

**BHARAT HEAVY ELECTRICALS LIMITED**  
**TRANSMISSION BUSINESS GROUP**  
**SUBCONTRACTS MANAGEMENT**  
**PLOT NO. 25, SECTOR 16A, NOIDA,**  
**DISTT. - GAUTAM BUDDH NAGAR**  
**U.P. - 201301**



**TENDER DOCUMENTS**

**FOR**

**DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR  $\pm$  800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.)**

**CUSTOMER**

**POWERGRID CORPORATION OF INDIA LIMITED (NAGPUR)**  
**ADANI ENERGY SOLUTIONS LIMITED (BHADLA & FATEHPUR)**

**TENDER SPEC. No.:** TBSM/HVDC/PEB-OB/TENDER/26-27  
**DATE:** 20.08.2026

**BHARAT HEAVY ELECTRICALS LIMITED**  
**TRANSMISSION BUSINESS GROUP**  
**SUBCONTRACTS MANAGEMENT**

**Index**

| <b>Sl. No.</b> | <b>Description</b>                                                                                                                   | <b>No. of Pages</b> |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1              | Notice Inviting Tender                                                                                                               | 6                   |
| 2              | Project Information/ BHEL's Contacts                                                                                                 | 1                   |
| 3              | Offer forwarding letter / Tender submission letter                                                                                   | 1                   |
| 4              | Declaration by Authorised Signatory of Bidder                                                                                        | 1                   |
| 5              | Declaration confirming knowledge about Site conditions                                                                               | 1                   |
| 6              | Authorization of representative for Online RA Process                                                                                | 1                   |
| 7              | No deviation certificate                                                                                                             | 1                   |
| 8              | Declaration for relation in BHEL                                                                                                     | 1                   |
| 9              | Declaration Regarding Insolvency / Liquidation / Bankruptcy Proceedings                                                              | 1                   |
| 10             | Declaration regarding Authenticity of submitted documents                                                                            | 1                   |
| 11             | Declaration regarding minimum local content                                                                                          | 1                   |
| 12             | Declaration regarding no conflict of interest                                                                                        | 1                   |
| 13             | Indemnity Bond                                                                                                                       | 1                   |
| 14             | Proforma of BG inlieu of SD                                                                                                          | 2                   |
| 15             | Integrity Pact                                                                                                                       | 5                   |
| 16             | Pre-Qualifying Requirements                                                                                                          | 2                   |
| 17             | Format for e-payment                                                                                                                 | 1                   |
| 18             | Health, Safety & Environment specification<br>(Doc. No.: - TBG/HSE/NIT-01, Rev-03 Date 31.03.2026)                                   | 22                  |
| 19             | General Conditions of Contract                                                                                                       | 33                  |
| 20             | BHEL Conciliation Scheme                                                                                                             | 11                  |
| 21             | Bill of Quantity Cum price schedule (Annexure-I)                                                                                     | 1                   |
| 22             | Price Bid Format: - To be filled by the Bidder Online through<br><a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a> | 1                   |
| 23             | Technical Specifications for Integrated Site Office                                                                                  | 36                  |



**BHARAT HEAVY ELECTRICALS LIMITED**  
**TRANSMISSION BUSINESS GROUP**  
**SUBCONTRACTS MANAGEMENT**

PLOT NO. 25, SECTOR 16A, NOIDA,  
DISTT. – GAUTAM BUDDH NAGAR (U.P.) - 201301

REF No. TBSM/HVDC/PEB-OB/TENDER/26-27

Date : 20.08.2026

SUB : TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "

Dear Sir,

1 Sealed tender are invited for the following :

| NAME OF WORK                                                                                                                                                                                                                                                                           | TIME OF COMPLETION             | EARNEST MONEY DEPOSIT                                   | TENDER SUBMISSION DATE AND TIME DD/MM/YYYY | TENDER OPENING DATE & TIME DD/MM/YYYY |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------------------------|--------------------------------------------|---------------------------------------|
| DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) | 03 Months from the date of LOI | Rs. 2,00,000/-<br>As per General conditions of contract | 02.09.2026<br><br>11.00 hrs.               | 02.09.2026<br><br>16.00 hrs.          |

2 Bidder has to submit offer directly through E-PROCUREMENT MODE. Bidder may visit <https://eprocurebhel.co.in>

**Procedure for Submission of Tenders through e-tendering:**

The tender is also floated online through our E-Procurement Site <https://eprocurebhel.co.in>. The bidder may respond by submitting their offer online in our e-Procurement platform at <https://eprocurebhel.co.in>

Offers are invited in two-parts only.

**Documents Comprising the e-Tender**

The tender shall be submitted online

**a) Technical Bid (Un priced Tender)**

All Technical details (e.g. Eligibility Criteria requested (as mentioned below)) should be attached in e-tendering module, failing which the tender stands invalid & may be REJECTED. Bidders shall furnish the following information along with technical tender (preferably in pdf format):

- Earnest money Deposit (EMD) furnished in accordance with NIT Clause 4.0
- Technical Bid (without indicating any prices).

**b) Price Bid:**

- Prices are to be quoted in the attached Price Bid format online on e-tender portal.
- The price should be quoted for the accounting unit indicated in the e-tender document.
- Note: It is the responsibility of tenderer to go through the Tender document to ensure furnishing all required documents in addition to above, if any. Any deviation would result in REJECTION of tender and would not be considered at a later stage at any cost by BHEL.
- A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.

- v) A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
- vi) BHEL **shall not** conduct Reverse Auction in this tender. Hence bidders are requested to quote their best prices in sealed bid
- c) Uploading of the price bid in prequalification bid or technical bid may **RESULT IN REJECTION** of the tender.
- d) Tenders shall be uploaded with all relevant PDF/zip format. The relevant tender documents should be uploaded by an authorized person having Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION digital signature certificate (DSC).

Tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the manner described in “GENERAL CONDITIONS OF CONTRACT “which shall be part of the Technical Bid.

In case of E-Tenders, no paper bids shall be accepted, therefore, the scanned copy of the Banker’s Cheque/ Demand Draft/ Pay Order/ Details of payment made through Electronic Fund Transfer/ Fixed Deposit Receipt (FDR) / Bank Guarantee should be uploaded in the E-Procurement Portal and hard copy of the same should reach to following address at before the due date and time of bid submission. BHEL shall not be responsible for postal or any other delays in this regard.)

3

To,  
 Ashok Kumar Meena  
 AGM (TBSM)  
 BHARAT HEAVY ELECTRICALS LIMITED, TRANSMISSION BUSINESS GROUP,  
 4th Floor, BHEL SADAN, Plot no.: - 25, Sector- 16A, Noida, Distt. – Gautam Buddh Nagar, UP-201301  
 TELEPHONE: 0120-221 8640, 9831038136E-mail: akmeena@bhel.in

- 4 **Bidders may please note that no other mode of bid submission shall be considered for evaluation apart from Clause no. 02 to 03 mentioned above.**
- 5 The prospective bidders who have downloaded the tender documents from our website are requested to send their acknowledgement and willingness to participate in the tender to the undersigned, through fax or email.
- 6 Offers should be strictly in accordance with the Tender Specifications and General Instructions to Tenderer enclosed herewith.
- 7 **Reverse auction is not applicable in this tender.**
- 8 The contractor shall give his explicit confirmation without any deviations to the HSE (Health, Safety and Environment) requirements as per enclosed **specification No. TBSM/HSE/NIT-01, Rev-03** Date 31.03.2026. Contractors are also required to furnish details as per Annexure (HSE) to NIT along with their offer. Offers received without compliance & data about HSE requirements are liable to be rejected.
- 9 All documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder.
- 10 Clarifications, if any, can be obtained from the undersigned but such requests should be submitted well before the due date for submission of tenders. Due date for submission and opening of tenders will not be extended on such grounds.
- 11 Drawings & FQP enclosed with the NIT (if provided) are for tender purpose only. Drawings & FQP may get change during execution stage and work to be carried as per latest RFC drawings & Field Quality Plan (FQP).
- 12 Work fronts shall be furnished progressively as per project requirement and no claim towards idling charges/ project overheads etc. borne by the contractor on account of non-availability of drawings/ fronts shall be entertained.
- 13 Completion period of the work has been envisaged under best possible conditions. Any changes/ deviation during execution shall be dealt as per relevant clauses mentioned in general/ special conditions of contract for ETC works.

- 14 “In case this tender is awarded to first time contractor\*, then the bidder shall be eligible to qualify for the next tender of similar work# of BHEL, TBG; only after successful executing of 50% (fifty percent) of this work prior to the date of next tender (in which bidder desires to quote) and on satisfactory performance feedback by BHEL site Incharge.”
- \* First time contractor: The bidders who have not successfully executed more than 50% (fifty percent) of awarded similar work by BHEL (TBG/ ISG/Power Sector/Any BHEL Unit) in last 5 years from date of NIT.
- The bidders who have taken any order from BHEL under 1st time category, and desires to further participate in BHEL tenders, needs to submit a certificate/ undertaking mentioning the reason of not executing 50% of awarded work, hence the criteria under 1st time bidder shall not be applicable to them. The certificate/ undertaking shall be duly certified by Site In charge of BHEL
- # Similar work: Similar to nature of work of the tender under consideration.
- 15 **Before submission of offer, the tenderer is advised to inspect the work & the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, sourcing of material and labour, means of transport and access to site, accommodation, etc. No claim will be entertained later on the grounds of lack of knowledge on any of these conditions/ resources.**
- 16 Deleted
- 17 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 [www.bhel.com](http://www.bhel.com).
- 18 Integrity commitment, performance of the contract and punitive action thereof:
- 18.1 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.
- 18.2 Commitment by Bidder/ Supplier/ Contractor:
- i) The bidder/ supplier/ contractor commits 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.
- ii) 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.
- iii) 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](http://www.bhel.com) and/or under applicable legal provisions”.
- 19 Also, offer of the bidders who are suspended (under hold/ delist) for business dealings by BHEL, TBG shall not be considered. Please note that lifting/ restoration of suspension (Ban/Hold/ De-list) of business dealing is not automatic after expiry of specified suspension period. Hence, vendor shall be considered as suspended for business till suspension is lifted by BHEL in writing on specific request of the vendor as per extant guidelines.
- 20 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 soon as it comes to their notice."
- 21 Offers will be scrutinized based on the qualifying requirements and only those who are technically and financially capable to execute the Job and who fulfil the Pre-Qualifying Requirements (PQR) are eligible to quote against the above NIT. However, final acceptance of the bidder/ offer shall be subject to acceptance of our customer.
- 22 The evaluation currency for this tender shall be INR.

- 23 The Submission of EMD is compulsory for subject tender. In case requisite Amount of EMD not submitted by the bidder before tender opening or along with offer, the offer shall not be considered for evaluation and the offer shall be rejected.
- 24 In the course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders.  
In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by toss/ draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s).  
Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.
- 25 Technical Bid will be opened in the office of undersigned. If required, technical discussions will be held with only those bidders who have taken any deviations. The price bids will be opened subsequently, after Technical Bids of all the bidders have been evaluated and frozen. Bidders should quote their most competitive rates as there will not be any price negotiation. However, if felt necessary by BHEL, price negotiation will be held with lowest bidder (L-1) only. **IT WOULD BE PREFERRED THAT YOUR OFFER IS WITHOUT ANY DEVIATION w.r.t. TENDER SPECIFICATIONS AND THE SAME MAY BE CLEARLY MENTIONED ON THE COVERING LETTER ACCOMPANYING THE TECHNICAL BID.** Offers with deviations are likely to be rejected.
- 26 In case any adverse information is received concerning performance, capability or conduct of the bidder after issue of tender enquiry, BHEL reserves the right to reject the offer at any stage as deemed fit.
- 27 **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 in the tender, offer shall be processed construing that the bidder is not falling under MSE category.**

28 **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

| Sr. No. | IEM                                  | E-mail                                         |
|---------|--------------------------------------|------------------------------------------------|
| 1       | Dr. Sarat Kumar Acharya, Ex-CMD, NLC | <a href="mailto:iem1@bhel.in">iem1@bhel.in</a> |
| 2       | Shri R. Mukundan, IRPS (Retd.)       | <a href="mailto:iem2@bhel.in">iem2@bhel.in</a> |
| 3       | Shri Madan Lal Meena, IAS (Retd.)    | <a href="mailto:iem3@bhel.in">iem3@bhel.in</a> |

- (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): -

|                         |                                                                        |                                                                            |
|-------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Name                    | Ashok Kumar Meena                                                      | Ajay Kumar Chowdhary                                                       |
| Designation/ Department | AGM/TBSM                                                               | GM/TBMM&SM                                                                 |
| Address                 | 4th Floor, TBG, BHEL Sadan, Film City,<br>Sector-16A, Noida, UP-201301 | 5th Floor, TBG, BHEL Sadan, Film<br>City, Sector-16A, Noida, UP-<br>201301 |
| Phone                   | 0120 2218640                                                           | 0120 2218789                                                               |
| E-mail                  | <a href="mailto:akmeena@bhel.in">akmeena@bhel.in</a>                   | <a href="mailto:akchowdhary@bhel.in">akchowdhary@bhel.in</a>               |
| Fax                     |                                                                        |                                                                            |

- 29 Any materials (if required) for subject works have to be procured from Customer approved sources only. It will be the bidder's responsibility to get the approval of materials and vendors for materials.
- 30 The purchase preference for central P.S.U.s shall be given as per the prevailing Government policy.
- 31 Work schedule and the deployment of manpower and T&P resources committed by the contractor in their offer, to match the scheduled completion, shall be submitted by contractor and mutually agreed with site In-charge immediately after the award of work. Further, the contractor shall mobilise at site within two weeks of award of work.
- 32 In case an offer is not being submitted by the prospective bidders against this tender, they may send their "regret" letter to this office, for information.
- 33 Details of qualifying work(s) executed by the bidder will be forwarded to the principal employer for verification of the work with respect to completion, commencement & completion date and value of the work executed. Performance feedback of the bidder will also be sought from the principal employer.
- 34 The bidder representative may be called for discussion with the committee. His originals may be verified by the committee. In addition to above their organisation chart and detail list of manpower, tools & plants and technically capability will be discussed and ascertained by the committee.
- 35 **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:
- they have controlling partner (s) in common; or
  - they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
  - they have the same legal representative/agent for purposes of this bid; or
  - 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
  - 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
  - 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 authorise only one agent/dealer. There can be only one bid from the following:
    - The principal manufacturer directly or through one Indian agent on his behalf; and
    - Indian/foreign agent on behalf of only one principal; or
    - 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
    - In case of it 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. "

36 **GRIEVANCE REDRESSAL MECHANISM:**

To promote transparency and ensure fair treatment of all bidders, a structured Grievance Redressal Mechanism is in place to address any concerns or issues arising during the tendering process or in subsequent business dealings with the company. Suppliers/Contractors are requested to follow the below escalation process for grievance resolution:

1. **First Level:** Any grievance should initially be addressed to the designated Dealing Officer, whose contact details are as follows:

(i) **During tendering Stage –**

Ashok Kumar Meena

AGM/TBSM, TBG, BHEL

Email: [akmeena@bhel.in](mailto:akmeena@bhel.in)

Phone: 0120-2218640

(ii) **After execution of work –**

Laxman Sarkar

General Manager(ES, TS & Project Director-KN800 HVDC)), BHEL

BHEL Bhawan

3rd Floor, D/J-9/1, Salt Lake City.

Sector-II, Karunamoyee, Kolkata-700 091

E-mail: [lsarkar@bhel.in](mailto:lsarkar@bhel.in)

Phone – 9557494442

2. **Second Level:** If the issue remains unresolved, it may be escalated by lodging a formal grievance through the **SUVIDHA Portal**: <https://suvidha.bhel.in/suvidha/>. Responses will be provided in accordance with the defined escalation matrix.”

Thanking you,

Yours faithfully,

For and on behalf of BHEL,

**(Ashok Kumar Meena)**

**AGM /TBSM**

## **PROJECT INFORMATION**

REF No. TBSM/HVDC/PEB-OB/TENDER/26-27

DATE : 20.08.2026

|   |                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <b>CUSTOMER:</b>                                     | POWERGRID CORPORATION OF INDIA LIMITED (NAGPUR)<br>ADANI ENERGY SOLUTIONS LIMITED (BHADLA & FATEHPUR)                                                                                                                                                                                                                                                                                                                                                                  |
| 2 | <b>PROJECT LOCATION AND DETAILS:</b>                 | TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR $\pm$ 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "                                                                                                                                                                |
| 3 | <b>SITE ADDRESS:</b>                                 | <b>NAGPUR</b> - 600 MW, 800 kV HVDC Terminal, Powergrid West Central Transmission Ltd, Wardha, Samudrapur, Bhosa, Wardha, Maharashtra, 442301.<br><b>BHADLA:</b> Rajasthan Part-I Power Transmission Limited<br>NH-911, Near Baba Ramdevji Mandir, Village-Bikolai, Tehsil-Baiju, Disctrict: Bikaner (Phalodi), Rajasthan-334305<br><b>FATEHPUR:</b> Rajasthan Part-I Power Transmission Limited<br>Village-Bardara & Naraicha, Tehsil : Bindki, District-Fatehpur(UP) |
| 4 | <b>CONTACT PERSON AT SITE/HQ :</b>                   | Mr. Sandip Kumar Halder<br>Dy. General Manager<br>Phone No. : 9650094410<br>E-mail: skhalder@bhel.in                                                                                                                                                                                                                                                                                                                                                                   |
| 5 | <b>CONTACT PERSON: FOR CONTRACTUAL ISSUES</b>        | Sh. Ashok Kumar Meena<br>AGM (TBSM)<br>SUBCONTRACTS MANAGEMENT,<br>TRANSMISSION BUSINESS GROUP,<br>Plot No. 25, Sector-16A, Noida,<br>Distt. Gautambudh Nagar, UP-201301<br>PHONE: 0120-221- 8640/ 9831038136<br>E-mail: akmeena@bhel.in                                                                                                                                                                                                                               |
| 6 | <b>CONTACT PERSON: FOR CONTRACT EXECUTION ISSUES</b> | Shri Laxman Sarkar<br>General Manager(ES, TS & Project Director-KN800 HVDC),<br>BHEL Bhawan<br>3rd Floor, D/J-9/1, Salt Lake City.<br>Sector-II, Karunamoyee, Kolkata-700 091<br>E-mail: lsarkar@bhel.in<br>Phone – 9557494442                                                                                                                                                                                                                                         |

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**OFFER FORWARDING LETTER / TENDER SUBMISSION LETTER**

**REF:**

**DATE:**

**To,  
AGM/TBSM  
Transmission Business Group,  
Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddha Nagar, UP-201301**

Dear Sir,

**Sub: Submission of Offer against following tender specification No. :**

**TENDER REF NO. TBSM/HVDC/PEB-OB/TENDER/26-27**

**DATE: 20.08.2026**

I/We hereby offer to carry out the work detailed in the Tender Specification issued by Bharat Heavy Electricals Limited, Transmission Business Group (TBG) in accordance with the terms and conditions thereof. I/We have carefully perused the following listed documents connected with the above work and agree to abide by the same.

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

Should our Offer be accepted by BHEL for Award, I/we further agree to furnish 'Security Deposit' for the work as provided for in the Tender Conditions within the stipulated time as may be indicated by BHEL. I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

I/We have deposited/depositing herewith the requisite documents furnished in the Check List.

Place :

Date :

Signature of the Authorized Signatory

Name:

Designation:

**TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD**

**ANNEXURE – X**

**DECLARATION BY BIDDER**

REF: TBSM/HVDC/PEB-OB/TENDER/26-27

DATE: 20.08.2026

SUB : TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "

It is certified that General Instructions and Information for tenderer have been read/ complied/ agreed to and each page of tender offer has been initialled and stamped.

Also It is being declares that we \_\_\_\_\_(Bidder Name) 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 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, suitable action shall be taken by BHEL as per extant policies/ guidelines

(Signature of Tenderer)

Name and Designation of Authorised person (s)  
Signing the tender on behalf of the tenderer

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**ANNEXURE – Y**

REF: TBSM/HVDC/PEB-OB/TENDER/26-27

DATE: 20.08.2026

**TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "**

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

I/We, \_\_\_\_\_ hereby declare and confirm that we have visited the Project Site with reference to above BHEL Tender Specifications and acquired full knowledge and information about the Site conditions including Wage structure, Industrial Climate, the Law & Order and other conditions prevalent at and around the Site. Also, we have acquired information about availability of manpower, construction material, water, electricity etc.

We further confirm that the above information is true and correct and we shall not raise any claim of any nature due to lack of knowledge of Site conditions.

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

**Site Visited Official Name & Contact Details:**

Date of Site Visit:

(Signature of Tenderer)

Date :

Place :

Name and Designation of Authorised person (s)  
Signing the tender on behalf of the tenderer

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**ANNEXURE – Z**

**REF:** TBSM/HVDC/PEB-OB/TENDER/26-27

**DATE:** 20.08.2026

**SUB :** TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800

**Subject:** Contact Details of the participatong bidder :

|   |                                                                                                                    |                                      |
|---|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1 | NAME & DESIGNATION OF OFFICIAL                                                                                     |                                      |
| 2 | POSTAL ADDRESS (complete)                                                                                          |                                      |
| 3 | TELEPHONE NOS.<br>(LAND LINE & MOBILE BOTH)                                                                        |                                      |
| 4 | FAX NO.                                                                                                            |                                      |
| 5 | E-MAIL ADDRESS                                                                                                     |                                      |
| 6 | NAME OF PLACE / STATE / COUNTRY, WHEREFROM S/HE WILL PARTICIPATE IN THE REVERSE AUCTION ( If Applicable in Tender) | <b>Not Applicable in this tender</b> |

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

## **NO DEVIATION CERTIFICATE**

REF:

DATE:

**SUB : TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "**

**TENDER REF NO. : TBSM/HVDC/PEB-OB/TENDER/26-27**

**Dated: 20.08.2026**

**Subject: NO DEVIATION STATEMENT**

Dear Sir,

With reference to above, this is to confirm that as per tender conditions, we have visited subject site before submission of our offer and noted the job content & site conditions etc.

We also confirm that we have not changed / modified the tender documents as appeared in the website and in case of observance at any stage, it shall be treated as null and void. We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT and we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT. In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer strictly in accordance with tender instructions

Thanking you,

(Signature of Tenderer)

Date :

Place :

Name and Designation of Authorised person (s)  
Signing the tender on behalf of the tenderer

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**Declaration for Relation in BHEL**

REF:

DATE:

To,  
AGM/TBSM  
Transmission Business Group,  
Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Sub: Declaration for relation in BHEL**

**TENDER REF NO.: TBSM/HVDC/PEB-OB/TENDER/26-27**

**Dated 20.08.2026**

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

**Tick (✓) any one as applicable:**

1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL  
OR
2. The Proprietor, Partner(s), or Director(s) of our Company / Firm HAVE relation / relatives employed in BHEL and their particulars are as below:
  - a)
  - b)

Signature of the Authorized Signatory

**Note:**

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

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**DECLARATION REGARDING INSOLVENCY / LIQUIDATION / BANKRUPTCY PROCEEDINGS**

REF:

DATE:

To,  
AGM/TBSM  
Transmission Business Group,  
Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Sub: Declaration Regarding Insolvency / Liquidation / Bankruptcy Proceedings**

Reference Documents :

(a) NIT/Tender NO.: TBSM/HVDC/PEB-OB/TENDER/26-27

Dated 20.08.2026

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.

