such controls, the importance (criticality) of the control (critical major or minor) with respect to the functioning of the item the extent to which the controls are exercised (100% samples, one per heat, etc.). Acceptance norms for the characteristics, method of maintaining records thereof as a proof of having exercised the control successfully, the agency responsible for performing and witnessing the checks and for verifying the records thereof.
- 2. The bidders shall furnish the Quality Plan for approval from BHEL / NTPC/BHEL'S CUSTOMER. In case the Standard Quality plans are included in tender specification, the bidder shall furnish his Quality Plan strictly in line with the same. Instructions for filling the Quality Plan format are given on the back of the format.
- 3. Copies of Bidder's/Bidder's Collaborators catalogues/drawings/standards/specifications/ procedures etc. as mentioned in reference document of the Quality Plan shall be furnished for approval.
- 4. In the Quality Plan, the bidder shall give in detail, the quality control checks exercised by him during the various stages of fabrication / manufacture such as:
  - a) All bought out items and incoming material checks carried out at sources and on receipt.
  - b) Process of manufacture i.e. welding, heat treatment etc.
  - c) Manufacture of various components, sub-assemblies and assembly.
  - d) Final Inspection and Testing including Performance Test at shop.
  - e) Surface preparation and painting.
  - f) Packing, Marking and Dispatch.

#### 2.18 Inspection Agency:

Inspection of packages shall be carried out by agency as per below Inspection category of packages:

- 1. Cat I: Inspection shall be done jointly by NTPC/BHEL'S CUSTOMER, BHEL & Successful bidder.
- 2. Cat-II: Inspection shall be done by BHEL & Successful bidder.
- 3. **Cat-III:** Certificate of Compliance shall be furnished by Successful bidder.

Please note, for Cat I & II items BHEL reserve the right to carry inspection by themselves or through nominated third party. For Inspection agency for various items, vendor may refer to Quality Plan.

#### 2.19 Material Dispatch Clearance Certificate (MDCC)

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When the tests have been satisfactorily completed at the Contractor's works, the Inspection Agency shall issue a

certificate to that effect within fifteen (15) days after completion of tests, but if the tests were not witnessed by

the Inspection Agency or his representative, the certificate would be issued within fifteen (15) days of the receipt

of the test certificates by the Inspection Agency.

BHEL / NTPC/BHEL'S CUSTOMER will issue MDCC to the Contractor based on the QS Note/Report from the

Inspection Agency.

Contractor will not dispatch any material before issue of MDCC by BHEL / NTPC/BHEL'S CUSTOMER. 3.

The satisfactory completion of these tests or the issue of MDCC, shall not bind BHEL / NTPC/BHEL'S CUSTOMER

to accept the supply/equipment, should it, on further tests after erection, be found not to comply with the

contract provisions.

For Cat-I item, MDCC shall be issued by NTPC/BHEL'S CUSTOMER and it's the responsibility of vendor to

arrange MDCC from them, and original MDCC shall be attached with Invoice by Vendor for claiming payment

from BHEL.

For Cat-II & Cat-III items, MDCC shall be issued by NTPC/BHEL'S CUSTOMER/BHEL, which shall be valid for

vendor payment.

2.20 GENERAL INSTRUCTION FOR DISPATCH:

No equipment / material shall be dispatched without prior consent of BHEL / NTPC/BHEL'S CUSTOMER. Vendor

shall dispatch the equipment / material only after receipt of "Quality Surveillance Note" and Material Dispatch

Clearance Certificate (MDCC) issued by BHEL / NTPC/BHEL'S CUSTOMER.

Vendor shall notify in writing to site at least within 15 days in advance of shipment, the probable date, when the

equipment / material shall be ready for dispatch.

The distribution procedure for the above documents shall be as per the "dispatch instructions".

A. Consignee Address:

Construction Manager / BHEL Site office 3x800 MW PVUNL Project Patratu

Note:

1. Consignee address in LR should be strictly as per above.

2. Seller / contractor to note that to effect "Sale in Transit", BHEL shall issue "Delivery Note" to the

Transporter for transferring the ownership from BHEL to customer (NTPC/BHEL'S CUSTOMER).

3. Delivery note shall be carried by transporter along with other dispatch documents.

B. Road Permit Requirement: As per requirement.

C. Mode of Dispatch: By Road

Note: It is Seller / contractor responsibility to ensure availability of trucks well in advance for dispatch of

material to meet contractual delivery requirement and as per instruction of BHEL engineer.

D. Transit Insurance: In BHEL Scope

Prior dispatch intimation shall be issued to Insurance agency about the value of consignment, dispatch details,

along with one set of documents consisting of LR/RR copy, packing list / Challan indicating the items dispatched

(with their weights.) A copy of above should be sent to BHEL PSWR HQ (address same as consignee address).

Upon dispatch of material, supplier has to immediately intimate underwriter of BHEL, failing which transit loss if

any, would be borne by supplier. Vendor shall obtain details of Insurance agency & policy documents from BHEL

prior to dispatch of first consignment of Fabricated material to site.

E. Packing:

1. The packing shall be in conformity with specification and shall be such as to ensure prevention of damages,

corrosion, deterioration, shortages, pilferage and loss in transit or storage.

2. Packing list shall be submitted as per standard format along with advance set of documents for claiming

payment which shall also indicate: -

a) Packing size.

b) Gross weight and net weight of each package.

c) Contents of the package with quantity of each item separately.

F. Transportation & Freight Charges:

1. All road dispatches shall be only through the carriers approved by the BHEL.

2. Owing to any reason, in case the seller / contractor has to resort to a mode of transport other than what was

contemplated, to keep up the delivery / completion schedule incurring extra expenditure, such extra expenditure

shall be borne by the seller / contractor.

3. Freight charges shall be borne by the seller / contractor.

4. Any charge against ODC consignment shall be borne by seller / vendor.

5. Any charges related to the transportation of fabricated material till site is to be borne by the seller /

vendor.

2.21 MATERIAL RECEIPT CERTIFICATE:

The Seller/Contractor shall arrange Material Receipt Certificate (MRC) at project site, duly signed by the BHEL/NTPC/BHEL'S CUSTOMER/NTPC/BHEL'S CUSTOMER Site Engineer, after receipt of the material at site and its

physical verification.

2.22 SHORTAGES/DAMAGES:

Any shortages or damages during transit, transportation or handling at site, including at the time of erection and

 $commissioning, shall \ be \ made \ good \ by \ the \ Seller/Contractor \ at \ his \ risk \ and \ costs, to \ meet \ the \ project \ schedule. \ In$ 

case of faults/discrepancies in any material, component, sub-assembly, assembly, etc., the same shall be

supplied/replenished free of cost to enable the equipment to be put in service. Shortages in some cases shall also

be replenished free of cost.

2.23 Dispatch Documents required (to be furnished by vendor):

**A. For customer billing by PSWR**, supplier shall provide the following documents to BHEL-PSWR in 4 sets:

1. Copy of vendor Invoice

2. Copy of Packing List Indicating Quantity / Gross weight/Net Weight and NTPC/BHEL'S CUSTOMER

approved BBU item no. wherever applicable against each item dispatched.

3. MDCC/CHP (NTPC/BHEL'S issued, if applicable).

4. Insurance intimation copy

5. Test certificate / Inspection Reports- Original (For Cat II & III packages).

**B.** For vendor payments by PSWR, the following documents are required in 4 sets:

1. Original Invoice

2. LR copy (Consignee address shall be BHEL project site).

3. Packing list.

4. Copy of insurance intimation letter / e-mail. (Intimation to Insurance agency to be sent on the same day

of dispatch.)

