



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Limited

(भारत सरकार का उपक्रम / A Government of India Undertaking)

CIN: L74899DL1964GOI004281

पावर सेक्टर - पश्चिमी क्षेत्र / Power Sector Western Region

श्रीमोहिनी कॉम्प्लेक्स, 345, किंग्सवे नागपुर - 440001 फोन: 0712-2858695 / 601 / 600
Shree Mohini Complex, 345 Kingsway Nagpur - 440001, Phone: 0712-2858695 / 601 / 600

TENDER

Volume - IA: Technical Bid

E - Tender No. 2501105 Date 08-10-2025 comprising of following:

Salient Details of NIT		
S. No.	Issue	Description
1.	Job	Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu.
2.	E - Tender No	2501105
3.	Details of Tender Document	
3.1	Volume _IA _ Technical_bid	NIT & Technical Conditions of contract
3.2	Volume_IA_Technical_bid_Appendix-I (Part of Vol-IA)	Additional Terms &Condition
3.2	Volume _IA _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
4.	Issue of Tender Documents	Date: 15-10-2025 Time: 15:00 hrs https://eprocurebhel.co.in/nicgep/app (Tender documents will be available for downloading from BHEL e-Procurement website till due date of submission)
5.	Due Date Of Offer Submission	Date: 15-10-2025 Time: 15:00 hrs https://eprocurebhel.co.in/nicgep/app Offer to be submitted in online only through e-procurement Portal. (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 (Techno-Commercial Bid)	Date: 15-10-2025 Time: 17:00 Hrs Notes:

Salient Details of NIT		
		<i>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.</i>
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	<p>15-10-2025</p> <p><i>Along with soft version also, addressing to undersigned & to others as per contact address given below.</i></p> <p><i>Bidders may consider to seek clarifications on the e-tender portal---</i></p> <p><i>https://eprocurebhel.co.in/nicgep/app</i></p>
14.	Integrity Pact & Details of Independent External Monitor (IEM)	As per Annexure-1 (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** signed is to be uploaded with the Techno Commercial offer **on e-tender portal <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 **E-Procurement Portal Inputs**

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

0120-4001 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 - support-eproc@nic.in

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:

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

SPECIAL NOTE: 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 Techno-commercial 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 be 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 Validity of the offer shall be for **03 months** from the latest due date of offer submission or specified otherwise in GCC/SCC of tender.

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:

- Contract Agreement with its Amendments
- Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL
- Technical Conditions of Contract (TCC) - Volume- I A (All parts)
- Notice Inviting Tender (NIT)
- Price Bid – Volume – II
- Techno-Comml – Compliance – Volume - I C
- General Conditions of Contract (GCC)

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)

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:

- ❖ GM Purchase, Email id: vkarya@bhel.in. Ph: +91 – 712 – 2858659
- ❖ DGM PMX, Email id: praveen.pandey@bhel.in, Ph: +91 - 9574015556
- ❖ Sr. Manager Purchase, Email: biraj@bhel.in, Ph: +91 – 712 – 2858742
- ❖ Sr. Engineer Purchase, Email id: jayant@bhel.in, Ph: +91 - 7018702036

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.

- ❖ 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: http://www.bhel.com/vender_registration/pdf/Suspension_guidelines_adbridged.pdf

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

2. 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."

3. 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.

4. 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:

Sl.	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**

5. 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.

6. 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. 1364(E) dated 21.03.2025 issued by Ministry of MSME regarding change in definition of Micro, Small & Medium Enterprises (MSMEs) applicable w.e.f. 01.04.2025. 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 two crore rupees and turnover does not exceed ten crore rupees
2	Small	a small enterprise, where the investment in plant and machinery or equipment does not exceed twenty five crore rupees and turnover does not exceed one hundred crore rupees
3	Medium	a medium enterprise, where the investment in plant and machinery or equipment does not exceed one hundred twenty five crore rupees and turnover does not exceed five 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.

Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.

Type under MSE	SC/ST owned	Women owned	Others (excluding SC/ ST & Women Owned)
Micro			
Small			

Note: If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.

a) MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) only if they submit along with the offer, attested copies of either Udyam Registration. Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of supporting document in GeM portal will lead to consideration of their bids at par with other bidders. No benefits shall

be applicable for this enquiry if the above required documents are not uploaded at the time of bid submission. Documents submitted by the bidder shall be verified by BHEL for rendering the applicable benefits

7. 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
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 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 <https://eprocurebhel.co.in/nicgep/app>**.

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.

8. 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".
- ❖ 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.

9. 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 :

- I. 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. The Competent Authority for the purpose of this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of

several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Clause means:-

- a. An entity incorporated established or registered in such a country; or
- b. A subsidiary of an entity incorporated established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

IV. The beneficial owner for the purpose of (III) above will be as under:

- 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company.
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.
- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person has ownership of or entitlement to more than fifteen percent of the property or capital or profits of the such association or body of individuals.
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person. Note:

- (i) The bidder shall provide undertaking for their compliance to this Clause, in the format provided.

Registration of the bidder with Competent Authority should be valid at the time of submission of bids and at the time of acceptance of the bids.

10. Conflict of Interest among Bidders/ Agents:

"A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) they have controlling partner (s) in common;
or
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
- c) they have the same legal representative/agent for purposes of this bid; or
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid; or
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
 - 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 - 2. Indian/foreign agent on behalf of only one principal;
 or
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

Treatment of cases regarding conflict of interest:

The bidder notes that a conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations:

- I. If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly;
- II. The bidder (or his allied firm) provided services for the need assessment/ procurement planning of the Tender process in which it is participating;
- III. Procurement of goods directly from the manufacturers/ suppliers shall be preferred. However, if the OEM/ Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/

supplier or the manufacturer/ supplier could bid directly but not both. In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorised distributor (with/ or without the OEM) from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate.

IV. A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a sub-contractor in more than one bid if he is not bidding independently in his own name or as a member of a JV.

The Bidder declares that they have read and understood the above aspects, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. 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. In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/ guidelines

11. Limitation of Liability:

"Notwithstanding anything to the contrary in this Contract or LOA or Work Order or any other mutually agreed document between the parties, the maximum liability, for damages, of the contractor, its servants or agents, shall under no circumstances exceed an amount equal to the Price of the Contract or the Work Order. Neither party shall be liable to the other for any indirect or consequential loss or damage, including but not limited to loss of use, loss of profits, or loss of contracts, or special, punitive, exemplary losses whatsoever, arising out of or in connection with this contract.

This shall not be applicable on the recoveries made by Customer from BHEL on account of Contractor, any other type of recoveries for workmanship, material, T&P etc. due from the contractor."

This shall be the part of General Conditions of Contract for this tender.

12. BREACH OF CONTRACT, REMEDIES AND TERMINATION:

12.1 The following shall amount to breach of contract:

- I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.
- II. The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.
- III. The Supplier/Vendor delivers equipment/ material not of the contracted quality.
- IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.
- V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.

VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.

VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.

VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.

IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.

X. Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner

Note-Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.

In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract

Remedies in case of Breach of Contract

- I. Wherein the period as stipulated in the notice issued under clause 12.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.
- II. Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.

III. wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:

IV. In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.

V. If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:

a) from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.

b) If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.

VI. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor.

VII. It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.

VIII. In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

Note:

1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:

(a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.

(b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners; or sole proprietorship firm owned by any partner(s) as a sole proprietor.

LD against delay in executed supply in case of Termination of Contract:

LD against delay in executed supply shall be calculated in line with LD clause no. 18.0 below, for the delay attributable to Supplier/Vendor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of supply till termination of contract.

Method for calculation of "LD against delay in executed supply in case of termination of contract" is given below.

- i. Let the time period from scheduled date of start of supply till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1
- ii. Let the value of executed supply till the time of termination of contract= X
- iii. Let the Total Executable Value of supply for which inputs/fronts were made available to Supplier/Vendor and were planned for execution till termination of contract = Y
- iv. Delay in executed supply attributable to Supplier/Vendor i.e. $T2 = [1 - (X/Y)] \times T1$
- v. LD shall be calculated in line with LD clause (clause 18.0) of the Contract for the delay attributable to Supplier/Vendor taking "X" as Contract Value and "T2" as period of delay attributable to Supplier/Vendor.

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)

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:

Format - III

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

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

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

Dear Sir,

Sub: 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 (*specify the name of the organization here*) 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.

Format - IV

Undertaking for Indian Bidders

(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 REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS

Ref: Tender Specification No:

I/We, _____ 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:

Format - V
DECLARATION

Date: _____

To	_____
	BHEL, _____

Email:	_____

Sub: **Details of related firms and their area of activities**

Dear Sir/ Madam,

Please find below details of firms owned by our family members that are doing business/ registered for same item with BHEL, _____ (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: I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards,

(_____)

From: M/s _____
 Supplier Code: _____
 Address: _____

Format - VI

Declaration for prevention/elimination of suspected cartel formation between suppliers

(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 or 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:

Format -V

(Declaration/Undertaking regarding Conflict of Interest among Bidders)

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

To,

GM/Purchase
BHEL PSWR
Floor No. 5 & 6, Shree Mohini Complex,
345-Kingsway, Nagpur-440001

Dear Sir/Madam,

Sub: Declaration/Undertaking regarding Conflict of Interest among Bidders

E-Tender Specification No: 2501105

Job: Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu

The Bidder declares that they have read and understood the aspects stated in **SI No. 3 of Annexure-12 above**, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. 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.

In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/ guidelines.

**Signature of the Authorised Signatory
(With Name, Designation and Company seal)**

Place:

Date:

Format - VI

For Bid Security Declaration

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

To,

GM/Purchase
BHEL PSWR
Floor No. 5 & 6, Shree Mohini Complex,
345-Kingsway, Nagpur-440001

Dear Sir/Madam,

Sub: Bid Security Declaration

E-Tender Spec No: 2501105

JOB Description : Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu

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:

I. Pre-Qualification Criteria (PQR)

Bidder shall essentially meet all the Qualifying Requirements cited below:

A	<p>A.1 Bidder should have Executed minimum 50 MT fabrication of the Structures/Ducts in last 12 months. Towards above, bidder must submit the following:</p> <ul style="list-style-type: none"> • Purchase/Work orders and proof of delivery/supply of fabricated Ducts/structural material of at least 50 MT in last 12 months from the latest date of technical bid opening. • Factory Registration Certificate / Factory License
B	<p>Financial Turnover</p> <p>Bidders must have achieved an average annual financial turnover (Audited) of Rs. 1.5 Crore or more, over the last three Financial Years (FY) i.e. 2021-2022, 2022-23 and 2023-2024'.</p>
C	<p>Submission of Integrity Pact duly signed (IP)</p> <p>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.</p>
D	<p>Customer Approval – Not Required.</p>

Explanatory Notes for PQR

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
 - 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. Definition of startup shall be in line with Gazette Notification No DL 33004/99 dated 19.02.2019 with subsequent amendments, if any.
- b. Norms for startups Medium Enterprises in Public Procurement shall be in line with OM no. F.20-2/2014-PPD(pt) dtd 27/07/2017 and O.M. NO. F.20/2/2014-PPD(pt.) dated 20.09.2016 issued GOI, Ministry of finance, Department of expenditure, Procurement policy division, along with D.O. No. 12(11)/2017-SI dtd 22/06/2017 of DoE.
- c. Bidder shall keep updated themselves with all related orders/schemes issued by the Govt from time to time, DPIIT portal for start-ups may also be checked.
- d. Bidder shall submit Startup recognition certificate (no.) issued by competent authority which shall be checked for authenticity.
- e. Startup bidders shall be exempted from the payment of EMD.

4.1. Provision in the tender document regarding relaxation in prior experience and turnover criteria for Startups & MSE's as mentioned below:

(a) Technical Pre-Qualifying Requirement (PQR) for prior experience:

i. Technical pre-qualifying requirements is relaxed by 50% (quantities /amount) of the original Pre -Qualifying Requirement specified in the tender (round off to the higher limit or number). Further, if the required quantity as per Original PQR is only one (1), then relaxed PQR shall also remain the same, (since quantity is non-divisible in this case.) ii. Other Technical Pre-Qualification requirements or any form of licenses or requirements other than stated in Point no. i above, shall remain the same for all bidders.

(b) Financial Pre-Qualifying Requirement (PQR) Turnover: Financial pre-qualifying requirements is relaxed by 50% of the original Pre -Qualifying Requirement specified in the tender (round off to the higher limit or number)."

II. Techno - Commercial Terms and Conditions:

1. Total Tendered Quantity: 504.737 MT ($\pm 30\%$)

a. Fabrication and supply of the Boiler Enclosure support structures - 108.919 MT

b. Fabrication and supply of the ducts and supports - 395.818

Note: Package wise detailed Item List and Quantity is provided in Annexure - A

2. Ordering Philosophy:

- ❖ The subject tender consists of Four Package i.e. Package A, Package-B, Package-C & Package- D: Supply of shop fabricated Ducts, ducts supports and Enclosure support structures.
- ❖ L-1 Bidder shall be awarded Package-A with acceptable L-1 rate.

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: 504 $\pm 30\%$					
Manner of Splitting	173.76 $\pm 30\%$	121.471 $\pm 30\%$	115.734 $\pm 30\%$	93.82 $\pm 30\%$	
Quantity Awarded to	L-1	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	For remaining Pkg-3 quantity next bidder in the order of Price Competitiveness (i.e. L-3, L-4 and hence forth) shall be given an opportunity to match awarded L-1 rate	For remaining Pkg-4 quantity next bidder in the order of Price Competitiveness (i.e. L-4) shall be given an opportunity to match awarded L-1 rate	If Step 2 and/or Step 3 and/or 4 in the Scenario-1 gets failed, Scenario - 2 or 3 or 4 will be applicable, as the case may be.