Thanking you,

Date :

(Signature of Tenderer)

Place :

Name and Designation of Authorised person (s)  
Signing the tender on behalf of the tenderer

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**DECLARATION BY AUTHORISED SIGNATORY OF BIDDER REGARDING  
AUTHENCITY OF SUBMITTED DOCUMENTS**

REF:

DATE:

To,  
AGM/TBSM  
Transmission Business Group,  
Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Sub: Declaration by Authorized Signatory regarding Authenticity of submitted documents.**

Reference Documents :

- (a) NIT/Tender NO. TBSM/HVDC/PEB-OB/TENDER/26-27
- (b) All other pertinent issues till date

Dated 20.08.2026

I/We, hereby certify that all the documents submitted by us in support of possession of “Qualifying Requirements” are true copies of the original and are fully compliant required for qualifying / applying in the bid and shall produce the original of same as and when required by Bharat Heavy Electricals Limited.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as bidder. I / We understand that at any stage (during bidding process or while executing the awarded works) if it is found that fake / false / forged bid qualifying /supporting documents / certificates were submitted, it would lead to summarily rejection of our bid / termination of contract. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the Bid / Contract and other extant policies of Bharat Heavy Electricals Limited.

Thanking you,

Date :

(Signature of Tenderer)

Place :

Name and Designation of Authorised person (s)  
Signing the tender on behalf of the tenderer

**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).**

REF: TBSM/HVDC/PEB-OB/TENDER/26-27

DATE: 20.08.2026

NIT TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "

To,  
AGM/TBSM  
Transmission Business Group,  
Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Subject:** 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).

Reference Documents :

(a) NIT/Tender No. TBSM/HVDC/PEB-OB/TENDER/26-27

Dated 20.08.2026

(b) All other pertinent issues till date

We here by 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 1 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:

Bidders to note that above format Duly filled & signed by authorized signatory, shall be submitted.

In case the bidders quoted value is excess of 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/contractors other than companies).

In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

**(TO BE FILLED BY TENDERER OVER THEIR LETTERHEAD)**

**DECLARATION REGARDING NO CONFLICT OF INTEREST**

REF: TBSM/HVDC/PEB-OB/TENDER/26-27

DATE: 20.08.2026

TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "

To,  
AGM/TBSM

Bharat Heavy Electricals Limited,  
6th Floor, BHEL SADAN,  
Plot No. 25, Sector-16A, Noida,  
Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Subject: DECLARATION REGARDING NO CONFLICT OF INTEREST**

Reference Documents :

NIT / TENDER NO. TBSM/HVDC/PEB-OB/TENDER/26-27

Dated 20.08.2026

We, M/s. \_\_\_\_\_ a company/Firm incorporated under the laws of the country having its registered office at \_\_\_\_\_, hereby declare and confirm the following in connection with the tender No.

We confirm that no conflict of interest exists in our participation in this tender.

None of our personnel, agents, or subcontractors have any personal, financial, or business relationship with BHEL's employees or officials involved in this tender process that could constitute a conflict of interest.

None of our directors, employees, agents, or allied firms have been involved in need assessment, procurement planning, or evaluation of this tender.

If we are acting as an agent/distributor, we confirm that we do not represent more than one manufacturer in this tender and that the OEM is not bidding separately.

We are not participating in more than one bid in this tender. \*

\*Participating 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.

We understand that false declarations may result in disqualification or legal action."

Thanking you,  
Yours faithfully,

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

Note:

1) Attach separate sheet, if necessary.

## **INDEMNITY BOND**

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

This Indemnity Bond executed by <\_\_\_\_\_ name of company> having their Registered Office at <\_\_\_\_\_> in favour of M/s Bharat Heavy Electricals Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at BHEL House, Siri Fort, Asiad, New Delhi - 110049 through its unit - TBG, 5th Floor, BHEL Sadan, Plot No. 25, Sector-16A, Noida-201301 (UP). (Hereinafter referred to as the Company)

And whereas the Company has entered into a Contract with M/s \_\_\_\_\_, the executants of this Deed (hereinafter referred to as the Contractor) as its contractor in respect of the work of DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR  $\pm$  800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.)

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

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

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

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

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

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

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

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

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

Signed for and on behalf of M/s \_\_\_\_\_

Witness

1 \_\_\_\_\_

2 \_\_\_\_\_

## **PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)**

(On non-Judicial paper of appropriate value)

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 BHEL House, Siri Fort, New Delhi-110049 through its Unit at BHEL, Transmission Business Group, Noida (name of the Unit) having agreed to exempt \_\_\_\_\_ (Name of the Vendor / Contractor / Supplier) with its registered office at \_\_\_\_\_<sup>1</sup> (hereinafter called the said "Contractor" which term includes supplier), from demand under the terms and conditions of the Contract reference No. \_\_\_\_\_ dated \_\_\_\_\_<sup>2</sup> valued at Rs. \_\_\_\_\_<sup>3</sup> (Rupees \_\_\_\_\_) (hereinafter called the said Contract), of Security Deposit for the due fulfilment by the said Contractor of the terms and conditions contained in the said Contract, on production of a Bank Guarantee for Rs. \_\_\_\_\_<sup>4</sup> (Rupees \_\_\_\_\_ only),

We \_\_\_\_\_ (indicate the name and address of the Bank) having its Head Office at \_\_\_\_\_ (address of the head Office) (hereinafter referred to as the Bank), at the request of \_\_\_\_\_ [Contractor(s)], being the Guarantor under this Guarantee, do hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer, an amount not exceeding Rs. \_\_\_\_\_ without any demur, immediately on 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 Contractor(s) in any suit or proceeding pending before any Court or Tribunal or 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 hereunder and the Contractor(s) shall have no claim against us for making such payment.

We, 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 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 & the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said contractor(s) or acceptance of the final bill or discharge of this guarantee by the Employer, whichever is earlier. This guarantee shall initially remain in force up to and including \_\_\_\_\_<sup>5</sup> and shall be extended from time to time for such period as may be desired by the Employer.

Unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_<sup>6</sup>, (3 months more than the present date of validity of Bank Guarantee) we shall be discharged from all the liability under this guarantee thereafter.

We, \_\_\_\_\_ (indicate the name of the 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 contractor(s) 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 contractor(s) 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 any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said contractor(s) 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 Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor 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. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

We,..... BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....<sup>4</sup>
- b) This Guarantee shall be valid up to .....<sup>5</sup>
- c) Unless the Bank is served a written claim or demand on or before .....<sup>6</sup> 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.

Date \_\_\_\_\_ Day of \_\_\_\_\_

for \_\_\_\_\_ (indicate the name of the Bank) \_\_\_\_\_

(Signature of Authorised signatory)

<sup>1</sup> ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER .

<sup>2</sup> DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

<sup>3</sup> CONTRACT VALUE

<sup>4</sup> BG AMOUNT IN FIGURES AND WORDS

<sup>5</sup> VALIDITY DATE (At least 3 months more than completion period)

<sup>6</sup> DATE OF EXPIRY OF CLAIM PERIOD (At least 3 months more than the present date of validity of BG)

#### Notes:

- 1 The expiry of claim period shall be at least 3 months more than the validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
- 2 The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.

#### 3 In Case of Bank Guarantees submitted by Foreign Vendors:

##### a From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)

From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.

##### b From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)

In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by any of the Consortium Banks only will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter-Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.

**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 \_\_\_\_\_

\_\_\_\_\_ (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 Bharatiya Nyaya Sanhita (BNS) 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.

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### Section 5 - Previous Transgression

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- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 (three) years (to be reckoned from date of bid submission) with any other company in any country conforming to the anti-corruption approach in India that could justify his exclusion from the tender process. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The transgression(s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.
- 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 a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of Sub-contracting, the Principal Contractor shall be solely responsible for the adherence to the provisions of IP by the sub-contractor(s).
- 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 on receipt of any complaint by them from the bidder(s).
- 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 /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 role of IEM is advisory and the advice of IEM is non- binding on the Organization. However, as IEMs are invariably persons with rich experience who have retired as senior functionaries of the government, their advice would help in proper implementation of the IP.



- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of the tendering process, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an examination, and submit their joint recommendations to the Management. In case the full panel is not available due to some unavoidable reasons, the available IEM(s) will conduct examination of the complaints. Consent of the IEM(s), who may not be available, shall be taken on record.
- 8.7 The IEMs shall examine all the representations/grievances/ complaints received by them from the bidders or their authorized representative related to any discrimination on account of lack of fair play in modes of procurement and bidding systems, tendering method, eligibility conditions, bid evaluation criteria, commercial terms & conditions, choice of technology/ specifications etc.
- 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.
- 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. 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. If required, the Principal may adopt any mediation rules for this purpose. However, not more than five meetings shall be held for a particular dispute resolution. The fees/expenses on dispute resolution shall be equally shared by both the parties. 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.

  
\_\_\_\_\_  
For & On behalf of the Principal  
(Office Seal)

Place \_\_\_\_\_  
Date \_\_\_\_\_

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_  
\_\_\_\_\_

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

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_  
\_\_\_\_\_

## Pre-Qualifying Requirements

Tender Spec. No.: TBSM/HVDC/PEB-OB/TENDER/26-27

Date : 20.08.2026

SUB : **TENDER FOR DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) "**

Tenders (Under two-part bid system) are invited from competent contractors for subject works. Only those who are technically and financially capable to execute the Job and who fulfil the Pre-Qualifying Requirements [PQR] given under are eligible to quote against the above NIT. Tenderers should submit their offer as per the procedure specified in tender documents. The PQR of contractor for tender submission shall be as under:

| Sl. No. | Criteria          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A       | Turn Over         | Bidders should have a <b>minimum average annual turnover</b> (Annual Gross Revenue from operations/ Gross operating income as incorporated in the profit & loss account excluding Other Income) of<br><br><b>₹ 64,97,714/-</b><br><br><b>for last three fin. Years 2022-23, 2023-24 &amp; 2024-25 or 2023-24,2024-25 &amp; 2025-26)</b><br><br>and should submit audited balance sheet and Profit & Loss Account Sheet of these years.<br>The audited financial statements must be signed by the owner and the auditor. Auditors seal, Name, Membership No., Firm Registration No. & firm name (if applicable), UDIN and the capacity in which he is signing (Proprietor/Partner), must be mentioned on the Profit & Loss A/c and Balance Sheet.<br><br>In case of proprietorship and partnership firms where Audited Profit & Loss A/c and Balance Sheet is not mandatory as per extant rules, CA certificate certifying turnover and profit for the required financial years must be submitted. CA certificate must be on his letter head mentioning his/her name, Membership No., Firm Registration No. & firm name (if applicable), UDIN, capacity in which he is signing (Proprietor/Partner), date and place of signing. |
|         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| B       | Profit & Networth | Bidder should have earned profit in at least one financial year during the period of last three Financial Years as per Sl. No. A above<br><br>and<br><br>Net worth of the Bidder based on the latest Audited Accounts as furnished for 'A' above should be positive. Net worth = Paid up share capital + Reserves. (Net worth is required to be evaluated in case of companies)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C       | Similar Work      | Bidder should have successfully executed :<br><br><b>"Pre-Engineered Office Building"</b><br><br>during last seven years ending on <b>31.07.2026</b> and should be either of the following:<br>(i) Three similar jobs executed costing (except service tax/GST) not less than <b>₹ 86,63,618.00</b><br><br>OR<br>(ii) Two similar jobs executed costing (except service tax/GST) not less than <b>₹ 1,08,29,523.00</b><br><br>OR<br>(iii) One similar job executed costing (except service tax/GST) not less than <b>₹ 1,73,27,236.00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**NOTES:**

- 1 The Bidder shall submit the Contract Agreement/Work Order/LOI along with BOQ and Performance/completion/execution certificate issued by customer/contractor along with technical bid in support of qualification.
- 2 In order to technically qualify in this tender, bidder should meet all criteria i.e. A, B & C mentioned above.
- 3 If the job is completed in the last seven years period, as specified above, even if it has been started earlier, the same will also be considered meeting the qualifying requirements.
- 4 Consortium/ JV bidding is not allowed unless specifically mentioned in NIT.
- 5 BHEL reserves the right to:
  - (a) Accept or reject any bid received at its discretion without assigning any reasons whatsoever.
  - (b) Postpone the above-mentioned date, split and distribute the work among more than one bidder without assigning any reason whatsoever.
  - (c) May ask for further qualification during techno commercial scrutiny of bids received.
  - (d) May ask for further proofs including TDS certificates/ Form 26AS/ Final bill/ payment detail for the said job for cross- verification.
- 6 BHEL shall not be responsible for any delay, loss, damage for bids/documents sent by post.

- 7 BHEL shall not be liable for any expenses incurred by bidder in preparation of bid irrespective of whether it is accepted or not.
- 8 Quotations received from bidders who do not fulfil the PQR shall be summarily rejected without any further evaluation and information to bidders.
- 9 Canvassing i.e. soliciting favour, seeking advantage etc. in any form is strictly prohibited and any bidder found to have engaged in canvassing shall be liable to have his bid rejected summarily
- 10 If the bidder deliberately gives any wrong information in his tender to create in circumstances for the acceptance to his bid, BHEL reserves the right to reject such application.
- 11 Bidder's selection is subject to approval of BHEL's customer for this work. The approval/acceptance of bidders from Customer is mandatory requirement for subject tender.
- 12 All corrigenda, addenda, amendments and clarifications to this Tender will be hosted in web page, [www.bhel.com](http://www.bhel.com) and <https://eprocurebhel.co.in> and not in the newspaper. Bidders shall keep themselves updated with all such amendments.

## **FORMAT FOR E-PAYMENT**

To,  
 GM/Finance  
 Transmission Business Group,  
 Bharat Heavy Electricals Limited,  
 5th Floor, BHEL SADAN,  
 Plot No. 25, Sector-16A, Noida,  
 Distt. – Gautam Buddh Nagar, UP-201301

Dear Sir,

**Sub: e-Payment vide RTGS/NEFT**

I / We hereby request and authorise you to effect E-Payment vide any of the two modes to my bank account as per the details given below:

|                                                                                                                         |  |
|-------------------------------------------------------------------------------------------------------------------------|--|
| <b>Vendor Name</b>                                                                                                      |  |
| <b>Title / Name of account in the bank</b>                                                                              |  |
| <b>Account Type (Saving / Current)</b>                                                                                  |  |
| <b>Bank account number</b>                                                                                              |  |
| <b>Name and address of the bank</b>                                                                                     |  |
| <b>Bank / Branch contact person's Name</b>                                                                              |  |
| <b>Bank / Branch Telephone Number with STD Code</b>                                                                     |  |
| <b>Bank Branch MICR Code</b><br>(Please enclose a copy of a cheque. This Cheque should not be a payable at par cheque.) |  |
| <b>Bank Branch RTGS IFSC Code</b>                                                                                       |  |
| <b>Bank Branch NEFT IFSC Code</b>                                                                                       |  |
| <b>Vendor email address</b>                                                                                             |  |
| <b>Name of authorised signatory of Vendor</b>                                                                           |  |
| <b>Vendor's Contact persons name</b>                                                                                    |  |

I/We confirm that information provided above is correct & any consequences due to any mistake in above will be borne by us.

Thanking you,

Name and Designation of Authorised person (s)

We confirm that we are enabled for receiving RTGS/NEFT credits and we further confirm that the account number of \_\_\_\_\_, the signature of the authorised signatory and the MICR and IFSC codes of our branch mentioned above are correct.

Bank's Verification  
 (Manager's / Officer's Signature under bank stamp)

**Note : Please attach cancelled original Cheque leaf**

# NIT HSE SPECIFICATIONS



Health Safety and Environment Management System

**TRANSMISSION BUSINESS GROUP, NOIDA**



**BHARAT HEAVY ELECTRICALS LIMITED**

|                                                                                   |                                                                                                    |                                                                               |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 1 of 22                                                                 |



## Transmission Business Group, Noida

| DOCUMENT CONTROL      |                     |                                   |            |
|-----------------------|---------------------|-----------------------------------|------------|
| Document number:      | TBG/HSE/NIT-01      |                                   |            |
| Issue number:         | 00                  | Issue date:                       | 08.01.2020 |
| Revision number:      | 01                  | Revision date :                   | 22.10.2021 |
| Revision number:      | 02                  | Revision date :                   | 31.01.2024 |
| Revision number:      | 03                  | Revision date :                   | 31.03.2026 |
|                       |                     |                                   |            |
|                       | Prepared by         | Approved and Issued<br>for use by |            |
| Name                  | Arvind Kumar Pandey |                                   |            |
| Designation           | Sr. Engineer        | Head/HSE                          |            |
| Signature             | -sd-                |                                   |            |
| Date                  | 31.03.2026          |                                   |            |
|                       |                     |                                   |            |
| Doc. copy issue no. : |                     | Doc. copy issue date :            |            |
|                       | Name                | Designation                       | Signature  |
| Issued to :           |                     |                                   |            |
|                       | Name                | Designation                       | Signature  |
| Issued by :           |                     |                                   |            |

**BHARAT HEAVY ELECTRICALS LIMITED**

**TRANSMISSION BUSINESS GROUP**

|                                                                                   |                                                                                                                                                                                                 |                                                                                                                          |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|  | <p align="center"><b>Transmission Business Group</b></p> <p align="center"><b>Department of Health, Safety &amp; Environment, Noida</b></p> <p align="center"><b>NIT HSE Specifications</b></p> | <p><b>Doc No. TBG/HSE/NIT-01</b></p> <p><b>Rev No. : 03</b></p> <p><b>Date: 31.03.26</b></p> <p><b>Page- 2 of 22</b></p> |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|

**Preamble:** BHEL-TBG, through its long experience and policies, has developed a strong culture of prioritizing societal well-being, environmental protection, and the occupational health and safety of its workforce. Transparency in all business dealings is also a hallmark of TBG. In line with this culture, this NIT HSE Specification provides a concise glimpse of TBG's HSE requirements, drawn from the detailed document '**HSE Plan for Site Operations (for Sub-contractors), Doc. No. HSEP-14**'. While the complete HSE provisions with applicable formats are covered in HSEP-14, this annexure serves as a primary reference to highlight the major compliances that must 100% be adhered to by the successful bidder during contract execution. All interested bidders are advised to carefully review these HSE specifications before quoting.

## 1. BHEL HSE Policy

(Rev-03)



### स्वास्थ्य, सुरक्षा एवं पर्यावरण नीति

बीएचईएल अपने कर्मचारियों और संगठन के लिए काम करने वाले अन्य लोगों के व्यावसायिक स्वास्थ्य और सुरक्षा को सुनिश्चित करने और सक्रिय नेतृत्व के माध्यम से अपनी गतिविधियों, उत्पादों और सेवाओं के पर्यावरणीय पदचिह्नों को कम करने एवं आवश्यक संसाधनों की उपलब्धता सुनिश्चित करने के लिए प्रतिबद्ध है। इसके अलावा, हम अपने पर्यावरण, सामाजिक और प्रशासन (ESG) प्रदर्शन को निम्नलिखित द्वारा लगातार बेहतर बनाने के लिए प्रतिबद्ध हैं:

- शून्य क्षति के लक्ष्य को प्राप्त करने के उद्देश्य से सुरक्षा संस्कृति को मजबूत करना,
- प्रदूषण की रोकथाम, जैव विविधता और पारिस्थितिकी तंत्र की सुरक्षा और जलवायु परिवर्तन शमन (mitigation) और अनुकूलन सहित पर्यावरण की सुरक्षा के लिए गतिविधियों को और सृढ़ता से करना,
- 2047 तक शुद्ध शून्य (Net Zero) उत्सर्जन (स्कोप 1 और स्कोप 2) प्राप्त करने के लिए कदम उठाना,
- संसाधनों का संरक्षण करना तथा उनका उपयोग कम करना / पुनर्चक्रण करना / पुनः उपयोग करने (Reduce / Recycle / Reuse) के दृष्टिकोण के आधार पर स्थायी अपशिष्ट प्रबंधन प्रथाओं को अपनाना,
- उन्मूलन / प्रतिस्थापन / कमी / नियंत्रण (elimination / substitution / reduction / control) दृष्टिकोण के माध्यम से पर्यावरणीय प्रभावों तथा व्यावसायिक स्वास्थ्य एवं सुरक्षा जोखिमों का प्रबंधन करना,
- लागू विधानों, विनियमों तथा बीएचईएल प्रबंधन प्रणालियों का अनुपालन सुनिश्चित करना,
- व्यावसायिक निर्णयों, उत्पादों की अवधारणा एवं डिजाइन, संयंत्रों, प्रौद्योगिकियों एवं सेवाओं के चयन, खरीद तथा आउटसोर्स प्रक्रियाओं में उपयुक्त व्यावसायिक स्वास्थ्य, सुरक्षा एवं पर्यावरण मानदंडों को शामिल करना,
- एच.एस.ई. प्रबंधन प्रणाली (एच.एस.ई.एम.एस.) में सुधार के लिए श्रमिकों एवं अन्य हितधारकों से परामर्श एवं भागीदारी सुनिश्चित करना तथा उनकी प्रासंगिकता, उपयुक्तता एवं प्रभावशीलता सुनिश्चित करने के लिए समय-समय पर इस नीति एवं एच.एस.ई.एम.एस. की समीक्षा करना,
- हमारे कार्यस्थलों पर कार्यरत व्यक्तियों को उचित संरचित प्रशिक्षण प्रदान करना तथा एच.एस.ई. मुद्दों पर ग्राहकों, ठेकेदारों एवं आपूर्तिकर्ताओं के बीच जागरूकता को बढ़ावा देना,
- बीएचईएल के भीतर इस नीति का संचार करना तथा ड्यूक पक्षों को इसे उपलब्ध कराना।

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(यह नीति अध्यक्ष एवं प्रबंध निदेशक, बीएचईएल द्वारा अनुमोदित है)



**भारत हेवी इलेक्ट्रिकल्स लिमिटेड**



### Health, Safety & Environment Policy

BHEL is committed to ensure occupational health & safety of its employees and other people working for the organisation and minimising the environmental footprints of its activities, products and services through active leadership and ensuring availability of required resources. Further, we commit to continually improve our Environmental, Social and Governance (ESG) performance by:

- Strengthening safety culture with an objective to attain Zero Harm,
- Taking up activities for protection of the environment, including prevention of pollution, protection of biodiversity & ecosystems and climate change mitigation & adaptation,
- Taking steps for attaining Net Zero emissions (Scope 1 and Scope 2) by 2047,
- Conserving resources and adopting sustainable waste management practices based on Reduce / Recycle / Reuse approach,
- Managing Environmental impacts and Occupational Health & Safety risks through elimination / substitution / reduction / control approach,
- Ensuring compliance with applicable legislations, regulations and BHEL Management Systems,
- Incorporating appropriate Occupational Health, Safety and Environment criteria into business decisions, conceptualisation and design of products, selection of plants, technologies and services, procurements and in outsourced processes,
- Ensuring consultation and participation of workers and other stakeholders for improvements in the HSE Management System (HSEMS) and reviewing periodically this policy and HSEMS to ensure their relevance, appropriateness and effectiveness,
- Imparting appropriate structured training to persons engaged at our workplaces and promoting awareness amongst customers, contractors and suppliers on HSE issues,
- Communicating this policy within BHEL and making it available to interested parties.