5. Guarantee certificates in line with PO terms- Original.

6. In addition to the above, vendor may furnish mfg. clearance/drg/docs approval date for the purpose of determining contractual delivery for expeditious processing of Invoices.

#### 2.24 STEEL Specifications

Agency has to procure the Structural Steel as per below technical specification basis:

The total quantity of steel required for the work will be calculated from the approved, fabrication drawings, lugs etc. The measurement for payment as well as for accounting shall be based on the sectional weights as indicated in the following IS/BS/EN specifications.

S. No.	Name of Standard	Name of Section
1.	IS: 808-1964	Beams, Channels and Angles
2.	IS: 1730-1961	Plates, Sheets and Strips/Flats
3.	BS4-1: 1993	UB/UC sections
4.	IS: 12778/equivalence with EN-19-57	For NPB sections
5.	IS: 12778/equivalence with EN-53-62	For HE/WPB sections
6.	IS: 1786 or grade -1 of IS432 (Part-I)	Rounds including deformed high yield strength bars

In case any such sectional weights are not available in the above documents, the manufacturer recommendation shall be binding.

#### 2.25 GUARANTEE FOR THE FINISHED GOODS

The Fabricator shall warrant that the fabrications comply fully with the drawings and other technical conditions specified by BHEL. If the fabrications are found defective owing to faulty workmanship/incomplete work within a period contract period (Including Extended Period) + Performance guarantee period of 6 months. The BG shall be extended up to completion of Performance guarantee period from the date of supply of last consignment., the Fabricator shall do the necessary repair/rework or replace the defective items free of cost. Alternatively, the rework/replacement charges shall be recovered from vendor if the same has been carried out by BHEL as per tender condition.

**Performance Security Clause:** 

- a) The Performance Security shall be 5% of the contract value for each **Sub Purchase**Order (Sub PO) issued to the fabricating agencies under the framework agreement.
- b) In case of increase in contract value, additional 5% of differential/increased amount shall be submitted by Contractor before payment of next RA Bill due.
- c) Performance Security may be accepted in the following forms:
  - i. Cash (as permissible under the extant Income Tax Act).
  - Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favor of BHEL.
  - iii. Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated / pledged, as applicable, in favour of BHEL).
  - iv. Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Performance Security Amount shall be in the prescribed formats. The validity of BG shall be initially for the contract period (Including Extended Period) + Performance guarantee period of 6 months. The BG shall be extended up to completion of Performance guarantee period from the date of supply of last consignment.
  - v. Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL). Insurance Surety Bonds.
- d) 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.
- e) Refund of Performance Security amount shall be released against each Sub POs after completion of Performance Guarantee period and after deduction of all expenses/

other amounts due to BHEL under the contract/ other contracts entered into with them (contractor) by BHEL.

#### **For Supply Contract**

Bidder must be possessing established fabrication **work shop** / **factory** equipped with all kinds of T & P's and other necessary requirement for supply of finished material as per specification at their own cost Tentative requirement of Factory is stipulated in **Annexure - A**. All other equipment's and T&Ps (if required) for supply of finished material, shall be arranged by Fabricator.

#### **Important Notes:**

- The scope of Permanent / Erection bolts, it is not in Vendor scope.
- Supply and fixing of Electro forged gratings is not in bidder scope.
- All structural steel works including tubular sections shall be painted as per specification.
- All factory fabricated structures shall have bolted field connections.
- Splice is permitted only for longer length of members and at selected and approved location finalized during detailed engineering.
- Stainless Steel, Grating, Handrails are not the part of the Tender's scope

#### 2.26 Subletting:

The vendor shall not sublet or assign this work or any part thereof without the prior written permission of BHEL. In the event of the vendor subletting or assigning this work or any part thereof without such permission, BHEL shall be entitled to cancel the Order and execute the same elsewhere at the risk and cost of the vendor and the vendor shall be liable for any loss or damage which BHEL may sustain in consequence of such event. Further BHEL has the right to cancel the PO's placed on such vendor/s and suspend the business dealings with such vendor/s as per the policy of BHEL. The Fabricators who are falling under highest bidder category shall not be considered.

#### 2.27 Confidentiality Obligation:

**2.27.1** All the documents of BHEL (inclusive of Drawings, and Standards) made available to the vendor should be kept in strict confidence and under no circumstance be made available to others or allow others to make use of them. Such documents should be returned to BHEL after completion of the work ordered and also as and when BHEL demands.

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**2.27.2** The above CONFIDENTIALITY CLAUSE is binding on the employees of the Fabricators also.

Any contravention will be viewed very seriously and may include cancelling the contract or

legal action on the vendor.

2.28 Other Conditions:

**2.28.1** All the Statutory Obligations such as ESI, PF, Labour Acts, Factories Act, GST, etc. will have to

be taken care of by the vendor. BHEL will have no liability on them. Notwithstanding the above,

if any demand notice is served by the concerned Statutory Authorities for recovery of any of

their dues on BHEL, the same would be paid with notice to the vendor and recovered from any

pending / future bills.

**2.28.2** All Safety Precautions and use of Safety Equipment's are to be followed while carrying out the

fabrication and Despatch of the same. The vendor must have proper tools and handling

equipment's. There should always be a responsible person available to oversee the operation

and compliance of safety regulation etc. If any non-compliance with respect to proper safety

conditions/requirements, BHEL may withhold visit/inspection, instruct stoppage of work till

such time the desired safety requirements/conditions are met with.

**2.28.3** Fabricators are required to equip themselves with communication facilities like Telephone,

internet and e-mail, etc. BHEL will have the right not to consider those Fabricators who do not

equip themselves with these facilities.

2.28.4 The vendor shall be responsible for mismatch of components if any noticed at site during

erection. Any rework shall be carried out by vendor at their cost and risk including transport, if

necessary.

**2.28.5** All clarifications pertaining to techno-commercial conditions of the tender shall be sought

before submitting the price bid. No claim for increase in rates will be entertained by BHEL.

Chapter-III,IV & V - Not Applicable for this contract.

## TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter – VI: Time Schedule

#### 6.1 Time schedule & mobilization

#### 6.1.1 Commencement of contract period and tentative schedule: -

i. Date of start (Zero date) of contract period shall be considered as from the date of issuance of first deign drawings or detail drawing to Fabricator under the issuance of the Sub PO.

#### ii. Validity of Contract

A Rate Contract shall be entered into with eligible Fabricators. The contract thus signed shall be valid up to 12 months from the date of issuance of LOA of Framework Agreement. Moreover, validity of contract is subject to further extension with mutual consent. PO(s) placed under this contract shall be governed by the T&C's of this contract till the completion of PO.

**iii.** Supply of Fabricated structures as per scope including surface preparation and application of primer paint for PVUNL Patratu STPP shall as per the following schedule against the issued SUB POs:

#### Case-1 (When Detail drawings prepared by the BHEL)

- b. For awarded tonnage is 50 MT under Sub POs 45 days from the date of issuance of the Sub POs.
- c. For awarded tonnage is 51 MT-200MT under Sub POs 75 days from the date of issuance of the Sub POs.
- d. For awarded tonnage is 201 MT-400 MT under Sub POs 105 days from the date of issuance of the Sub POs.
- e. Further increase in scope of work above 400 MT by 50 MT will add the 15 days additional.

#### iv. Case-2 (When Detail drawings prepared by the agency)

- a. For awarded tonnage is 50 MT under Sub POs 90 days from the date of issuance of the Sub POs.
- b. For awarded tonnage is 51 MT-200MT under Sub POs 120 days from the date of issuance of the Sub POs.
- c. For awarded tonnage is 201 MT-400 MT under Sub POs 150 days from the date of issuance of the Sub POs.
- d. Further increase in scope of work above 400 MT by 50 MT will add the 15 days additional.
- v. The Fabricator has to subsequently augment his resources in such a manner that the entire work is completed to achieve the following tentative schedule.

## TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter – VI: Time Schedule

#### Note:

- 1. The above quantities are tentative and may vary, BHEL reserves the right for allocation of tonnage to the agencies as per requirements.
- 2. Quantity Variation limit: ±30% of awarded quantities.
- 3. As the work against subject tender will be executed as per BHEL requirement of "as and when requirement basis" thus no compensation shall be given to the Fabricator; even in case the final executed work is below 30% of awarded quantities wrt Framework Work Agreement quantity as well as Sub PO quantity.
- 4. This is a framework agreement contract and not a firm order contract. Consequently, BHEL shall not be obligated to award the entire rate contract quantity. Awards will be issued within the contract period based on BHEL's project requirements. The agencies shall not be entitled to any compensation for non-award of Sub Purchase Orders (Sub POs) under the framework agreement.
- 5. Issuance of the Sub PO against awarded framework agreement is on BHEL desecrations and agencies are bounded for BHEL decision. Any dispute & claim or compensation will not be admissible.

#### L-2 Schedule shall be prepared and submitted by Fabricator for approval of BHEL.

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.

#### 7 Term of Payment: -

The progressive payment for supply on accepted price of contract value will be released as per the break up given hereinafter: -

#### Stages of progressive pro-rata payments

- 7.1 100% payment as per PO, Billing schedule/Price Bid, excluding GST shall be released within 45 days after receipt & acceptance of material at site and submission of following documents
  - **For vendor payments by PSWR**, the following documents are required in 4 sets:
    - a. GST Compliant Invoice (1 Original + 3 copies)
    - b. Copy of MDCC (NTPC/BHEL issued MDCC, if applicable)
    - c. LR copy
    - d. Packing list Indicating Quantity / Net weight (Design Weight) wherever applicable against each item dispatched
    - e. Material Receipt certificate issued by BHEL/site
    - f. Copy of insurance intimation letter / e-mail. (Intimation to Insurance agency to be sent on the same day of dispatch)
    - g. Guarantee certificates in line with PO terms (1 Original + 3 copies)
- 7.2 Applicable GST shall be released upon compliance of following documents:

Vendor has declared such Invoice in their GSTR-1 & has paid the tax to the Government by filing GSTR-3B or any other return/form for payment of tax so that Vendor's invoice details appear in BHEL's GSTR-2A. Payment may not be released if above is not complied & invoice details do not appear in BHEL's GSTR-2A.

7.3 Paying Authority shall be **3x800 MW PVUNL Project Patratu**.

#### 7.4 Retention amount:

7.4.1 Retention Amount shall be 5% of contract value and shall be furnished before the first RA Bill becomes due for payment. In case of increase in contract value, additional 5% of differential amount shall be submitted by Consultant before payment of next RA Bill due.

The Retention amount of 5% of the contract value may be accepted in the following forms:

- i. Cash (as permissible under the extant Income Tax Act).
- ii. Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand
- iii. Draft/ Electronic Fund Transfer in favour of BHEL.
- iv. Securities available from Indian Post offices such as National Savings Certificates,
- v. Kisan Vikas Patras etc. (held in the name of Consultant furnishing the security and duly endorsed/hypothecated / pledged, as applicable, in favour of BHEL).
- vi. Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act and in line with clause 1.12 of GCC. The Bank Guarantee format for Retention Amount shall be in the prescribed formats. The validity of BG shall be initially for the contract period & shall be extended up to acceptance of final bill if the final bill is not settled during the contract period.
- vii. Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Consultant, a/c BHEL).
- viii. Insurance Surety Bonds.
- on successful bidder's request, the Retention Amount can also be recovered at the rate of 10% of the gross amount, progressively, from each of the running bills of the Consultant till the total amount of the required retention amount is collected.
- 7.6 In case, Consultant opts cash deduction from RA bills in the beginning & subsequently submit 5% of the Contract Value as Retention amount in any form as mentioned above, then refund of deducted retention amount may be permitted to Consultant.

**Note:** 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.

#### 7.7 Refund of Retention Amount shall be as follows:

Retention amount shall be released after successful completion of supply and along with last RA Bill. Retention amount shall be released after deduction all expenses/ other amounts due to BHEL under the contract/ other contracts entered into with them (Consultant) by BHEL.

#### ➤ Interest bearing advance

Advance Payment: Normally no advance is payable to the Fabricator. However, advance payment in
exceptional circumstances shall be interest bearing and secured through a Bank Guarantee and shall
be limited to a maximum of 5% of contract value. This 'Interest Bearing Recoverable Advance' shall
be payable in not less than two instalments with any of the instalment not exceeding 60% of the total
eligible advance.

### TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

• Additional Interim Advance: In exceptional circumstances, with due justification, Competent

Authority of BHEL is empowered to approve proposals for payment of additional interim interest

bearing advance against Bank Guarantee, for resource augmentation towards expediting work for

project implementation.

Bank Guarantee towards 'Interest Bearing Recoverable Advance' shall be at least 110% of the

advance so as to enable recovery of not only principle amount but also the interest portion, if so

required.

Fabricator shall establish the utilization of advance drawn before the release of next instalment.

• 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.

• The rate of interest applicable for the above advances shall be the base rate of State Bank of India

prevailing on the date of release of advance plus 6%, and such rate will remain fixed till the total

advance amount is recovered.

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 from the Running Bills progressively such that the advance

amounts paid along with the interest is fully recovered by the time the Fabricator's billing reaches

90% of contract value.

Recovery rate shall be the sum of:

i) 10% of Running Bill amount

ii) Simple interest up to the date of RA Bill on the outstanding Principle amount/amounts

• Fabricator 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 whichever is earlier. In case the recovery of dues

does not get completed within the aforesaid BG period, the Fabricator shall renew the BG or submit

fresh BG for the outstanding amount, valid for at least one year or the remaining recovery duration

whichever is earlier.

• BHEL is entitled to make recovery of the entire outstanding amount in case the Fabricator fails to

comply with the BG requirement.

7.8 PRICE VARIATION COMPENSATION

PVC shall be applicable for entire contract period and extended period if any.

- 7.8.1 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, WELDING ROD, CEMENT, STEEL, PAINT MATERIALS, Price Variation Formula as described herein shall be applicable
- 7.8.2 85% component of Contract Value shall be considered for PVC calculations and remaining 15% shall be treated as fixed component. The basis for calculation of price variation in each category, their component,

Base Index, shall be as under:

SL NO.	CATEGORY	INDEX/AVERAGE MINIMUM WAGE PERCENTAGE COMPONENT ('K')	FABRICATION (Material in Agency Scope)		
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)	18		
ii	WELDING ROD	Name of Commodity: Manufacture of Basic Metals Commodity Code: 1314000000	5		
iii	HIGH SPEED DIESEL	Name of Commodity: HSD ommodity Code: 1202000005	2		
		С			
iv	STEEL (Structural)	Name of Commodity: Mild Steel: Long Products	55		
v	PAINT	Name of Commodity: Paint Commodity Code: 1310050000	5		

- 7.8.3 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: eaindustry.nic.in). Revisions in the index or commodity will be re-adjusted accordingly.
- 7.8.4 Payment/recovery due to variation in index shall be determined on the basis of the following notional formula in respect of the identified COMPONENT ('K') viz LABOUR, HIGH SPEED DIESEL OIL, WELDING ROD, CEMENT, STEEL, PAINT, MATERIALS.HSD