Ordering Philosophy: Scenario-2

Steps	1	2	3	
Total Tendered Quantity: 504 $\pm 30\%$				
Manner of Splitting	267.42 $\pm 30\%$	121.471 $\pm 30\%$	115.734 $\pm 30\%$	
Quantity Awarded to	L-1	Pkg-B quantity next bidder in the order	Pkg-C quantity next bidder in the order	If Step 2 in the Scenario-2 gets

		of price competitiveness (i.e. L-2, L-3 and hence forth) shall be given an opportunity to match awarded L-1 rate	of price competitiveness (i.e. L-3) shall be given an opportunity to match awarded L-1 rate	failed, Scenario - 3 or 4 will be applicable.
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Ordering Philosophy: Scenario-3

Step	1	2	
Manner of Splitting			
Quantity Awarded	$383.154 \pm 30\%$	$121.471 \pm 30\%$	
Quantity Awarded to	L-1	Pkg-B quantity next bidder in the order of price competitiveness (i.e. L-2,) shall be given an opportunity to match awarded L-1 rate	If scenario 1 and 2 gets failed, Scenario - 3 will be applicable.

Ordering Philosophy: Scenario-4

Step	1	2	
Manner of Splitting			
Quantity Awarded	$504.625 \pm 30\%$		Full quantity will be awarded to the L1 Bidder
Quantity Awarded to	L-1		

- ❖ The above quantities are tentative and may vary,
- ❖ Quantity Variation limit: $\pm 30\%$ of awarded quantities.
- ❖ As the work against subject tender will be executed as per BHEL requirement of "as per BHEL 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 to awarded POs quantity.
- ❖ **Award of the packages as per the above scenarios shall be at the sole discretion of BHEL, and the agencies shall be bound by BHEL's decision. No dispute, claim, or compensation in this regard shall 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

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. **Weightment:** BHEL or BHEL approved third party weightment shall be final and payment will be done accordingly.
12. **Transit Insurance:** Transit insurance from supplier's works/warehouse to BHEL site stores shall be arranged by BHEL.

Prior dispatch intimation shall be issued by supplier 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

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:
 - ❖ Repo rate (as applicable on the date of bid opening; Techno-commercial bid opening in case of two part bids) + 4%; shall be considered for loading for the period of relaxation sought by bidders.

15. **Liquidated Damages/Penalty:**

As per TCC.

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.

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.

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Salient Details of NIT		
S. No.	Issue	Description
1.	Job	Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu.
2.	E - Tender No	2501105

2501105

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BHARAT HEAVY ELECTRICALS
LIMITED



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Sl no	Description	Chapter	No. of 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) — Not Applicable	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	

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2.1 Scope of work

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

Fabrication, and supply of ducts, duct supports, and enclosure support structures based on the input design drawings provided by BHEL, with door-delivery at Patratu Project. Procurement of raw material, including steel, shall be in the scope of the bidder.

S. No.	Description of Material	Pkg details	Unit	Quantity
1	Fabrication and supply of ducts, duct supports, and enclosure support structures based on the input design drawings provided by BHEL, with door-delivery at Patratu Project. Procurement of raw material, including steel, shall be in the scope of the bidder			
2	Fabrication and Supply of the ducts and supports as per the Item List mentioned in Annexure-A. (Supply/ Procurement of all required materials including Structural Steel from NTPC approved Suppliers shall be in the scope of Fabricator)	Pkg-A	MT	138.302
3	Fabrication and Supply of the Boiler Enclosure Support structures.			35.434
4	Fabrication and Supply of the ducts and supports as per the Item List mentioned in annexure-A. (Supply/ Procurement of all required materials including Structural Steel from NTPC approved Suppliers shall be in the scope of Fabricator)	Pkg-B	MT	95.988
5	Fabrication and Supply of the Boiler Enclosure Support structures.			25.483
6	Fabrication and Supply of the ducts and supports as per the Item List mentioned in annexure-A. (Supply/ Procurement of all required materials including Structural Steel from NTPC approved Suppliers shall be in the scope of Fabricator)	Pkg-C	MT	90.537
7	Fabrication and Supply of the Boiler Enclosure Support structures.			25.197

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8	Fabrication and Supply of the ducts and supports as per the Item List mentioned in annexure-A. (Supply/ Procurement of all required materials including Structural Steel from NTPC approved Suppliers shall be in the scope of Fabricator)	Pkg-D	MT	70.986
9	Fabrication and Supply of the Boiler Enclosure Support structures.			22.835

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,**
- b. **Quantity Variation Limit: $\pm 30\%$. No compensation shall be applicable for any reduction in quantity beyond the mentioned limit.**

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.

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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 **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 Patratu 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.

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2.12 **Specific for Fabrication and Supply Contract**

2.12.1 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.

2.12.2 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.

2.12.3 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.

2.12.4 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.

2.12.5 Wherever Customer / Consultant "Hold Points" are indicated in the approved Quality Plan an additional 10 days' notice shall be given for Inspection / Testing.

2.12.6 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.

2.12.7 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

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

- 2.12.8 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.
- 2.12.9 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.
- 2.12.10 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.
- 2.12.11 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.
- 2.12.12 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.
- 2.12.13 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.
- 2.12.14 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.
- 2.12.15 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.

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- 2.12.16 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.
- 2.12.17 Material Dispatch Clearance Certificate (MDCC) for Supply of Fabricated Structures to be issued by customer/BHEL before supply of finished material.
- 2.12.18 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.
- 2.12.19 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
- 2.12.20 Separate storage area and Engineer shall be allotted by Bidder for BHEL contract.
- 2.12.21 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.
- 2.12.22 Each item shall have the PGMA, DU number, quantity, and weight mentioned and punch-marked.

2.13 SPECIFIC CONDITIONS FOR SUPPLY OF FABRICATED STRUCTURES

- 2.13.1 After receipt of Purchase Order, Bidder shall discuss with Project Manager / Construction Manager of BHEL regarding starting of fabrication job. 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.
- 2.13.2 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.

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2.14 **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.

2.15 **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.

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2.16 Material Dispatch Clearance Certificate (MDCC)

1. 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.
2. BHEL / NTPC/BHEL'S CUSTOMER will issue MDCC to the Contractor based on the QS Note/Report from the Inspection Agency.
3. Contractor will not dispatch any material before issue of MDCC by BHEL / NTPC/BHEL'S CUSTOMER.
4. 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.

2.17 GENERAL INSTRUCTION FOR DISPATCH:

1. 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.
2. 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.
3. 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.

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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.

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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.

2.18 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.

2.19 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.

2.20 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).

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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.

2.21 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.

2.22 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

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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
- 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).
 - ii. 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.

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e) Refund of Performance Security amount shall be released against each PO 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**

2.23 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.

2.24 Confidentiality Obligation:

2.24.1 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

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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.

2.24.2 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.

2.25 Other Conditions:

2.25.1 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.

2.25.2 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.

2.25.3 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.

2.25.4 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.

2.25.5 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.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - II: Scope of Works

2.26: PROGRESS REPORT

The Subcontractor shall furnish progress report(s) from time to time, and also interact with BHEL officials regarding the progress of the work as may be required by BHEL, PSWR. The submission, receipt and acceptance of such reports shall not prejudice the rights of BHEL, PSWR under the contract merely by reason of the fact that they have not taken notice of or not objected to any information contained in such reports. Action as deemed fit shall be taken if the progress of work is not satisfactory. The Subcontractor shall furnish monthly report (status at the end of every calendar month) regarding the availability of materials at their end. In the event of non-submission of monthly report, suitable action deemed fit shall be taken against such failing Subcontractor.

2.26 ACTION AND COMPENSATION IN CASE OF BAD WORKMANSHIP

If any work has been executed with unsound, imperfect or bad workmanship or with materials of inferior quality, the Subcontractor shall on demand, in writing from BHEL specifying the work, materials/articles complained of, notwithstanding that the same may have been passed, certified and paid for, forthwith, rectify the work, so specified in whole or in part as the case may require, at their own cost. In the event of the Subcontractor's failure to do so within reasonable period, BHEL shall rectify or remove and re-execute the work at the risk and expense of the default Subcontractor.

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

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 detail drawing to Fabricator under the issuance of the PO.

ii. **Validity of Contract:**

Delivery Period of Packages is as follows:

- a. Pkg- A - 4.5 Months
- b. Pkg- B - 3.5 Months
- c. Pkg - C - 3 Months
- d. Pkg - D - 3 Months

Note: If any bidder receives more than one packages on price match basis as per ordering philosophy then delivery period shall increase by 1 week for every 45 MT additional quantity.

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

6.2 Ordering Philosophy

- ❖ The subject tender consists of Four Package i.e. Package A, Package-B, Package-C & Package- D: Supply of shop fabricated Ducts, ducts supports and Enclosure support structures.
- ❖ L-1 Bidder shall be awarded Package-A with acceptable L-1 rate.

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: $504 \pm 30\%$					
Manner of Splitting	$173.76 \pm 30\%$	$121.471 \pm 30\%$	$115.734 \pm 30\%$	$93.82 \pm 30\%$	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

Quantity Awarded to	L-1	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	For remaining Pkg-3 quantity next bidder in the order of Price Competitiveness (i.e. L-3, L-4 and hence forth) shall be given an opportunity to match awarded L - 1 rate	For remaining Pkg-4 quantity next bidder in the order of Price Competitiveness (i.e. L-4) shall be given an opportunity to match awarded L -1 rate	If Step 2 and/or Step 3/and /or 4 in the Scenario-1 gets failed, Scenario - 2 or 3 or 4 will be applicable, as the case may be.
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Ordering Philosophy: Scenario-2

Steps	1	2	3	
Total Tendered Quantity: $504 \pm 30\%$				
Manner of Splitting	267.42 $\pm 30\%$	121.471 $\pm 30\%$	115.734 $\pm 30\%$	
Quantity Awarded to	L-1	Pkg-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	Pkg-C quantity next bidder in the order of price competitiveness (i.e. L-3) shall be given an opportunity to match awarded L-1 rate	If Step 2 in the Scenario-2 gets failed, Scenario - 3 or 4 will be applicable.

Ordering Philosophy: Scenario-3

Step	1	2	
Manner of Splitting			
Quantity Awarded	$383.154 \pm 30\%$	$121.471 \pm 30\%$	If scenario 1 and 2 gets failed, Scenario - 3 will be applicable.
Quantity Awarded to	L-1	Pkg-B quantity next bidder in the order of price competitiveness (i.e. L-2,) shall be given an opportunity to match awarded L-1 rate	

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

Ordering Philosophy: Scenario-4

Step	1	2
Manner of Splitting		Full quantity will be awarded to the L1 Bidder
Quantity Awarded	504.625 ± 30%	
Quantity Awarded to	L-1	

Note:

- The above quantities are tentative and may vary,**
- Quantity Variation limit: ±30% of awarded quantities.
- As the work against subject tender will be executed as per BHEL requirement of "as per BHEL 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 to awarded POs quantity.
- Award of the packages as per the above scenarios shall be at the sole discretion of BHEL, and the agencies shall be bound by BHEL's decision. No dispute, claim, or compensation in this regard shall 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.

6.3 LIQUIDATED DAMAGES (LD) / PENALTY & RISK PURCHASE

6.3.1 Timely delivery is the essence of the Contract.

6.3.2 The finished fabrications should be delivered as per the delivery date stipulated in the PO/Addendum. In case of delay in delivery beyond the delivery period specified in PO at item level, Liquidated Damages (LD) shall be levied at the rate of 0.5% of the value of corresponding PO line item for each week of delay or part thereof based on last dispatch date for the PO line item. LD is subject to a maximum of 10% of the total value of the particular Purchase order/in the addendum to the contract without prejudice to any relief or compensation to BHEL, PSWR under any other conditions of the contract.

LD (PO Line Item wise) = 0.5% * Value of PO Line Item * delay in weeks or part thereof,

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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Where, Delay = Maximum delay occurred (last dispatch date) for the delivery of PO line item.

- 6.3.3 There is no maximum limit on the value of LD% calculated at PO item level. Cumulative value of LD for a PO is subject to a maximum of 10% of the total value of the particular Purchase order.
- 6.3.4 Since LD shall be recovered invoice wise, invoice should be submitted for the fully completed DUs/PO Item. GST shall be applicable on the LD thus recovered from a Subcontractor, and the same shall also be recovered along with the LD.
- 6.3.5 Request for extension of PO delivery date shall not be entertained for normal cases unless there are delays which have justifiable reasons attributable to BHEL.
- 6.3.6 In such cases where the reasons for delay are attributable to BHEL. Request for delivery extension should be submitted along with supporting documents & justification, indicating the number of days/ date till which extension is requested. Extension shall not be made beyond this date.
- 6.3.7 Reasons such as power cut, labour issues, machine break down, etc., which are controllable by the Subcontractor shall not be accepted as reason for delay while requesting for extension of PO delivery date.
- 6.3.8 For invoices received without any request for delivery extension and/or without proper justification, LD shall be automatically deducted.
- 6.3.9 In case of any revision/ amendment of PO, the LD shall be linked to the amended/revised

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
- 7.2 Amendment(s), if any, to a PO are being issued to sub-contractor by BHEL. Subcontractor shall attach a copy of amendment(s) with the invoices for processing of invoices.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

7.3 Payment would be made within 45 days from invoice submission date, after GR, subject to submission of invoice along with full set of proper supporting documents by the subcontractor at Patratu Site. GST shall be paid extra at the prevailing rate. TDS on GST is applicable as per prevailing norms of GST Act.

7.4 Trade Receivables Discounting System (TReDS) is an institutional mechanism set up in order to facilitate the discounting of invoices for MSMEs from buyers through multiple financiers. Invoice discounting on TReDS involves three participants MSME Supplier, Buyer and Financier.

7.5 Sub-contractor may register themselves on TReDS platforms to obtain the intended benefit.

7.6 The TReDS benefit is applicable for Micro / Small / Medium enterprise.

7.7 Invoice shall be raised for DU weights as per the Purchase Order (PO). Payments shall be for the drawing weight only. However, if the material weight changes over \pm 5% from the total weight of a particular purchase order due to substitution of material, the fabrication cost for the difference in net weight shall be paid or recovered as applicable after raising necessary P.O. amendment. The same can be claimed along with original invoice.

❖ **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)

7.8 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.

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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII: Payment Terms

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

11.3 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.
- iii. 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.

11.4 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.