\*\*\*

(This policy bears the approval of Chairman & Managing Director, BHEL)



**Bharat Heavy Electricals Limited**

|                                                                                   |                                                                                                    |                                                                               |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 3 of 22                                                                 |

## 2. Legal/Statutory Compliances:

- a. **Statutory Provisions:** All the sub-contractors are to comply with client specific rules and procedures, the National legislations and codes, in particular the following or their revised versions:

| S.no. | Acts/Rules Name                                                                                           | S.no | Acts/Rules Name                                                                       |
|-------|-----------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|
| 1     | The Code on Wages, 2019                                                                                   | 13   | <b>Contractor labour Act, 1970 (Regulation and abolition) (4)</b>                     |
| 2     | The Industrial Relations Code, 2020                                                                       | 14   | <b>Provident fund Act, 1952 (3)</b>                                                   |
| 3     | The Code on Social Security, 2020                                                                         | 15   | <b>Payment of gratuity Act, 1972 (3)</b>                                              |
| 4     | The Occupational Safety, Health and Working Conditions Code, 2020                                         | 16   | Indian Explosives Act and the explosives Rules 2008                                   |
| 5     | <b>Buildings and Other Construction Workers Welfare Act, 1996 (4)</b>                                     | 17   | The Gas Cylinder Rules, 2016, Static and Mobile Pressure Vessels (Unfired) Rules 2016 |
| 6     | <b>The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 (4)</b> | 18   | The Indian Electricity Act 2003 and Indian Electricity Rules 2005                     |
| 7     | <b>Employee's Compensation Act, 1923 (4)</b>                                                              | 19   | The Atomic Energy Act, 2015                                                           |
| 8     | <b>Payment of wages Act, 2017</b><br><b>Equal remuneration Act, (1)</b>                                   | 20   | The atomic energy (Radiation Protection) Rules. 2004                                  |
| 9     | <b>Minimum wages Act.1948 (1)</b>                                                                         | 21   | National Fire Protection Association (NFPA),                                          |
| 10    | <b>Maternity benefit amendment act 2017 (3)</b>                                                           | 22   | National Building Code of India 2016 etc.                                             |
| 11    | <b>The Factories Act 1948 (4)</b>                                                                         | 23   | The Environment Act 1986                                                              |
| 12    | <b>Industrial dispute Act, 1947 (2)</b>                                                                   | 24   | Employers liability Act, 1938                                                         |
| 13    | <b>Employees' State Insurance Act, 1948 (3)</b>                                                           |      |                                                                                       |

**Note:** Although new labour codes came into effect from 21.11.2025, yet till the OSHWC Code rules are fully notified and enforced by a State, BOCW Act, Contract Labour Act, Factories Act, etc., continue to apply in that State.

(Rev-03)

### b. Indian Standard (IS) Codes related to HSE

All the sub-contractors are to comply with client specific rules and procedures, the National legislations and codes in particular the following or their revised versions:

| Srl | IS Code                  | Applies on                                                                                 |
|-----|--------------------------|--------------------------------------------------------------------------------------------|
| 1   | IS: 4081 -1986           | Safety code for Blasting and Related Drilling operations                                   |
| 2   | IS: 3764 -1992           | Safety code for excavation work                                                            |
| 3   | IS: 5121 -1969           | Safety code for pilling and other deep foundations                                         |
| 4   | IS: 2750 -1964           | Specification for steel scaffoldings                                                       |
| 5   | IS: 3696 (Part-I)-1987   | Safety code for scaffolds and Ladders: Part- I Scaffolds                                   |
| 6   | IS: 3696 (Part-II) -1991 | Safety code for scaffolds and Ladders: Part –II Ladders                                    |
| 7   | IS: 4082 -1977           | Recommendations on stacking and storage of construction materials at site (First revision) |
| 8   | IS: 4130-1976            | Safety code for demolition of building (First revision)                                    |
| 9   | IS: 4912-1978            | Safety requirements for floor and wall openings, railings and toe boards (First revision)  |

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No. TBG/HSE/NIT-01</b><br><b>Rev No. : 03</b><br><b>Date: 31.03.26</b> |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | <b>Page- 4 of 22</b>                                                          |

|    |                            |                                                                                                                                                                                                                                  |
|----|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | IS: 5916- 1970             | Safety code for constructions involving use of hot bituminous materials                                                                                                                                                          |
| 11 | IS: 7205 -1974             | Safety code for erection of structural steel work                                                                                                                                                                                |
| 12 | IS: 7969 -1975             | Safety code for handling and storage of building materials                                                                                                                                                                       |
| 13 | IS: 8989 -1978             | Safety code for erection of concrete framed structures                                                                                                                                                                           |
| 14 | IS: 7293 -1974             | Safety code for working with construction machinery                                                                                                                                                                              |
| 15 | IS: 2212 -1991             | Pipe lines –Identification –Colour code                                                                                                                                                                                          |
| 16 | IS: 5216 -1982             | Recommendations on safety procedures & practices in Electrical works (Part -I & II)                                                                                                                                              |
| 17 | IS: 875 -1964              | Code of practice for structural safety of buildings and loading standards                                                                                                                                                        |
| 18 | IS: 10386 -1983            | General aspects Part-1 -1983, Part-2 -1982, Part-6 -1983, Part-10 -1983- Amenities, Protective clothing and equipment, construction, storage, handling, detection and Safety measures for gases, chemicals and flammable liquids |
| 19 | IS: 10500-2012             | Drinking water (Specification)                                                                                                                                                                                                   |
| 20 | IS: 10291 -1982            | Code of dress in civil engineering works                                                                                                                                                                                         |
| 21 | IS: 2925-1984              | Safety helmets                                                                                                                                                                                                                   |
| 22 | IS: 1179-1967              | Welding helmets                                                                                                                                                                                                                  |
| 23 | IS: 7524 -1979 (Part-I)    | Safety goggles                                                                                                                                                                                                                   |
| 24 | IS: 9167 -1979             | Ear muff /Ear plugs                                                                                                                                                                                                              |
| 25 | IS: 6994 -1973 (Part-I)    | Canvas hand gloves, Cotton hand gloves, Chrome leather gloves                                                                                                                                                                    |
| 26 | IS: 4770 -1991             | Rubber hand gloves tested for 15,000 volts                                                                                                                                                                                       |
| 27 | IS: 3521 -1999             | Full body safety harness                                                                                                                                                                                                         |
| 28 | IS: 11057 -1984            | Specification for Industrial safety nets                                                                                                                                                                                         |
| 29 | IS: 13415 -1992            | Protective Barriers in & around buildings (Code of safety)                                                                                                                                                                       |
| 30 | IS: 13416 -1992            | Preventive measures against Hazards at work places-Recommendations part-I Falling materials hazards Prevention part-I                                                                                                            |
| 31 | IS: 13416 -1992            | Preventive measures against Hazards at work places-Recommendations part-II Fall Prevention                                                                                                                                       |
| 32 | IS: 15298 -2011 (Part 1&2) | Personal Protective Equipment -Safety shoes                                                                                                                                                                                      |
| 33 | IS: 12254 -1993            | Poly vinyl chloride (PVC) industrial boots                                                                                                                                                                                       |
| 34 | IS: 5557:2004              | Industrial and Protective Rubber knee and Ankle boots                                                                                                                                                                            |
| 35 | IS: 2878 -2004             | Co2 Type fire extinguisher                                                                                                                                                                                                       |
| 36 | IS: 2171 -1999             | Dry chemical powder fire extinguisher                                                                                                                                                                                            |
| 37 | IS: 13849 – 1993           | Fire extinguisher for ABC fires                                                                                                                                                                                                  |
| 38 | IS: 10204-2001             | Mechanical Foam type extinguisher (Foam used shall conform to IS: 4989 -1974 and Co2 cartridge shall conform to IS: 4947 -1985)                                                                                                  |
| 39 | IS: 3786 -1983             | Methods for computation of Frequency rate and Severity rates for Industrial injuries and classification of Industrial accidents (First revision)                                                                                 |

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 5 of 22                                                                 |

### 3. Standard conditions of Subcontractor mobilization:

- Attend HSE familiarization program at TBG-HQ with his site management team. This will be a half day long awareness session on HSE requirements and compliances which the agency is supposed to fulfil during contract execution at site. The session shall be taken by TBG HSE department on intimation by TBSM. Minutes shall be prepared and shall be jointly signed
- Request for issuance of Form-V in their name from customer on behalf of BHEL
- Get the Labour license registration from concerned Labour office.
- Get the BOCW Registration done along with the labour license.
- Get the labourers registered under BOCW for benefits provided by the office.
- Maintain legal registers of labours as per BOCW requirement.
- Ensure payment of wages to labours not less than the current minimum wages applicable in the premises.
- Ensure PF deduction of labourers and submission of proof to BHEL office (Wage sheet, ECR & Challan copies) duly signed.
- Submit Labour Payment Certificate by 10th of Every month.
- File timely returns, get renewals done and submit a copy to BHEL office.
- Get Workmen's Compensation policy before the start of work, covering all the labourers and staff,
  - Policy should clearly mention the project name and location,
  - should be as per labour class and wage.
  - Should cover all the height workers with clear mention of Max. height.
  - Policy should be submitted to BHEL office and renewal before expiry.
- Issue employment card and identity card to every worker.
- Submit filled and signed RA bill checklist with each bill
- **Judiciously include the cost against safety related expenditures while bidding.**
- Subcontractor shall ensure submission of identity and address proof (preferably Aadhaar card/Voter card) and mobile number of the person to be mobilized at site well in advance.
- Subcontractor shall ensure that the person joining the site has no criminal record.
- Subcontractor shall also ensure the health check-up and induction training is done and the person is covered under employee's compensation insurance policy before he is actually engaged in the work.
- I-card in the prescribed format of BHEL/Customer is mandatory for all the persons of the subcontractor.
- If subcontractor fails to comply with any of the above provisions, BHEL shall not allow the person(s) to enter and work in the project premises. **(Rev-03)**

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 6 of 22                                                                 |

## 4. Labour Welfare and Medical Facilities

### a. Labour Welfare

1. Declaration of normal working hours and weekly off day, Payment day & intervals
2. Paid rest days & holidays.
3. Payment of overtime @ twice the normal wage rate.
4. No labour shall be allowed overtime >12 hrs/week, limited to 48 hrs/month.
5. Ensure to provide a dedicated rest and lunch area.
6. Separate Male/Female Toilets and Lavatories, clearly marked in local Language and provided with signage.
7. Cold and clean drinking water facility suitable to strength and near workplace
8. Creche for children of female workers as per BOCW requirements
9. Arranging labour accommodation in hygienic environment with the facilities of Water (Drinking, Sanitation), washing and bathing area, toilets in sufficient nos., clean and safe camps and surrounding, access road, well illuminated camp and roads, display of emergency contacts, transport facility, first aid centre, 24x7 Security etc.
10. Cooking and eating place to be maintained in hygienic condition
11. General awareness of health and hygiene.

### b. Medical facilities and Health centres

- Availability of first aid box at every work location and agency office, with contents as per BOCW requirement.
- Emergency vehicle (four-wheeler) at work place with display of driver name and number
- Availability of stretchers in emergency vehicle and in office.
- Availability of trained first aider
- Medical check-up for all the supervisors and workers including cooks, at the time of induction and annually thereafter.
- Tetanus Vaccination for all in every six months.
- Identification and tie-up with nearby reputed hospital(s) and display of their contact number in Emergency contact list.

## 5. House Keeping & Storage

Housekeeping is a continuous process and is the part of work. Agencies shall maintain safe and presentable housekeeping all the time in their respective areas, common work locations and passage areas. Roads, passages, staircases, entrance/exit gates shall always be maintained obstruction free. No material shall be left or stacked at the roof edges. Agency shall make arrangements to remove scraps on regular basis and dispose them at a space provided by customer, clearly fenced and marked by the sub-contractor as **"SCRAP YARD"**. Suitable arrangement like dedicated housekeeping team and tractor/Farana should be identified for this work.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | <b>Page-</b> 7 of 22                                                          |

Construction materials like shuttering materials, staging materials, cables, re-bars, cements bags, earthing flats and rods, FF pipes, surplus soil etc should be stored/stacked properly such that it should neither pose threat to safety of man nor should obstruct the free movement of man and machineries.

Every sub-contractor should have separate and well-maintained storage area for his own materials, T&Ps, PPEs and BHEL issued materials. Consumables like diesel, cotton, grease, oil, paint, admixtures and other fire potential materials should be stored separately with suitable firefighting facility.

Fire capacity of store area to be assessed and accordingly fire extinguishers shall be planned suiting the class and capacity of fire. Sand heaps may also be stacked in open store yards suitably to use in case of fires.

## 6. Site Safety

### a. Induction and others safety trainings

Every sub-contractor shall make arrangement to provide induction training as per BHEL and/or customer requirement on a pre-approved and fixed module to all its new inductees irrespective of class or grade of appointment/hire. He shall also arrange the required facilities for induction training such as White board and marker, dummy with all PPEs, posters/banners with all the mandatory PPEs.

Sub-contractor shall also arrange for periodic trainings on fire-fighting, first aid, CPR, importance and use of PPEs, electrical safety, hot work safety, Height work safety, confined space, deep excavations and barricading, concreting work safety etc.

### b. Deployment of safety personnel by subcontractor:

(Rev-03)

Deployment of safety personnel may be done as per the conditions prescribed below. This shall be payable at the approved basis of monthly rates as per **Annexure-1**. The qualification and experience criteria of each type of safety personnel is given in the table below:

| Type | Safety personnel                                                                             | Minimum Qualification & Experience                                                                                                                                                                                                                                                | Remarks                                                                                      |
|------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| A    | <b>Safety officer</b><br><br>(To be deployed on need basis, as decided by BHEL site-charge.) | <b>Qualification:</b> A recognised Degree or Diploma in Engineering with a recognised Degree or Diploma in Industrial Safety.<br><b>Experience:</b> in building and other construction works.<br>- Two years for degree in engineering<br>- Five years for diploma in engineering | Applicable to all projects.                                                                  |
| B    | <b>Safety supervisor</b><br><br>(Max.-1 no.)                                                 | <b>Qualification:</b> A recognised Diploma in Engineering or B.Sc.<br><b>Experience:</b> Two years field experience in construction safety.                                                                                                                                       | <b>For POWERGRID Contracts only</b><br><br>(where revised POWERGRID safety plan and GCC-2025 |

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 8 of 22                                                                 |

|   |                                            |                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                      |
|---|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                            |                                                                                                                                                                                                                                                                             | are applicable and when total number of workers exceeds 250)                                                                                                                                         |
| C | <b>Safety steward</b><br><br>(Max.-2 nos.) | <b>Qualification:</b> An ITI or 10th pass, having undergone safety training programs and/or understands basic field safety requirements.<br><br><b>Experience:</b> field experience in construction safety.<br>- One year for ITI certificate<br>- Five years for 10th pass | <b>For POWERGRID Contracts only</b><br>(where revised POWERGRID safety plan and GCC-2025 are applicable- 01 safety steward up to 75 workers, second steward- when total number of workers exceed 75) |

- a) The provision for deploying Safety Supervisors or Safety Stewards applies exclusively to **POWERGRID projects** to ensure compliance with specific contractual requirements. This deployment is authorized only for projects where the **Revised POWERGRID Safety Plan** and **GCC-2025** have been formally incorporated into the contract.
- b) Safety personnel deployment and extensions are subject to actual site requirements and shall require a prior formal approval from the Sector Head/concerned GM by the BHEL Site In-charge.
- c) Total worker strength mentioned in remarks column in above table refers to the overall manpower deployed at site under BHEL, not to the manpower of any individual subcontractor.
- d) Subcontractor shall ensure deployment of safety personnel as per the stipulated qualification and experience on the direction of BHEL site-in-charge.
- e) The subcontractor shall deploy safety personnel within 15 days of formal written intimation by BHEL.
- f) The subcontractor shall submit the credentials and present the candidate to the BHEL Site In-Charge for verification and assessment of suitability prior to deployment.
- g) BHEL shall have the right to accept or reject the candidate upon verification and assessment. Subcontractor shall submit credentials of another suitable candidate within the original stipulated time of 15 days.
- h) BHEL site in-charge may seek help of HSE-HQ in verification and suitability assessment of the candidate.
- i) The deployed safety personnel by subcontractor shall functionally report to BHEL Site In-Charge for daily duties and work assignments.
- j) Subcontractor shall demobilize the safety personnel and terminate the services on the written instruction of BHEL Site in-charge on an advance notice of not less than a month.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 9 of 22                                                                 |

- k) The subcontractor shall be solely responsible for fulfilling all legal and contractual obligations without additional cost to BHEL. This includes, but is not limited to: applicable minimum wages, medical services, PPE, leave and overtime compensation, transportation, accommodation, and catering.
- l) Additionally, the subcontractor shall provide all necessary administrative resources, including gate pass processing, seating arrangements, secure record storage, stationery, and continuous access to computing and printing facilities.
- m) The safety personnel may be assigned the responsibilities of one or more agencies other than the employing agency as per requirement.
- n) He shall perform his duties in line to meet the requirements of TBG HSE MANAGEMENT SYSTEMS, such as; but not limited to:
  - o Ensure compliance to all legal, regulatory, and contractual HSE obligations including customer's contractual requirements.
  - o Implement and monitor BHEL TBG's HSE Manual, Standard Procedures, Formats, Checklists, and Operational Control Procedures (OCPs) in their true spirit within the agency's work area.
  - o Ensures daily toolbox talks, job safety analyses and timely incident investigations.
  - o Maintain and submit safety records, compliance reports, and participate in HSE meetings and audits.
  - o Coordinate with the BHEL site HSE in-charge and lead in organising HSE campaigns, health check-ups, periodic mock drills and participate in regular HSE performance reviews.
  - o conducting site safety inspections, induction trainings and other HSE training and awareness programs,
  - o Ensure other such compliances as per HSE Plan for Site Operation (TBG/HSEP-14) on regular basis.

The sub-contractor shall ensure that the Safety personnel have adequate authority of decision-making and access to resources including workforce to implement safety measures effectively.  
**(Rev-03)**

#### **c. Safety organisation, Safety committees and meetings**

Safety officer shall administratively report to the head of the projects of the sub-contracting agency. There shall be some nominated **safety stewards** from each sub-group like shuttering, bar-bending, concreting, brick work, material handling, structure erection, cable laying, pipe work, maintenance, batching plant, housekeeping, etc.

A **safety committee** shall be formed including members from different agencies, BHEL and customer covering at-least 50% participation from workers. Safety committee shall meet on weekly basis or as may be decided by customer, outcomes shall be complied as committed.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 10 of 22                                                                |

#### d. Personal Protective Equipment.

Unless mentioned otherwise, there will be three mandatory PPEs- Safety shoes, Safety Helmet and Reflective jackets conforming to relevant IS codes as mentioned above. Every person entering in the project premises shall use above mandatory PPEs.

There will be other PPEs too, based on the work requirement like: Twin lanyard full body harness, fall arresters and life lines for height workers, Face shield for welders and grinders, Induction helmets and Electrical resistant shoes with FRP/PVC toe for electricians and commissioning engineers, Gum boots for concrete workers and manual excavators, Goggle for gas cutters and grinders, Aprons for welders, shoulder pads for material handlers, Hand gloves – Leather for binders/welders/grinders, certified Rubber gloves for electricians, PVC for concrete/cement handlers, cotton-housekeeping team/brick coolies/erectors, cable laying men and other material handlers. Dust mask for cement handlers.

#### f. Material Handling

BHEL as a policy discourages continuous manual handling. Material handling contributes a major portion in the project and hence proper means (mechanical/ electrical powered) should be deployed appropriately for this work. Cranes/Faranas should not be used for material transportation for long distances(>100m), if such movement is un-avoidable, it must be accompanied by a trained signal man/flag man. Long materials should be guided by tagline. Roads for material movement should be free from obstructions. Lifting appliances must be in good condition and must have test/inspection certificates.

Lifting tackles like- D-shackles, chains, ropes, slings, belts shall be periodically inspected and shall have valid test certificate and/or third-party inspection certificates.

Painted/galvanized structures/materials to be lifted by adequate capacity nylon belts only.

If a machine undergoes a major maintenance, fresh TPI shall be required before use.

Hydraulic/pneumatic machines shall be free from leakages. Daily checklist to be filled and witnessed by the concerned supervisor before start of the work.