 $P = K \times R \times (XN - Xo)$ 

Xo

Where,

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

K = Percentage COMPONENT ('K') applicable for Labour, High Speed Diesel Oil, Welding Rod, Paint, Cement, Steel and Materials

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

XN = Revised Index for Labour, Revised Average Minimum Wages for Labour, Revised Index for High Speed Diesel Oil, Welding Rod, Paint, Cement, Steel and Materials for the billing month under consideration

Xo = Index for Labour, Average Minimum Wages for Labour, Index for High Speed Diesel Oil, Welding Rod, Paint Cement, Steel and Materials as on the Base date

- 7.8.5 PVC shall not be payable for Supplementary/Additional Items, Extra works. However, PVC will be payable for items executed under quantity variation of BOQ items under originally awarded contract.
- 7.8.6 Base date shall be the calendar month of the 'last date of bid submission'.
- 7.8.7 The contractor shall furnish necessary monthly bulletins in support of the requisite indices from the relevant websites along with his Bills.
- 7.8.8 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.
- 7.8.9 PVC shall be applicable for the entire original contract period plus the extended period, i.e. for the complete execution period, as follows:

#### For PVC computation of the nth month:

Let the cumulative delay attributable to the Contractor is Dn in the nth month.

Considering Rn as the billing value for the nth month, PVC for the nth month shall be calculated as follows:

- a) PVC for the portion of Rn for an amount of D(n-1) shall be payable as per indices for the (n-1)th month.
- b) PVC for the balance portion of Rn shall be payable as per indices for the nth month

In case D(n-1) is greater than Rn, then entire Rn shall be payable as per indices for the (n-1)th month and the balance portion of D(n-1) shall be adjusted from R(n+1) of the (n+1)th month and will be payable as per indices for the (n-1)th month. The above process shall be continued for subsequent month(s) also till full D(n-1) is consumed.

- i) PVC shall not be applicable for time extension provided for the delays solely attributable to the contractor. No PVC is payable during the period of Provisional Time Extension till grant of final time extension. Applicability of PVC will be decided at the time of grant of final time extension.
- ii) The total amount of PVC shall not exceed 15% of the cumulatively executed contract value. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items and Extra works except items due to quantity variation.

Chapter-VIII, IX and X - Not applicable for this contract.

### TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter-XI: Welding & NDT

#### 11. WELDING, RADIOGRAPHY AND OTHER NON-DESTRUCTIVE TESTING, POST WELD HEAT TREATMENT

#### **11.15 WELDING**

- i. INSTALLATION OF EQUIPMENT INVOLVES GOOD QUALITY WELDING, NDE CHECKS, POST WELD HEAT TREATMENT ETC. CONTRACTOR'S PERSONNEL ENGAGED SHOULD HAVE ADEQUATE QUALIFICATION ON THE ABOVE WORKS.
- **ii.** THE METHOD OF WELDING WILL BE INDICATED IN THE DETAILED DRAWING/DOCUMENTS. BHEL ENGINEER WILL HAVE THE OPTION OF CHANGING THE METHOD OF WELDING AS PER SITE REQUIREMENT.
- BEFORE ANY WELDER IS ENGAGED ON WORK, HE SHALL BE TESTED AND QUALIFIED BY BHEL/CUSTOMER, THOUGH THEY MAY POSSESS THE PREVIOUS CERTIFICATE. BHEL RESERVES THE RIGHT TO REJECT ANY WELDER WITHOUT ASSIGNING ANY REASON. ALL THE EXPENDITURE IN TESTING/QUALIFICATION OF THE CONTRACTOR'S WELDER SHALL BE BORNE BY CONTRACTOR.
- iv. UNSATISFACTORY AND CONTINUOUS POOR PERFORMANCE MAY RESULT IN DISCONTINUATION OF CONCERNED WELDER.
- v. THE WELDED SURFACE SHALL BE CLEANED OF SLAG AND PAINTED WITH PRIMER PAINT TO PREVENT RUSTING, CORROSION. FOR THESE CONSUMABLES LIKE PAINT /PRIMER ETC WILL BE IN THE CONTRACTOR'S SCOPE.
- vi. WELDING ELECTRODES HAVE TO BE STORED IN ENCLOSURES HAVING TEMPERATURE AND HUMIDITY CONTROL ARRANGEMENTS. THIS ENCLOSURE SHALL MEET BHEL SPECIFICATIONS.
- **vii.** WELDING ELECTRODES, PRIOR TO THEIR USE, CALL FOR BAKING FOR SPECIFIED PERIOD AND WILL HAVE TO BE HELD AT SPECIFIED TEMPERATURE FOR SPECIFIED PERIOD. ALSO, DURING EXECUTION, THE WELDING ELECTRODES HAVE TO BE CARRIED IN PORTABLE OVENS.

#### 11.16 NON DESTRUCTIVE EXAMINATION:

i. CONTRACTOR SHALL PROVIDE ALL RESOURCES AND MAKE ALL ARRANGEMENTS FOR THE RADIOGRAPHIC EXAMINATION OF WELDS FOR THIS WORK. FOR REASONS OF SAFETY, INVARIABLY THE RADIOGRAPHY WORK WILL BE CARRIED OUT AFTER THE NORMAL WORKING HOURS AND CLOSE OF OTHER SITE ACTIVITIES ONLY. IN THIS REGARD, THE CONTRACTOR HAS TO ADHERE TO THE SAFETY RULES / REGULATIONS LAID BY BARC AUTHORITIES FROM TIME TO TIME.

## TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter-XI: Welding & NDT

- ii. RADIOGRAPHY INSPECTION OF WELDS SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS AND RECOMMENDATION OF BHEL ENGINEER. THE MINIMUM QUANTUM OF RADIOGRAPHIC INSPECTION SHALL BE AS PER PROVISION OF BHEL'S ERECTION DOCUMENTS. THEY MAY, HOWEVER BE INCREASED DEPENDING UPON THE PERFORMANCE OF THE INDIVIDUAL WELDER AT THE DISCRETION OF BHEL ENGINEER/BOILER INSPECTING AUTHORITY. BIDDER SHALL ALSO ARRANGE THE UT EQUIPMENT WITH RECORDING FACILITY AT HIS OWN COST. UT SHALL BE DONE AS PER REQUIREMENT OF BHEL / CLIENT. RECORDS OF UT SHALL BE PRODUCED & SUBMITTED TO AS PER SITE REQUIREMENT.
- iii. ALL X-RAY / GAMMA RAY FILMS OF WELD JOINTS SHALL BE PRESERVED PROPERLY AND BE HANDED OVER TO BHEL.
- iv. THE FIELD WELDED JOINTS SHALL BE SUBJECT TO DYE-PENETRANT/MPT/RT/ OTHER NON-DESTRUCTIVE EXAMINATION AS SPECIFIED IN THE RESPECTIVE ENGINEERING DOCUMENTS/ AS INSTRUCTED BY BHEL.
- V. WHERE REQUIRED, SURFACE PREPARATION, LIKE SMOOTH GRINDING OF WELDED AREA, PRIOR TO RADIOGRAPHY SHALL BE DONE. IT MAY ALSO BECOME NECESSARY TO ADOPT INTER-LAYER RADIOGRAPHY/MPT/UT DEPENDING UPON THE SITE/ TECHNICAL REQUIREMENT NECESSITATING INTERRUPTIONS IN CONTINUITY OF THE WORK AND MAKING NECESSARY ARRANGEMENTS FOR CARRYING OUT THE ABOVE WORK. THE CONTRACTOR SHALL TAKE ALL THIS INTO ACCOUNT IN HIS OFFER. THE REQUIRED NDT METHOD/PROCEDURE WILL BE DECIDED BY BHEL ENGINEER AT SITE.
- vi. FOR CARRYING OUT ULTRASONIC TESTING OF WELDING JOINTS OF LARGE SIZE, IT WILL BE NECESSARY TO PREPARE SURFACE BY GRINDING AND BUFFING A SMOOTH FINISH AND CONTOUR AS NECESSARY. THE CONTRACTOR'S SCOPE OF WORK INCLUDES SUCH PREPARATION AS INCIDENTAL TO WORK.
- vii. NO SEPARATE PAYMENT FOR ANY NDE ACTIVITIES IS ENVISAGED. ACCORDINGLY, THE OFFERED RATE SHALL BE INCLUSIVE OF COST OF ALL NDE.