11.5 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

TECHNICAL CONDITIONS OF CONTRACT (TCC)

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ATTACHED USING CAPACITOR DISCHARGE TYPE PORTABLE THERMOCOUPLE ATTACHMENT UNIT. CONTRACTOR SHALL ARRANGE SUFFICIENT NUMBER OF THERMOCOUPLE ATTACHMENT UNITS.

- 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.
- vii. 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-XI: Welding & NDT

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

ANNEXURE - A

Tentative requirement for FACTORY for Fabrication of Steel Structures		
S. No	Characteristic	Check List
9.	NDT/HEAT treatment/hydr/leak test facility	<ul style="list-style-type: none"> A. Availability of sufficient size covered shed with concrete platform for fabrication activities B. Availability of beam straightening machine C. Availability of DPT/MPI facility-in house /outsourced to another agency D. Availability of RT facility-in house/outsourced (as applicable) 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
10.	Professional qualification/quality manpower	<ul style="list-style-type: none"> A. Availability of qualified & experience manpower for quality B. availability of qualified welding inspectors C. Availability of DP/MPT Level II qualified personal D. Availability of RT level II qualified personal if applicable E. Availability of UT level II qualified personal if required
11.	Testing facility	<ul style="list-style-type: none"> A. Availability of in house/outsourced testing facilities for chemical testing by Spectro/PMI B. Availability of in house/outsourced testing facilities like UTS% elongation/ben/impact testing /hardens etc. C. Availability of calibrated tape/laser beam instruments to measure long column length for proto /assembly/ D. Availability of calibrated weld gauge, Vernier, micrometre & measuring instruments
12.	Surface cleaning & painting	<ul style="list-style-type: none"> A. Availability of covered shot/grit blasting facility with air compressor, mechanism to segregate fine shot (Sievers) shots/grits re-collection mechanism, surface compactor/surface roughness meter etc. 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

Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu.

Total Amount for the entire Bill of Quantities (BOQ) of Pkg - A

-

Note: Bidders to quote Total Amount in this format given above, which shall be taken into account for evaluation and awarding and hence, shall be complete in all respect for the full scope defined in specification and in accordance with all terms & conditions of tender for Package A only.

Sr. No	Description of BOQ Item	Total Quantity in MT for all Packages (Pkg A + Pkg B + Pkg C + Pkg D)	Pkg-A			Weightage Factor
			Qty (MT)	Unit Rate /Mt	Total Cost (₹)	
1	Fabrication and Supply of the ducts and supports as per the Item List mentioned in annexure-A	395.815	138.302	0	₹ 0.00	0.780028424482
2	Fabrication and Supply of the Boiler Enclosure Support Structures	108.919	35.434	0	₹ 0.00	0.219971575518
Total Cost for Pkg -A		504.734	173.736		0	

Note:

1. Bidder to quote Total Amount for the entire Bill of Quantities (BOQ) of Pkg - A in Price Bid Sheet of Tender Specification - 2501105
2. Unit rate shall be derived from above sheet and same unit rate shall be applicable to award other packages

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
1	183048382046	1830	48382	046	ECO DUCT WALL	NO	1	2,442.23	Pkg-A
2	183048382047	1830	48382	047	ECO DUCT WALL	NO	1	2,439.41	Pkg-A
3	183048382048	1830	48382	048	ECO DUCT WALL	NO	1	2,485.89	Pkg-A
4	183048382049	1830	48382	049	ECO DUCT WALL	NO	1	2,485.89	Pkg-A
5	183048382050	1830	48382	050	ECO DUCT WALL	NO	1	2,646.27	Pkg-A
6	183048382051	1830	48382	051	ECO DUCT WALL	NO	1	2,646.27	Pkg-A
7	183048382052	1830	48382	052	ECO DUCT WALL	NO	1	2,645.04	Pkg-A
8	183048382053	1830	48382	053	ECO DUCT WALL	NO	1	2,645.04	Pkg-A
9	182948382054	1829	48382	054	ECO DUCT WALL	NO	1	1,907.83	Pkg-A
10	183048382055	1830	48382	055	ECO DUCT WALL	NO	1	1,907.62	Pkg-A
11	183048382056	1830	48382	056	ECO DUCT WALL	NO	1	1,191.39	Pkg-A
12	183048382057	1830	48382	057	ECO DUCT WALL	NO	1	1,055.90	Pkg-A
13	183048382058	1830	48382	058	ECO DUCT WALL	NO	1	1,451.40	Pkg-A
14	183048382059	1830	48382	059	ECO DUCT WALL	NO	1	1,055.90	Pkg-A
15	183048382060	1830	48382	060	ECO DUCT WALL	NO	1	1,451.40	Pkg-A
16	183048382061	1830	48382	061	ECO DUCT WALL	NO	2	3,034.96	Pkg-A
17	183048382062	1830	48382	062	BEAM	NO	2	622.45	Pkg-A
18	183048382063	1830	48382	063	BEAM	NO	6	2,235.60	Pkg-A
19	183048382064	1830	48382	064	BEAM	NO	2	36.87	Pkg-A
20	183048382065	1830	48382	065	ECO DUCT WALL	NO	1	2,149.61	Pkg-A
21	183048382066	1830	48382	066	ECO DUCT WALL	NO	1	524.80	Pkg-A
22	183048382067	1830	48382	067	ECO DUCT WALL	NO	1	524.80	Pkg-A
23	183048382068	1830	48382	068	ECO DUCT WALL	NO	1	238.07	Pkg-A
24	183048382069	1830	48382	069	ECO DUCT WALL	NO	1	238.07	Pkg-A
25	183048382070	1830	48382	070	ECO DUCT WALL	NO	8	11,642.26	Pkg-A
26	183048382071	1830	48382	071	ECO DUCT WALL	NO	2	2,418.92	Pkg-A
27	183048382072	1830	48382	072	CHANNEL ASSEMBLY	NO	2	1,112.82	Pkg-A
28	183048382073	1830	48382	073	CHANNEL ASSEMBLY	NO	2	802.20	Pkg-A
29	183048382074	1830	48382	074	CHANNEL ASSEMBLY	NO	2	802.20	Pkg-A
30	183048382075	1830	48382	075	CHANNEL ASSEMBLY	NO	2	725.44	Pkg-A
31	183048382076	1830	48382	076	CHANNEL ASSEMBLY	NO	2	687.97	Pkg-A
32	183048382077	1830	48382	077	CHANNEL BOX-1	NO	5	2,381.51	Pkg-A
33	183048382078	1830	48382	078	CHANNEL BOX-2	NO	1	548.90	Pkg-A
34	183048382079	1830	48382	079	CHANNEL BOX-3	NO	1	548.90	Pkg-A
35	183048382080	1830	48382	080	CHANNEL BOX-4	NO	1	551.61	Pkg-A
36	183048382081	1830	48382	081	CHANNEL BOX-5	NO	1	551.61	Pkg-A
37	183048382082	1830	48382	082	CONNECTION PLATE	NO	69	296.70	Pkg-A
38	183048382083	1830	48382	083	FABRICATED BEAM-3	NO	3	1,801.52	Pkg-A
39	183048382084	1830	48382	084	FABRICATED BEAM-4	NO	3	743.99	Pkg-A
40	183048382085	1830	48382	085	FABRICATED BEAM-5	NO	3	2,511.75	Pkg-A
41	183048382086	1830	48382	086	FABRICATED BEAM-6	NO	3	1,608.84	Pkg-A
42	183048382087	1830	48382	087	FABRICATED BEAM-7	NO	2	1,782.69	Pkg-A
43	183048382088	1830	48382	088	FABRICATED BEAM-8	NO	3	2,255.53	Pkg-A
44	183048382089	1830	48382	089	FABRICATED BEAM-9	NO	1	739.65	Pkg-A
45	183048382090	1830	48382	090	FABRICATED BEAM-10	NO	3	113.43	Pkg-A
46	183048382091	1830	48382	091	FABRICATED BEAM-11	NO	3	1,227.85	Pkg-A
47	183048382092	1830	48382	092	FABRICATED BEAM-12	NO	3	2,310.32	Pkg-A
48	183048382093	1830	48382	093	CHANNEL BOX-6	NO	1	559.06	Pkg-A
49	183048382094	1830	48382	094	CHANNEL BOX-7	NO	1	564.48	Pkg-A
50	183048382095	1830	48382	095	TRUSS	NO	3	638.51	Pkg-A
51	183048382096	1830	48382	096	TRUSS	NO	3	120.16	Pkg-A
52	183048382097	1830	48382	097	TRUSS	NO	3	81.79	Pkg-A
53	183048382098	1830	48382	098	TRUSS	NO	3	215.68	Pkg-A
54	183048382099	1830	48382	099	TRUSS	NO	3	150.99	Pkg-A
55	183048382100	1830	48382	100	TRUSS	NO	3	653.12	Pkg-A
56	183048382101	1830	48382	101	TRUSS	NO	3	607.92	Pkg-A
57	183048382102	1830	48382	102	TRUSS	NO	3	634.49	Pkg-A
58	183048382103	1830	48382	103	TRUSS	NO	3	622.27	Pkg-A
59	183048382104	1830	48382	104	TRUSS	NO	3	344.76	Pkg-A
60	183048382105	1830	48382	105	TRUSS	NO	3	329.56	Pkg-A
61	183048382106	1830	48382	106	TRUSS	NO	3	103.10	Pkg-A
62	183048382107	1830	48382	107	TRUSS	NO	3	181.85	Pkg-A
63	183048382108	1830	48382	108	TRUSS	NO	3	148.67	Pkg-A
64	183048382109	1830	48382	109	TRUSS	NO	3	72.73	Pkg-A
65	183048382110	1830	48382	110	TRUSS	NO	3	73.10	Pkg-A
66	183048382111	1830	48382	111	TRUSS	NO	2	309.48	Pkg-A
67	183048382112	1830	48382	112	TRUSS	NO	2	303.79	Pkg-A
68	183048382113	1830	48382	113	TRUSS	NO	3	62.77	Pkg-A
69	183048382114	1830	48382	114	TRUSS	NO	2	87.24	Pkg-A
70	183048382115	1830	48382	115	DEFLECTOR PLATE WALL	NO	1	1,112.76	Pkg-A
71	183048382116	1830	48382	116	DEFLECTOR PLATE WALL	NO	1	1,112.76	Pkg-A
72	183048382117	1830	48382	117	DEFLECTOR PLATE WALL	NO	2	3,262.89	Pkg-A
73	183048382118	1830	48382	118	DEFLECTOR PLATE WALL	NO	1	1,569.59	Pkg-A
74	183048382119	1830	48382	119	DEFLECTOR PLATE WALL	NO	1	1,422.89	Pkg-A
75	183048382120	1830	48382	120	BEAM	NO	3	117.23	Pkg-A
76	183048382121	1830	48382	121	DEFLECTOR PLATE WALL	NO	2	2,250.28	Pkg-A
77	183048382122	1830	48382	122	CONNECTION PLATE	NO	3	82.43	Pkg-A
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Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
1	183048462009	1830	48462	009	SEAMLESS PIPE 168.3X7.11	NO	4	860.24	Pkg-B
2	183048462010	1830	48462	010	SEAMLESS PIPE 168.3X7.11	NO	4	911.22	Pkg-B
3	183048462050	1830	48462	050	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
4	183048462051	1830	48462	051	SEAMLESS PIPE 168.3X7.11	NO	2	425.71	Pkg-B
5	183048462052	1830	48462	052	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
6	183048462053	1830	48462	053	SEAMLESS PIPE 168.3X7.11	NO	2	406.83	Pkg-B
7	183048462054	1830	48462	054	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
8	183048462055	1830	48462	055	SEAMLESS PIPE 168.3X7.11	NO	4	453.74	Pkg-B
9	183048462056	1830	48462	056	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
10	183048462057	1830	48462	057	SEAMLESS PIPE 168.3X7.11	NO	2	437.63	Pkg-B
11	183048462058	1830	48462	058	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
12	183048462059	1830	48462	059	SEAMLESS PIPE 168.3X7.11	NO	2	469.96	Pkg-B
13	183048462099	1830	48462	099	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
14	183048462100	1830	48462	100	SEAMLESS PIPE 168.3X7.11	NO	2	425.71	Pkg-B
15	183048462101	1830	48462	101	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
16	183048462102	1830	48462	102	SEAMLESS PIPE 168.3X7.11	NO	2	406.83	Pkg-B
17	183048462103	1830	48462	103	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
18	183048462104	1830	48462	104	SEAMLESS PIPE 168.3X7.11	NO	4	453.74	Pkg-B
19	183048462105	1830	48462	105	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
20	183048462106	1830	48462	106	SEAMLESS PIPE 168.3X7.11	NO	2	437.63	Pkg-B
21	183048462107	1830	48462	107	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
22	183048462108	1830	48462	108	SEAMLESS PIPE 168.3X7.11	NO	2	469.96	Pkg-B
23	183048462135	1830	48462	135	SEAMLESS PIPE 168.3X7.11	NO	2	437.63	Pkg-B
24	183048462136	1830	48462	136	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
25	183048462137	1830	48462	137	SEAMLESS PIPE 168.3X7.11	NO	1	208.19	Pkg-B
26	183048462138	1830	48462	138	SEAMLESS PIPE 168.3X7.11	NO	2	336.86	Pkg-B
27	183048462139	1830	48462	139	SEAMLESS PIPE 168.3X7.11	NO	2	448.99	Pkg-B
28	183048462140	1830	48462	140	SEAMLESS PIPE 168.3X7.11	NO	1	207.01	Pkg-B
29	183048462167	1830	48462	167	SEAMLESS PIPE 168.3X7.11	NO	2	437.63	Pkg-B
30	183048462168	1830	48462	168	SEAMLESS PIPE 168.3X7.11	NO	2	430.12	Pkg-B
31	183048462169	1830	48462	169	SEAMLESS PIPE 168.3X7.11	NO	1	208.19	Pkg-B
32	183048462170	1830	48462	170	SEAMLESS PIPE 168.3X7.11	NO	2	336.86	Pkg-B
33	183048462171	1830	48462	171	SEAMLESS PIPE 168.3X7.11	NO	2	448.99	Pkg-B
34	183048462172	1830	48462	172	SEAMLESS PIPE 168.3X7.11	NO	1	207.01	Pkg-B
35	183048462178	1830	48462	178	SEAMLESS PIPE 168.3X7.11	NO	4	673.72	Pkg-B
36	183048462215	1830	48462	215	SEAMLESS PIPE 168.3X7.11	NO	2	336.86	Pkg-B
37	183048462216	1830	48462	216	SEAMLESS PIPE 168.3X7.11	NO	1	200.96	Pkg-B
38	183048462225	1830	48462	225	SEAMLESS PIPE 168.3X7.11	NO	2	405.08	Pkg-B
39	183048462239	1830	48462	239	SEAMLESS PIPE 88.9X5.49	NO	2	64.58	Pkg-B
40	183048462240	1830	48462	240	SEAMLESS PIPE 88.9X5.49	NO	1	31.15	Pkg-B
41	183048462241	1830	48462	241	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
42	183048462255	1830	48462	255	SEAMLESS PIPE 88.9X5.49	NO	2	64.58	Pkg-B
43	183048462256	1830	48462	256	SEAMLESS PIPE 88.9X5.49	NO	1	31.15	Pkg-B
44	183048462257	1830	48462	257	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
45	183048462270	1830	48462	270	SEAMLESS PIPE 88.9X5.49	NO	4	169.26	Pkg-B
46	183048462271	1830	48462	271	SEAMLESS PIPE 88.9X5.49	NO	4	129.16	Pkg-B
47	183048462272	1830	48462	272	SEAMLESS PIPE 88.9X5.49	NO	2	86.05	Pkg-B
48	183048462279	1830	48462	279	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
49	183048462280	1830	48462	280	SEAMLESS PIPE 88.9X5.49	NO	1	40.57	Pkg-B
50	183048462297	1830	48462	297	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
51	183048462298	1830	48462	298	SEAMLESS PIPE 88.9X5.49	NO	1	39.81	Pkg-B
52	183048462315	1830	48462	315	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
53	183048462316	1830	48462	316	SEAMLESS PIPE 88.9X5.49	NO	1	39.81	Pkg-B
54	183048462508	1830	48462	508	SEAMLESS PIPE 88.9X5.49	NO	1	32.29	Pkg-B
55	183048462509	1830	48462	509	SEAMLESS PIPE 88.9X5.49	NO	1	40.57	Pkg-B
56	R84048482004	R840	48482	004	TRUSS	NO	12	620.76	Pkg-B
57	183048482010	1830	48482	010	TRUSS	NO	4	206.92	Pkg-B
58	183048482017	1830	48482	017	TRUSS	NO	2	103.46	Pkg-B
59	183048482021	1830	48482	021	TRUSS	NO	4	206.92	Pkg-B
60	R84048482041	R840	48482	041	TRUSS	NO	16	827.68	Pkg-B
61	183048482063	1830	48482	063	TRUSS	NO	8	413.84	Pkg-B
62	183048482085	1830	48482	085	TRUSS	NO	8	376.30	Pkg-B
63	183048482086	1830	48482	086	TRUSS	NO	8	310.06	Pkg-B
64	183048482087	1830	48482	087	TRUSS	NO	8	256.28	Pkg-B
65	183048482103	1830	48482	103	TRUSS	NO	16	690.30	Pkg-B
66	183048482119	1830	48482	119	TRUSS	NO	2	103.78	Pkg-B
67	183048482120	1830	48482	120	TRUSS	NO	2	118.33	Pkg-B
68	183048482121	1830	48482	121	TRUSS	NO	2	92.21	Pkg-B
69	183048482122	1830	48482	122	TRUSS	NO	2	92.09	Pkg-B
70	183048482123	1830	48482	123	TRUSS	NO	2	118.15	Pkg-B
71	183048482127	1830	48482	127	TRUSS	NO	1	58.26	Pkg-B
72	183048482141	1830	48482	141	TRUSS	NO	2	92.21	Pkg-B
73	183048482142	1830							