#### g. Vehicle/Machinery Documents and other safety requirements (Rev-03)

| Sr.; | Required Docs. / compliances              | Crawler mounted boom cranes/Tyre mounted telescopic cranes | Loader backhoe (JCB), crawler excavators (Poclain), Farana lifters/ cranes | Tipper, Transit mixtures/Self-loading concrete mixture (Ajax Fiori), tractors | Cars, Taxis, scooters, motor cycles and other public carriers | Man-lifts (Cherry pickers), Scissors Lifts |
|------|-------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------|
| 1.   | Valid third-party inspection certificate. | Yes                                                        | Yes                                                                        | -                                                                             | -                                                             | Yes                                        |
| 2.   | Valid Insurance policy                    | Yes                                                        | Yes                                                                        | Yes                                                                           | Yes                                                           | Yes                                        |

|                                                                                   |                                                                                                    |                                                                               |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No. TBG/HSE/NIT-01</b><br><b>Rev No. : 03</b><br><b>Date: 31.03.26</b> |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | <b>Page- 11 of 22</b>                                                         |

| Sr.: | Required Docs. / compliances                         | Crawler mounted boom cranes/Tyre mounted telescopic cranes | Loader backhoe (JCB), crawler excavators (Poclain), Farana lifters/ cranes | Tipper, Transit mixtures (TM), Self-loading concrete mixture (Ajax Fiori), Tractors | Cars, Taxis, scooters, motor cycles and other public carriers | Man-lifts (Cherry pickers), Scissors Lifts |
|------|------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------|
| 3.   | Registration Certificate                             | Yes (if tyre mounted)                                      | Yes                                                                        | Yes                                                                                 | Yes                                                           | Yes (for truck mounted)                    |
| 4.   | Valid Pollution under control (PUC)                  | Yes (if applicable)                                        | Yes (if applicable)                                                        | Yes (if applicable)                                                                 | Yes (if applicable)                                           | Yes (for truck mounted)                    |
| 5.   | Fitness certificate from RTO                         | Yes (if tyre mounted)                                      | Yes                                                                        | Yes                                                                                 | -                                                             | Yes (for truck mounted)                    |
| 6.   | Driver/Operator's valid license                      | Heavy License (LDRXCV/HMV)                                 | Heavy License (LDRXCV/HMV)                                                 | Heavy License (HMV)                                                                 | Yes (As applicable)                                           | Yes (for truck mounted)                    |
| 7.   | Operators experience and/ or competency certificate. | Yes                                                        | Yes                                                                        | -                                                                                   | -                                                             | Yes                                        |
| 8.   | Swing horn                                           | Yes                                                        | -                                                                          | -                                                                                   | -                                                             | Yes                                        |
| 9.   | Reverse horn                                         | Yes                                                        | Yes                                                                        | Yes                                                                                 | -                                                             | Yes                                        |
| 10.  | Boom aviation light                                  | Yes                                                        | Yes (if applicable)                                                        | -                                                                                   | -                                                             | Yes                                        |
| 11.  | Approved Load chart (inside cabin)                   | Yes                                                        | Yes (if applicable)                                                        | -                                                                                   | -                                                             | -                                          |
| 12.  | Fire extinguisher (inside cabin)                     | Yes                                                        | Yes                                                                        | Yes                                                                                 | -                                                             | Yes                                        |
| 13.  | First aid kit (inside cabin)                         | Yes                                                        | Yes                                                                        | Yes                                                                                 | Yes                                                           | -                                          |
| 14.  | Boom angle indicator                                 | Yes                                                        | Yes (if applicable)                                                        | -                                                                                   | -                                                             | Yes (if applicable)                        |
| 15.  | Hook Latch                                           | Yes                                                        | Yes (if applicable)                                                        | -                                                                                   | -                                                             | -                                          |
| 16.  | Reflector strips on around cabin and on boom         | Yes                                                        | Yes                                                                        | Yes                                                                                 | -                                                             | Yes                                        |
| 17.  | SLI+Load Limit Switch                                | Yes                                                        | -                                                                          | -                                                                                   | -                                                             | -                                          |

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 12 of 22                                                                |

**Note:**

1. No one shall ride man-lift bucket without safety belt, safety shoes, helmet and reflective jacket.
2. Not more than 3 persons at a time will board in bucket of man-lift (without any heavy materials) including operator.
3. Operator will not leave the machine while persons are elevated and working.
4. No one other than the authorised operator will operate the man lifts/Scissors lifts.
5. Hydra cranes are not allowed. Contractors must instead use Farana cranes with that meet safety standards for stability and operator visibility.
6. Farana and other lifting cranes must have operational safe load indicator (SLI) and load limit switch as standard attachment. **(Rev-03)**

**h. Excavation**

Prior permission/clearance from customer is a must for excavations in areas where underground service services such as gas/water/oil/chemical/electrical lines may be routed. Due precautions shall be taken during excavation in such area. Excavations near water bodies (ponds/canals etc.) shall be done with sand/soil bags ready to plug water from accidental damaged/burst of edges. All the excavations shall be done by either step cutting (min. 600mm step at every 1.5m depth) or slope cutting at 1:2(X:Y axis) (or greater depending upon the soil condition). Where step cutting/slope cutting is not possible due to space constraints, shoring/shuttering or sheet piling to be used to check collapse of soil.

Excavated soil shall be stacked away from edge of the pit, at-least 1.5 meters or half of the depth whichever is higher. Height of the stack shall not exceed 2m in height.

Ramps shall be provided for access of the workers in large pits and ladder of metal/good built for small pits. Ladders shall be of sufficient length protruding at least 1m above the ground level.

Pumps of adequate capacity shall be available for pumping out of water. No lone worker shall be allowed to work in any excavation. Overloaded vehicle shall not be allowed near excavated pits.

**i. Bar bending and Binding**

Bar bending machine shall be installed under shed/roof. It shall be properly earthed and maintained for operation. Housekeeping of the area shall be team's responsibility on daily basis. All be bar benders shall be given hand gloves (leather/cotton) in addition to mandatory PPEs. Scrap shall be segregated and moved to scrap yard on regular basis. Bar bending station shall be located away from Main plying roads/passages. The station shall be well illuminated, shall have a maintained first aid kit and potable water. Station shall be located in such a way that the movement of the material be minimised.

**j. Concreting**

**No electric vibrators** shall be allowed to use. All the concrete workers shall be issued gum boots, safety helmets, reflective jackets and PVC hand gloves. Free fall of concrete from chute shall not exceed 1m in height. Heavy machineries/ vehicles shall be kept at least 2m away from the edge. Emergency vehicle shall be available near concreting work. Late night works shall be avoided, if it is unavoidable, a prior permission from BHEL/Customer is mandatory.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 13 of 22                                                                |

#### k. Welding, Gas Cutting & other hot works

**Welding:** Only experienced welders should be deployed for welding jobs. Welders shall be provided with apron, hand gloves, arm pads, leg pads, face shield and safety shoes. Welding leads shall be joint less and insulated. Power input point shall be fully covered at machine.

**Gas cutting:** If LPG is being used, domestic cylinder is strictly prohibited inside the project premises, (not allowed for site kitchen too). Hose pipes shall be in good condition without cracks, cuts, punctures or joints. Ends should be clamped with worm clamps. Dial gauges shall be of good quality and duly calibrated. Flash back arresters is a must for both oxygen/acetylene or LPG/Oxygen combination. Cylinders shall be stored, transported and used in vertical position only. When not in use, they shall be capped. Empty and filled cylinders to be stored separately with distinct marking.

Cylinders shall neither be rolled on the ground nor thrown during loading/unloading.

**Grinding:** Grinder shall be given clear glass face shield, apron, safety shoes, ear muffs and hand gloves. Grinder machines shall have wheel guard. Plug tops to be used for power connection preferably three wire type. Only trained persons shall be allowed to use grinders, abrasive cutters. Electrical connection shall be free from cuts, joints etc.

#### l. Erection & Height Work

Only trained filters and experienced helpers shall be engaged in erection work. Step bolts of lattice towers shall be checked for full tightness with spring washers before use. Height pass shall be issued to the identified group of erectors who have passed medical test and have working experience at height. Name of such workers shall be displayed at appropriate place. These workers only shall be allowed to work at height. Height work shall not be permitted in high wind/bad weather condition, during raining or in night/dark.

#### m. Electrical Safety

BHEL usually provided single point power source and sub-contractors draw power from there. Otherwise agencies make their own arrangement for construction power like DG sets etc. Sub-contractors shall submit their load requirement (amperage & phase) to BHEL before start of work. Accordingly, they shall make arrangements to draw power and distribution arrangements too in a safe way. MCCBs and HRC fuses to be put in circuit for short circuit and overload protections and RCCBs of 30mA sensitivity to be put at each distribution panel for human safety. Earthing pits shall be installed at each distribution point and maintained below three Ohm resistivity which shall be inspected randomly. The distribution points shall be clean, free from vegetation and water logging, easily accessible and covered/protected from three sides and top for rain. Earthing of DBs shall be done by 25x3mm GI flats connected from proper earth pits. Insulation mat, PVC Sheet/Wooden plank to be placed before DBs as platform. DB Sheds shall be legibly marked with name of agency, contact no of electrician and SLD of that DB. Only industrial plugs and sockets shall be allowed. Three wire (Phase, neutral and earth) system shall be used for tools, lights and machineries and two wire power draws shall be strictly prohibited. PTW and LOTO system shall be maintained to work on LT system. Name and contact no of authorised electricians who will be responsible of electrical power facility maintenance shall be submitted to BHEL by Agencies. Unauthorised sharing of power from one agency to other is strictly prohibited. Electricians shall use standard PPEs and insulated

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. :</b> 03<br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 14 of 22                                                                |

tools only. Standard and tested/certified discharge rods to be used in the areas where there is a possibility of residual current or induction charge. The induction rod to be connected to the earth first and removed in the last. Induction helmets only to be used in the charged area. Electricians to be provided with electrical resistant safety shoes having FRP/PVC toe.

#### **n. Dust Gases and fumes**

Sub-contractor shall make arrangements to avoid accumulation of dust fumes and gases. Cement handlers inside store or at batching plant and gravel spreader shall be given effective nose masks and jaggery (at least 200g per person per day). DG sets and other machineries like cranes excavators etc. shall have valid and effective PUC certificate and shall have maintained engine with silencer. No IC engine operated machine shall be used in confined and covered area like hall, sheds, store etc. where accumulation due to lack of ventilation can increase to harmful levels. Dedicated arrangements (tanker or tractor with sprinkler) shall be made by the sub-contractors (individual or jointly) to continuously subside the dusts arising out of the movement of the vehicle's roads/passages. Welding activities near roof accumulates harmful gases. Welders in such positions shall be provided with effective masks conforming to IS standards.

#### **o. Vehicular Traffic**

Speed limits defined within the premises shall strictly be followed by the drivers/commuters of construction as well as other vehicles.

Every construction machinery, man-lift shall display the name, contact no and passport size photograph of the authorised operator (There can be one or more authorised operators).

No one other than operator and co-operator shall sit inside the cabin of any construction machine while it is working.

Construction machineries (tractor, trucks, tippers, JCBs, Farana, Fassi cranes etc. shall never be used as mode of public transport. Machineries like Ajax Fiori and Farana shall not be driven in back direction except for small distances. No overloaded vehicle shall be permitted entry in the project premises.

Over speeding shall be reported and driver/operator shall be barred from entry or shall be penalised.

Drunken drivers shall be barred from entry in the project.

Carrying harmful weapons like knives (>6"), guns etc. shall permanently disqualify the person from entry in project premises.

#### **p. Barricading and floor openings**

Every pit deeper than 4 feet (1.2m) shall be barricaded immediately after excavation and will remain barricaded till backfilling.

Pits/trenches drains near roads, passages whether temporary or permanent shall be hard barricaded and well illuminated. Roof edges and openings shall be strictly hard barricaded and illuminated. Height works like masonry works, structure erection, erection by cranes, Lattice tower/beam erection areas shall be barricaded to restrict entry. Areas under charging/commissioning shall be barricaded and caution boards shall be displayed on newly charged areas.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 15 of 22                                                                |

#### q. Scaffold & Ladder

**No bamboo/wooden scaffold** shall be allowed to be used. Only tubular steel scaffolds with couplers conforming to the relevant IS codes shall be allowed with base plates. Standard steel or wooden planks to be used as platforms and no packing materials shall be used. All the platforms shall be built with provisions of **top rail at 1m height, mid rail at 0.5m height and toe boards of min 6" height** at floor level. Minimum width of platform shall be 900mm and if wheel barrow is to be used then 1200mm. Means of access to be provided in the form of ladders, ramps or staircase. Multilevel work platforms or those platforms having passage underneath shall be provided with safety net, screen or canopy at each level for protection from falling objects. Platforms shall be free from concrete, debris or other materials. Platforms shall not extend out of the putlogs and shall be secured and fastened. Decking shall be made non-skidding.

Scaffolds under erection shall be tagged "**RED**", under repair/maintenance/inspection shall be tagged "**YELLOW**" and ready for use shall be tagged "**GREEN**"

Only metal ladders in the construction site and FRP ladders in charged areas shall be allowed. Ladders made from packing materials shall not be used. Ladders shall be securely fixed at bottom, top and long ladders at middle points too at an interval not more than 2400mm and must have a landing at every 6m. Inclination angle should be approximately 1:4 (X:Y) or 75deg. Ladder must extend at least 1m above the platform/access area. Gap between two rungs shall not exceed 300mm. Portable ladder should not be more than 4m in length. Minimum width of the ladder shall not be less than 300mm.

Use of Mobile aluminium scaffold is preferably advisable for erection of transformers/reactors.

#### r. Illumination

The sub-contractor shall ensure that the areas such as work stations, buildings, batching plants, passages/roads, stores, rest areas, power sources, staircases etc. are illuminated sufficiently to make safe work conditions at site and shall not be less than the relevant IS standards. Excavations/ below ground level structures near passages/roads shall also be sufficiently illuminated.

#### s. Safety banners/posters, caution boards

Sub-contractors shall display boards and banners in sufficient quantity having safety signs, slogans, important messages, pictures, cautions at prominent locations to promote safety and spread awareness for important precautions such as "Deep Excavation Ahead", "Speed Limit", "Charged Area", "Do not operate", "Hard hat area", "No smoking Zone" etc. Boards containing messages of Emergency contacts, First aid facility, rates of minimum wages, working hours, rest day etc. should be displayed at specific areas.

#### t. Waste management and disposal

Sub-contractor shall make suitable and effective arrangement to remove waste material from site on regular basis and store them in an identified and safe location. Disposal of wastes shall also be done as per manufacturer's instructions or as per the guidelines laid by legal authorities. Re-bars, Cement bags, packing material (wooden/metal/plastic/paper), paint, oil, grease, cables (armour, sheathing, insulation), civil debris, metal chips, GI sheet scraps, batteries etc. are the common waste materials. Sub-contractor

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 16 of 22                                                                |

shall arrange disposal of the hazardous wastes/materials in conformance to the legal and contractual requirements only.

#### **u. Inspection of PPEs, T&Ps, Machineries and lifting appliances**

All the PPEs, T&P and lifting appliances purchased newly by sub-contractors shall have test certificates which shall be submitted to BHEL office periodically or on demand. There shall be at least monthly joint inspection schedule for inspection of healthiness of all the PPEs, T&Ps and lifting appliances. All the lifting appliances shall be tested and examined by a competent person before taking into use for the first time or after it has undergone any alterations or repairs liable to affect its strength or stability

and also once at least in every twelve months. To confirm quality of the PPEs as per the relevant IS codes, BHEL may ask sub-contractors to get any or all types of PPEs tested through NABL approved lab as per relevant IS codes. At any stage, the 100% cost of such tests shall be in the scope of respective sub-contractors.

#### **v. Cable Laying**

Sub-contractor shall ensure cable trenches free from water, mud, debris, snakes, Scorpions, lizards before start of the work in trenches. Cable drum rollers shall be used to pull cables out of drums to avoid twisting of cables. Hand gloves, Safety shoes/gum boots, reflective jackets, safety helmets shall be provided to the workers. Cable laying area shall be well illuminated.

#### **w. Fire Protection**

Every sub-contractor has to maintain their working area, store and office area free from bushes. Stacking of flammable materials like wood, paper, plastic, paint, oil, grease, fuel, cotton, gases etc. at isolated place disconnected from other storage and office areas. Adequate arrangements of firefighting means like suitable extinguishers, fire/water buckets, water tanks, sand dunes etc. shall be made by the agency depending upon the fire capacity assessed or as per MSDS. Fire drills and trainings on how to operate fire extinguishers and how to react in case of fire breakouts shall be the part of regular training program. Guards and store persons must be a regular participant of such training programs. A list of trained firefighting persons and periodicity of such training programs shall be submitted to BHEL by every agency and same to be adhered. Sufficient number of fire extinguishers with suitable class shall be placed at such locations where there can be fire hazard like stores, pantry, office, DG set, electrical distribution panels etc.

#### **x. Fencing of exposed rotating parts**

Exposed rotating parts poses great threat to the person in vicinity. Such parts need to be fenced/covered. Guards are mandatory of grinders, abrasive cutters. Flywheels of the engines of heavy machines, Diesel engines, DG sets need to be covered. Electric winch machines, pulleys, chains, shafts, exhaust fans at reachable height, table fans, need to be caged/fenced. Such fencing/guard shall not be removed while machinery is in operation.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | <b>Page-</b> 17 of 22                                                         |

**y. Emergency preparedness response plan and periodic mock drills.**

Sub-contractor shall comply JSA (Job Safety Analysis) and arrange to mitigate the effects of identified possible hazards. He shall also define following in response to emergency preparedness:

An emergency assembly point and put a board of the same with information to all in induction training.

Have facility of ambulance or tie-up with nearest hospital for service in minimum possible time (Max-30min) if there is not ambulance inside the premises.

Ensure availability of emergency vehicle with driver all the time at site during work.

Conduct mock-drills on possible risks like electrocution, fall from height, fire, heat stroke etc., record responses and take photographs to submit in BHEL office. Stretchers availability in emergency vehicle or at work place should be well accessible. Provide fire extinguishers of right type at right place in right quantity with information to all. Display emergency contact nos. to various risk locations and at office, service building or at major work locations. Provide first aid training by doctors for and display names of such trained first aiders and fire fighters. Rescue kit with trained staff or man lift or both to rescue a man hanging by safety belt at height. Provide running water tap near chemical storage and handling points. Agencies shall follow emergency response plan prepared by BHEL in each area of work, store and office.

**z. Safety reports & Reporting of accidents**

BHEL will provide "formats and checklists" for the purpose of records/documents pertaining to the compliance of aforesaid clauses. Agencies shall be responsible for strict adherence and compliance for timely generation and fill-up of the checklists and reports. These shall be submitted on weekly and monthly basis as specified in the formats.

Agency shall also promote such an environment that the near misses, incidents and accidents are reported by every person, whosoever witnesses them. These shall help in analysing the trend and taking measures in reducing/stopping the accidents/incidents. Initial reporting can be in any form-by call, SMS, WhatsApp, e-mail, letter etc.

Major and fatal accidents or high potential incidents shall be investigated for root cause and outcomes shall be immediately implemented to check recurrences.

## 7. REPORTING OF ACCIDENTS:

- ❖ Any accident on the construction site which causes loss of life or disables the person from working for a period of more than 10 days, shall be reported in writing to:
  - Regional Labour Commissioner
  - State BOCW Inspector / Board to which the person is registered as beneficiary.
  - Director General of Factory Advice Service and Labour Institutes (DGFASLI), Mumbai
  - Employees' Compensation Commissioner or ESIC Branch Office as applicable
  - Nearest Police Station
  - District Magistrate (in case of fatality)
  - The next of kin or relative of the person.
- ❖ Fatal accidents within 4 hours and major accidents within 72 hours of occurrence must be reported to authorities as above and client. Hiding facts like incidents, accidents, submitting fake/forged reports/certificates shall also attract penalty/ notice or both.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 18 of 22                                                                |

- ❖ All PPEs shall conform to relevant BIS/IEC/EN standards in performance, not merely carry an ISI mark. For helmets, DGMS-approved models should be preferred, 100% compliance is mandatory.
- ❖ Over speeding of vehicles shall attract penalty/notice and recurrence will attract debarring from entry into project premises.
- ❖ Only approved third party agencies shall be allowed to inspect the machines, T&Ps. Reports shall directly be sent to BHEL/customers by the third parties.
- ❖ Insurance and TPIs to be renewed before expiry. Machines, T&Ps shall not be allowed to work if renewal delayed. Continuity of EC policy to be maintained religiously by the respective agencies.
- ❖ Agency shall submit the status report of his labour license, BOCW registration, EC Policy, insurance & TPI certificate's validity on monthly basis with list of machineries and T&Ps
- ❖ Sub-contractors shall also maintain a buffer stock of all the PPEs in at least 20% excess to the present strength of the work force.
- ❖ Agencies shall be responsible for the compliance of the above requirements. Failure in one or more clauses/area shall attract a notice or monetary penalty or a combination of both. **(Rev-03)**

## 8. PENAL PROVISIONS:

**(Rev-03)**

- a) Subcontractor shall be responsible for ensuring HSE compliances with respect to the applicable legal and contractual obligations (refer **TBG/HSEP-14** for details). The performance of the subcontractor with respect to HSE compliances shall be evaluated by BHEL on monthly basis (format no. **TBG/HSEP07:F02**).
- b) Non-compliance with any stipulated HSE requirement shall attract a notice and/or a monetary penalty. Such penalties shall be in addition to any medical expenses incurred for treatment of victims or compensation payable to the affected persons or their families, including amounts covered under insurance policies (Employees' Compensation Policy / Group Insurance). Monetary penalties shall be recovered from the next bills or from the EMD/SD of the subcontractors, as applicable.
- c) In addition to the above, BHEL has the right to suspend/debar the subcontractor from participating in future tenders for a period of one year from the date of second fatal accident.
- d) Upon the first incident, BHEL Site In-charge shall issue a notice to the agency, cautioning that suspension/debarment will be considered in the event of a second fatal incident.
- e) Post mobilization, the subcontractor shall consult with the BHEL site in-charge to understand and acknowledge the customer's penal provisions that may be levied upon or passed on to the subcontractor in the event of any non-compliance or incident.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 19 of 22                                                                |

**The penalties shall be applicable as below:**

#### **8.1. Penal Provisions for Non-Compliances and Safety Violations.**

- Up to ₹1,000/- per person/incident per day for HSE related non-compliances and safety violations (**Refer- Clause 18**, HSE NON-COMPLIANCE & PENALTIES of TBG/HSEP-14).
- Three times consecutive penalty on the same person for the same reason shall debar him/her from working into the TBG project premises.
- In case a penalty is imposed by the customer on account of non-compliances and safety violations, the higher of the two amounts shall be recoverable from the subcontractor.

#### **8.2. Penal Provisions for Non-deployment of safety personnel.**

- Deployment of safety personnel will be done on formal written communication from BHEL. In case the contractor fails to deploy the required safety manpower within the stipulated time, a recovery of **₹50,000/-** per person per month or part thereof shall be made from the next bill, irrespective of the category of safety manpower, notwithstanding availability of schedule of rate item for deployment of safety personnel in the contract which shall be operated as per contract provisions.
- Upon failure to deploy the required safety personnel by subcontractor, BHEL reserves the right to deploy a full-time qualified Safety Officer through its existing Safety Consultancy Rate Contract and assign duties of any category of safety personnel. The cost incurred on such deployment shall be recovered from the subcontractor at the higher of the actual expenditure incurred by BHEL or **₹50,000/-** per person per month.
- If a safety personnel is deployed by BHEL on behalf of the subcontractor, the person shall remain deployed for a minimum period of two months from the date of deployment and recovery shall be made accordingly. If the subcontractor mobilizes his safety personnel during this period (two months), no payment against that item shall be admissible by BHEL.
- Continuous absence of deployed safety personnel for more than **10 days** shall be treated as demobilization, penalty shall be imposed on a pro-rata basis for the entire period of absence.
- Any penalty imposed by the customer on account of non-deployment of safety personnel, attributable to sub-contractor shall be recoverable from the subcontractor.
- The deployment of safety personnel by BHEL on behalf of subcontractor will not absolve him from legal and contractual obligations.
- Instructions of safety person engaged by BHEL directly or indirectly (through other agencies/subcontractors) to be followed by the subcontractor.

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. :</b> 03<br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 20 of 22                                                                |

- h) BHEL Site In-charge shall issue a written intimation to the subcontractor with copy to TBSM, regarding deployment of safety personnel on behalf of the subcontractor. The subcontractor shall provide a written acknowledgement of the same.

### 8.3. Penalty Provisions on Major/disablement/Fatal accidents.

- Major injuries or accidents causing 25% or more permanent disablement: **₹2,00,000/-** per incident. The cumulative penalty amount shall be limited to 5% of the original contract value.
- Fatality or permanent disability with total loss of earning capacity: **₹5,00,000/-** per incident irrespective of contract value.