#### **11.17 HEAT TREATMENT:**

i. FOR THE PURPOSE OF TEMPERATURE RECORDING OF STRESS RELIEVING PROCESS, THERMOCOUPLES HAVE TO BE ATTACHED TO THE WELD JOINT. THE NUMBER OF TEMPERATURE MEASURING POINTS AND LOCATIONS SHALL BE AS PER THE STANDARDS OF BHEL. THERMOCOUPLES HAVE TO BE ATTACHED USING CAPACITOR DISCHARGE TYPE PORTABLE THERMOCOUPLE ATTACHMENT UNIT. CONTRACTOR SHALL ARRANGE SUFFICIENT NUMBER OF THERMOCOUPLE ATTACHMENT UNITS.

### TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter-XI: Welding & NDT

- ii. CONTRACTOR SHOULD PROVIDE TEMPERATURE INDICATOR / TEMPERATURE RECORDER FOR MEASURING TEMPERATURE DURING PRE-HEATING FOR WELDING OR FOR CONTROLLING TEMPERATURE OF METAL FOR HOT CORRECTION ETC. THE TEMPERATURE RECORDERS SHOULD BE PREFERABLY OF SOLID STATE TYPE.
- iii. HEAT TREATMENT MAY REQUIRE TO BE CARRIED OUT AT ANY TIME (DAY OR NIGHT) TO ENSURE THE CONTINUITY OF THE PROCESS. THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS INCLUDING LABOURER REQUIRED FOR THE SAME AS PER DIRECTIONS OF BHEL.
- iv. IN CERTAIN CASES ONLY THE PRE-HEATING OF WELD JOINTS MAY BE CALLED FOR.
- v. FOR WELD JOINTS OF HEAVY STRUCTURAL SECTIONS, IF HEAT TREATMENT IS REQUIRED, THE SAME SHALL BE CARRIED OUT AS PART OF THE WORK.
- vi. CHECKING EFFECTIVENESS OF STRESS RELIEVING BY HARDNESS TESTS (BY DIGITAL HARDNESS TESTER OR OTHER APPROVED TEST METHODS AS PER BHEL ENGINEER'S INSTRUCTION) INCLUDING NECESSARY TESTING EQUIPMENTS IS WITHIN THE SCOPE OF THE WORK / SPECIFICATION.
- PREHEATING, INTER-PASS HEATING, POST WELD HEATING AND STRESS RELIEVING AFTER WELDING ARE PART OF ERECTION WORK AND SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH BHEL ENGINEER'S INSTRUCTIONS. WHERE THE ELECTRIC RESISTANCE HEATING METHOD IS ADOPTED CONTRACTOR SHALL MAKE ALL ARRANGEMENT INCLUDING HEATING EQUIPMENT WITH AUTOMATIC RECORDING DEVICES, ALL HEATING ELEMENTS, THERMOCOUPLES AND ATTACHMENT UNITS, GRAPH SHEETS, THERMAL CHALKS, & INSULATING MATERIALS LIKE MINERAL WOOL, ASBESTOS CLOTH, CERAMIC BEADS, ASBESTOS ROPES ETC, REQUIRED FOR ALL HEATING AND STRESS RELIEVING WORKS.
- viii. ALL THE RECORDED GRAPHS FOR HEAT TREATMENT SHALL BE HANDED OVER TO BHEL/ IBR AUTHORITIES AND DUE CLEARANCES OBTAINED.
- ix. RESULTS OF THESE PROCESSES SHALL BE VERIFIED/ VALIDATED AS PER REQUIREMENTS OF BHEL / CLIENT.

### TECHNICAL CONDITIONS OF CONTRACT (TCC) Chapter-XII PRESERVATION & PROTECTION OF COMPONENTS

#### 12.0 Preservation & Protection of Components

At all stages of work, equipment's / materials in the custody of contractor will have to be preserved as per the instructions of BHEL. Necessary preservation agents including the primer & paint, for the above work shall be provided by the contractor.

### ANNEXURE - A

	Tentative requirement for FACTORY for Fabrication of Steel Structures							
S. No	Characteristic	Check List						
1.	License	A. Availability of factory registration licence ,GST Registration etc.						
2.	Quality management	A. Availability of work instruction/procedures for critical activities & its implementations.						
3.	Raw material control	<ul> <li>A. Incoming ram material acceptance -MTC review records available</li> <li>B. Availability of material correlation/identification procedures &amp; its implementations by hard punching/by record keeping/painting etc</li> <li>C. Storage/stacking of raw material-in organized manner or elevated platform with proper identification</li> </ul>						
4.	Material handling	<ul> <li>A. Availability of EOT crane/ Gantry Crane of required capacity to handle maximum Load required for movement.</li> <li>B. Availability of gantry cranes/Hydra/other handling equipment's capable to handle proposed heaviest component(if required other than EOT crane)</li> </ul>						
5.	Handling of weld consumables	<ul> <li>A. Availability of calibrated baking oven, holding oven &amp; portable ovens (in sufficient quantities)</li> <li>B. Proper storage of weld consumables or racks &amp; other controlled conditions</li> <li>C. Weld consumables handling: Issue/return of electrodes from store properly documented/recorded.</li> </ul>						
6.	Welding qualification	<ul> <li>A. Availability of qualified WPS &amp; PQR</li> <li>B. Availability of sufficient no of qualified welders</li> <li>C. Availability of welder performance monitoring/defect rate monitoring systems</li> </ul>						
7.	Machinery	<ul> <li>A. Availability of sufficient no of SAW welding machines</li> <li>B. Availability of sufficient number of GTAW welding machines</li> <li>C. Availability of sufficient number of welding machinery-SMAW/GTAW/FCAE etc.</li> <li>D. Availability of CNC plasma/torchy cutting machines/profile cutting machines</li> <li>E. Availability of PUG/Gas cutting machines</li> <li>F. Availability of radial drilling machine-capacity matching to proposed thickness &amp; size of component</li> <li>G. Availability of weld edge preparation/bevel end cutting machines</li> </ul>						
	Spare/Inspection	A. Availability of said levelled floor for trail assembly adequate for proposed size						
8.	Area	of components with required material handling capacity						