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
98	183048482233	1830	48482	233	TRUSS	NO	8	882.22	Pkg-B
99	183048482245	1830	48482	245	TRUSS	NO	16	1,186.62	Pkg-B
100	183048482246	1830	48482	246	TRUSS	NO	4	703.34	Pkg-B
101	183048482247	1830	48482	247	TRUSS	NO	8	882.22	Pkg-B
102	183048482251	1830	48482	251	TRUSS	NO	8	593.31	Pkg-B
103	183048482252	1830	48482	252	TRUSS	NO	2	351.69	Pkg-B
104	183048482253	1830	48482	253	TRUSS	NO	4	441.11	Pkg-B
105	183048482279	1830	48482	279	TRUSS	NO	4	703.37	Pkg-B
106	183048482280	1830	48482	280	TRUSS	NO	8	593.32	Pkg-B
107	183048482281	1830	48482	281	TRUSS	NO	8	505.50	Pkg-B
108	183048482282	1830	48482	282	TRUSS	NO	4	638.72	Pkg-B
109	183048482283	1830	48482	283	TRUSS	NO	4	638.37	Pkg-B
110	183048492023	1830	48492	023	TRUSS	NO	2	252.93	Pkg-B
111	183048492024	1830	48492	024	TRUSS	NO	4	299.28	Pkg-B
112	183048492025	1830	48492	025	TRUSS	NO	2	148.54	Pkg-B
113	183048492026	1830	48492	026	TRUSS	NO	2	148.54	Pkg-B
114	183048492027	1830	48492	027	TRUSS	NO	6	718.59	Pkg-B
115	183048492028	1830	48492	028	TRUSS	NO	6	448.92	Pkg-B
116	183048492029	1830	48492	029	TRUSS	NO	2	149.16	Pkg-B
117	183048492030	1830	48492	030	TRUSS	NO	4	298.31	Pkg-B
118	183048492031	1830	48492	031	TRUSS	NO	4	428.46	Pkg-B
119	183048492035	1830	48492	035	TRUSS	NO	2	251.90	Pkg-B
120	183048492036	1830	48492	036	TRUSS	NO	8	599.94	Pkg-B
121	183048492037	1830	48492	037	TRUSS	NO	4	428.46	Pkg-B
122	183048492046	1830	48492	046	TRUSS	NO	4	503.80	Pkg-B
123	183048492047	1830	48492	047	TRUSS	NO	16	1,199.87	Pkg-B
124	183048492048	1830	48492	048	TRUSS	NO	8	856.92	Pkg-B
125	183048492053	1830	48492	053	TRUSS	NO	2	251.90	Pkg-B
126	183048492054	1830	48492	054	TRUSS	NO	8	599.94	Pkg-B
127	183048492055	1830	48492	055	TRUSS	NO	4	428.46	Pkg-B
128	183048492079	1830	48492	079	TRUSS	NO	2	252.93	Pkg-B
129	183048492080	1830	48492	080	TRUSS	NO	2	149.32	Pkg-B
130	183048492081	1830	48492	081	TRUSS	NO	2	149.77	Pkg-B
131	183048492082	1830	48492	082	TRUSS	NO	2	149.19	Pkg-B
132	183048492083	1830	48492	083	TRUSS	NO	2	149.64	Pkg-B
133	183048492084	1830	48492	084	TRUSS	NO	6	642.69	Pkg-B
134	183048492085	1830	48492	085	TRUSS	NO	4	299.28	Pkg-B
135	183048492086	1830	48492	086	TRUSS	NO	8	596.62	Pkg-B
136	183048492087	1830	48492	087	TRUSS	NO	4	289.84	Pkg-B
137	183048492088	1830	48492	088	TRUSS	NO	4	269.09	Pkg-B
138	183048492089	1830	48492	089	TRUSS	NO	2	256.63	Pkg-B
139	183048492090	1830	48492	090	TRUSS	NO	2	253.09	Pkg-B
140	183048492091	1830	48492	091	TRUSS	NO	10	1,071.15	Pkg-B
141	183048492096	1830	48492	096	TRUSS	NO	3	224.78	Pkg-B
142	183048492097	1830	48492	097	TRUSS	NO	1	74.90	Pkg-B
143	183048492098	1830	48492	098	TRUSS	NO	1	125.95	Pkg-B
144	183048492099	1830	48492	099	TRUSS	NO	2	214.23	Pkg-B
145	183048492103	1830	48492	103	TRUSS	NO	3	224.78	Pkg-B
146	183048492104	1830	48492	104	TRUSS	NO	1	74.90	Pkg-B
147	183048492105	1830	48492	105	TRUSS	NO	1	125.96	Pkg-B
148	183048492106	1830	48492	106	TRUSS	NO	2	214.23	Pkg-B
149	183048492112	1830	48492	112	TRUSS	NO	6	449.56	Pkg-B
150	183048492113	1830	48492	113	TRUSS	NO	2	149.80	Pkg-B
151	183048492114	1830	48492	114	TRUSS	NO	2	251.91	Pkg-B
152	183048492115	1830	48492	115	TRUSS	NO	4	428.46	Pkg-B
153	183048492142	1830	48492	142	TRUSS	NO	4	299.28	Pkg-B
154	183048492143	1830	48492	143	TRUSS	NO	4	298.31	Pkg-B
155	183048492144	1830	48492	144	TRUSS	NO	2	256.68	Pkg-B
156	183048492145	1830	48492	145	TRUSS	NO	4	289.84	Pkg-B
157	183048492146	1830	48492	146	TRUSS	NO	2	149.15	Pkg-B
158	183048492147	1830	48492	147	TRUSS	NO	2	149.16	Pkg-B
159	183048492148	1830	48492	148	TRUSS	NO	4	299.28	Pkg-B
160	183048492149	1830	48492	149	TRUSS	NO	4	298.88	Pkg-B
161	183048492150	1830	48492	150	TRUSS	NO	2	253.53	Pkg-B
162	183048492151	1830	48492	151	TRUSS	NO	8	856.92	Pkg-B
163	183048492184	1830	48492	184	TRUSS	NO	3	223.53	Pkg-B
164	183048492185	1830	48492	185	TRUSS	NO	3	224.16	Pkg-B
165	183048492186	1830	48492	186	TRUSS	NO	3	224.00	Pkg-B
166	183048492187	1830	48492	187	TRUSS	NO	3	224.46	Pkg-B
167	183048492188	1830	48492	188	TRUSS	NO	3	519.62	Pkg-B
168	183048492189	1830	48492	189	TRUSS	NO	3	519.65	Pkg-B
169	183048492201	1830	48492	201	TRUSS	NO	4	420.79	Pkg-B
170	183048492202	1830	48492	202	TRUSS	NO	2	149.57	Pkg-B
171	183048492203	1830	48492	203	TRUSS	NO	2	149.37	Pkg-B
172	183048492204	1830	48492	204	TRUSS	NO	2	249.94	Pkg-B
173	183048382001	1830	48382	001	ECO DUCT WALL	NO	1	879.96	Pkg-B
174	183048382002	1830	48382	002	ECO DUCT WALL	NO	1	879.96	Pkg-B
175	183048382003	1830	48382	003	ECO DUCT WALL	NO	1	603.46	Pkg-B