**8.4** If the penalties **imposed by the customer** for major/disablement/fatal accidents, attributable to subcontractor are **higher** than the limits mentioned in **clause 8.3** above, then recoveries shall be made as per the following conditions:

- Contracts up to ₹1 crore value:** Clause no. **8.3** shall apply.
- Contracts above ₹1 crore to ₹5 crore value:** Customer penalty shall be transferred to subcontractor, subject to a liability of the higher of **Rs. 5 lakh** or **3%** of original contract value per person/per incident but not exceeding the actual penalty imposed.
- Contracts with value of more than ₹5 crore:** Customer-imposed penalty shall be transferred to the subcontractor, subject to a liability of the higher of **₹15 lakh** or **2%** of the original contract value per person/per incident, but not exceeding the actual penalty imposed.

## 9. Creation of common HSE Facilities on contribution basis at sites:

All health, safety and welfare provisions stipulated under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and allied rules shall be adequately and timely complied with by the subcontractor. These include, but are not limited to, arrangements for clean drinking water, toilets and urinals, safe electrical installations, periodic health check-ups of workers, operators and supervisors, medical examination of height workers, tetanus vaccination, induction training and provision of mandatory and job specific PPEs. In the event of non-compliance or delay in fulfilling these obligations, BHEL reserves the right to arrange the same on behalf of the subcontractor, along with applicable overhead charges.

In order to comply with the legal and contractual obligations, BHEL site in-charge shall decide to create certain HSE facilities involving fixed or recurring expenditure which shall

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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  | <b>Transmission Business Group</b><br><b>Department of Health, Safety &amp; Environment, Noida</b> | <b>Doc No.</b> TBG/HSE/NIT-01<br><b>Rev No. : 03</b><br><b>Date:</b> 31.03.26 |
|                                                                                   | <b>NIT HSE Specifications</b>                                                                      | Page- 21 of 22                                                                |

be operated on a contributory basis among the running contracts at site. The contribution shall be determined proportionately based on either the manpower strength or the original contract value of each subcontractor, as decided by the site management. The facilities to be covered under this arrangement include, but are not limited to:

- Dust suppression arrangements,
- Ambulance van (Advanced Life Support type),
- Periodic visit of a qualified medical officer,
- Engagement of trained first-aid person or a qualified nurse for the medical/first-aid centre.
- Drinking water facility with periodic cleaning arrangement.
- Toilet/urinal facility with daily cleaning arrangement.

The contribution per contractor per month shall not exceed ₹20,000 (Rupees Twenty Thousand only). Any balance cost beyond this limit shall be borne by BHEL. **(Rev-03)**

## 10. Revision History

| Revision Date | Revision No. | Old Text | New Text                                                                                                                                                                                                                                                                                                                         | Reason                                                                                        | Revised by (with sign) |
|---------------|--------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------|
| 03.05.2019    | 00           | N/A      | Full Document                                                                                                                                                                                                                                                                                                                    | New Release                                                                                   | -sd-                   |
| 12.10.2021    | 01           | Nil      | Attend HSE familiarization program at TBG-HQ with his site management team. This will be a half day long awareness session on HSE requirements and compliances which the agency is supposed to fulfil during contract execution at site. The session shall be taken by TBG HSE department on intimation by TBSM. (at page no. 5) | For better understanding of HSE requirements to agency. (HSE Review meeting dated 23.08.2021) | -sd-                   |
| 12.10.2021    | 01           | Edition  | Inclusion of penalty provisions in case of non-deployment of safety person (page-8)                                                                                                                                                                                                                                              | Introduction of HSEP-14                                                                       | -sd-                   |
| 17.01.2024    | 02           | Edition  | Appointment and duties of qualified safety officer (Page-8)                                                                                                                                                                                                                                                                      | As per BOCW 1996                                                                              | -sd-                   |
| 05.09.2025    | 03           | Edition  | Document name change, Clause (1) new HSE policy, Revised clause 2(a), 3, 6 (b,c,g) addition of new clause 7,8&9,                                                                                                                                                                                                                 | Inclusion of CFC recommendations                                                              | -sd-                   |

-:End of Document:-

## **GENERAL CONDITIONS OF CONTRACT**

The following terms and conditions shall form a part of the tender document.

### **A. Condition of Contract**

#### **A.1. GENERAL INSTRUCTION**

A.1.1. **All pages of the tender documents shall be duly signed, stamped and submitted along with the offer in token of complete acceptance thereof.** The information furnished shall be complete by itself. The tenderer is required to furnish all the details and other documents as required in the following pages.

A.1.2. Tenderers are advised to study all the tender documents carefully. Any submission of tender by the tenderer shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. Should the tenderers have any doubt about the meaning of any portion of the Tender Specification or find discrepancies or omissions in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, the scope of work etc., tenderer shall at once, contact the authority inviting the tender well in time (so as not to affect last date of submission) for clarification before the submission of the tender. Tenderer's request for clarifications shall be with reference to Sections and Clause numbers given in the tender documents. The specifications and terms and conditions shall be deemed to have been accepted by the tenderer in his offer. Non-compliance with any of the requirements and instructions of the tender enquiry may result in the rejection of the tender.

#### **A.2. PROCEDURE FOR SUBMISSION OF SEALED TENDERS**

A.2.1. Bidders may please refer Cl no. 02 to Cl no. 03 of the Notice inviting tender.

A.2.2. The tenders received after the specified time of their submission shall be treated as 'Late Tenders' and shall not be considered under any circumstances.

A.2.3. Tenders shall be opened by the officers concerned of BHEL at the time, date and venue as specified in the tender enquiry. Tenderer or their authorized representative may witness the bid opening.

A.2.4. The tenderer shall closely pursue all the clauses, specifications and drawings indicated in the Tender Documents before quoting. Should the tenderer have any doubt about the meaning of any portion of the Tender Specifications or find discrepancies/omission in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, scope of work etc. he shall at once contact the authority inviting the tender for clarification before the submission of the tender.

A.2.5. Before submission of offer, the tenderer is advised to inspect the work & the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, sourcing of material and labour, means of transport and access to site, accommodation, etc. No claim will be entertained later on the grounds of lack of knowledge on any of these conditions/ resources.

A.2.6. Tenderer must fill up all the schedules and furnish all the required information as per the instructions given in various sections of the tender specification. Each and every page of the Tender Specification must be SIGNED AND SUBMITTED ALONG WITH THE OFFER by the Tenderer in token of complete acceptance thereof the information furnished shall be complete by itself.

A.2.7. The tenderer shall quote the rates in English Language and international numerals.

Total price offered should be entered in figures as well as in words. For the purpose of the tender, the metric system of units shall be used.

A.2.8. The tenderer shall quote a percentage above/ below/At Par the rates shown in the "Bill of Quantities Cum Price Schedule (Annexure-I)" of subject tender.

A.2.9. The quoted percentage will apply to the individual items of "Annexure-I i.e. Bill of Quantity Cum Price Schedule" uniformly.

A.2.10. All entries in the tender shall either be typed or be written legibly in ink. Erasing and overwriting are not permitted and may render such tender liable for rejection. All cancellations and insertions shall be duly attested by the tenderer.

A.2.11. The tenderer must provide the registered e-mail of their registered office along with the addresses and authorised phone/mobile nos.

**A.3. ADJUSTMENT PRICE DISCREPANCY (IES): - Not Applicable being e procurement.**

**A.4. EVALUATION OF TECHNICAL BIDS**

A.4.1. Technical Bids submitted by the tenderer will be opened first and evaluated for fulfilling the Pre-Qualification criteria and other conditions in NIT/Tender documents, based on documentary evidences submitted along with the offer.

A.4.2. In case the same qualifying experience is claimed by more than one bidder due to subletting of work by main contractor to subcontractor (s) then following conditions shall be applicable.

A.4.2.1. For labour + consumable contract without material and T&P:

Benefit of work experience shall be given to the subcontractor who has actually executed job and not to the contractor offloaded down the line.

A.4.2.2. For contract with complete scope i.e. with materials, T&P, labour and consumable:

- i) Benefit of work experience shall be given to the subcontractor who has actually executed job and not to the contractor offloaded down the line.
- ii) If the contractor offloads the labour and/or T&P portion only, benefit of work experience shall be given to the main contractor and not to the subcontractor who has executed only as labour supply contractor

The bidder's qualification shall be subject to submission of documentary proof. BHEL reserves the right to ask for further proofs including submission of TDS certificates/ for the said job.

A.4.3. In case the qualifying experience is claimed by private organizations based on Work Order and completion certificates from another private organization, BHEL reserves the right to ask for further proofs including submission of TDS certificates/ form 26AS /bills for the said job.

A.4.4. Credentials of all the bidders participating in open tender will be scrutinized thoroughly by the nominated committee w.r.t. the pre-qualifying requirement for the tender.

A.4.5. Details of qualifying work(s) executed by the bidder will be forwarded to the principle

employer for verification of the work with respect to completion, commencement & completion date, scope and value of the work executed. Performance feedback of the bidder will also be sought from the principle employer.

A.4.6. BHEL may conduct onsite verification of at least one of the qualifying works to verify completion of the work and evaluate capability and performance of the bidder.

A.4.7. The bidder representative may be called for the discussion with the committee. His originals may be verified by the committee. In addition to above their organization chart and detailed list of manpower, tools & plants and technical capability may be discussed and ascertained by the committee.

**A.5. EVALUATION OF PRICE BIDS**

A.5.1. Price Bids of unqualified bidders shall not be opened.

A.5.2. The offers will be evaluated on the basis of total price basis (refer "BILL OF QUANTITY AND PRICE SCHEDULE) as shown in the price bid.

A.5.3. Reasons for rejection of the bid shall be intimated in due course after issue of LOI/LOA to successful bidder and receipt of unconditional acceptance of LOI /LOA from the successful bidder.

A.5.4. In case of electronic Reverse Auction, the unqualified bidders shall not be allowed to participate in reverse auction.

**A.6. DOCUMENTS TO BE ENCLOSED:**

Full information shall be given by the tenderer in respect of the following.

A.6.1. Tenders shall be signed by persons duly authorized/empowered to do so. An attested copy of the Power of Attorney to be submitted in all cases except where the sole proprietor is the signatory to the tender documents.

**A.6.2. PERMANENT ACCOUNT NUMBER:**

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

**A.6.3. AUDITED BALANCE SHEET AND INCOME TAX RETURN:**

Copy of Audited Balance sheets and income tax return for last Five financial years (financial years as specified in PQR).

**A.6.4. SOLVENCY CERTIFICATE:**

If asked in NIT, bidder should submit solvency certificate (not older than 12 months from date of tender notification) issued by any scheduled bank.

**A.6.5. DOCUMENT RELATED TO INCORPORATION OF BUSINESS ENTITY:**

**A.6.5.1. IN CASE OF INDIVIDUAL TENDERER:**

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

**A.6.5.2. IN CASE OF PARTNERSHIP FIRMS:**

The names of all the partners with address. A copy of the partnership deed/instrument of partnership duly certified by the Notary shall be enclosed.

**A.6.5.3. IN CASE OF COMPANIES:**

Date & place of registration including date of commencement certificate in case of Public Companies and the nature of business carried on by the company. Certified copies of Memorandum and Articles of Association are also to be furnished.

A.6.6. Offer forwarding letter over the letterhead.

A.6.7. Declaration sheets (As per Prescribed format) over the letter head.

A.6.8. No Deviation certificates (As per Prescribed format) over the letterhead.

A.6.9. GST Registration certificate: -

All the data required to be enclosed with the tender need to be furnished neatly typed, signed & stamped in the given formats only (in the form of separate sheets) failing which the tender may be considered as incomplete and is liable for rejection. Documentary proof wherever necessary also need to be enclosed.

**A.7. VALIDITY OF OFFER**

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

**A.8. REJECTION OF TENDER & OTHER CONDITIONS:**

A.8.1. The decision of acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:

- a) To reject any or all of the tenders.
- b) To split up the work amongst two or more Tenderer as per NIT
- c) To award the work in part as per NIT
- d) In either of the contingencies stated in (b) and (c) above to modify the time for completion suitably.

A.8.2. Conditional tenders, unsolicited tenders, containing abnormally low/ unworkable rates & amounts, tenders which are incomplete or not in the form specified or defective or have been materially altered or not in accordance with the tender conditions, specifications etc. are liable to be rejected.

A.8.3. Tenders are liable to be rejected in case of unsatisfactory performance of the tenderer with BHEL, or tenderer under suspension (hold / banning / delisted) by any unit /

region / division of BHEL or tenderers who do not comply with the latest guidelines of Ministry / Commissions of Govt. of India. BHEL reserves the right to reject a bidder in case it is observed that they are overloaded and may not be in a position to execute this job as per the required schedule in line with 'NIT'. The decision of BHEL will be final in this regard.

- A.8.4. In case of any adverse information is received concerning performance, capability or conduct of the tenderer after issue of tender enquiry or opening of tender or award of work, BHEL reserves the right to reject the offer at any stage as deemed fit.
- A.8.5. Offers with inadequate Tools & Plants, Manpower Deployment Plan, and Method Statement are liable for rejection.
- A.8.6. If a tenderer who is a proprietor expires after the submission of his tender or after the acceptance of his tender, BHEL may at its discretion, cancel such tender. If a partner of a firm expires after the submission of the tender or after the acceptance of the tender, BHEL may cancel such tender at its discretion unless the firm retains its character.
- A.8.7. BHEL will not be bound by any Power of Attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. BHEL may, however, recognise such Power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
- A.8.8. If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded, and forfeit the Earnest Money/Security Deposit/any other moneys due.
- A.8.9. Canvassing in any form in connection with the tender is strictly prohibited and the tenders submitted by the tenderer who resorts to canvassing are liable to be rejected.
- A.8.10. In case the Proprietor, Partner or Director of the Company / Firm submitting the Tender, has any relative or relation employed in BHEL, the authority inviting tender shall be informed to the fact as per specified format along with the offer, failing this, BHEL may, at its sole discretion reject the tender or cancel the contract and forfeit the Earnest Money/ Security Deposit.
- A.8.11. The successful tenderer should not sub-contract the part or complete work detailed in the tender specifications without written permission of BHEL's Site In charge/ Sector Head. For this the contractor shall submit request application to site in charge supported by credentials (financial and technical) and resource mobilization schedule of such sub-contractor. Such request is to be considered in consultation with end user/ultimate customer (if applicable) and subject to satisfactory credentials, fund flow arrangement between them, HSE and other contractual and statutory obligations. The tenderer is solely responsible to BHEL for the work awarded to him.
- A.8.12. Unsolicited discount received after the due date and time of Bid Submission shall not be considered for evaluation. However, if the party who has submitted the unsolicited discount/rebate becomes the L-1 party, then the awarded price i.e. contract value shall be worked out after considering the discount so offered.

A.8.13. BHEL shall not be liable for any expenses incurred by the bidder in the preparation of the tender irrespective of whether the tender is accepted or not.

A.9. **NO DEVIATIONS ARE ACCEPTABLE: -**

Offers with deviations are likely to be rejected. However, if the bidder insists on any technical or commercial deviations from the specifications and / or tender conditions, **the price implication, if any, of withdrawing the deviations must be submitted along with the price bid in a separate sealed envelope super-scribed "PRICE IMPLICATION FOR WITHDRAWAL OF DEVIATIONS"**. No price implication for withdrawal of deviation shall be accepted at a later date, after opening of technical bid.

A.10. Consortium/ JV bidding is not allowed under this NIT.

**B. EARNEST MONEY DEPOSIT**

Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) mentioned in NIT.

B.1. Mode of EMD deposit:

Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) mentioned in NIT.

Mode of EMD deposit:

EMD can be submitted in any one of the following modes:

- i) Cash deposit as permissible under the extant Income Tax Act (before tender opening),
- ii) Electronic Fund Transfer credited in BHEL account (before tender opening). Details of BHEL account mentioned in tender document.
- iii) Banker's cheque/Pay order/Demand Draft, in favour of 'BHEL' and payable at New Delhi (Along with offer)
- iv) Fixed Deposit Receipt (FDR) issued by schedule Banks/Public Finance Institutions as defined in the companies ACT (FDR should be in the name of the contractor, a/c BHEL)
- v) Insurance Surety Bonds

**In addition to above, the EMD amount in excess of Rs Two lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The Bank Guarantee in such cases shall be valid for at least six months.**

**For example:** In case the EMD amount is Rs. 20,00,000/- and bidder want to submit EMD in form of BG then amount of Rs. 2,00,000/- atleast to be submitted in the form of modes mentioned in sl. No. i) to v) above and BG for balance Rs. 18,00,000/- can be submitted.

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

**Note: The Submission of EMD is compulsory for subject tender. In case requisite Amount of EMD not submitted by the bidder along with offer or before technical bid opening, the offer shall not be considered for evaluation and the offer shall be rejected.**

#### **B.2. Forfeiture of EMD**

EMD by the bidder will be forfeited as per NIT conditions, if

- i) After opening the tender and within the offer validity period, the bidder revokes his tender or makes any modification in his tender which is not acceptable to BHEL.
- ii) The contractor fails to deposit the required Security deposit or commence the work within the period as per LOI/contract.

B.3. EMD by the tenderer shall be withheld in case any action on the tenderer is envisaged under the provision of extant "Guidelines on Suspension of business dealing with Supplier/contractors" and forfeited/ released based on the action as determined under these guidelines.

B.4. In the case of unsuccessful bidders, the Earnest Money will be refunded to them within a reasonable time after award of work.

B.5. EMD shall not carry any interest.

B.6. EMD of successful bidder shall be retained as part of Security Deposit.

B.7. Bidders may please note that "One Time EMD" provision stands deleted. Hence, bidders who have deposited Rs. 2 Lakh as 'One Time EMD' with BHEL are also required to submit the requisite amount of EMD.

**B.8. No MSE benefits shall be given to MSEs bidder for WORKS CONTRACT. Please refer clause no. P (facilities provided to MSEs) for detail.**

#### **C. SECURITY DEPOSIT**

Security Deposit means the security provided by the Contractor towards fulfilment of any obligations in terms of the provision of the contract.

C.1. Upon acceptance of Tender, the successful Tenderer should deposit the required amount of Security Deposit for satisfactory completion of work. **The total amount of Security Deposit will be 5% of the Contract Value.**

#### **C.2. Mode of Security deposit:**

**EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.**

The balance amount to make up the required Security Deposit of 5% of the contract Value may be furnished in any of 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 favour of BHEL.

- iii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Security Deposit shall be in the prescribed formats enclosed with general conditions of contract.
- iv) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL and duly discharged on the back.
- v) Securities available from Indian Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly endorsed/hypothecated/pledged, as applicable, in favour of BHEL and duly discharged on the back).
- vi) Insurance Surety Bonds

**(NOTE: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith)**

**C.3. Submission of Security Deposit:**

- i) At least 50 % of the required Security Deposit, including the EMD, shall be submitted before start of work. Balance of the Security Deposit can be submitted by way of deduction of 10% of the gross amount progressively from each running bills of the contractor till the total amount of the required Security Deposit is collected.
- ii) The security deposit should be furnished before start of the work by the contractor by the submission date mentioned in LOI.
- iii) In case of delay in submission of Security Deposit, a penalty equivalent to interest for the delayed period (@ Repo rate + 4%) shall be submitted by contractor in Cash/ Cheque/ DD/ Pay-order else BHEL shall recover the same from their first RA Bill. This penalty for the delayed period would be non-refundable. However, in any case, the delay in submission of Security Deposit should not exceed beyond 90 days from the date of start of work, else BHEL reserve the right to consider it as non-compliance of contractual conditions and may act as per clause N.2.2. of Annexure to GCC i.e. Breach of Contract.
- iv) If the value of work at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or it shall be recovered from payment/s due to the Contractor.
- v) The recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, at the discretion of BHEL.

C.4. The BG shall be submitted only through the Banker. Along with the BG, the Bank shall also furnish a letter of confirmation (in the prescribed formats enclosed with general conditions of contract).

C.5. The validity of the Bank Guarantee furnished towards Security Deposit shall be up to three months more than the period of completion of work as stipulated in the LOI and the same will be kept valid by proper renewal till the completion of the work.

C.6. BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the contractor's failure to fulfil any of the contractual obligations or in the event of termination of contract as per terms and conditions of the contract. BHEL reserves the right to set off the Security Deposit, against any claims of any other contracts with BHEL.

**C.7. Conditions for acceptance of bank guarantees**

Contractors are advised to obtain Bank Guarantee preferably from any of the following BHEL consortium banks

| Sl. No. | Name of Bank          | Sl. No. | Name of Bank                                  |
|---------|-----------------------|---------|-----------------------------------------------|
| 1       | State Bank of India   | 11      | Punjab National Bank                          |
| 2       | Canara Bank           | 12      | Union Bank of India                           |
| 3       | IDBI Bank Limited     | 13      | Yes Bank Limited                              |
| 4       | ICICI Bank Limited    | 14      | RBL Bank Ltd.                                 |
| 5       | HDFC Bank Limited     | 15      | Standard Chartered Bank                       |
| 6       | Axis Bank             | 16      | Indian Overseas Bank                          |
| 7       | IndusInd Bank Limited | 17      | Kotak Mahindra Bank Limited                   |
| 8       | Bank of Baroda        | 18      | Federal Bank Limited                          |
| 9       | Exim Bank             | 19      | Hongkong and Shanghai Banking Corporation Ltd |
| 10      | Indian Bank           |         |                                               |

Bank Guarantees from Banks outside BHEL's consortium shall be as below:

The Bank Guarantees of all Public sector banks can be accepted (in addition to consortium banks)

**The Bank Guarantees of Co-operative banks shall not be accepted.**

Bank Guarantees of other than consortium bank and public sector bank can be accepted subject to an overall exposure limit (at New Delhi) of Rs. 10 crores for banks with net worth of more than Rs. 500 crores as on last balance sheet date and Rs 5 crores for banks with net worth between Rs. 350 to Rs 500 crores (A certificate and copy of latest Balance Sheet to be given by the Bank at the time of submission of Bank Guarantees).

In case of private sector banks, a clause to be incorporated in the text of Bank Guarantee that it can be enforceable by being presented at any branch of the bank.

In case of foreign vendors, the bank guarantees issued by foreign banks may be confirmed by our consortium bank in India.

**In case of Bank Guarantees given by Non-Consortium banks (Private sector or Public sector), the Bank Guarantees are to be enforceable in New Delhi or the town/ city in which the sector office is located.**

**C.8. RETURN OF SECURITY DEPOSIT:**

If the contractor duly performs and completes the work in all respects to the entire satisfaction of BHEL and presents an absolute "No demand certificate", returns properties belonging to BHEL, taken, borrowed or hired by him for carrying out the said works, and furnishes performance bond BG in the prescribed proforma, Security Deposit will be released to the contractor after deducting all costs, expenses and other amounts that are to be paid to BHEL under this contract or other contracts entered into with the contractor.