### ANNEXURE - A

	Tentative red	quirement for FACTORY for Fabrication of Steel Structures							
S. No	Characteristic	Check List							
		A. Availability of sufficient size covered shed with concrete platform for							
		fabrication activities							
		B. Availability of beam straightening machine							
	NDT/HEAT	C. Availability of DPT/MPI facility-in house /outsourced to other agency							
9.	treatment/hydr/leak	D. Availability of RT facility-in house/outsourced (as applicable)							
	test facility	E. Availability of UT facility-in house/outsourced (however done inside vendors							
		own works)							
		F. Availability of RT film viewer/dark room, densitometer, reference photograph							
		etc. if RT is done							
		A. Availability of qualified & experience manpower for quality							
	Professional	B. availability of qualified welding inspectors							
10.	qualification/quality	C. Availability of DP/MPT Level II qualified personal							
	manpower	D. Availability of RT level II qualified personal if applicable							
		E. Availability of UT level II qualified personal if required							
		A. Availability of in house/outsourced testing facilities for chemical testing by							
		spectro/PMI							
		B. Availability of in house/outsourced testing facilities like UTS%							
11.	Testing facility	elongation/ben/impact testing /hardens etc.							
11.	resting facility	C. Availability of calibrated tape/laser beam instruments to measure long column							
		length for proto /assembly/							
		D. Availability of calibrated weld gauge, vernier, micrometer & measuring							
		instruments							
		A. Availability of covered shot/grit blasting facility with air compressor,							
12.		mechanism to segregate fine shot (sievers) shots/grits re-collection							
	Surface cleaning &	mechanism, surface compactor/surface roughness meter etc.							
	painting	B. Availability of in house painting facility (separate covered area) airless gun for							
		painting etc.							
		C. Availability of in house testing facility, paint thickness & paint adhesion							

### Chapter-XIII BOQ-Schedule of Rates & Quantities

					Weightage
S. No.	Description of Material	Pkg details	Unit	Quantity	Factor
1	Detailed drawing preparation based on Input design drawings provided by BHEL/PEM & ISG and getting approval from BHEL PEM, BHEL ISG /BHEL customer ,Fabrication and supply of Steel Structures as per the approved detailed drawings .(Procurement of Raw Material including Steel is in the scope of Bidder) of various ongoing sites of the BHEL				
2	Supply of shop fabricated structural steel of grade E350/E250 in rolled section / built up section / combination of both (shop connections (factory fabricated) will be welded type and field connections will generally be bolted type unless otherwise specified) conforming to IS:2062 and technical specification, pipes conforming to IS:1161/IS:1239, monorails, stays, ladders, etc. in columns, beams, gantry girders, bunkers, silo supporting structures, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, etc., including blast cleaning, providing and applying primer, providing and applying intermediate & finish coats of paint as per specification (This item rate is inclusive of blast cleaning and providing & applying primer coats, providing & applying intermediate coats of paint, providing and applying finish coats of paint, connection design & preparation of fabrication drgs, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment(weight of welds not payable.), including, assembly, edge preparation, , testing of welders, inspection of welds, visual inspection, non-destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, rectification wherever if required (at no extra cost to BHEL), dismantling and removal of all temporary structures (weight of temporary structures not payable) etc. all complete as per technical specification. Including appointment of a drawing detailing agency, approved by BHEL, for detailed drawings preparation and approval of	Pkg-A	MT	600	0.9888843061130
3	Preparation of detail drawings on the basis of the Design drawings in Tekla model, preparation of marking list, shipping list, connection details, bolt details, BOM preparation,		МТ	600	0.0111156938870

Annexure-1

#### **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

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(hereinafter referred to as "Contract"). 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 panel of Independent External Monitor(s) (IEMs), 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. The Bidder(s)/ Contractor(s) commits himself to observe the following principles during 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 Indian Penal Code (IPC) and Prevention of Corruption 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 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. 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.
  - 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

#### 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 Bidder(s)/ Contractor(s) from the tender process, terminate the contract, if already awarded, exclude from future business dealings and/ or take action as per the separate "Guidelines on Banning 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 before award / order acceptance 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 is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above , the Bidder(s)/ Cotractor (s) transgression through a violation of Section 2 above shall be construed breach of contract and the Principal shall be-entitled to demand and recover from the Contractor an amount equal to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee , whichever is higher, as damages, in addition to and without prejudice to its right to demand and recover compensation for any other loss or damages specified elsewhere in the contract.

#### **Section 5 - Previous Transgression**

- The Bidder declares that no previous transgressions occurred in the last 3 (three) 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 or action can be taken as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

#### Section 6 - Equal treatment of all Bidder (s)/ Contractor (s) / Sub-contractor (s)

- 6.1 The Principal will enter into Integrity Pacts with identical conditions as this Integrity Pact with all Bidders and Contractors.
- 6.2 In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor(s) and ensure that all Sub-contractors also sign the Integrity Pact.
- 6.3 The Principal will disqualify from the tender process all Bidders who do not sign this Integrity Pact or violate its provisions.

#### Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

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 panel of Independent External Monitor (s) (IEMs) for this Integrity Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.
- 8.2 The IEMs are 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 IEMs shall be provided access to all documents/ records pertaining to the Contract, for which a complaint or issue is raised before them as and when warranted. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 8.4 The Principal will provide to the IEMs 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 IEMs the option to participate in such meetings.

- 8.5 The advisory role of IEMs is envisaged as that of a friend, philosopher and guide. The advice of IEMs would not be legally binding and it is restricted to resolving issues raised by a Bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some Bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of Contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to the CMD, BHEL at the earliest. They may also send their report directly to the CVO, in case of suspicion of serious irregularities requiring legal/ administrative action. Only in case of very serious issue having a specific, verifiable Vigilance angle, the matter should be reported directly to the Commission. IEMs will tender their advice on the complaints within 30 days.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the IEMs and its terms and conditions.
- 8.9 IEMs should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the Prinicpal should be looked into by the CVO of the Principal.
- 8.10 If the IEMs have reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code / Prevention of Corruption 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 IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 After award of work, the IEMs shall look into any issue relating to execution of Contract, if specifically raised before them. As an illustrative example, if a Contractor who has been awarded the Contract, during the execution of Contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs. Issues like warranty/ guarantee etc. shall be outside the purview of IEMs.
- 8.12 However, the IEMs may suggest systemic improvements to the management of the Principal, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.
- 8.13 The word `Monitor' would include both singular and plural.

#### **Section 9 - Pact Duration**

- 9.1 This Integrity Pact shall be operative from the date this Integrity Pact is signed by both the parties till the final completion of contract for successful Bidder, and for all other Bidders 6 months after the Contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.
- 9.2 If any claim is made/ lodged during currency of this Integrity Pact, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

#### **Section 10 - Other Provisions**

- 10.1 This Integrity Pact is subject to Indian Laws and exclusive jurisdiction shall be of the competent Courts as indicated in the Tender or Contract, as the case may be.
- 10.2 Changes and supplements as well as termination notices need to be made in writing.
- 10.3 If the Bidder(s)/ Contractor(s) is a partnership or a consortium or a joint venture, this Integrity Pact shall be signed by all partners of the partnership or joint venture or all consortium members.
- 10.4 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- Only those bidders / contractors who have entered into this Integrity Pact with the Principal would be competent to participate in the bidding. In other words, entering into this Integrity Pact would be a preliminary qualification.
- In the event of any dispute between the Principal and Bidder(s)/ Contractor(s) relating to the Contract, in case, both the parties are agreeable, they may try to settle dispute through Mediation before the panel of IEMs in a time bound manner. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as the terms & conditions of the Contract. The fees/expenses on dispute resolution through mediation shall be shared by both the parties. Further, the mediation proceedings shall be confidential in nature and the parties shall keep confidential all matters relating to the mediation proceedings including any settlement agreement arrived at between the parties as outcome of mediation. Any views expressed, suggestions, admissions or proposals etc. made by either party in the course of mediation shall not be relied upon or introduced as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the dispute that is the subject of mediation proceedings. Neither of the parties shall present IEMs as witness in any Alternative Dispute Resolution or judicial proceedings in respect of the dispute that was subject of mediation.