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
195	183048382023	1830	48382	023	TRUSS	NO	1	221.64	Pkg-B
196	183048382024	1830	48382	024	TRUSS	NO	1	240.91	Pkg-B
197	183048382025	1830	48382	025	TRUSS	NO	1	240.91	Pkg-B
198	183048382026	1830	48382	026	TRUSS	NO	1	241.13	Pkg-B
199	183048382027	1830	48382	027	TRUSS	NO	1	241.13	Pkg-B
200	183048382028	1830	48382	028	TRUSS	NO	1	224.82	Pkg-B
201	183048382029	1830	48382	029	TRUSS	NO	1	224.82	Pkg-B
202	183048382030	1830	48382	030	TRUSS	NO	1	125.45	Pkg-B
203	183048382031	1830	48382	031	TRUSS	NO	1	148.48	Pkg-B
204	183048382032	1830	48382	032	TRUSS	NO	1	148.48	Pkg-B
205	183048382033	1830	48382	033	TRUSS	NO	1	129.56	Pkg-B
206	183048382034	1830	48382	034	TRUSS	NO	1	323.25	Pkg-B
207	183048382035	1830	48382	035	TRUSS	NO	1	323.25	Pkg-B
208	183048382036	1830	48382	036	TRUSS	NO	1	389.30	Pkg-B
209	183048382037	1830	48382	037	TRUSS	NO	1	388.18	Pkg-B
210	183048382038	1830	48382	038	TRUSS	NO	1	338.55	Pkg-B
211	183048382039	1830	48382	039	TRUSS	NO	1	354.42	Pkg-B
212	183048382040	1830	48382	040	TRUSS	NO	1	354.18	Pkg-B
213	183048382041	1830	48382	041	TRUSS	NO	1	338.23	Pkg-B
214	183048382042	1830	48382	042	BEAM ASSEMBLY	NO	2	529.17	Pkg-B
215	183048382043	1830	48382	043	FABRICATED BEAM-1	NO	2	653.30	Pkg-B
216	183048382044	1830	48382	044	BEAM ASSEMBLY	NO	2	506.39	Pkg-B
217	183048382045	1830	48382	045	FABRICATED BEAM-2	NO	2	1,062.98	Pkg-B
Sub Total of Pkg-B								95,988.32	
1	183048208063	1830	48208	063	ELBOW DUCT WALL	NO	4	2,069.86	Pkg-C
2	18304812057	1830	48112	057	TRUSS	NO	2.00	108.05	Pkg-C
3	183048112058	1830	48112	058	TRUSS	NO	1.00	40.84	Pkg-C
4	183048112122	1830	48112	122	TRUSS	NO	4.00	137.08	Pkg-C
5	183048112123	1830	48112	123	TRUSS	NO	1.00	34.25	Pkg-C
6	183048112124	1830	48112	124	TRUSS	NO	1.00	34.25	Pkg-C
7	183048112079	1830	48112	079	ELBOW DUCT WALL	NO	2.00	314.59	Pkg-C
8	183048208011	1830	48208	011	DIVIDER PLATE	NO	3.00	391.35	Pkg-C
9	183048018027	1830	48018	027	TRUSS	NO	2.00	82.53	Pkg-C
10	183048018028	1830	48018	028	TRUSS	NO	1.00	42.96	Pkg-C
11	183048018029	1830	48018	029	TRUSS	NO	1.00	43.03	Pkg-C
12	183048018030	1830	48018	030	TRUSS	NO	1.00	42.09	Pkg-C
13	183048018031	1830	48018	031	TRUSS	NO	1.00	42.98	Pkg-C
14	183048112023	1830	48112	023	TRUSS	NO	4.00	216.10	Pkg-C
15	183048112026	1830	48112	026	TRUSS	NO	4.00	216.10	Pkg-C
16	183048112086	1830	48112	086	TRUSS	NO	4.00	131.23	Pkg-C
17	183048112087	1830	48112	087	TRUSS	NO	3.00	210.69	Pkg-C
18	183048112152	1830	48112	152	TRUSS	NO	4.00	215.70	Pkg-C
19	183048112176	1830	48112	176	TRUSS	NO	12.00	648.30	Pkg-C
20	183048112184	1830	48112	184	TRUSS	NO	12.00	648.30	Pkg-C
21	183048112188	1830	48112	188	TRUSS	NO	4.00	216.10	Pkg-C
22	183048112009	1830	48112	009	TRUSS	NO	2.00	97.05	Pkg-C
23	183048112010	1830	48112	010	TRUSS	NO	2.00	92.93	Pkg-C
24	183048112019	1830	48112	019	TRUSS	NO	2.00	97.05	Pkg-C
25	183048112020	1830	48112	020	TRUSS	NO	2.00	92.93	Pkg-C
26	183048112035	1830	48112	035	TRUSS	NO	1.00	40.84	Pkg-C
27	183048112049	1830	48112	049	TRUSS	NO	2.00	65.62	Pkg-C
28	183048112137	1830	48112	137	TRUSS	NO	8.00	441.90	Pkg-C
29	183048112138	1830	48112	138	TRUSS	NO	4.00	335.25	Pkg-C
30	183048112146	1830	48112	146	TRUSS	NO	4.00	341.73	Pkg-C
31	183048112147	1830	48112	147	TRUSS	NO	4.00	230.82	Pkg-C
32	183048112148	1830	48112	148	STRAIGHT DUCT WALL	NO	2.00	387.23	Pkg-C
33	183048112149	1830	48112	149	STRAIGHT DUCT WALL	NO	2.00	441.49	Pkg-C
34	183048112169	1830	48112	169	TRUSS	NO	6.00	323.56	Pkg-C
35	183048222008	1830	48222	008	TRANSITION DUCT WALL	NO	1.00	580.52	Pkg-C
36	183048112168	1830	48112	168	TRUSS	NO	3.00	210.69	Pkg-C
37	183048018069	1830	48018	069	TRUSS	NO	1.00	38.65	Pkg-C
38	183048018070	1830	48018	070	TRUSS	NO	1.00	97.59	Pkg-C
39	183048018074	1830	48018	074	TRUSS	NO	1.00	97.44	Pkg-C
40	183048018075	1830	48018	075	TRUSS	NO	1.00	77.08	Pkg-C
41	183048018076	1830	48018	076	TRUSS	NO	1.00	77.00	Pkg-C
42	183048018077	1830	48018	077	TRUSS	NO	1.00	53.12	Pkg-C
43	183048018078	1830	48018	078	TRUSS	NO	1.00	53.12	Pkg-C
44	183048018079	1830	48018	079	TRUSS	NO	1.00	143.41	Pkg-C
45	183048018080	1830	48018	080	TRUSS	NO	1.00	193.14	Pkg-C
46	183048018081	1830	48018	081	TRUSS	NO	1.00	143.41	Pkg-C
47	183048222008	1830	48222	008	TRANSITION DUCT WALL	NO	1.00	580.52	Pkg-C
48	183048208011	1830	48208	011	DIVIDER PLATE	NO	3.00	391.35	Pkg-C
49	183048112079	1830	48112	079	ELBOW DUCT WALL	NO	2.00	314.59	Pkg-C
50	183048112136	1830	48112	136	DIVIDER PLATE	NO	2.00	138.10	Pkg-C
51	183048112148	1830	48112	148	STRAIGHT DUCT WALL	NO	2.00	387.23	Pkg-C
52	183048112149	1830	48112	149	STRAIGHT DUCT WALL	NO	2.00	441.49	Pkg-C
53	183048012090	1830	48012	090	T-DUCT WALL	NO	1.00	46.	

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
74	183048262268	1830	48262	268	STRAIGHT DUCT WALL	NO	2	185.44	Pkg-C
75	183048262272	1830	48262	272	GUIDE VANE	NO	1	187.46	Pkg-C
76	183048262289	1830	48262	289	TRUSS	NO	1	57.59	Pkg-C
77	183048262291	1830	48262	291	TRANSITION DUCT WALL	NO	1	385.36	Pkg-C
78	183048262292	1830	48262	292	TRANSITION DUCT WALL	NO	1	184.74	Pkg-C
79	183048262293	1830	48262	293	TRANSITION DUCT WALL	NO	1	184.81	Pkg-C
80	183048262298	1830	48262	298	STRAIGHT DUCT WALL	NO	1	391.45	Pkg-C
81	183048262299	1830	48262	299	STRAIGHT DUCT WALL	NO	1	413.40	Pkg-C
82	183048262300	1830	48262	300	STRAIGHT DUCT WALL	NO	1	383.55	Pkg-C
83	183048262301	1830	48262	301	STRAIGHT DUCT WALL	NO	1	268.48	Pkg-C
84	183048262302	1830	48262	302	STRAIGHT DUCT WALL	NO	1	268.48	Pkg-C
85	183048262303	1830	48262	303	STRAIGHT DUCT WALL	NO	1	258.60	Pkg-C
86	183048262304	1830	48262	304	STRAIGHT DUCT WALL	NO	2	429.41	Pkg-C
87	183048262311	1830	48262	311	TRUSS	NO	1	57.59	Pkg-C
88	183048262317	1830	48262	317	TRANSITION DUCT WALL	NO	1	413.69	Pkg-C
89	183048262320	1830	48262	320	STRAIGHT DUCT WALL	NO	2	262.84	Pkg-C
90	183048262321	1830	48262	321	STRAIGHT DUCT WALL	NO	2	449.23	Pkg-C
91	183048262322	1830	48262	322	TRUSS	NO	1	57.61	Pkg-C
92	183048262323	1830	48262	323	STRAIGHT DUCT WALL	NO	2	155.77	Pkg-C
93	183048262324	1830	48262	324	STRAIGHT DUCT WALL	NO	2	285.08	Pkg-C
94	183048262330	1830	48262	330	STRAIGHT DUCT WALL	NO	1	440.52	Pkg-C
95	183048262331	1830	48262	331	STRAIGHT DUCT WALL	NO	1	440.52	Pkg-C
96	183048262332	1830	48262	332	STRAIGHT DUCT WALL	NO	2	790.90	Pkg-C
97	183048262336	1830	48262	336	STRAIGHT DUCT WALL	NO	2	724.83	Pkg-C
98	183048262338	1830	48262	338	STRAIGHT DUCT WALL	NO	2	819.84	Pkg-C
99	183048262344	1830	48262	344	TRANSITION DUCT WALL	NO	1	408.37	Pkg-C
100	183048262345	1830	48262	345	TRANSITION DUCT WALL	NO	1	405.26	Pkg-C
101	183048262347	1830	48262	347	TRANSITION DUCT WALL	NO	1	168.15	Pkg-C
102	183048262353	1830	48262	353	STRAIGHT DUCT WALL	NO	2	208.67	Pkg-C
103	183048265001	1830	48265	001	CHANNEL - 1	NO	4	23.40	Pkg-C
104	183048265002	1830	48265	002	FAB BOX - 1	NO	4	1,036.45	Pkg-C
105	183048265003	1830	48265	003	FAB BOX - 2	NO	1	386.42	Pkg-C
106	183048265004	1830	48265	004	FAB BOX - 3	NO	1	386.42	Pkg-C
107	183048265005	1830	48265	005	FAB BOX - 4	NO	2	772.84	Pkg-C
108	183048265006	1830	48265	006	ISMB125;3010	NO	4	161.34	Pkg-C
109	183048265007	1830	48265	007	ISMB125;4005	NO	4	214.67	Pkg-C
110	183048265008	1830	48265	008	STIFFNER PLATE - 1	NO	32	274.08	Pkg-C
111	183048265009	1830	48265	009	STIFFNER PLATE - 2	NO	32	459.58	Pkg-C
112	183048265010	1830	48265	010	ANGLE - 1	NO	4	132.72	Pkg-C
113	183048265011	1830	48265	011	ANGLE - 2	NO	4	132.72	Pkg-C
114	183048265012	1830	48265	012	FAB BOX - 5	NO	8	2,309.10	Pkg-C
115	183048265013	1830	48265	013	FAB BEAM - 1	NO	1	129.67	Pkg-C
116	183048265014	1830	48265	014	STIFFNER PLATE - 3	NO	32	301.82	Pkg-C
117	183048265015	1830	48265	015	STIFFNER PLATE - 4	NO	32	299.65	Pkg-C
118	183048265016	1830	48265	016	BEAM - 1	NO	2	205.80	Pkg-C
119	183048265017	1830	48265	017	ISMB200;1760	NO	2	89.41	Pkg-C
120	183048265018	1830	48265	018	BEAM - 2	NO	2	243.85	Pkg-C
121	183048265019	1830	48265	019	ISMB200;1128	NO	2	57.30	Pkg-C
122	183048265020	1830	48265	020	BEAM-3	NO	3	365.32	Pkg-C
123	183048265021	1830	48265	021	ISMB200;2010	NO	6	306.32	Pkg-C
124	183048265022	1830	48265	022	BEAM - 4	NO	4	425.16	Pkg-C
125	183048265023	1830	48265	023	ISMB200;1610	NO	4	163.58	Pkg-C
126	183048265024	1830	48265	024	BEAM - 5	NO	2	206.21	Pkg-C
127	183048265025	1830	48265	025	BEAM - 6	NO	1	121.80	Pkg-C
128	183048265026	1830	48265	026	BEAM - 7	NO	1	104.74	Pkg-C
129	183048265027	1830	48265	027	ISMB150;1760	NO	2	52.80	Pkg-C
130	183048265028	1830	48265	028	FAB BEAM - 2	NO	2	120.24	Pkg-C
131	183048265029	1830	48265	029	BEAM - 8	NO	5	316.11	Pkg-C
132	183048265030	1830	48265	030	BEAM - 9	NO	3	184.93	Pkg-C
133	183048265031	1830	48265	031	ISMB150;1610	NO	12	289.80	Pkg-C
134	183048265032	1830	48265	032	RESTRAINT - 1	NO	38	643.57	Pkg-C
135	183048265033	1830	48265	033	RESTRAINT - 2	NO	4	71.99	Pkg-C
136	183048265034	1830	48265	034	RESTRAINT - 3	NO	30	435.12	Pkg-C
137	183048265035	1830	48265	035	BEAM - 10	NO	2	52.28	Pkg-C
138	183048265036	1830	48265	036	BEAM - 11	NO	1	63.24	Pkg-C
139	183048265037	1830	48265	037	BEAM - 12	NO	1	61.66	Pkg-C
140	183048265038	1830	48265	038	BEAM - 13	NO	1	61.36	Pkg-C
141	183048265039	1830	48265	039	BEAM - 14	NO	1	59.78	Pkg-C
142	183048265040	1830	48265	040	BEAM - 15	NO	1	58.95	Pkg-C
143	183048265041	1830	48265	041	ISMB150;2010	NO	4	120.60	Pkg-C
144	183048265042	1830	48265	042	BEAM - 16	NO	1	61.38	Pkg-C
145	183048265043	1830	48265	043	FAB BOX - 6	NO	1	209.64	Pkg-C
146	183048265044	1830	48265	044	PLT 16;250x250	NO	3	23.55	Pkg-C
147	183048265045	1830	48265	045	PLT 16;300x200	NO	15	113.04	Pkg-C
148	183048265046	1830	48265	046	PLT 16;300x250	NO	4	37.68	Pkg-C
149	183048265047	1830	48265	047	PLT 16;300x300	NO			