**It may be noted that in no case the Security Deposit shall be refunded/released prior to passing of final bill.**

**D. Bank Account Details for submission of EMD/ Security Deposit through electronic fund transfer mode.**

|                        |                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------|
| NAME OF THE COMPANY    | BHARAT HEAVY ELECTRICALS LTD                                                                       |
| ADDRESS OF THE COMPANY | TRANSMISSION BUSINESS GROUP, 5TH FLOOR, BHEL TOWER, PLOT NO. 25, SECTOR-16A, NOIDA – 201301 (U.P.) |
| NAME OF BANK           | STATE BANK OF INDIA                                                                                |
| NAME OF BANK BRANCH    | CAG-II NEW DELHI (17313)                                                                           |
| CITY                   | NEW DELHI                                                                                          |
| ACCOUNT NUMBER         | 00000030206227732                                                                                  |
| ACCOUNT TYPE           | CASH CREDIT                                                                                        |
| IFSC CODE              | SBIN0017313                                                                                        |

**E. Overall Quantity variation-**

The individual quantity can vary to any extent or may be deleted for which no compensation will be payable to the contractor and the rates will remain firm. Also the rate of each item remains firm as long as the variation in the total value of work executed under the contract including extra items (if any) remains within plus/minus 30 percent of the contract value. In case the actual value of executed work including extra work on completion of work becomes less than 70% of the basic/original contract value than the following method shall be adopted.

The actual executed value shall be raised by 7% (For arriving at the final payment against work executed) subject to the condition that total value of work executed plus increase by 7% as above shall be limited to 70% of the basic/original contract value. The rate quoted shall be firm irrespective of any upward variation in the contract price.

It is further clarified that the enhancement/rate revision on the basic rate as per PVC clause shall not be accounted for the purpose of operating this clause.

**F. Taxes and Duties clause :**

- F.1. All taxes (except GST), duties, charges, royalties, cess and any other levies by Central/ State/local authorities for the execution of the contract shall be borne by the contractor and shall not be payable extra.  
Any increase of the same at any stage during execution of the contract shall be borne by the contractor.  
Quoted price of the same shall be inclusive of all such requirements.
- F.2. GST along with Cess (as applicable) legally leviable & payable by successful bidder as per GST Law shall be paid by BHEL, extra.

Hence, bidder shall not include GST along with Cess (as applicable) in their quoted rates/ price.

- F.3. Contractors have to make their own arrangement at their cost for completing the formalities, if required with relevant taxation authorities, for bringing their material, plant and machinery at site for the execution of the contract. Road permits / way bill, if required shall be arranged by the contractor.
- F.4. Contractor shall furnish proof of GST registration with GSTN Portal covering the services under this contract.

Registration should also bear endorsement for the premises from where the billing shall be done by contractor on BHEL for this project / work

However, in case contractor submits GST Registration of a state other than the state wherein the site is located, then contractor has to submit an undertaking that contractor is not liable to take registration in the state wherein the site is located as per the provision of Place of Supply under CGST/SGST/IGST Act.

BHEL will not be held responsible for any non-compliance of the Contractor in respect of GST laws as framed from time to time.

- F.5. Contractor shall comply with all statutory amendment/notifications in this respect  
Contractor shall submit the tax invoice complying with GST Invoice Rules (Section 31 of GST Act & Rules referred thereunder).

In case of raising any Supplementary Tax Invoice (Debit / Credit Note), contractor shall issue the same containing all the details as referred in Section 34 read with Section 31 of GST Act & Rules referred there under.

Contractor shall comply with the Time Limit prescribed under the GST Law and rules thereof for raising the Tax Invoice

- F.6. Goods and Service Tax (GST) will be reimbursed to the Contractor subject to the following conditions: -
  - I. Submission of valid GST Compliant Tax Invoice as per the GST Invoice Rules.
  - II. The Invoice raised by the Contractor should indicate the BHEL GST Registration Number.)
  - III. Contractor shall upload the invoices raised on BHEL in IFF/GSTR-1 within the prescribed time as given in the GST Act.
  - IV. Invoice raised and uploaded in IFF/GSTR-1 by the Contractor should be available to BHEL in FORM GSTR-2B electronically through the common portal
  - V. Confirmation of payment of such GST to the Government through filing of GSTR-3B of corresponding month/quarter.

- F.7. The GST amount should get reflected within prescribed time limit in the GSTN for BHEL to avail the input credit. If the GST Credit is reversed/ denied/ delayed to BHEL due to non-receipt/delayed receipt of Services and/or tax invoice or due to expiry of timeline prescribed in GST law or due to any other factor for availing such Input Tax Credit (ITC) or for any other reason arising out of the act directly attributable to the Contractor, GST

amount shall be recoverable from Contractor from any dues payable to the Contractor along with any interest levied/ leviable on BHEL.

- F.8. Statutory variation, if any, on account of GST will be payable by BHEL at actuals on submission of documentary evidence.
- F.9. TDS under Income Tax Act/ GST Act shall be deducted as per applicable rates unless Exemption certificate, if applicable, from the appropriate Authority is furnished to BHEL along with the Invoice.
- F.10. **New Taxes & duties (Introduced after tender opening date):**  
If any new tax or duty is levied by the Central/State Government/Municipality/Local Authority and becomes directly applicable on items specified in the Bill of Quantities, full reimbursement shall be made subject to submission of documentation as per statute.

**G. Over run Charges :** No overrun charges are payable under the contract.

**H. Advance:** No advance on materials shall be payable under the contract.

**I. Price Variation:** Price variation clause is not applicable for this contract.

**J. Issue of Material by BHEL: NA**

**K. RESPONSIBILITY OF CONTRACTOR IN RESPECT OF STATUTORY RULES / REGULATIONS PERTAINING TO BOCW.**

It shall be mandatory for the contractor to comply with Building and Other Construction Worker (Regulation of Employment and Conditions of Service) Act, 1996 and Rules of 1998 read with Building and other Construction Workers welfare Cess act, 1996 and Cess Rules.

It shall be the sole responsibility of the contractor to apply for a license to the Competent Authority under the Building and Other Construction Worker (Regulation of Employment and Conditions of Service) Act, 1996 and Rules of 1998 read with Building and other Construction Workers welfare Cess act, 1996 and Cess Rules and obtain proper certificate thereof by specifying the scope of its work. It shall also be responsibility of the contractor to furnish a copy of such certificate of license / permission to BHEL within 2 months from date of start of work at site or along with 1st RA bill whichever is earlier.

It shall be the responsibility of the sub-contractor to furnish the receipts / challans towards deposit of the cess together with the number, name and other details of beneficiaries (building or construction workers) engaged by the sub-contractor during the preceding month.

The onus shall lie on the contractor to register with the authorities and provide the details of the amount remitted to the authorities. In case the contractor fails to comply with the BOCW act, no payments shall be released to the contractor.

In case the customer owns the responsibility of compliance of BOCW act and deducts the amount from BHEL, the same shall be deducted from the RA bills of the contractor.

In the event of any penalty or other implication due to non-compliance of statutory obligation the same shall be on contractor's account.

**L. Delay and Extension of Time :**

If, in the opinion of the Engineer, the work is delayed

- (i) by reason of abnormally bad weather, or
- (ii) by reason of serious loss or damage by fire, or
- (iii) by reason of civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (iv) by delay on the part of the agency or tradesman engaged by the BHEL in executing work not forming part of the contract, or
- (v) By reason of any other cause which in the absolute discretion of the Engineer is beyond the contractor's control, then in any such case, the Engineer (or higher authority) may make fair and reasonable extension in the completion dates of the individual items of work of the contract as whole. Such extension which will be communicated to the contractor by the Engineer in writing shall be final and binding on the contractor. No other claim in this respect for compensation, idle labour or otherwise howsoever is admissible. Upon the happening of any such event causing delay the contractor shall immediately give notice thereof in writing to the Engineer but shall nevertheless use constantly his best endeavour to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Engineer to proceed with the work.
- (vi) In case of delay in completion of work BHEL reserve the right to grant time extension under the following options depending upon the performance of the vendor:
  - a) Time extension without levy of LD in case it is found that delay is not attributable to the vendor
  - b) Time extension with deduction of applicable LD in line with Liquidity Damage clause if the delay is solely attributable to the vendor.
  - c) In case facts of delay is not settled, BHEL reserve the right to grant provisional time extension for delay in completion of total work or part thereof and running/ interim payments to the vendor will be released without deduction of LD subject to submission of additional Bank guarantee equivalent to maximum LD amount valid till completion of work under their scope and grant of final time extension.

During provisional time extension period ORC/ PVC shall not be payable to the contractor. The Final Delay analysis shall be prepared on completion of the work. In case of delay is not attributable to contractor as per final delay analysis the ORC/ PVC shall be released along with the final bill without any interest charges attributable to BHEL.

In case of delay attributable to contractor, LD shall be deducted for that period in line with clause "Compensation/ LD/ Penalty for delay in execution" of conditions of contract and balance ORC/ PVC (if any) shall be released along with the final bill without any interest charges attributable to BHEL.

**M. LD / PENALTY FOR DELAY IN EXECUTION:**

Liquidated Damages, wherever referred under this Tender/Agreement, shall mean and refer to the damages, not in the nature of penalty, which the contractor agrees to pay in the event of delay in delivery of stores, installation, commissioning, breach of contract etc. as the case may be.

Liquidated Damages leviable upon the contractor is a sum which is agreed by the parties as a reasonable and genuine pre-estimate of damages which will be suffered by BHEL on account of delay/breach on the part of the contractor.

**Liquidated Damages shall be calculated in the manner stipulated hereinafter:**

In case the work is not completed within the stipulated time period, BHEL at its discretion may grant provisional time extension to contractor for the sole purpose of completion of balance works keeping its right reserved under the contract and law.

Grant of any provisional time extension shall by no means be considered as waiver of BHEL rights under the contract or law.

After the completion of work, duly certified by Engineer In charge, a comprehensive delay analysis shall be carried out to ascertain the attribution of delays in the provisional time extensions granted to contractor. The delay analysis shall record:

- a) Delays solely attributable to contractor
- b) Delays attributable to BHEL
- c) Delays on account of Force Majeure (as specified elsewhere in the contract)

The total period under the final time extension shall be equal to the period between the scheduled date of completion and the actual date of completion of contract. LD shall be imposed/ levied for the portion of time extensions solely attributable to contractor and recoverable from the dues payable to the contractor.

For the periods, wherein the delay as per the comprehensive delay analysis carried out is solely attributable to contractor, BHEL shall have the right to impose Liquidated Damage at the rate of 0.5% of the contract value, per week of delay or part thereof subject to a maximum of 10% of the contract value.

Contract Value for this purpose, shall be the final executed value exclusive of ORC, Extra Works executed on Man-day rate basis, Supplementary/ Additional Items and PVC. Before levying LD, the contractor shall be duly intimated the amount and reasons thereof for imposition of LD.

**N. RIGHTS OF BHEL: -**

**BHEL reserves the following rights in respect of this contract during the original contract period or its extensions if any, as per the provisions of the contract, without entitling the contractor for any compensation.**

1. To withdraw any portion of work and/or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through other agencies to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergent reasons/ BHEL's obligation to its customer.  
In case of inadequate manpower deployed by the contractor, BHEL reserves the right to deploy additional manpower through any other agency for expediting activities in the interest of the project.  
Supplied manpower shall be put on job by the contractor and payments and other statutory compliances related to manpower shall be the contractor's responsibility. In case of contractor's failure to fulfill his obligations in respect of such manpower, BHEL reserves the right to take necessary action as per contract conditions.

**2. Breach of Contract, Remedies and Termination**

- 2.1. 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.

**LD against delay in executed work in case of Termination of Contract:**

LD against delay in executed work shall be calculated in line with relevant LD clause of GCC, for the delay attributable to contractor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of work till termination of contract.

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

- i) Let the time period from scheduled date of start of work till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1

- ii) Let the value of executed work till the time of termination of contract= X
- iii) Let the Total Executable Value of work for which inputs/fronts were made available to contractor and were planned for execution till termination of contract = Y
- vi) Delay in executed work attributable to contractor i.e.  $T2 = [1 - (X/Y)] \times T1$
- vii) LD shall be calculated in line with **LIQUIDATED DAMAGES/PENALTY** clause of the Contract for the delay attributable to contractor taking "X" as Contract Value and "T2" as period of delay attributable to contractor.

## 2.2 Remedies in case of Breach of Contract is established:

- i) Wherein the period as stipulated in the notice issued under clause "**BREACH OF CONTRACT, REMEDIES AND TERMINATION**" of GCC has expired and Contractor 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 Contractor. 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 contractor, retention amount, from the money due to the Contractor 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 Contractor.
- v) If Contractor 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 Contractor 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 Contractor 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.
  - c. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted Contractor.
- vi) 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 Contractor for the purpose of estimation of damages.

- vii) 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 contractor 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 contractor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.
  - (b) In case defaulted contractor is The Partnership Firm, any firm comprising of same partners/ some of the same partners (but not including any new partner); or sole proprietorship firm owned by any partner(s) as a sole proprietor.
3. In case Contractor fails to deploy the resources as per requirement informed by BHEL in writing to expedite the work, BHEL can deploy own/hired/otherwise arranged resources and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.
4. To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customer are terminated for any reason, whatsoever.
5. Whenever any Claim or Claims for payment of any sum of money(s) arises under this or any other contract against the contractor, BHEL shall be entitled to withhold and also have a lien to retain such sum of money(s) in whole or in part from any money(s) payable to contractor and/or security deposits furnished or deducted in cash from the bills of contractor, (if any) under this contract. In the event of the securities or the amounts payable to Contractor, being insufficient to cover BHEL claims, then BHEL shall be entitled to withhold and have a lien to the extent of such claims from any sum or sums found payable or which at any time thereafter may become payable to the contractor under this or any other contract with BHEL.
  - a) Claim or Claims for payment of any sum of money(s) arising from the Contractor under this or any other contract against the contractor, shall mean, the sum of money(s) actually incurred by BHEL in fulfilling the contractual responsibilities of contractor under the contract, to which he has failed to fulfil plus applicable overheads (@ 5%) along with interest as applicable under the Contract on total amount (i.e. money actually incurred plus overheads)
  - b) It is an agreed term of the contract that, the sum or sums of money so withheld or retained under the lien by BHEL will be kept withheld or retained as such by BHEL till the claims arising out of this or any other contract are finally adjudicated wither through Arbitration or a Court of competent jurisdiction as the case may be in accordance with the terms of contract. Intimation given by the BHEL Engineer regarding withholding of such money(s) shall be considered as sufficient and relevant date for all purposes. No Interest shall be payable on such sum(s) of money which becomes due or as the case may be adjudged to be due from BHEL to Contractor, whether under contract or otherwise.
  - c) Where the contractor is a partnership firm, BHEL shall be entitled to withhold and also have a lien to retain towards such claims in whole or in part, from any other money(s) payable to any partner, whether in his individual capacity or otherwise.
  - d) If any money(s) shall, as a result of any claim or application made under the relevant provisions of any Labour Welfare Act and/ or Rules, including but not limited to Contract Labour Regulation & Abolition Act, Minimum Wages Act, Payment of Gratuity Act, BOCW (RE&CS) Act, Provident Fund Act, Employee State Insurance Act, be directed to be paid by the BHEL, such money shall be deemed to be moneys payable to the BHEL by the Contractor.

- e) Where the Contractor fails to repay to BHEL such moneys along with applicable overheads (@ 5%) and interest, as aforesaid within seven days of being demanded, BHEL shall be entitled to recover the same from Contractor's bills/ Security Deposit or any other money(s) payable to Contractor under this Contract or any other Contract with BHEL.
6. While every endeavor will be made by BHEL to this end, yet BHEL cannot guarantee uninterrupted work due to conditions beyond its control. The Contractor will not be normally entitled for any compensation/extra payment on this account unless otherwise specified elsewhere in the contract.
7. BHEL may permit or direct contractor to demobilize and remobilize at a future date as intimated by BHEL in case of following situations for reasons other than Force majeure conditions and not attributable to contractor:
- i) suspension of work(s) at a Project either by BHEL or Customer,  
or
  - ii) where work comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than three months

In such cases, charges towards demobilization and remobilization shall be as decided by BHEL after successful remobilization by contractor at site, and decision of BHEL shall be final and binding on the contractor. After remobilization, all conditions as per contract shall become applicable. In case Contractor does not remobilize with adequate resources or does not start the work within the period as intimated, then BHEL reserves the right to terminate the contract and effect remedies under Clause "**Remedies in case of Breach of Contract**". In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.

8. In the unforeseen event of inordinate delay in receipt of materials, drawings, fronts etc. due to which inordinate discontinuity of work is anticipated, BHEL on its own or contractor's request at its discretion may consider to short close the contract in any of the following cases:
- a) The balance works (including but not limited to Trial Operation, PG Test etc.) are minor vis a vis the scope of work envisaged as per the contract.
  - b) There has been no significant work in past 6 months OR no significant work is expected in next 6 months (example in Hydro projects or in projects where work has stopped due to reasons beyond the control of BHEL).
  - c) The balance works cannot be done within a reasonable period of time as they are dependent on unit shut down or on other facilities of customer or any other such reasons not attributable to the contractor.

At the point of requesting for short closure, contractor shall establish that he has completed all works possible of completion and he is not able to proceed with the balance works due to constraints beyond his control. In such a case, the estimated value of the unexecuted portion of work (or estimated value of services to be provided for carrying out milestone/stage payments like Trial Operation/PG Test etc.) as decided by BHEL, shall however be reduced from the final contract value.

**Note:** The Contractor shall not be eligible for any compensation on account of Quantity Variation arising out of short-closure of contract as per clause above.

**O. PERFORMANCE MONITORING:**

The Contractors performance shall be continuously monitored during execution of work at site.

In case of contractor's performance is found not satisfactory during the execution of work at site, BHEL may take alternate remedial measures and may not consider the contractor for further tenders, if the contractor performance is not improved in spite of opportunities given by BHEL.

**P. FACILITIES PROVIDED TO MSEs**

Vide office memorandum F.No.21(8)/2011-MA dated 09.11.2016, Office of AS&DC, Ministry of MSME has issued clarification regarding definition of Goods and Services under the Public Procurement Policy of MSEs order-2012, In accordance with the Public Procurement Policy for MSEs order-2012 and OM regarding definition of Goods and Services issued by Ministry of MSME, it is clarified that benefits as envisaged in Public Procurement Policy for MSEs Order 2012 are to be provided in respect of the procurements related to the Goods and Services produced and provided by Micro and Small Enterprises (MSEs) only and **no benefits is to be given in Case of Works Contracts.**

**Q. BOCW (TAXES, DUTIES & LEVIES):**

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S.1   | <b>BUILDING &amp; OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 (BOCW Act) AND RULES OF 1998 READ WITH BUILDING &amp; OTHER CONSTRUCTION WORKERS CESS Act, 1996 &amp; CESS RULES, 1998.</b>                                                                                                                                                                                                                                                  |
|       | In case any portion of work involves execution through building or construction workers, then compliance to the above titled Acts shall be ensured by the contractor and contractor shall obtain license and deposit the cess under the Act. In the circumstances it may be ensured as under: -                                                                                                                                                                                          |
| S.1.1 | It shall be the sole responsibility of the contractor in the capacity of employer to forthwith (within a period of 15 days from the award of work) apply for a licence to the Competent Authority under the BOCW Act and obtain proper certificate thereof by specifying the scope of its work. It shall also be responsibility of the contractor to furnish a copy of such certificate of licence / permission to BHEL within a period of one month from the date of award of contract. |
| S.1.2 | It shall be the sole responsibility of the contractor as employer to ensure compliance of all the statutory obligations under these act and rules including that of payment / deposit of 1% cess on gross payment made for value of work involving building or construction workers engaged by the contractor within a period of one month from the receipt of payment.                                                                                                                  |
| S.1.3 | It shall be the responsibility of the sub-contractor to furnish the receipts / challans towards deposit of the cess together with the number, name and other details of beneficiaries (building workers) engaged by the sub-contractor during the preceding month.                                                                                                                                                                                                                       |
| S.1.4 | It shall be the absolute responsibility of the sub-contractor to make payment of all statutory payments & compensations to its workers including that is provided under the Workmen's Compensation Act, 1923.                                                                                                                                                                                                                                                                            |
| S.1.5 | The contractor shall, however ensure before deposit of any BOCW cess, that customer is not depositing the same in order to avoid excess deposit of cess.                                                                                                                                                                                                                                                                                                                                 |

|       |                                                                                                                                                                                              |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S.1.6 | The contractor shall bear cost of BOCW cess either by way of deposit or through recovery by BHEL in case the same is deposited by the customer.                                              |
| S.1.7 | In case of failure in above mentioned compliances, BOCW Cess @ 1% as well as applicable penalty as specified in BOCW Act/Rules shall be deducted from the contractor.                        |
| S.1.8 | <b>Note: Any labour law or statutory compliance enacted or brought into force by the applicable government during the term of this contract shall be deemed applicable to this contract.</b> |

## **R. TERMS OF PAYMENT:**

- R.1. 50% of the contract item price on the monthly progressive bills on prorated basis after supply, receipt of the material at site, unloading, proper storage and as certified by site in charge. From payable amount recoveries such as security deposit, income tax etc. would be made as per rule. The certificate of the Engineer regarding such approval and passing of sums so payable shall be final and conclusive against the contractor.
- R.2. 30% of the contract item price on the monthly progressive bills on prorated basis after material erection as certified by BHEL site In-charge on prorated basis after erection.
- R.3. Last 20% of the contract item price after handing over of office to BHEL as per contract and jointly signed by contractor with BHEL.

### **NOTE:**

1. The Engineer shall after a measured bill allow and certify payment to the contractor on the basis of abstract measurement bill submitted by contractor. However, the usual recoveries would be effected from bill.
2. Any certificate relating to the work done may be modified by any subsequent interim certificates or by the final certificate and no certificate of the Engineer supporting an advance payment shall of itself be conclusive evidence that any work or materials to which it relates are in accordance with the contract.
3. All intermediate payments shall be regarded as advance against the final payment only and shall not be considered as an admission of the due performance of the contract or any part thereof in any respect of the occurring of any claim whatsoever. Such intermediate payments shall not conclude, determine or effect in any way the powers of the Engineer as to the final settlement and adjustment of the account of otherwise, or in any way vary or affect the contract. To this effect the contractor shall submit the final bill, which shall contain the complete up-to-date measurements for the total work done.
4. The contractor shall guarantee the work under the scope of the contract for a period of 12 months from the date of start of the guarantee period as certified by BHEL site (i.e. completion of total work under the scope and or taking over by BHEL/owner), and shall rectify free of cost all defects due to faculty supply or work done. In case the contractor fails to repair/ replace the defective work within the time specified by BHEL, BHEL may proceed to undertake such repair/replace such defective work at contract's risk and cost without prejudice to any other right and recover the sum from security deposit/BG/ any dues.