#### Clause on IP in the tender

#### Integrity Pact (IP)

(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

SI	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in

- (b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.
- (c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

#### Note:

No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

Details of contact person(s):

(1)	(2)				
Name: P K Nagendra	Name: Biraj Roy				
Deptt: PURCHASE	Deptt: PURCHASE				
Address: PSWR-HQ, NAGPUR	Address: PSWR-HQ, NAGPUR				
Phone: (Landline/ Mobile)	Phone: (Landline/ Mobile)				
	9587886706				
Email: pn@bhel.in	Email: biraj@bhel.in				
Fax:	Fax:				

#### Annexure-2

#### 2.0 Performance Bank Guarantee (PBG):

- ❖ The Successful Bidder has to furnish PBG as per format provided.
- ❖ The Successful Bidder has to submit 5 % of the contract value as Performance Bank Guarantee (PBG) for each sub Purchase Order Value (excluding taxes) issued under the framework agreement at the time of submission of first invoice of the sub Purchase Order. Validity of PBG shall be revised by the Successful Bidder from time to time.
- ❖ The Successful Bidder shall warrant that the supplied products comply fully with the drawings and other technical requirements for a warranty period of 18 months, from the site acknowledgement date of last dispatch.
- ❖ Validity of PBG: From [the date of submission of PBG] till [Site acknowledgement date of last dispatch + 6 months + 90 days (Claim period)
- ❖ The Performance Bank Guarantee should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the PBG is submitted or is to be acted upon or the rate prevailing in the state where the PBG is executed, whichever is higher

#### BANK GUARRENTEE FOR PERFORMANCE SECURITY

Bank Guarantee No: Date:
To NAME & ADDRESSES OF THE BENEFICIARY:
Dear Sirs,
In consideration of <u>Bharat Heavy Electricals Limited</u> (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at
Contractor / Supplier) with its registered office at² hereinafter referred to as the <u>' Vendor /</u>
<u>Contractor / Supplier '</u> , which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No dated3
valued at Rs4 (Rupees)/FC(in words) for
5 (hereinafter called the 'Contract') and the <u>Vendor / Contractor / Supplier</u> having agreed to provide a Contract Performance Bank Guarantee, equivalent to% (Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,
we, (hereinafter referred to as the Bank), having registered/Head office at and inter alia a branch at being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer any sum or sums upto a maximum amount of Rs 6 (Rupees) without any demur, immediately on first demand from the Employer and without any reservation, protest, and recourse and without the Employer needing to prove or demonstrate reasons for its such demand.
Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the <u>Vendor / Contractor / Supplier</u> in any suit or proceeding pending before any Court or Tribunal, Arbitrator or any other authority, our liability under this present being absolute and unequivocal.
The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the <u>Vendor / Contractor / Supplier</u> shall have no claim against us for making such payment.
We the bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract/satisfactory completion of the performance guarantee period as per the terms of the Contract and that it shall

been fully paid and its claims satisfied or discharged.
WeBANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Vendor / Contractor / Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Vendor / Contractor / Supplier and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Vendor / Contractor / Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Vendor / Contractor / Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.
The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the <u>Vendor / Contractor / Supplier</u> and notwithstanding any security or other guarantee that the Employer may have in relation to the <u>Vendor / Contractor / Supplier</u> 's liabilities.
This Guarantee shall remain in force upto and including $\_\7$ and shall be extended from time to time for such period as may be desired by Employer.
This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the <u>Vendor / Contractor / Supplier</u> but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.
Unless a demand or claim under this guarantee is made on us in writing on or before the $\_\_\_^8$ we shall be discharged from all liabilities under this guarantee thereafter.
We, BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.
Any claim or dispute arising under the terms of this Guarantee shall be subject to the exclusive jurisdiction of the court at NAGPUR only.
Notwithstanding anything to the contrary contained hereinabove:
a) The liability of the Bank under this Guarantee shall not exceed6
b) This Guarantee shall be valid up to <sup>7</sup>
c) Unless the Bank is served a written claim or demand on or before8 all rights under this
guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this
guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.
We, Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.
For and on behalf of (Name of the Bank)

Place of Iss	ıe			
<sup>1</sup> NAME AN	D ADDRESS OF EMPLOYER	R i.e. Bharat Heavy Electrica	ls Limited	
<sup>2</sup> NAME AN	D ADDRESS OF THE VEND	OR /CONTRACTOR / SUPPI	JER.	
<sup>3</sup> DETAILS	ABOUT THE NOTICE OF AV	VARD/CONTRACT REFERE	NCE	
4 CONTRAC	T VALUE			
5 PROJECT	SUPPLY DETAILS			
<sup>6</sup> BG AMOU	NT IN FIGURES AND WORI	OS		
7 VALIDITY	DATE			
<sup>8</sup> DATE OF	EXPIRY OF CLAIM PERIOD			

#### **Annexure-3**

#### PRICE VARIATION COMPENSATION (PVC)

- 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, WELDING ROD, CEMENT, STEEL, MATERIALS, Price Variation Formula as described herein shall be applicable. PVC is applicable from the Purchase Order date and during the extension period as well (if any), *subject to other conditions as described in this section.*
- 2) 85% component of Contract Value shall be considered for PVC calculations and remaining 15% shall be treated as fixed component. The basis for calculation of price variation in each category, their component, Base Index shall be as under:

SL NO.	CATEGORY	BASE INDEX	PERCENTAGE COMPONENT ('K') MECHANICAL / FABRICATION PACKAGES
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)	18
ii)	HIGH SPEED DIESEL OIL	Name of Commodity: HSD  Commodity Code: 1202000005 (See Note E)	2
iii)	WELDING ROD	Name of Commodity: MANUFACTURE OF BASIC METALS  Commodity Code: 1314000000 (See Note E)	5
iv)	STEEL (Structural and Reinforcement Steel)	Name of Commodity: MILD STEEL: LONG PRODUCTS  Commodity Code: 1314040000 (See Note E)	55
v)	Paint	Name of Commodity: Paint Commodity Code: 1310050000	5

#### Note:

A) 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: http://eaindustry.nic.in/home.asp). Revisions in the index or commodity will be re adjusted accordingly.

Payment/recovery due to variation in index shall be determined on the basis of the following notional formula in respect of the identified COMPONENT ('K') viz LABOUR, HIGH SPEED DIESEL OIL, WELDING ROD, CEMENT, STEEL, MATERIALS.

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

Xo

Where

- P = Amount to be paid/recovered due to variation in the Index for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials
- K = Percentage COMPONENT ('K') applicable for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials
- R = Value of work done for the billing month (Excluding Taxes and Duties if payable extra)
- $X_N$  = Revised Index for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials for the billing month under consideration
- Xo = Index for Labour, High Speed Diesel Oil, Welding Rod, Cement, Steel and Materials as on the Base date
- 4) Base date shall be the calendar month of the 'Last date of bid submission'.
- 5) PVC shall not be payable for the ORC amount, Supplementary/Additional Items, Extra works. However, PVC will be payable for items executed under quantity variation of BOQ items under originally awarded contract.
- 6) The contractor shall furnish necessary monthly bulletins in support of the requisite indices from the relevant websites along with his Bills.
- 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.
- 8) PVC shall be applicable for the entire original contract period plus the extended period, i.e. for the complete execution period, as follows:

#### For PVC computation of the nth month:

Let the cumulative delay attributable to the Contractor is Dn in the nth month.

Considering Rn as the billing value for the nth month, PVC for the nth month shall be calculated as follows:

a) PVC for the portion of Rn for an amount of D(n-1) shall be payable as per indices for the (n-1)th month.