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
171	183048265069	1830	48265	069	RESTRAINT - 11	NO	2	224.36	Pkg-C
172	183048265070	1830	48265	070	CHANNEL BOX - 3	NO	4	564.66	Pkg-C
173	183048265071	1830	48265	071	CHANNEL - 5	NO	2	33.41	Pkg-C
174	183048265072	1830	48265	072	CHANNEL - 6	NO	2	33.41	Pkg-C
175	183048265073	1830	48265	073	CHANNEL - 7	NO	2	32.33	Pkg-C
176	183048265074	1830	48265	074	CHANNEL BOX - 4	NO	8	540.29	Pkg-C
177	183048265075	1830	48265	075	CHANNEL BOX - 5	NO	2	267.50	Pkg-C
178	183048265076	1830	48265	076	RESTRAINT - 12	NO	8	318.72	Pkg-C
179	183048265077	1830	48265	077	RESTRAINT - 13	NO	1	26.89	Pkg-C
180	183048265078	1830	48265	078	CHANNEL BOX - 6	NO	1	134.09	Pkg-C
181	183048265079	1830	48265	079	CHANNEL BOX - 7	NO	1	132.52	Pkg-C
182	183048265080	1830	48265	080	CHANNEL BOX - 8	NO	2	265.07	Pkg-C
183	183048265081	1830	48265	081	CHANNEL BOX - 9	NO	2	264.97	Pkg-C
184	183048265082	1830	48265	082	RESTRAINT - 14	NO	2	107.26	Pkg-C
185	183048265083	1830	48265	083	RESTRAINT - 15	NO	6	258.86	Pkg-C
186	183048265084	1830	48265	084	RESTRAINT - 16	NO	2	87.97	Pkg-C
187	183048265085	1830	48265	085	RESTRAINT - 17	NO	5	163.82	Pkg-C
188	183048265086	1830	48265	086	RESTRAINT - 18	NO	4	83.04	Pkg-C
189	183048265087	1830	48265	087	CHANNEL BOX - 10	NO	4	422.97	Pkg-C
190	183048265088	1830	48265	088	CHANNEL BOX - 11	NO	4	538.94	Pkg-C
191	183048265089	1830	48265	089	RESTRAINT - 19	NO	1	28.86	Pkg-C
192	183048265090	1830	48265	090	CHANNEL BOX - 12	NO	2	111.13	Pkg-C
193	183048265091	1830	48265	091	RESTRAINT - 20	NO	2	56.36	Pkg-C
194	183048265092	1830	48265	092	FAB BOX - 8	NO	2	500.34	Pkg-C
195	183048265093	1830	48265	093	FAB BOX - 9	NO	2	531.61	Pkg-C
196	183048265094	1830	48265	094	ANGLE - 3	NO	4	133.95	Pkg-C
197	183048265095	1830	48265	095	ANGLE - 4	NO	4	133.95	Pkg-C
198	183048265096	1830	48265	096	STOPPER - 1	NO	6	22.76	Pkg-C
199	183048265097	1830	48265	097	STOPPER - 2	NO	2	5.53	Pkg-C
200	183048265098	1830	48265	098	STOPPER - 3	NO	1	2.17	Pkg-C
201	183048265099	1830	48265	099	STOPPER - 4	NO	47	74.40	Pkg-C
202	183048265100	1830	48265	100	STOPPER - 5	NO	2	3.28	Pkg-C
203	183048265101	1830	48265	101	HANGER SUPPORT - 1	NO	2	110.86	Pkg-C
204	183048265102	1830	48265	102	HANGER SUPPORT - 2	NO	2	113.26	Pkg-C
205	183048265103	1830	48265	103	PLT 16;441x189	NO	2	20.88	Pkg-C
206	183048265104	1830	48265	104	PLT 16;283x166	NO	1	5.88	Pkg-C
207	183048265111	1830	48265	111	PLT 16;250x180	NO	2	11.30	Pkg-C
208	183048265112	1830	48265	112	PLT 16;594x300	NO	4	89.53	Pkg-C
209	183048465008	1830	48465	008	GUESSET PLATE PL.10	NO	24	295.54	Pkg-C
210	183048465009	1830	48465	009	GUESSET PLATE PL.10	NO	24	209.06	Pkg-C
211	183048465013	1830	48465	013	GUESSET PLATE PL.10	NO	2	18.54	Pkg-C
212	183048465014	1830	48465	014	GUESSET PLATE PL.10	NO	2	18.36	Pkg-C
213	183048465015	1830	48465	015	GUESSET PLATE PL.10	NO	2	16.65	Pkg-C
214	183048465016	1830	48465	016	GUESSET PLATE PL.10	NO	2	17.64	Pkg-C
215	183048465017	1830	48465	017	GUESSET PLATE PL.10	NO	2	17.30	Pkg-C
216	183048465018	1830	48465	018	STRUT PIPE;DIA 88.9X5.49	NO	2	50.04	Pkg-C
217	183048465019	1830	48465	019	STRUT PIPE;DIA 88.9X5.49	NO	2	53.38	Pkg-C
218	183048465020	1830	48465	020	STRUT PIPE;DIA 88.9X5.49	NO	2	46.83	Pkg-C
219	183048465021	1830	48465	021	STRUT PIPE;DIA 88.9X5.49	NO	2	50.58	Pkg-C
220	183048465022	1830	48465	022	GUESSET PLATE PL.10	NO	4	35.38	Pkg-C
221	183048465023	1830	48465	023	GUESSET PLATE PL.10	NO	4	33.86	Pkg-C
222	183048465024	1830	48465	024	STRUT PIPE;DIA 88.9X5.49	NO	8	211.08	Pkg-C
223	183048465029	1830	48465	029	GUESSET PLATE PL.10	NO	8	122.35	Pkg-C
224	183048465030	1830	48465	030	GUESSET PLATE PL.10	NO	8	89.38	Pkg-C
225	183048465031	1830	48465	031	STRUT PIPE;DIA 168.3X12	NO	8	760.08	Pkg-C
226	183048465032	1830	48465	032	GUESSET PLATE PL.10	NO	8	103.09	Pkg-C
227	183048465033	1830	48465	033	GUESSET PLATE PL.10	NO	8	107.26	Pkg-C
228	183048465034	1830	48465	034	STRUT PIPE;DIA 168.3X12	NO	8	932.58	Pkg-C
229	183048465039	1830	48465	039	GUESSET PLATE PL.10	NO	4	27.14	Pkg-C
230	183048465040	1830	48465	040	GUESSET PLATE PL.10	NO	4	59.66	Pkg-C
231	183048465041	1830	48465	041	STRUT PIPE;DIA 168.3X12	NO	4	493.64	Pkg-C
232	183048465049	1830	48465	049	GUESSET PLATE PL.10	NO	40	489.72	Pkg-C
233	183048465050	1830	48465	050	GUESSET PLATE PL.10	NO	40	346.80	Pkg-C
234	183048465053	1830	48465	053	STRUT PIPE;DIA 88.9X5.49	NO	80	1,983.44	Pkg-C
235	183048465054	1830	48465	054	STRUT PIPE;DIA 88.9X5.49	NO	20	758.68	Pkg-C
236	183048465056	1830	48465	056	GUESSET PLATE PL.10	NO	4	35.12	Pkg-C
237	183048465057	1830	48465	057	GUESSET PLATE PL.10	NO	4	36.46	Pkg-C
238	183048465058	1830	48465	058	STRUT PIPE;DIA 88.9X5.49	NO	8	207.82	Pkg-C
239	183048485014	1830	48485	014	TRUSS	NO	2	251.48	Pkg-C
240	183048485015	1830	48485	015	TRUSS	NO	2	306.23	Pkg-C
241	183048485016	1830	48485	016	TRUSS	NO	2	278.85	Pkg-C
242	183048485017	1830	48485	017	TRUSS	NO	8	663.80	Pkg-C
243	183048485018	1830	48485	018	TRUSS	NO	8	581.98	Pkg-C
244	183048485019	1830	48485	019	TRUSS	NO	8	502.00	Pkg-C
245	183048485022	1830	48485	022	TRUSS	NO</td			

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
268	183048202151	1830	48202	151	TRUSS	NO	1	127.90	Pkg-C
269	183048208049	1830	48208	049	TRUSS	NO	2	264.43	Pkg-C
270	183048208059	1830	48208	059	TRUSS	NO	16	865.49	Pkg-C
271	183048208121	1830	48208	121	TRUSS	NO	10	708.27	Pkg-C
272	183048208122	1830	48208	122	TRUSS	NO	3	264.42	Pkg-C
273	183048208138	1830	48208	138	TRUSS	NO	14	991.58	Pkg-C
274	183048208139	1830	48208	139	TRUSS	NO	4	352.56	Pkg-C
275	183048432039	1830	48432	039	SEAMLESS PIPE 168.3X7.11	NO	2	232.13	Pkg-C
276	183048432040	1830	48432	040	SEAMLESS PIPE 168.3X7.11	NO	2	230.09	Pkg-C
277	183048432047	1830	48432	047	SEAMLESS PIPE 127X8	NO	1	156.85	Pkg-C
278	183048432048	1830	48432	048	SEAMLESS PIPE 127X8	NO	1	129.96	Pkg-C
279	183048432049	1830	48432	049	SEAMLESS PIPE 127X8	NO	1	126.53	Pkg-C
280	183048432050	1830	48432	050	SEAMLESS PIPE 127X8	NO	1	141.28	Pkg-C
281	183048432051	1830	48432	051	SEAMLESS PIPE 127X8	NO	1	116.46	Pkg-C
282	183048432053	1830	48432	053	SEAMLESS PIPE 127X8	NO	2	319.42	Pkg-C
283	183048432054	1830	48432	054	SEAMLESS PIPE 168.3X7.11	NO	2	320.86	Pkg-C
284	183048432055	1830	48432	055	SEAMLESS PIPE 127X8	NO	2	237.62	Pkg-C
285	183048432058	1830	48432	058	SEAMLESS PIPE 127X8	NO	1	159.71	Pkg-C
286	183048432059	1830	48432	059	SEAMLESS PIPE 127X8	NO	1	134.00	Pkg-C
287	183048432060	1830	48432	060	SEAMLESS PIPE 127X8	NO	1	103.10	Pkg-C
288	183048432063	1830	48432	063	SEAMLESS PIPE 127X8	NO	1	159.71	Pkg-C
289	183048432064	1830	48432	064	SEAMLESS PIPE 127X8	NO	1	128.98	Pkg-C
290	183048432099	1830	48432	099	SEAMLESS PIPE 168.3X7.11	NO	2	232.13	Pkg-C
291	183048432100	1830	48432	100	SEAMLESS PIPE 168.3X7.11	NO	2	230.09	Pkg-C
292	183048432107	1830	48432	107	SEAMLESS PIPE 127X8	NO	1	156.85	Pkg-C
293	183048432108	1830	48432	108	SEAMLESS PIPE 127X8	NO	1	129.96	Pkg-C
294	183048432109	1830	48432	109	SEAMLESS PIPE 127X8	NO	1	126.53	Pkg-C
295	183048432110	1830	48432	110	SEAMLESS PIPE 127X8	NO	1	141.28	Pkg-C
296	183048432111	1830	48432	111	SEAMLESS PIPE 127X8	NO	1	116.46	Pkg-C
297	183048432113	1830	48432	113	SEAMLESS PIPE 127X8	NO	2	319.42	Pkg-C
298	183048432114	1830	48432	114	SEAMLESS PIPE 168.3X7.11	NO	2	320.86	Pkg-C
299	183048432115	1830	48432	115	SEAMLESS PIPE 127X8	NO	2	237.62	Pkg-C
300	183048432118	1830	48432	118	SEAMLESS PIPE 127X8	NO	1	159.71	Pkg-C
301	183048432119	1830	48432	119	SEAMLESS PIPE 127X8	NO	1	134.00	Pkg-C
302	183048432120	1830	48432	120	SEAMLESS PIPE 127X8	NO	1	103.10	Pkg-C
303	183048432123	1830	48432	123	SEAMLESS PIPE 127X8	NO	1	159.71	Pkg-C
304	183048432124	1830	48432	124	SEAMLESS PIPE 127X8	NO	1	128.98	Pkg-C
305	183048432170	1830	48432	170	SEAMLESS PIPE 127X8	NO	1	119.63	Pkg-C
306	183048432171	1830	48432	171	SEAMLESS PIPE 168.3X7.11	NO	2	492.29	Pkg-C
307	183048432172	1830	48432	172	SEAMLESS PIPE 168.3X7.11	NO	2	249.54	Pkg-C
308	183048432173	1830	48432	173	SEAMLESS PIPE 168.3X7.11	NO	1	126.15	Pkg-C
309	183048432174	1830	48432	174	SEAMLESS PIPE 168.3X7.11	NO	2	527.16	Pkg-C
310	183048432218	1830	48432	218	SEAMLESS PIPE 127X8	NO	1	119.63	Pkg-C
311	183048432219	1830	48432	219	SEAMLESS PIPE 168.3X7.11	NO	2	492.29	Pkg-C
312	183048432220	1830	48432	220	SEAMLESS PIPE 168.3X7.11	NO	2	249.54	Pkg-C
313	183048432221	1830	48432	221	SEAMLESS PIPE 168.3X7.11	NO	1	126.15	Pkg-C
314	183048432222	1830	48432	222	SEAMLESS PIPE 168.3X7.11	NO	2	527.16	Pkg-C
315	183048432265	1830	48432	265	SEAMLESS PIPE 127X8	NO	2	207.33	Pkg-C
316	183048432266	1830	48432	266	SEAMLESS PIPE 127X8	NO	2	209.63	Pkg-C
317	183048432267	1830	48432	267	SEAMLESS PIPE 168.3X7.11	NO	2	492.29	Pkg-C
318	183048432268	1830	48432	268	SEAMLESS PIPE 168.3X7.11	NO	1	113.61	Pkg-C
319	183048432269	1830	48432	269	SEAMLESS PIPE 168.3X7.11	NO	1	114.59	Pkg-C
320	183048432270	1830	48432	270	SEAMLESS PIPE 168.3X7.11	NO	1	114.00	Pkg-C
321	183048432271	1830	48432	271	SEAMLESS PIPE 168.3X7.11	NO	1	114.99	Pkg-C
322	183048432272	1830	48432	272	SEAMLESS PIPE 127X8	NO	2	300.54	Pkg-C
323	183048432273	1830	48432	273	SEAMLESS PIPE 127X8	NO	1	156.10	Pkg-C
324	183048432331	1830	48432	331	SEAMLESS PIPE 168.3X7.11	NO	4	448.88	Pkg-C
325	183048432332	1830	48432	332	SEAMLESS PIPE 168.3X7.11	NO	4	457.02	Pkg-C
326	183048432333	1830	48432	333	SEAMLESS PIPE 127X8	NO	4	522.20	Pkg-C
327	183048432334	1830	48432	334	SEAMLESS PIPE 127X8	NO	2	291.86	Pkg-C
328	183048432364	1830	48432	364	SEAMLESS PIPE 168.3X7.11	NO	2	241.62	Pkg-C
329	183048432365	1830	48432	365	SEAMLESS PIPE 168.3X7.11	NO	2	220.15	Pkg-C
330	183048432366	1830	48432	366	SEAMLESS PIPE 127X8	NO	2	329.19	Pkg-C
331	183048432367	1830	48432	367	SEAMLESS PIPE 127X8	NO	1	163.07	Pkg-C
332	183048432397	1830	48432	397	SEAMLESS PIPE 168.3X7.11	NO	2	241.62	Pkg-C
333	183048432398	1830	48432	398	SEAMLESS PIPE 168.3X7.11	NO	2	220.15	Pkg-C
334	183048432399	1830	48432	399	SEAMLESS PIPE 127X8	NO	2	329.19	Pkg-C
335	183048432400	1830	48432	400	SEAMLESS PIPE 127X8	NO	1	163.07	Pkg-C
336	183048432422	1830	48432	422	SEAMLESS PIPE 88.9X5.49	NO	16	468.40	Pkg-C
337	183048432423	1830	48432	423	SEAMLESS PIPE 88.9X5.49	NO	4	182.22	Pkg-C
338	183048432431	1830	48432	431	SEAMLESS PIPE 127X8	NO	16	1,568.10	Pkg-C
339	183048432432	1830	48432	432	SEAMLESS PIPE 114.3X6.02	NO	8</		