**S. MEASUREMENT OF WORK AND MODE OF PAYMENT:**

- S.1. All payments due to the contractors shall be made by e mode only, unless otherwise found operationally difficult for reasons to be recorded in writing.
- S.2. For progress running bill payments: - The Contractor shall present detailed measurement sheets in triplicate, duly indicating all relevant details based on technical documents and connected drawings for work done during the month/period under various categories in line with terms of payment as per contract. The basis of arriving at the quantities, weights shall be relevant documents and drawings released by BHEL. These measurement sheets shall be prepared jointly with BHEL Engineers and signed by both the parties.
- S.3. These measurement sheets will be checked by BHEL Engineer and quantities and percentage eligible for payment under various groups shall be decided by BHEL Engineer. The abstract of quantities and percentage so arrived at based on the terms of payment shall be entered in Measurement Book by BHEL Engineers and signed by both the parties.
- S.4. These measurement sheets will be checked by BHEL Engineer and quantities and percentage eligible for payment under various groups shall be decided by BHEL Engineer. The abstract of quantities and percentage so arrived at based on the terms of payment shall be entered in Measurement Book and signed by both the parties.
- S.5. Based on the above quantities, contractor shall prepare the bills, along with statutory documents, in prescribed format and work out the financial value. These will be entered in Measurement Book and signed by both the parties. Payment shall be made by BHEL after effecting the recoveries due from the contractor.
- S.6. All recoveries due from the contractor for the month/period shall be effected in full from the corresponding running bills unless specific approval from the competent authorities is obtained to the contrary.
- S.7. Measurement shall be restricted to that portion of work for which it is required to ascertain the financial liability of BHEL under this contract.
- S.8. The measurement shall be taken jointly by persons duly authorized on the part of BHEL and by the Contractor.
- S.9. The Contractor shall bear the expenditure involved if any, in making the measurements and testing of materials to be used/ used in the work. The contractor shall, without extra charges, provide all the assistance with appliances and other things necessary for measurement.
- S.10. If at any time due to any reason whatsoever, it becomes necessary to re-measure the work done in full or in part, the expenses towards such re measurements shall be borne by the contractor unless such re measurements are warranted solely for reasons not attributable to contractor.
- S.11. Passing of bills covered by such measurements does not amount to acceptance of the completion of the work measured. Any left out work has to be completed, if pointed out at a later date by BHEL.
- S.12. Final measurement bill shall be prepared in the final bill format prescribed for the purpose based on the certificate issued by BHEL Engineer that entire works as stipulated in tender specification has been completed in all respects to the entire satisfaction of BHEL. Contractor shall give unqualified "No Claim" Certificate. All the tools and tackles loaned to him should be returned in satisfactory condition to BHEL. The abstract of final quantities and financial values shall also be entered in the Measurement Books and signed by both parties to the contract. The Final Bill shall be prepared and paid within a reasonable time after completion of work.

**T. NO INTEREST PAYABLE TO CONTRACTOR:**

Notwithstanding anything to the contrary contained in any other document comprising in the Contract, no interest shall be payable by BHEL to Contractor on any moneys or balances including but not limited to the Security Deposit, EMD, Retention Money, RA Bills or the Final Bill, or any amount withheld and/or appropriated by BHEL etc., which becomes or as the case may be, is adjudged to be due from BHEL to Contractor whether under the Contract or otherwise.

## **U. CLOSING OF CONTRACTS**

The Contract shall be considered completed and closed upon completion of contractual obligations and settlement of Final Bill or completion of Guarantee period whichever is later. Upon closing of Contract, BHEL shall issue a performance/ experience certificate as per standard format, based on specific request of Contractor as per extant BHEL guidelines through the online portal available at <https://siddhi.bhel.in> only.

## **V. SUSPENSION OF BUSINESS DEALINGS**

BHEL reserves the right to take action against Contractors who either fail to perform or Tenderers/Contractor who indulge in malpractices, by suspending business dealings with them in line with BHEL guidelines issued from time to time.

The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms / principal / agents, shall be rejected. The list of banned firms is available on BHEL web site [www.bhel.com](http://www.bhel.com).

If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution stage indulges in any act, including but not limited to, malpractices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process 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, or does anything which is actionable under the Guidelines for Suspension of Business dealings, action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on [www.bhel.com](http://www.bhel.com) and / or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage:

[http://www.bhel.com/vender\\_registration/vender.php](http://www.bhel.com/vender_registration/vender.php).

## **W. SETTLEMENT OF DISPUTE**

If any dispute or difference of any kind whatsoever shall arise between BHEL and the Supplier/Vendor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to **General Manager, BHEL** for amicable resolution by the parties. (**General Manager, BHEL** within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Supplier/Vendor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not.

If after the **General Manager, BHEL** has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Supplier/Vendor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as per Clause "Conciliation" of GCC.

### **W.1. Conciliation:**

Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and

as provided in - "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com)).

Note: Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding "Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/ Entities/agencies are to encourage mediation under the Mediation Act. 2023 . The said Act has not yet been notified by the Government. Therefore, the clause "**Settlement of Disputes**" shall be modified accordingly as and when the Mediation Act 2023 gets notified.

**W.2. ARBITRATION:**

- W.2.1. Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause "**Conciliation**" herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to Arbitral Institution i.e. "**India International Arbitration Centre (IIAC) Delhi**" and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution.
- W.2.2. A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to arbitral institution. The Notice shall be addressed to the **Executive Director, TBG, BHEL, Noida**, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.
- W.2.3. After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institutions and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.
- W.2.4. The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.
- W.2.5. The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be **Delhi**.
- W.2.6. Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at **Delhi**.
- W.2.7. Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.
- W.2.8. The Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.
- W.2.9. In case the disputed amount (Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than

Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.

- W.2.10. In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause X.2.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.

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

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14-12-2022 as amended from time to time.

**X. PROGRESSIVE PAYMENT/ FINAL PAYMENT:**

**X.1. Running Account Bills (RA Bills)**

- i) These are for interim payments when the contracts are in progress. The bills for such interim payments are to be prepared by Contractor in prescribed formats (RA Bill forms).
- ii) Payments shall be made according to the extent of work done as per measurements taken up to the end of the calendar month and in line with the terms of payments described in the Tender documents.
- iii) Recoveries on account of electricity, water, statutory deductions etc. are made as per terms of contract.
- iv) Full rates for the work done shall be allowed only if the quantum of work has been done as per the specifications stipulated in the contract. If the work is not executed as per the stipulated specifications, BHEL may ask the contractor to redo the work according to the required specifications, without any extra cost.
- v) The contractor shall submit his monthly RA bills with all the details required by BHEL on specified date every month covering progress of work in all respects and areas for the previous calendar month.
- vi) Mode of payment and measurement of work completed shall be as per relevant clauses of General Conditions of Contract
- vii) Release of payment in each running bill including PVC Bills where ever applicable will be as per stages of progressive pro rata payments.
- viii) The contractor will be eligible for payment of RA Bills within 30 days of submission of running bill complete in all respects with all documents. It is the responsibility of the contractor to make his own arrangements for making timely payments towards labour wages, statutory payments, outstanding dues etc. and other dues in the meanwhile.  
All documents like HR Clearance, Quality and Safety Compliances etc. required for processing the RA Bills should be submitted along with RA Bills.
- ix) BHEL shall release payment through Electronic Fund Transfer (EFT)/RTGS. In order to implement this system, Contractor to furnish details pertaining to his Bank Accounts where proceeds will be transferred through BHEL's banker, as per prescribed formats.

**For MSMEs, at the time of submission of first RA bill, the subcontractor has to declare whether it is registered on RXIL portal and wishes to receive the proceeds through RXIL portal throughout the contract duration**

**X.1.1. Documents required for RA Bill:**

- a) GST Complied Invoice of the work done as per approved BOQ.
- b) Jointly signed Measurement sheet, Abstract (for civil works), WAM -6 for RA Bill.
- c) Validity of Bank Guarantees as applicable under the contract.
- d) Labour Payment Certificate
- e) Material Reconciliation statement
- f) Test Report of the material as per FQP
- g) Royalty challan for material used (for civil works)
- h) Power of Attorney for representative signing MBs etc, if not submitted earlier.
- i) HR compliance documents (like PF, ESI, Wage sheets etc.)
- j) Any other documents as per customer/statutory requirement

**Note :**

**Site in charge has to certify that all the above required documents have been received and verified and document sl no. a) to d) duly verified are to be sent to Finance alongwith RA bills.**

**X.2. Final Bill:**

- X.2.1. Final Bill' is used for final payment on closing of Running Account for works or for single payment after completion of works. 'Final Bill' shall be submitted as per prescribed format after completion of works as per scope, material reconciliation, removal of temporary structures, return of scrap/surplus material of BHEL. BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL.

**X.2.2. Documents required for Final Bill:**

- a) GST Complied Invoice of the work done as per approved BOQ.
- b) Jointly signed Measurement sheet, Abstract (for civil works), WAM -7, WAM-10 (if applicable)
- c) Valid Bank Guarantees as applicable under the contract.
- d) Labour Payment Certificate
- e) 'No claim' certificate from the contractor.
- f) Deviation statement showing the Executed quantities and quantities as per the contract.
- g) Material Reconciliation statement
- h) Submission of As Built Drawings (if applicable)
- i) Submission of balance royalty challan/Clearance from Mining dept. (for civil works)
- j) Material Reconciliation statement duly approved by BHEL
- k) Power of Attorney for representative signing MBs etc, if not submitted earlier.
- l) HR compliance documents (like PF, ESI, Wage sheets etc.)
- m) Compliance report from BHEL/Customer for completion of punch points
- n) Final Delay Analysis.
- o) Any other documents as per customer requirement/statutory requirement.

**Note :**

**Site incharge has to certify that all the above required documents have been received and verified and document sl no. a) to f) duly verified are to be sent to Finance alongwith Completion certificate.**

**Y. Royalty:**

The contractor shall pay the Royalty of sand, aggregate and earth material used for the project and the contractor has to submit the Royalty certificate to BHEL along with the RA bills.

**Z. 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”.

**AA. Consequential Loss:**

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.

**AB. FORCE MAJEURE "Force Majeure" shall mean circumstance which is:**

- i) beyond control of either of the parties to contract.
  - ii) Either of the parties could not reasonably have provided against the event before entering into the contract,
  - iii) Having arisen, either of the parties could not reasonably have avoided or overcome,
- and
- iv) Is not substantially attributable to either of the parties and prevents the performance of the contract.

Such circumstances include but not limited to

- i) War, hostilities, invasion, act of foreign enemies.
- ii) Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war.
- iii) Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors.
- iv) Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors.
- v) Encountering munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio- activity.
- vi) Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc.
- vii) Epidemic, pandemic etc.

The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party:

- a) any strike, work-to-rule action, go-slow or similar labour difficulty
- (b) late delivery of equipment or material (unless caused by Force Majeure event) and

(c) economic hardship.

If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event.

The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended by a period of time equal to period of delay caused due to such Force Majeure event.

Delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not

- i) Constitute a default or breach of the Contract.
- ii) Give rise to any claim for damages or additional cost expense occasioned thereby, if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.

BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure.

**PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)**

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 BHEL House, Siri Fort, New Delhi-110049 through its Unit at BHEL, Transmission Business Group, Noida (name of the Unit) having agreed to exempt \_\_\_\_\_ (Name of the Vendor / Contractor / Supplier) with its registered office at \_\_\_\_\_<sup>1</sup> (hereinafter called the said "Contractor" which term includes supplier), from demand under the terms and conditions of the Contract reference No. \_\_\_\_\_ dated \_\_\_\_\_<sup>2</sup> valued at Rs. \_\_\_\_\_<sup>3</sup> (Rupees \_\_\_\_\_) (hereinafter called the said Contract), of Security Deposit for the due fulfilment by the said Contractor of the terms and conditions contained in the said Contract, on production of a Bank Guarantee for Rs. \_\_\_\_\_<sup>4</sup> (Rupees \_\_\_\_\_ only),

We \_\_\_\_\_ (indicate the name and address of the Bank) having its Head Office at \_\_\_\_\_ (address of the head Office) (hereinafter referred to as the Bank), at the request of \_\_\_\_\_ [Contractor(s)], being the Guarantor under this Guarantee, do hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer, an amount not exceeding Rs. \_\_\_\_\_ without any demur, immediately on 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 Contractor(s) in any suit or proceeding pending before any Court or Tribunal or 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 hereunder and the Contractor(s) shall have no claim against us for making such payment.

We, 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 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 & the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said contractor(s) or acceptance of the final bill or discharge of this guarantee by the Employer, whichever is earlier. This guarantee shall initially remain in force up to and including \_\_\_\_\_<sup>5</sup> and shall be extended from time to time for such period as may be desired by the Employer. Unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_<sup>6</sup>, (3 months more than the present date of validity of Bank Guarantee) we shall be discharged from all the liability under this guarantee thereafter.

We, \_\_\_\_\_ (indicate the name of the 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 contractor(s) 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

contractor(s) 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 any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said contractor(s) 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 Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor 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. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

We,..... BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....<sup>4</sup>
- b) This Guarantee shall be valid up to .....<sup>5</sup>
- c) Unless the Bank is served a written claim or demand on or before .....<sup>6</sup> 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.

Date \_\_\_\_\_ Day of \_\_\_\_\_  
for \_\_\_\_\_ (indicate the name of the Bank) \_\_\_\_\_

(Signature of Authorised signatory)

<sup>1</sup> ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

<sup>2</sup> DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

<sup>3</sup> CONTRACT VALUE

<sup>4</sup> BG AMOUNT IN FIGURES AND WORDS

<sup>5</sup> VALIDITY DATE (At least 3 months more than completion period)

<sup>6</sup> DATE OF EXPIRY OF CLAIM PERIOD (At least 3 months more than the present date of validity of BG)

**Notes:**

- 1 The expiry of claim period shall be at least 3 months more than the validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
- 2 The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp

Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.

**3 In Case of Bank Guarantees submitted by Foreign Vendors:**

- a) **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
- b) **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**
  - b.1. In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
  - b.2. In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.

**PROFORMA OF BANK GUARANTEE (in lieu of EARNEST MONEY if permissible in NIT)**

(On non-Judicial paper of appropriate value)

Bank Guarantee No.....

Date.....

To,

M/s Bharat Heavy Electricals Limited  
Transmission Business Group (TBG)  
6<sup>th</sup> Floor, Plot No. 25A, Sector-16A, Noida,  
UP-201305

Dear Sirs,

In accordance with the terms and conditions of Invitation for Bids/Notice Inviting Tender No.....<sup>1</sup>(Tender Conditions), M/s ..... having its registered office at .....<sup>2</sup> (hereinafter referred to as the 'Tenderer'), is submitting its bid for the work of .....<sup>3</sup> invited by M/s Bharat Heavy Electricals Limited through its Unit at BHEL, Transmission Business Group, Noida.

The Tender Conditions provide that the Tenderer shall pay a sum of Rs ..... as Earnest Money Deposit in the form therein mentioned. The form of payment of Earnest Money Deposit includes Bank Guarantee executed by a Scheduled Bank.

In lieu of the stipulations contained in the aforesaid Tender Conditions that an irrevocable and unconditional Bank Guarantee against Earnest Money Deposit for an amount of Rs.....<sup>4</sup> is required to be submitted by the Tenderer as a condition precedent for participation in the said Tender and the Tenderer having approached us for giving the said Guarantee,

We, the.....[Name & address of the Bank]

having our Registered Office at.....(hereinafter referred to as the Bank) being the Guarantor under this Guarantee, hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer without any demur, merely on your first demand any sum or sums of Rs. ....<sup>4</sup> (in words Rupees.....) without any reservation, protest, and recourse and without the beneficiary 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 hereunder and the Tenderer shall have no claim against us for making such payment.

We ..... Bank further agree 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 Tender or to extend the time of submission of 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 Tenderer and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Tenderer or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Tenderer 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 Tenderer and notwithstanding any security or other guarantee that the Employer may have in relation to the Tenderer's liabilities.

This Guarantee shall be irrevocable and shall remain in force upto and including.....<sup>5</sup> and shall be extended from time to time for such period as may be desired by the Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Tenderer but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms hereof. However, unless a demand or claim under this Guarantee is made on us in writing on or before the .....<sup>6</sup> we shall be discharged from all liabilities under this Guarantee.

We, ..... Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....<sup>4</sup>
- b) This Guarantee shall be valid up to .....<sup>5</sup>
- c) Unless the Bank is served a written claim or demand on or before .....<sup>6</sup> 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)

Date.....

Place of Issue.....

- 1 Details of the Invitation to Bid/Notice Inviting Tender
- 2 Name and Address of the Tenderer
- 3 Details of the Work
- 4 BG Amount in words and Figures
- 5 Validity Date (At least six months from date of tender opening)
- 6 Date of Expiry of Claim Period (At least 3 months more than the present date of validity of BG)

**Note:**

- 1 The Bank Guarantee should be valid for at least six months from date of tender opening. The expiry of claim period shall be at least 3 months more than the validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
- 2 The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.
- 3 **In Case of Bank Guarantees submitted by Foreign Vendors-**
  - a. **From Nationalized / Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
  - b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**
    - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
    - b.2 **In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank** (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure **at sl.no. b.1** will required to be followed.
    - b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

BHARAT HEAVY ELECTRICALS LIMITED  
DIVISION.....  
Running Account Bill  
(Para 4.3.1 of Works Accounts Manual)

Name of the Contractor

Name of the Work:

Sanctioned Estimate:

Code No.:

Contract Agreement No.:

Dated:

Division:

Date of written order to  
commence the Work:

Date of commencement  
of work:

Due date of completion as per  
agreement

Date of approval of Competent Authority for time extension as applicable  
(copy to be enclosed).

Departmental Bill No.

Date:

Sub-Division:

Period of work covered in this  
bill:

I. ACCOUNT OF WORK EXECUTED

| Adhoc payment for work not previously measured ** |                                 |                 | Item No. of work | Description of work | Quantity as per agreement | Quantity executed upto date | Rate | Unit | Payment on the basis of actual measurement upto date | Quantity executed since last RA bill | Payment on the basis of actual measurement since last running account bill | Remarks |
|---------------------------------------------------|---------------------------------|-----------------|------------------|---------------------|---------------------------|-----------------------------|------|------|------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------|---------|
| Total as per last running account bill            | Since last running account bill | Total upto date |                  |                     |                           |                             |      |      |                                                      |                                      |                                                                            |         |
| 1                                                 | 2                               | 3               | 4                | 5                   | 6                         | 7                           | 8    | 9    | 10                                                   | 11                                   | 12                                                                         | 13      |

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

2. Whenever there is an entry in column 12 on the basis of actual measurement, the whole of the amount previously paid without detailed measurement should be adjusted by a minus entry in column 2 equivalent to the amount shown in column 1, so that the total upto date in column 3 may become nil.

Total value of work done upto date (A) -----

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

Net value of work done since last Running Account Bill (C) -----

Rupees (in words) ..... Only

Note :  
Wherever adhoc payments to contractors against running bills are made in accordance with the extant Works Policy, the amount so paid shall be adjusted.

## II. MEMORANDUM OF PAYMENTS

|    |                                                                                                                                                        | I         | II    |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1. | Total value of work actually measured as per Account No. I, Column 10                                                                                  | (A) ----- | ----- |
| 2. | Total upto date adhoc payment for work covered by approximate or plan measurements as per Account I, Col. 3                                            | (B) ----- | ----- |
| 4. | Total upto date payments [(A)+(B)]                                                                                                                     | (C) ----- | ----- |
|    | Total amount of payments already made as per entry (D) of last Running Account Bill No. .... dated ..... forwarded to the Accounts Department on ..... | (D) ----- | ----- |
| 6. | Balance [(C) - (D)]                                                                                                                                    |           | ----- |
| 7. | Payments now to be made:                                                                                                                               | -----     |       |
|    | a) by cash / cheque                                                                                                                                    | -----     |       |
|    | b) by deduction for value of materials supplied by BHEL vide Annexure A attached                                                                       | -----     |       |
|    | c) by deduction for hire of tools and plant vide Annexure B attached                                                                                   | -----     |       |
|    | d) by deduction for other charges vide Annexure C attached                                                                                             | -----     |       |
|    | e) by deduction on account of security deposit                                                                                                         | -----     |       |
|    | f) by deduction on account of Income Tax                                                                                                               | -----     | ----- |

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

## III. CERTIFICATE OF THE ENGINEER IN CHARGE

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | The measurements on which the entries in column 7 to 12 of Part I of this Bill (Account of work executed) are based were made by ----- and are reorded at pages - ----- of Measurement Book No. ----- (Name and Designation)                                                                                                                                                                                                                                                             |
| 2 | Certified that the methods of measurement are correct and the work has been carried out in accordance with the terms and conditions, schedules, specifications and drawings etc. forming part of the contract agreement, subject to deviations included in the deviation statement (Annexure D)                                                                                                                                                                                          |
| 3 | Certified that in addition to and quite apart from the quantities of work actually executed as shown in column 10 of Part I, some work has actually been done in connection with several items and the value of the such work is, in no case, less than the adhoc payments as per column 3 of Part I, made or proposed to be made, for the convenience of the contractor in anticipation of, and subject to the results of, detailed measurement which will be made as soon as possible. |
| 4 | Certified that measurements by Engineer-incharge and test check of prescribed percentage of measurements by the concerned superior authorities has been carried out.                                                                                                                                                                                                                                                                                                                     |
| 5 | Certified that there are no pending recoveries from the contractor on account of chargeable items (e.g T&P, consumables, material, etc.) issued either by BHEL or by the customer and other recoveries like power, water, quarter, tax liability towards declaration forms etc.                                                                                                                                                                                                          |
| 6 | Certified that with regard to the free issues, regular reconciliation is being done, completed upto ----- and there are no recoveries pending from the contractor on account of such issues in excess of requirement for execution of work as per contract.                                                                                                                                                                                                                              |
| 7 | Certified that there is no pending recovery for damaged material issued free of cost.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 8 | Certified that the contractor has fulfilled all the requirements as per contract with reference to statutory obligations (PF, ESI, Minimum Wages, BOCW, Insurance etc.), support services such as service manpower, computer system , T&P etc                                                                                                                                                                                                                                            |

Signature of Contractor

Date:

Signature of Engineer in Charge

Designation:

Date:

## IV. CERTIFICATE OF THE SENIOR ENGINEER

|   |                                                                                                                                                                                                                                                   |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Certified that the measurements have been check measured to the prescribed extent by ..... at site and also by the undersigned and the relevant entries have been initialed in the Measurement Book. (vide pages .....)<br>(Name and Designation) |
| 2 | Certified that all the measurements recorded in the measurement book have been correctly billed for                                                                                                                                               |
| 3 | Certified that all recoverable amounts in respect of materials tools and plant etc. and other charges have been correctly made vide annexures A to C attached.                                                                                    |

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

\* Here specify the net amount payable.

Date:

Signature of Senior Engineer

## V. ENTRIES TO BE MADE IN THE FINANCE DEPARTMENT

Accounts Bill No. .... dated .....

Entered in Journal Book vide entry No. .... dated .....

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

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

Net amount payable ..... Rs. ....

(Rupees ..... only)

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

Entered in Contractors ledger No. .... Page .....