In case D(n-1) is greater than Rn, then entire Rn shall be payable as per indices for the (n-1)th month and the balance portion of D(n-1) shall be adjusted from R(n+1) of the (n+1)th month and will be payable as per indices for the (n-1)th month. The above process shall be continued for subsequent month(s) also till full D(n-1) is consumed.

b)

i) PVC shall not be applicable for time extension provided for the delays solely attributable to the contractor. No PVC is payable during the period of Provisional Time Extension till grant of final time extension. Applicability of PVC will be decided at the time of grant of final time extension.

PVC for the balance portion of Rn shall be payable as per indices for the nth month

ii) The total amount of PVC shall not exceed 15% of the cumulatively executed contract value. Executed contract value for this purpose is exclusive of PVC, ORC, Supplementary/Additional Items and Extra works except items due to quantity variation.

# CORPORATE QUALITY ASSURANCE VENDOR'S PROPOSAL CUM EVALUATION REPORT

	ANNEXURE- 4 (P4F1R0)											
*Supplier has to submit all the documents as per the annexures cited here and naming philosophy must be as												
presc	ribed in this docume	nt										
Ref No	):					Date:						
i.	Main Contractor	Bharat Heav	y Electricals Limite	ed								
ii.	Project											
iii.	Package Name						Packag	e No				
iv.	Proposed Item/Scope	of Sub-conti	racting									
v.	Item covered under	Schedu	le-1			As p	er contr	act clause No	)-			
		Schedu	le-2									
vi.	If item is Schedule-1 at	nd proposed	d sub-vendor is									
	indigenous, Main Cont											
	contractual provisions		_									
vii.	Name and Address of t	he propose	d Sub-vendor's w	vorks								
viii.	PO placement date/ St	art of man	ıfacturina (if seli	f-man	ามfactu	red) as r	er I.2 ne	etwork		Under eva	luation	
ix.	Item Description	-	otal quantity of		_	tity pro			ne fo	or quantity		ments as
20	(Type/Size/Rating/Sco		roposed item		_							
	Sub-Contracting)		nvisaged in this	procured from proposed   per project schedule & wheth   sub-vendor   (Nos/   proposed Sub-vendor equipped								
	Sub-Contracting)		_						e capacity to supply proposed			
		_	ackage (Nos/						uantity in time			
			Running Meters/ Tgs/ Tons etc)		/Tons etc) order (			quan	uditity in time			
	Supply experience of t	<b>h</b> a nuanasa	d aub wanda <i>n G</i> in	als di		ulias ta 1	Main Co.	atuaatan if a	) <i>6</i>	'ou similau i	tom /222	no of au
х.			•								-	
	contracting, for last 3	s years (No	te:- Uniy reieva	nt ex <sub>[</sub>	perienc	e aetan:	s w.r.t.	proposea ite	m/sc	cope of sub	contract	ing to be
	brought out here)	_						T			1	
	Project/Package	Custome	er Name		plied		Item	PO ref		pplied	Date of	Supply
						ing/Mod		no/date	Qu	antity		
				/Ca	pacity/	Size etc)						
											Ţ	
	nfirm that as per our a			b-ven	dor ha	s requisi	ite capai	l bilities & sup	ply e	experience (	and is su	itable for
	ying the proposed item <sub>/</sub>		b-contracting.	C	harat 17			Cia	1		D-4	
Name	:	Desig:		cont	tact No.	•		Sign:		1	Date:	

Company's Seal/Stamp:-

# CORPORATE QUALITY ASSURANCE VENDOR QUESTIONNAIRE

	ANNEXURE-5					
*Sup	plier has to submit all the documents as per the annexures	cited here and naming philosophy must be as				
prescribed in this document						
i.	Item/Scope of Sub-contracting					
ii.	Address of the registered office	Details of Contact Person				
		(Name, Designation, Mobile, Email)				
iii.	Name and Address of the proposed Sub-vendor's works	Details of Contact Person:				
	where item is being manufactured	(Name, Designation, Mobile, Email)				
iv.	Annual Production Capacity for proposed item/scope of					
	sub-contracting					
v.	Annual production for last 3 years for proposed					
	item/scope of sub-contracting					
vi.	Details of proposed works					
1.	Year of establishment of present works					
2.	Year of commencement of manufacturing at above works					
3.	Details of change in Works address in past (if any)	1				
4.	Total Area					
	Covered Area					
5.	Factory Registration Certificate	(Details attached at Annexure - F2.1 )				
	Design/ Research & development set-up	Applicable / Not applicable if manufacturing is as per Main				
6.	(No. of manpower, their qualification, machines & tools	Contractor/purchaser design)				
	employed etc.)	(Details attached at Annexure - F2.2)				
		(if applicable)				
	Quantil anganization Chart with Mannayan Details	(Details attached at Annexure – F2.3)				
7.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc)	(жения анисней иглинелите – 1.2.3)				
	(Designizatingaciaring/Quality etc)					
I						

# CORPORATE QUALITY ASSURANCE VENDOR QUESTIONNAIRE

8.	After sales service set up in India, in case of foreign	sub-	Applicable / I	Not applicable		
	vendor		(Details attac	hed at Annexure – F2.	4)	
	(Location, Contact Person, Contact details etc.)					
9.	Manufacturing process execution plan with flow	chart	(Details attac	hed at Annexure – F2.	5)	
	indicating various stages of manufacturing from	raw				
	material to finished product including outsourced proce	ess, if				
	any					
10.	Sources of Raw Material/Major Bought Out Item		(Details attac	hed at Annexure – F2.	6)	
			(Dataila attac	had at Amaguna E2	7)	
11.	Quality Control exercised during receipt of	raw	(Detaits attac	(Details attached at Annexure – F2.7)		
	material/BOI, in-process, Final Testing, packing					
12.	Manufacturing facilities		(Details attac	hed at Annexure – F2.	8)	
12.	(List of machines, special process facilities, material handling etc.)					
13.	Testing facilities		(Details attached at Annexure – F2.9)			
	(List of testing equipment)					
14.	If manufacturing process involves fabrication then- List of qualified Welders List of qualified NDT personnel with area of specialization		Applicable / Not applicable  (Details attached at Annexure – F2.10)  (if applicable)			
15.	List of out-sourced manufacturing processes with Sub-		Applicable / Not applicable			
	Vendors' names & addresses		(D. H. W. J. J. A. F. F. H.)			
		(Details attached at Annexure. –F2.11) (if applicable)				
			(ij appiicabie	,		
	Complementaries I. Proposed II.		David and A. F2 12			
16.	Supply reference list including recent supplies		Details attached at Annexure – F2.12 (as per format given below)			
Project	/ Customer   Supplied Item (Type/Rating/Model	PO ref i		Supplied Quantity	Date of Supply	
packag	11				- ***	
ļ.,		., . I	(4): -	72.50		
17.		dback	(Attached at a	unnexure - F2.13)		
	letter/certificates/End User Feedback					

# CORPORATE QUALITY ASSURANCE VENDOR QUESTIONNAIRE

21.	Product technical catalogues for proposed item (if available)	(Details attached at Annexure – F2.17)			
	(if available)				
20.	Copy of ISO 9001 certificate	(Attached at Annexure – F2.16)			
		(Details attached at Annexure – F2.15) (if applicable)			
19.	Statutory / mandatory certification for the proposed product	Applicable / Not applicable			
	Note:- Reports need not to be submitted	(if applicable)			
18.	No, Agency, Date of testing) for the proposed product (similar or higher rating)	(Details attached at Annexure – F2.14)			
18.	Summary of Type Test Report (Type Test Details, Report	Applicable / Not applicable			

Company's Seal/Stamp:-