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
16	183048208020	1830	48208	020	ELBOW DUCT WALL	NO	1	552.86	Pkg-D
17	183048208021	1830	48208	021	ELBOW DUCT WALL	NO	1	552.86	Pkg-D
18	183048208022	1830	48208	022	ELBOW DUCT WALL	NO	1	308.97	Pkg-D
19	183048208023	1830	48208	023	ELBOW DUCT WALL	NO	1	308.97	Pkg-D
20	183048208024	1830	48208	024	ELBOW DUCT WALL	NO	1	620.83	Pkg-D
21	183048208025	1830	48208	025	ELBOW DUCT WALL	NO	1	620.83	Pkg-D
22	183048208026	1830	48208	026	ELBOW DUCT WALL	NO	2	1,201.35	Pkg-D
23	183048208040	1830	48208	040	Y-DUCT WALL	NO	1	942.75	Pkg-D
24	183048208041	1830	48208	041	Y-DUCT WALL	NO	2	906.09	Pkg-D
25	183048208042	1830	48208	042	Y-DUCT WALL	NO	1	761.48	Pkg-D
26	183048208044	1830	48208	044	Y-DUCT WALL	NO	1	339.40	Pkg-D
27	183048208045	1830	48208	045	Y-DUCT WALL	NO	1	385.02	Pkg-D
28	183048208046	1830	48208	046	Y-DUCT WALL	NO	1	343.54	Pkg-D
29	183048208047	1830	48208	047	TRUSS	NO	2	124.18	Pkg-D
30	183048208048	1830	48208	048	TRUSS	NO	2	124.96	Pkg-D
31	182848208051	1828	48208	051	BEND DUCT WALL	NO	4	2,958.22	Pkg-D
32	183048208052	1830	48208	052	BEND DUCT WALL	NO	2	282.17	Pkg-D
33	183048208053	1830	48208	053	BEND DUCT WALL	NO	2	182.52	Pkg-D
34	183048208054	1830	48208	054	BEND DUCT WALL	NO	2	182.52	Pkg-D
35	183048208055	1830	48208	055	BEND DUCT WALL	NO	4	897.28	Pkg-D
36	183048208056	1830	48208	056	BEND DUCT WALL	NO	2	448.64	Pkg-D
37	183048208057	1830	48208	057	BEND DUCT WALL	NO	2	686.68	Pkg-D
38	183048208058	1830	48208	058	BEND DUCT WALL	NO	2	686.68	Pkg-D
39	183048208060	1830	48208	060	ELBOW DUCT WALL	NO	2	996.96	Pkg-D
40	183048208061	1830	48208	061	ELBOW DUCT WALL	NO	2	880.62	Pkg-D
41	183048208062	1830	48208	062	ELBOW DUCT WALL	NO	2	634.70	Pkg-D
42	183048208064	1830	48208	064	GUIDE VANE	NO	4	1,353.59	Pkg-D
43	183048208065	1830	48208	065	ELBOW DUCT WALL	NO	2	1,517.01	Pkg-D
44	183048208066	1830	48208	066	ELBOW DUCT WALL	NO	2	1,410.03	Pkg-D
45	183048208067	1830	48208	067	ELBOW DUCT WALL	NO	2	1,229.88	Pkg-D
46	183048208068	1830	48208	068	ELBOW DUCT WALL	NO	2	1,229.88	Pkg-D
47	183048208069	1830	48208	069	ELBOW DUCT WALL	NO	2	1,276.62	Pkg-D
48	183048208070	1830	48208	070	ELBOW DUCT WALL	NO	2	1,276.62	Pkg-D
49	183048208071	1830	48208	071	ELBOW DUCT WALL	NO	2	667.33	Pkg-D
50	183048208072	1830	48208	072	ELBOW DUCT WALL	NO	2	667.33	Pkg-D
51	183048208076	1830	48208	076	TRUSS	NO	32	1,730.98	Pkg-D
52	183048208077	1830	48208	077	TRUSS	NO	12	811.02	Pkg-D
53	183048208116	1830	48208	116	T-DUCT WALL	NO	1	454.88	Pkg-D
54	183048208131	1830	48208	131	T-DUCT WALL	NO	1	998.72	Pkg-D
55	183048145029	1830	48145	029	TRUSS	NO	9	208.38	Pkg-D
56	183048145038	1830	48145	038	TRUSS	NO	9	177.02	Pkg-D
57	183048145039	1830	48145	039	TRUSS	NO	42	1,671.26	Pkg-D
58	183048145040	1830	48145	040	TRUSS	NO	1	43.88	Pkg-D
59	183048145041	1830	48145	041	TRUSS	NO	1	43.95	Pkg-D
60	183048145042	1830	48145	042	TRUSS	NO	9	204.05	Pkg-D
61	183048482004	1830	48482	004	TRUSS	NO	8	413.84	Pkg-D
62	183048482041	1830	48482	041	TRUSS	NO	8	413.84	Pkg-D
63	183048482124	1830	48482	124	TRUSS	NO	2	103.62	Pkg-D
64	183048482125	1830	48482	125	TRUSS	NO	1	75.91	Pkg-D
65	183048482126	1830	48482	126	TRUSS	NO	1	40.61	Pkg-D
66	183048435024	1830	48435	024	STRUT PIPE;DIA 88.9X5.49	NO	4	154.08	Pkg-D
67	183048435025	1830	48435	025	STRUT PIPE;DIA 88.9X5.49	NO	4	157.52	Pkg-D
68	183048435026	1830	48435	026	STRUT PIPE;DIA 114.3X6.02	NO	12	966.72	Pkg-D
69	183048435027	1830	48435	027	STRUT PIPE;DIA 127X8	NO	2	354.74	Pkg-D
70	183048435034	1830	48435	034	GUESSET PLATE;PLATE-10	NO	88	265.50	Pkg-D
71	183048435042	1830	48435	042	GUESSET PLATE;PLATE-10	NO	6	54.25	Pkg-D
72	183048435046	1830	48435	046	STRUT PIPE;DIA 127X8	NO	4	488.20	Pkg-D
73	183048435047	1830	48435	047	STRUT PIPE;DIA 127X8	NO	6	628.88	Pkg-D
74	183048435048	1830	48435	048	STRUT PIPE;DIA 88.9X5.49	NO	8	163.30	Pkg-D
75	183048435049	1830	48435	049	STRUT PIPE;DIA 114.3X6.02	NO	4	611.68	Pkg-D
76	183048435053	1830	48435	053	GUESSET PLATE;PLATE-10	NO	12	38.89	Pkg-D
77	183048435054	1830	48435	054	STRUT PIPE;DIA 127X8	NO	4	818.04	Pkg-D
78	183048435061	1830	48435	061	GUESSET PLATE;PLATE-10	NO	2	20.50	Pkg-D
79	183048435065	1830	48435	065	STRUT PIPE;DIA 168.3X7.1	NO	2	240.94	Pkg-D
80	183048435066	1830	48435	066	STRUT PIPE;DIA 168.3X7.1	NO	2	247.16	Pkg-D
81	183048435067	1830	48435	067	STRUT PIPE;DIA 114.3X6.02	NO	2	266.61	Pkg-D
82	183048435068	1830	48435	068	STRUT PIPE;DIA 114.3X6.02	NO	2	266.61	Pkg-D
83	183048435069	1830	48435	069	STRUT PIPE;DIA 168.3X7.1	NO	2	243.09	Pkg-D
84	183048435070	1830	48435	070	STRUT PIPE;DIA 168.3X7.1	NO	2	249.26	Pkg-D
85	183048435074	1830	48435	074	GUESSET PLATE;PLATE-10	NO	12	150.02	Pkg-D
86	183048435076	1830	48435	076	GUESSET PLATE;PLATE-10	NO	12	168.35	Pkg-D
87	183048435077	1830	48435	077	GUESSET PLATE;PLATE-10	NO	12	172.48	Pkg-D
88	183048435080	1830	48435	080	STRUT PIPE;DIA 168.3X7.1	NO	12	1,346.64	Pkg-D
89	183048435081	1830	48435	081	STRUT PIPE;DIA 168.3X7.1	NO	12	1,371.06	Pkg-D
90	183048435082	1830	48435	082	STRUT PIPE;DIA 114.3X6.02	NO	12	1,072.85	Pkg-D</td

Annexure - A - I - Package wise Detailed Item List of Duct and supports

sl No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	WT (in Kg)	Pkg -Identifications
113	183048018036	1830	48018	036	ELBOW DUCT WALL	NO	1	577.11	Pkg-D
114	183048018037	1830	48018	037	ELBOW DUCT WALL	NO	1	646.19	Pkg-D
115	183048018038	1830	48018	038	ELBOW DUCT WALL	NO	1	605.22	Pkg-D
116	183048018039	1830	48018	039	ELBOW DUCT WALL	NO	1	825.18	Pkg-D

Annexure - A - II -Package wise details of Item required for Enclosure support									
Sr. No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	Required WT	Pkg Identification
1	183030219050	1830	30219	50	PLATE 6 MM	NO	8	1,177.50	Pkg-A
2	183030219052	1830	30219	52	PLATE 5	NO	80	9,812.48	Pkg-A
3	183030219065	1830	30219	65	PLATE	NO	2.00	458.72	Pkg-A
4	183030219066	1830	30219	66	PLATE	NO	2.00	76.40	Pkg-A
5	183030219067	1830	30219	67	PLATE	NO	2.00	347.22	Pkg-A
6	183030219068	1830	30219	68	PLATE	NO	2.00	123.45	Pkg-A
7	183030219069	1830	30219	69	PLATE	NO	2.00	65.20	Pkg-A
8	183030219070	1830	30219	70	PLATE	NO	2.00	196.05	Pkg-A
9	183030219071	1830	30219	71	CORNER PLATE	NO	4.00	54.39	Pkg-A
10	183030219072	1830	30219	72	SUPPORT ANGLE 100X100X10	NO	550.00	1,229.25	Pkg-A
11	183030219079	1830	30219	79	BEAM 250 X 125 - IS2062E250A(FE410W)	NO	4.00	895.20	Pkg-A
12	183030211006	1830	30211	006	PLATE 6	NO	52.00	146.95	Pkg-A
13	183030233135	1830	30233	135	STIFFENER PLATE-6	NO	208	3,673.90	Pkg-A
14	183030233136	1830	30233	136	PLATE-5	NO	3.00	441.56	Pkg-A
15	183030233137	1830	30233	137	PLATE-4	NO	3	353.25	Pkg-A
16	183030234150	1830	30234	150	STIFFENER PLATE-6	NO	208.00	3,673.90	Pkg-A
17	183030234151	1830	30234	151	PL-5MM	NO	3.00	441.56	Pkg-A
18	183030234152	1830	30234	152	PL-4MM	NO	3.00	353.25	Pkg-A
19	183030235001	1830	30235	001	ISMB 450	NO	17.00	11,914.14	Pkg-A
Sub Total Pkg-A								35,434.40	
1	183030105061	1830	30105	61	PLATE 6	NO	1.00	84.78	Pkg-B
2	183030215013	1830	30215	13	PLATE 6	NO	3.00	441.56	Pkg-B
3	183030215014	1830	30215	14	SUPPORT ANGLE	NO	32.00	65.28	Pkg-B
4	183030219011	1830	30219	11	ISA 100X100X10	NO	30	2,682.00	Pkg-B
5	183030219012	1830	30219	12	ISA 75X75X6	NO	35	1,428.00	Pkg-B
6	183030219021	1830	30219	21	SUPPORT CHANNEL ISMC 200	NO	14.00	274.95	Pkg-B
7	183030219022	1830	30219	22	SUPPORT CHANNEL ISMC 200	NO	10.00	252.14	Pkg-B
8	183030219023	1830	30219	23	SUPPORT CHANNEL ISMC 200	NO	12.00	310.60	Pkg-B
9	183030219027	1830	30219	27	SUPPORT CHANNEL ISMC 200	NO	42.00	1,553.50	Pkg-B
10	183030219031	1830	30219	31	SUPPORT CHANNEL ISMC 200	NO	12.00	489.89	Pkg-B
11	183030219032	1830	30219	32	SUPPORT CHANNEL ISMC 200	NO	12.00	516.65	Pkg-B
12	183030219033	1830	30219	33	SUPPORT CHANNEL ISMC 200	NO	24.00	1,060.06	Pkg-B
13	183030219034	1830	30219	34	SUPPORT CHANNEL ISMC 200	NO	40.00	1,820.28	Pkg-B
14	183030219035	1830	30219	35	ISMC 200 IS2062E250A(FE410W)	NO	15	2,007.00	Pkg-B
15	183030219043	1830	30219	43	PLATE 6 MM	NO	6	1,576.06	Pkg-B
16	183030219045	1830	30219	45	PLATE 6 MM	NO	2	540.99	Pkg-B
17	183030219046	1830	30219	46	PLATE 6 MM	NO	2	395.73	Pkg-B
18	183030219048	1830	30219	48	PLATE 6 MM	NO	32	9,983.68	Pkg-B
Sub Total Pkg-B								25,483.14	
1	183030105001	1830	30105	1	ISMB 250X125	NO	24.00	8,749.68	Pkg-C
2	183030105002	1830	30105	2	ISMB 250X125	NO	26.00	1,714.60	Pkg-C
3	183030105003	1830	30105	3	COLUMN ASSEMBLY	NO	2.00	551.29	Pkg-C
4	183030105004	1830	30105	4	COLUMN ASSEMBLY	NO	2.00	439.28	Pkg-C
5	183030105005	1830	30105	5	COLUMN ASSEMBLY	NO	2.00	327.31	Pkg-C
6	183030105006	1830	30105	6	COLUMN ASSEMBLY	NO	2	226.66	Pkg-C
7	183030105007	1830	30105	7	COLUMN ASSEMBLY	NO	2	114.65	Pkg-C
8	183030105008	1830	30105	8	COLUMN ASSEMBLY	NO	2.00	551.29	Pkg-C
9	183030105009	1830	30105	9	COLUMN ASSEMBLY	NO	2.00	439.28	Pkg-C
10	183030105010	1830	30105	10	COLUMN ASSEMBLY	NO	2.00	327.31	Pkg-C

Annexure - A - II -Package wise details of Item required for Enclosure support									
Sr. No	CUSTPGMADU	CUST	PGMA	DU	DESCRIPTION	UOM	Required QTY	Required WT	Pkg Identification
11	183030105011	1830	30105	11	COLUMN ASSEMBLY	NO	2	226.66	Pkg-C
12	183030105012	1830	30105	12	COLUMN ASSEMBLY	NO	2.00	114.65	Pkg-C
13	183030105013	1830	30105	13	ISMC 200	NO	2	556.89	Pkg-C
14	183030105014	1830	30105	14	ISMC 200	NO	2	556.89	Pkg-C
15	183030105015	1830	30105	15	PLATE 6	NO	4.00	353.06	Pkg-C
16	183030105017	1830	30105	17	BOX CHANNEL	NO	26	3,057.60	Pkg-C
17	183030105018	1830	30105	18	ISMC 150	NO	4	537.60	Pkg-C
18	183030105019	1830	30105	19	ISMB 250X125	NO	4.00	830.00	Pkg-C
19	183030105020	1830	30105	20	ISMB 250X125	NO	2.00	756.00	Pkg-C
20	183030105022	1830	30105	22	ISMB 250X125	NO	12	2,503.87	Pkg-C
21	183030105024	1830	30105	24	SUPPORT BEAM	NO	24	409.92	Pkg-C
22	183030105026	1830	30105	26	SUPPORT BEAM	NO	24	670.78	Pkg-C
23	183030105045	1830	30105	45	ISMC 250	NO	1	136.80	Pkg-C
24	183030105046	1830	30105	46	ISMC 100	NO	2.00	61.18	Pkg-C
25	183030105056	1830	30105	56	ISA 75X75X6	NO	4	136.00	Pkg-C
26	183030105057	1830	30105	57	PLATE 6	NO	4.00	847.80	Pkg-C
Sub Total Pkg-C								25,197.05	
1	183030235002	1830	30235	002	ISMB 250	NO	9	890.95	Pkg-D
2	183030235003	1830	30235	003	ISMB 250	NO	2	212.91	Pkg-D
3	183030235004	1830	30235	004	ISMB 250	NO	7	797.40	Pkg-D
4	183030235005	1830	30235	005	ISMB 250	NO	4	500.42	Pkg-D
5	183030235006	1830	30235	006	ISMB 250	NO	2	257.67	Pkg-D
6	183030235007	1830	30235	007	ISMB 250	NO	16	2,240.38	Pkg-D
7	183030235008	1830	30235	008	ISMB 250	NO	6	862.52	Pkg-D
8	183030235009	1830	30235	009	HANGER ANGLE	NO	27	775.04	Pkg-D
9	183030235010	1830	30235	010	HANGER ANGLE	NO	4	122.50	Pkg-D
10	183030235012	1830	30235	012	HANGER ANGLE	NO	12	413.58	Pkg-D
11	183030235013	1830	30235	013	HANGER ANGLE	NO	106	3,755.05	Pkg-D
12	183030235014	1830	30235	014	HANGER ANGLE	NO	12	430.86	Pkg-D
13	183030235015	1830	30235	015	HANGER ANGLE	NO	14	509.39	Pkg-D
14	183030235016	1830	30235	016	HANGER ANGLE	NO	4	149.38	Pkg-D
15	183030235018	1830	30235	018	HANGER ANGLE	NO	21	824.57	Pkg-D
16	183030235019	1830	30235	019	HANGER ANGLE	NO	11	188.72	Pkg-D
17	183030235020	1830	30235	020	HANGER ANGLE	NO	13	224.65	Pkg-D
18	183030235021	1830	30235	021	HANGER ANGLE	NO	2	35.52	Pkg-D
19	183030235022	1830	30235	022	HANGER ANGLE	NO	7	141.13	Pkg-D
20	183030235023	1830	30235	023	HANGER ANGLE	NO	27	775.04	Pkg-D
21	183030235024	1830	30235	024	HANGER ANGLE	NO	4	122.50	Pkg-D
22	183030235025	1830	30235	025	HANGER ANGLE	NO	17	553.27	Pkg-D
23	183030235026	1830	30235	026	HANGER ANGLE	NO	12	413.58	Pkg-D
24	183030235027	1830	30235	027	HANGER ANGLE	NO	106	3,755.05	Pkg-D
25	183030235028	1830	30235	028	HANGER ANGLE	NO	12	430.86	Pkg-D
26	183030235029	1830	30235	029	HANGER ANGLE	NO	14	509.39	Pkg-D
27	183030235030	1830	30235	030	HANGER ANGLE	NO	4	149.38	Pkg-D
28	183030235031	1830	30235	031	HANGER ANGLE	NO	36	1,378.98	Pkg-D
29	183030235032	1830	30235	032	HANGER ANGLE	NO	21	824.57	Pkg-D
30	183030235033	1830	30235	033	HANGER ANGLE	NO	11	188.72	Pkg-D
31	183030235034	1830	30235	034	HANGER ANGLE	NO	13	224.65	Pkg-D
32	183030235035	1830	30235	035	HANGER ANGLE	NO	2	35.52	Pkg-D
33	183030235036	1830	30235	036	HANGER ANGLE	NO	7	141.13	Pkg-D
Sub Total -Pkg-D								22,835.25	

Sr. No	Descriptions	Pkg-A	Pkg-B	Pkg-C	Pkg-D	Total
1	Duct & duct Supports	138.302	95.988	90.537	70.986	395.813
2	Enclosure materials	35.434	25.483	25.197	22.835	108.949
3		173.736	121.471	115.734	93.821	504.762

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

and

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

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for _____
 E tender ref: 2501105 - Fabrication and Supply of the Ducts, Duct supports and Enclosure support structures as per the approved detailed drawings (Procurement of Raw Material including Steel is in the scope of Bidder) for 3x800 MW PVUNL Project Patratu

_____ (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)/ Contractor (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

- 5.1 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 Principal 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.
- 10.5 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.
- 10.6 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.

Digitally signed by NAresh CHANDRA SHARMA
DN: c=IN, o=BHARAT HEAVY ELECTRICALS LTD, ou=PSWR
NAGPUR,
5.24.5.20=91e43cc0aa0f091e0fa982eb35b89dfc75ee7c2cb2d
5e5ff0143bad581, postal_code=440001, st=Maharashtra,
serialNumber=98EBCA20835FEEB2932516336685BC2D8489F36
3986898N=057AF0C240949CA, cn=NAresh CHANDRA SHARMA

For & On behalf of the Principal
(Office Seal)

Place NAGPUR
Date

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

Witness: _____
(Name & Address)

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)

Name: V K Arya
Dept: PURCHASE
Address: PSWR-HQ, NAGPUR
Phone: (Landline/ Mobile)

Email: vkarya@bhel.in
Fax: _____

(2)

Name: Biraj Roy
Dept: PURCHASE
Address: PSWR-HQ, NAGPUR
Phone: (Landline/ Mobile)
9587886706
Email: biraj@bhel.in
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 GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

NAME & ADDRESSES OF THE BENEFICIARY:

Dear Sirs,

In consideration of Bharat Heavy Electricals Limited (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 _____

_____¹ through its Unit at _____ (Name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) with its registered office at _____² hereinafter referred to as the 'Vendor / Contractor / Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No. _____ dated _____³ valued at Rs._____⁴ (Rupees _____)/FC _____(in words _____) for _____⁵ (hereinafter called the 'Contract') and the Vendor / Contractor / Supplier 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 Vendor / Contractor / Supplier 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 Vendor / Contractor / Supplier 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

continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We _____ BANK 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 Vendor / Contractor / Supplier and notwithstanding any security or other guarantee that the Employer may have in relation to the Vendor / Contractor / Supplier'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 Vendor / Contractor / Supplier 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 exceed _____⁶

b) This Guarantee shall be valid up to _____⁷

c) Unless the Bank is served a written claim or demand on or before _____⁸ 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)

Dated _____

Place of Issue _____

¹ NAME AND ADDRESS OF EMPLOYER i.e. Bharat Heavy Electricals Limited

² NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

³ DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

⁴ CONTRACT VALUE

⁵ PROJECT/SUPPLY DETAILS

⁶ BG AMOUNT IN FIGURES AND WORDS

⁷ VALIDITY DATE

⁸ DATE OF EXPIRY OF CLAIM PERIOD

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 prescribed in this document**

Ref No:			Date:			
<i>i.</i>	Main Contractor	Bharat Heavy Electricals Limited				
<i>ii.</i>	Project					
<i>iii.</i>	Package Name			Package No		
<i>iv.</i>	Proposed Item/Scope of Sub-contracting					
<i>v.</i>	Item covered under	Schedule-1	<input type="checkbox"/>	<input type="checkbox"/>	As per contract clause No-	<input type="checkbox"/>
		Schedule-2	<input type="checkbox"/>			
<i>vi.</i>	If item is Schedule-1 and proposed sub-vendor is indigenous, Main Contractor to explain how the contractual provisions will be fulfilled					
<i>vii.</i>	Name and Address of the proposed Sub-vendor's works					
<i>viii.</i>	PO placement date/ Start of manufacturing (if self-manufactured) as per L2 network				Under evaluation	
<i>ix.</i>	Item Description (Type/Size/Rating/Scope of Sub-Contracting)	Total quantity of proposed item envisaged in this package (Nos/ Running Meters/ Kgs/ Tons etc)	Quantity proposed to be procured from proposed sub-vendor (Nos/ Running Meters /Kgs /Tons etc)	Timeline for quantity requirements as per project schedule & whether the proposed Sub-vendor equipped with adequate capacity to supply proposed order quantity in time		
<i>x.</i>	Supply experience of the proposed sub-vendor (including supplies to Main Contractor, if any) for similar item/scope of sub-contracting, for last 3 years (Note:- Only relevant experience details w.r.t. proposed item/scope of subcontracting to be brought out here)					
	Project/Package	Customer Name	Supplied Item (Type/Rating/Model /Capacity/Size etc)	PO ref no/date	Supplied Quantity	

We confirm that as per our assessment, the proposed sub-vendor has requisite capabilities & supply experience and is suitable for supplying the proposed item/scope of sub-contracting.

Name:		Desig:		Contact No:		Sign:		Date:	
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Company's Seal/Stamp:-

CORPORATE QUALITY ASSURANCE

VENDOR QUESTIONNAIRE

ANNEXURE-5

(P4F2R0)

***Supplier has to submit all the documents as per the annexures cited here and naming philosophy must be as prescribed in this document**

<i>i.</i>	Item/Scope of Sub-contracting		
<i>ii.</i>	Address of the registered office	Details of Contact Person (Name, Designation, Mobile, Email)	
<i>iii.</i>	Name and Address of the proposed Sub-vendor's works where item is being manufactured	Details of Contact Person: (Name, Designation, Mobile, Email)	
<i>iv.</i>	Annual Production Capacity for proposed item/scope of sub-contracting		
<i>v.</i>	Annual production for last 3 years for proposed item/scope of sub-contracting		
<i>vi.</i>	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)		
4.	Total Area		
	Covered Area		
5.	Factory Registration Certificate	(Details attached at Annexure – F2.1)	
6.	Design/ Research & development set-up (No. of manpower, their qualification, machines & tools employed etc.)	Applicable / Not applicable if manufacturing is as per Main Contractor/purchaser design) (Details attached at Annexure – F2.2) (if applicable)	
7.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc)	(Details attached at Annexure – F2.3)	

CORPORATE QUALITY ASSURANCE

VENDOR QUESTIONNAIRE

	CORPORATE QUALITY ASSURANCE VENDOR QUESTIONNAIRE					
8.	<i>After sales service set up in India, in case of foreign sub-vendor (Location, Contact Person, Contact details etc.)</i>			<i>Applicable / Not applicable (Details attached at Annexure – F2.4)</i>		
9.	<i>Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any</i>			<i>(Details attached at Annexure – F2.5)</i>		
10.	<i>Sources of Raw Material/Major Bought Out Item</i>			<i>(Details attached at Annexure – F2.6)</i>		
11.	<i>Quality Control exercised during receipt of raw material/BOI, in-process , Final Testing, packing</i>			<i>(Details attached at Annexure – F2.7)</i>		
12.	<i>Manufacturing facilities (List of machines, special process facilities, material handling etc.)</i>			<i>(Details attached at Annexure – F2.8)</i>		
13.	<i>Testing facilities (List of testing equipment)</i>			<i>(Details attached at Annexure – F2.9)</i>		
14.	<i>If manufacturing process involves fabrication then- List of qualified Welders List of qualified NDT personnel with area of specialization</i>			<i>Applicable / Not applicable (Details attached at Annexure – F2.10) (if applicable)</i>		
15.	<i>List of out-sourced manufacturing processes with Sub-Vendors' names & addresses</i>			<i>Applicable / Not applicable (Details attached at Annexure. –F2.11) (if applicable)</i>		
16.	<i>Supply reference list including recent supplies</i>			<i>Details attached at Annexure – F2.12 (as per format given below)</i>		
<i>Project/ package</i>	<i>Customer Name</i>	<i>Supplied Item (Type/Rating/Model /Capacity/Size etc)</i>		<i>PO ref no/date</i>	<i>Supplied Quantity</i>	<i>Date of Supply</i>
17.	<i>Product satisfactory performance feedback letter/certificates/End User Feedback</i>			<i>(Attached at annexure - F2.13)</i>		

CORPORATE QUALITY ASSURANCE

VENDOR QUESTIONNAIRE

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

<i>Name:</i>	<i>Desig:</i>	<i>Sign:</i>	<i>Date:</i>
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Company's Seal/Stamp:-