Estimate No :

Debit

Credit

(Gross amount)

(Deductions)

Name of Work :

Account code head

Total

Code No.:

ALLOCATION

Assistant

Date:

Accountant

Date:

Finance Executive

Date:

## ANNEXURE A

Statement showing details of materials issued to the contractor Shri / M/S..... in respect of Contract Agreement / Work Order No.....Dated..... and covered by the agreement

| Sl.No. | Stores Issue Voucher No. and date | Issue voucher No. and date allotted by stores to the SIV | Description of material issued issued to the contractor | Quantity issued |            | Quantity actually incorporated in the work | Balance quantity with contractor |            | If recoverable from the contractor |                    |                                     |                       |         |
|--------|-----------------------------------|----------------------------------------------------------|---------------------------------------------------------|-----------------|------------|--------------------------------------------|----------------------------------|------------|------------------------------------|--------------------|-------------------------------------|-----------------------|---------|
|        |                                   |                                                          |                                                         | Free            | Chargeable |                                            | Free                             | Chargeable | Rate at which recoverable          | Amount recoverable | Amount recovered upto previous bill | Balance now recovered | Remarks |
| 1      | 2                                 | 3                                                        | 4                                                       | 5               | 6          | 7                                          | 8                                | 9          | 10                                 | 11                 | 12                                  | 13                    | 14      |
|        |                                   |                                                          |                                                         |                 |            |                                            |                                  |            |                                    |                    |                                     |                       |         |
|        |                                   |                                                          |                                                         |                 |            |                                            |                                  |            |                                    |                    |                                     |                       |         |
|        |                                   |                                                          |                                                         |                 |            |                                            |                                  |            |                                    |                    |                                     |                       |         |
|        |                                   |                                                          |                                                         |                 |            |                                            |                                  |            |                                    |                    |                                     |                       |         |
|        |                                   |                                                          |                                                         |                 |            |                                            |                                  |            |                                    |                    |                                     |                       |         |

Total

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

Certified that ..... (balance quantity of free issue material as per Col. 8 above) is physically available with the Contractor.

Signature of Contractor

Date:

Signature of Engineer in Charge

Date:

Signature of Senior Engineer

Date:

## ANNEXURE B

Statement showing tools and plant issued to the contractor Shri/M/s..... in respect of Contract Agreement No.....Dated.....

| Sl. No. | Description of Tools and Plant Issued | Period for which issued | Rate at which recovery is to be made | Amount recoverable | Amount recovered upto previous bill | Balance Recovered now | Remarks |
|---------|---------------------------------------|-------------------------|--------------------------------------|--------------------|-------------------------------------|-----------------------|---------|
| 1       | 2                                     | 3                       | 4                                    | 5                  | 6                                   | 7                     | 8       |
|         |                                       |                         |                                      |                    |                                     |                       |         |
|         |                                       |                         |                                      |                    |                                     |                       |         |
|         |                                       |                         |                                      |                    |                                     |                       |         |
|         |                                       |                         |                                      |                    |                                     |                       |         |
|         |                                       |                         |                                      |                    |                                     |                       |         |

TOTAL

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Signature of Contractor

Date :

Signature of Engineer in Charge

Date :

Signature of Senior Engineer

Date:

## ANNEXURE C

Form WAM 6 (Contd.)

Statement showing details of other recoveries to be made from the contractor Shri/M/s-----in respect of contract Agreement No. ....Dated .....

| S. No. | Particulars                                                | Unit | Quantity | Rate | Amount recoverable | Amount recovered up to previous bill | Amount now recovered | Remarks |
|--------|------------------------------------------------------------|------|----------|------|--------------------|--------------------------------------|----------------------|---------|
| 1      | 2                                                          | 3    | 4        | 5    | 6                  | 7                                    | 8                    | 9       |
| 1      | Water charges                                              |      |          |      |                    |                                      |                      |         |
| 2      | Electricity charges                                        |      |          |      |                    |                                      |                      |         |
| 3      | Seignorage charges                                         |      |          |      |                    |                                      |                      |         |
| 4      | Medical charges                                            |      |          |      |                    |                                      |                      |         |
| 5      | Cost of empty gunny bags and empty containers not returned |      |          |      |                    |                                      |                      |         |
| 6      |                                                            |      |          |      |                    |                                      |                      |         |
| 7      |                                                            |      |          |      |                    |                                      |                      |         |
| 8      |                                                            |      |          |      |                    |                                      |                      |         |

TOTAL

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Signature of Contractor

Date :

Signature of Engineer in Charge

Date :

Signature of Senior Engineer

Date:

ANNEXURE D  
DEVIATION STATEMENT

Name of the Contractor:

Contract Agreement No

Name of Work:

Date:

| S. No. | Description of Item | Unit | Quantity as per agreement | Quantity as executed | Quantity further anticipated | Total quantity anticipated on completion | Rate as per agreement | Rate as executed | Amount as per agreement | Amount as executed | Amount further anticipated | Total Amount anticipated on completion | Difference |         | Reason for deviation with authority, if any |
|--------|---------------------|------|---------------------------|----------------------|------------------------------|------------------------------------------|-----------------------|------------------|-------------------------|--------------------|----------------------------|----------------------------------------|------------|---------|---------------------------------------------|
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        | Excess     | Savings |                                             |
| 1      | 2                   | 3    | 4                         | 5                    | 6                            | 7                                        | 8                     | 9                | 10                      | 11                 | 12                         | 13                                     | 14         | 15      | 16                                          |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |
|        |                     |      |                           |                      |                              |                                          |                       |                  |                         |                    |                            |                                        |            |         |                                             |

Signature of Engineer in Charge

Date :

Signature of Senior Engineer

Date :

**BHARAT HEAVY ELECTRICALS LIMITED**  
**DIVISION.....**  
**.....And Final Bill**  
**(Para 4.3.2 of Works Accounts Manual)**

Departmental Bill No:

Date:

Name of the Contractor:

Name of the Work:

Division:

Date of Written order to commence the work:

Sub-Division:

Sanctioned Estimate:

Contract Agreement/ Work Order No:

Date of actual completion of the work:

Date of commencement of the Work:

Dated:

Due date of completion as per Agreement:

## I. ACCOUNT OF WORK EXECUTED

| Adhoc payment for work not previously measured ** |                                 |                 | Item no. of the agreement / work order | Description of work | Quantity as per agreement | Quantity executed upto date | Rate | Unit | Payment on the basis of actual measurement upto date | Quantity since last running account bill | Payment on the basis of actual measurement since last running account bill | Remarks |
|---------------------------------------------------|---------------------------------|-----------------|----------------------------------------|---------------------|---------------------------|-----------------------------|------|------|------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------|---------|
| Total as per last running account bill            | Since last running account bill | Total upto date |                                        |                     |                           |                             |      |      |                                                      |                                          |                                                                            |         |
| 1                                                 | 2                               | 3               | 4                                      | 5                   | 6                         | 7                           | 8    | 9    | 10                                                   | 11                                       | 12                                                                         | 13      |

\*\* Whenever there is an entry in column 12 on the basis of actual measurement, the whole of the amount previously paid without detailed measurement should be adjusted by a minus entry in column 2 equivalent to the amount shown in column 1, so that the total upto date in column 3 may become nil.

Total value of work done upto date (A) -----

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

Net value of work done since last Running Account Bill (C) -----

Rupees (in words) ..... Only

II. MEMORANDUM OF PAYMENTS

|   |                                                                                              |       |            |
|---|----------------------------------------------------------------------------------------------|-------|------------|
| 1 | Total value of work actually measured as per Account No. I column 10                         | (A)   | -----      |
| 2 | Deduct amount of payments already made as per last running account bill No. .... dated ..... | (B)   | -----      |
| 3 | Payment now to be made [(A) - (B)]                                                           | (C)   | -----      |
| 4 | Deduct amounts recoverable from the contractor on account of :                               |       |            |
|   | a) Materials supplied by BHEL vide Annexure A attached                                       | ----- |            |
|   | b) Hire of tools and plant vide Annexure B attached                                          | ----- |            |
|   | c) Other charges vide Annexure C attached                                                    | ----- |            |
|   | d) Income Tax                                                                                | ----- |            |
|   | Total Deductions                                                                             | ===== | -----      |
| 5 | Balance                                                                                      |       | -----      |
| 6 | Refunds of Security Deposit                                                                  |       | -----      |
| 7 | Net amount to be paid to the contractor                                                      |       | -----      |
|   | Net value Rupees (in words) .....                                                            |       | ..... Only |

I/ We hereby certify that I/We have performed the work as per the terms and conditions of Contract Agreement/Work Order No.....Dated.....for which payment is claimed as above and that I/We have no further claim under this agreement/work order.

Signature of the Contractor

Date:

III CERTIFICATE OF THE ENGINEER IN CHARGE

1. The measurements on which the entries in columns 7 to 11 of Part I of this bill (Account of work executed) are based were made by.....  
.....are recorded at pages.....of measurement book No..... (Name and Designation)
2. A statement showing the quantities of stores issued to the contractor (whether free or on recovery basis) and their disposal is attached.

Date:

Signature of Engineer incharge

Designation:

## IV CERTIFICATE OF THE SENIOR ENGINEER

1. Certified that I have personally inspected the work and that the work has been physically completed on the due date in accordance with the terms and conditions, schedules, specifications and drawings etc., forming part of the contract agreement, subject to the deviations noted in Deviation Statement (Annexure D).
2. Certified that the measurements have been check measured to the prescribed extent by..... and by the undersigned at site and the relevant entries have been initiated in the measurement book (vide pages.....) (Name and Designation)
3. Certified that the methods of measurement are correct.
4. Certified that the measurements have been technically checked with reference to contract drawings, deviations etc.
5. Certified that the measurements recorded in the measurement book have been correctly billed for at the contract rates or approved rates.
6. Certified that all recoverable amounts in respect of stores, tools and plant, water, electricity charges etc. have been correctly made vide Annexures A to C and that there are no other demands outstanding against the contractor on this contract.
7. Certified that the issues of all stores as per statement attached (whether charged to the contractor or direct to the work) have been technically checked and represent fair and reasonable issues for the items of work executed vide Annexure E.
8. Certified that all statutory requirements including PF, ESI, Minimum wages, Insurance, GST, BOCW, etc. are complied with by the Contractor. This should be duly backed by the relevant documents.

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

\*Here specify the net amount payable

Signature of Senior Engineer

Date

## IV ENTRIES TO BE MADE IN THE FINANCE DEPARTMENT

|                                |
|--------------------------------|
| Passed for.....Rs.....         |
| Less Deductions.....Rs.....    |
| Net Amount Payable.....Rs..... |
| (Rupees.....only)              |

| Account code head | Debit          | Credit       |
|-------------------|----------------|--------------|
|                   | (Gross Amount) | (Deductions) |
|                   |                |              |
|                   |                |              |
|                   |                |              |
|                   |                |              |
|                   |                |              |
|                   |                |              |
|                   |                |              |
|                   |                |              |
| <b>TOTAL</b>      |                |              |

Assistant

Date:

Accountant

Date:

Finance Executive

Date:

ANNEXURE A  
Part I

Statement showing details of materials issued to the contractor Shri / M/S.....in respect of Contract Agreement / Work Order No.....Dated..... and covered by the agreement.

| Sl.No. | Stores Issue Voucher No. and date | Issue voucher No. and date allotted by stores to the SIV | Description of material issued issued to the contractor | Quantity issued | Quantity actually incorporated in the work | Whether recoverable from the contractor or supplied free | If recoverable from t he Contractor |                    |                                     |                       |         |
|--------|-----------------------------------|----------------------------------------------------------|---------------------------------------------------------|-----------------|--------------------------------------------|----------------------------------------------------------|-------------------------------------|--------------------|-------------------------------------|-----------------------|---------|
|        |                                   |                                                          |                                                         |                 |                                            |                                                          | Rate at which recoverable           | Amount recoverable | Amount recovered upto previous bill | Balance now recovered | Remarks |

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

|  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Total

Signature of Contractor  
Date:

Signature of Engineer in Charge  
Date:

Signature of Senior Engineer  
Date:

ANNEXURE A  
Part II

Statement showing details of materials issued to the contractor Shri / M/S..... in respect of Contract Agreement / Work Order No.....Dated..... and not covered by the agreement

| Sl.No | Stores Issue Voucher No.and Date | Issue Voucher No. and date allotted by stores to the SIV | Description of material issued to the contractor | Quantity issued | Quantity actually incorporated in the work | Issue Rate | Amount recoverable | Amount recovered upto previous bill | Balance now recovered | Remarks |
|-------|----------------------------------|----------------------------------------------------------|--------------------------------------------------|-----------------|--------------------------------------------|------------|--------------------|-------------------------------------|-----------------------|---------|
|-------|----------------------------------|----------------------------------------------------------|--------------------------------------------------|-----------------|--------------------------------------------|------------|--------------------|-------------------------------------|-----------------------|---------|

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

|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

TOTAL  
Add Departmental Charges  
Add GST (Wherever applicable)

GRAND TOTAL

Signature of Contractor  
Date:

Signature of Engineer-in-Charge  
Date:

Signature of Senior Engineer  
Date:

Note: Cost of materials recovered in this bill should be shown against item 4 (a) of the memorandum of payments. The amounts of taxes and departmental charges recovered in this bill should be incorporated in Annexure C.

## ANNEXURE B

Statement showing tools and plant issued to the contractor Shri /M/S.....in respect of contract Agreement / Work Order No.....Dated.....

| Sl.No. | Description of Tools and Plant Issued | Period for which issued | Rate at which recovery is to be made | Amount recoverable | Amount recovered upto previous bill | Balance now recovered | Remarks |
|--------|---------------------------------------|-------------------------|--------------------------------------|--------------------|-------------------------------------|-----------------------|---------|
| 1      | 2                                     | 3                       | 4                                    | 5                  | 6                                   | 7                     | 8       |
|        |                                       |                         |                                      |                    |                                     |                       |         |
|        |                                       |                         |                                      |                    |                                     |                       |         |
|        |                                       |                         |                                      |                    |                                     |                       |         |
|        |                                       |                         |                                      |                    |                                     |                       |         |
|        |                                       |                         |                                      |                    |                                     |                       |         |
|        |                                       |                         |                                      |                    |                                     |                       |         |

TOTAL

Signature of Contractor

Date

Signature of Engineer-in-Charge

Date

Signature of Senior Engineer

Date

## ANNEXURE C

Statement showing details of other recoveries to be made from the contractor Shri/M/s..... In respect of Contract Agreement / Work Order No.....Dated.....

| Sl.No. | Particulars                                                | Unit | Quantity | Rate | Amount recoverable | Amount recovered upto previous bill | Amount now recovered | Remarks |
|--------|------------------------------------------------------------|------|----------|------|--------------------|-------------------------------------|----------------------|---------|
| 1      | 2                                                          | 3    | 4        | 5    | 6                  | 7                                   | 8                    | 9       |
| 1      | Water charges                                              |      |          |      |                    |                                     |                      |         |
| 2      | Electricity charges                                        |      |          |      |                    |                                     |                      |         |
| 3      | Medical charges                                            |      |          |      |                    |                                     |                      |         |
| 4      | Cost of empty gunny bags and empty containers not returned |      |          |      |                    |                                     |                      |         |
| 5      |                                                            |      |          |      |                    |                                     |                      |         |
| 6      |                                                            |      |          |      |                    |                                     |                      |         |
| 7      |                                                            |      |          |      |                    |                                     |                      |         |

TOTAL

Signature of Contractor

Date

Signature of Engineer in Charge

Date

Signature of Senior Engineer

Date

## Form WAM 7 (Contd.)

ANNEXURE D  
DEVIATION STATEMENT

Name of the Contractor:

Contract Agreement/Work Order No.

Name of the Work:

Date:

| SL. No. | Description of Item | Unit | Quantity as per agreement | Quantity as executed | Rate as per agreement | Rate as executed | Amount as per agreement | Amount as executed | Difference |         | Reason for the deviation with authority, if any |
|---------|---------------------|------|---------------------------|----------------------|-----------------------|------------------|-------------------------|--------------------|------------|---------|-------------------------------------------------|
|         |                     |      |                           |                      |                       |                  |                         |                    | Excess     | Savings |                                                 |

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

Signature of Engineer in Charge

Signature of Senior Engineer

Date:

Date:

## ANNEXURE E

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

Name of the Work:

## ON RECOVERY BASIS

| SL. No. | Description of material | Unit | Quantity actually issued | Quantity actually incorporated in the work | Balance | Particulars of disposal of balance | Quantity to be issued as per approved data for work actually done | Variation in consumption (difference between column 5 & 8) |      | Rate chargeable for excess/short consumption, if any | Amount Recoverable for excess/short consumption, including materials not returned, if any | Remarks |
|---------|-------------------------|------|--------------------------|--------------------------------------------|---------|------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------|------|------------------------------------------------------|-------------------------------------------------------------------------------------------|---------|
|         |                         |      |                          |                                            |         |                                    |                                                                   | More                                                       | Less |                                                      |                                                                                           |         |

|   |                |  |  |  |  |  |  |  |  |  |  |  |
|---|----------------|--|--|--|--|--|--|--|--|--|--|--|
| 1 | Cement         |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Bricks         |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Wood           |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Asbestos Sheet |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Iron Material  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |                |  |  |  |  |  |  |  |  |  |  |  |
| 7 |                |  |  |  |  |  |  |  |  |  |  |  |

Signature of Contractor

Signature of Engineer in Charge

Signature of Senior Engineer

Date:

Date:

Date:

Note

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

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

ANNEXURE F

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

Name of the Work:

| FREE OF COST |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|--------------|--------------------------|-------------------------|------|-----------------|-------------------------------|-------------------------------|------------------|------------------------------------|-------------------------------------------|----------------------------------------------|---------|
| Sl.No        | Stores Issue Voucher No. | Description of material | Unit | Quantity issued | Quantity required as per data | Quantity consumed in the work | Balance (if any) | Nature of disposal for the balance | Rate chargeable for material not returned | Amount recoverable for material not returned | Remarks |
| 1            | 2                        | 3                       | 4    | 5               | 6                             | 7                             | 8                | 9                                  | 10                                        | 11                                           | 12      |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |
|              |                          |                         |      |                 |                               |                               |                  |                                    |                                           |                                              |         |

Signature of Contractor  
Date:

Signature of Engineer in Charge  
Date:

Signature of Senior Engineer  
Date:

**ANNEXURE G**  
**QUESTIONNAIRE TO BE ANSWERED BY THE ENGINEER IN CHARGE AND SENIOR ENGINEER**  
**(Correct particulars and answers to be recorded)**

1. Name of the Work:
2. Name of the Contractor:
3. Date of commencement of the Work:
4. Contract agreement /Work Order No. and date:
5. Reference to the supplementary Agreement No. if any:
6. Whether administrative approval and technical sanction has been accorded by the competent authority? If so, cite reference?
7. Whether sanction of the competent authority and financial concurrence of the Finance Department for award of the work has been accorded? If so, cite reference.
8. Whether the work has been completed in time? If not whether penalty has been levied or sanction of the competent authority for extension of time granted and communicated to the Finance Department with reasons for grant of extension? (Due and actual date of completion of the work and reference to letter No. and date granting the extension of time should be given).
9. (a) Whether the rates allowed in the bill have been checked with the contract agreement?  
 (b) Whether the rates for extra/supplemental items have been approved by the competent authority and the sanction communicated to the Finance Department together with rate analysis? If so, cite reference
10. Whether deviations have been approved by the competent authority? If yes, give reference to the approval; if not, give reasons.
11. Whether the rates of recovery of stores issued to the contractor which are not provided for in the contract agreement have been settled in consultation with Finance?
12. Whether discrepancies pointed out by the Finance department in the stores statement have been reconciled and accepted by the Finance Department?
13. Whether materials issued to the contractor in excess of the theoretical requirements have been returned to the Stores department and the No. and date of such returned stores vouchers have been shown in Stores statement? If not, whether the cost of such excess materials has been recovered at the prescribed rate? Whether consumption statements in respect of materials chargeable to the work have been attached to the bill?
14. Whether consumption of materials shown has been technically checked by Senior Engineer?
15. Whether materials issued and used in the work is not less than that required for consumption in work according to our specifications? If consumption is less, whether necessary recovery has been made in the bill?
16. Whether measurements have been checked by the Engineer and Senior Engineer to the extent required and certificates of check recorded in the measurement books?
17. Whether contractor has signed the bill and the measurement books without reservations? If not, whether reasons have been intimated to the Finance Department?
18. Whether arithmetical calculations have been checked and certificate recorded in the measurement books by a person other than the one who calculated initially?
19. Whether any work was done at the risk and cost of the contractor and whether such cost has been recovered from him? Give particulars.
20. Whether all advance payments on running accounts have been recovered?
21. Whether all the recoveries due for services given to the contractor like rent of accommodation, water charges, electricity charges have been recovered and whether payments made by the company on behalf of the contractor have been adjusted?
22. Whether the files containing abstracts from measurement books/standard measurement books have been completed/updated?
23. Whether hire charges for tools & plant have been recovered and the statement of hire charges with full details attached?
24. Whether the certificate of workmanship and completion of work according to specifications, drawings etc. is recorded by Engineer Incharge/Senior Engineer and whether recoveries have been made for defective works, if any?
25. Whether all corrections in the bill/measurement books etc. have been neatly made and attested and there are no overwriting?
26. Whether final measurements have been taken as soon as possible after completion of the work and the certificate of completion issued? If not, whether reasons for delay have been recorded and communicated to finance department?
27. In respect of quantities reduced in the final bill as compared to the running payment, whether adequate reasons have been recorded and communicated to finance department?
28. Whether the expenditure has been classified correctly according to heads of account recorded in the sanctioned estimate?
29. Whether the work has been completed within the estimated cost? If not, what is the percentage of excess over the sanctioned estimate/ administrative approval? In case the excess is beyond the competency of the Senior Engineer, what action has been taken for obtaining the approval of the authority competent to sanction the excess?
30. (a) If the contractor has furnished bank guarantee in lieu of cash security deposit towards proper execution of works and guarantee against defects during the maintenance period, whether the period of currency of the bank guarantee covers the entire maintenance period?  
 (b) If not whether security deposit has been proposed to be recovered from the final bill?
31. Whether all the previous audit objections raised on running account bills have been settled? If so, cite references.

Signature of Engineer in Charge  
 Date:

Signature of Senior Engineer  
 Date:

**ANNEXURE TO MODEL CONCILIATION CLAUSE FOR CONDUCT OF  
CONCILIATION UNDER THE BHEL CONCILIATION SCHEME, 2018**

**BRIEF PROCEDURE FOR CONDUCT OF CONCILIATION PROCEEDINGS**

1. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided herein:
2. The party desirous of resorting to Conciliation shall send an invitation/notice in writing to the other party to conciliate specifying all points of Disputes with details of the amount claimed. The party concerned shall not raise any new issue thereafter. Parties shall also not claim any interest on claims/counter-claims from the date of notice invoking Conciliation till the conclusion of the Conciliation proceedings.
3. The party receiving the invitation/notice for Conciliation shall within 30 days of receipt of the notice of Conciliation intimate its consent for Conciliation along with its counter-claims, if any.
4. The Conciliation in a matter involving claim or counter-claim (whichever is higher) up to Rs 5 crores shall be carried out by sole Conciliator nominated by BHEL while in a matter involving claim or counter-claim (whichever is higher) of more than Rs 5 crores Conciliation shall be carried out by 3 Conciliators nominated by BHEL.
5. The Parties shall be represented by only their duly authorized in-house executives/officers and neither Party shall be represented by a Lawyer.
6. The first meeting of the IEC shall be convened by the IEC by sending appropriate communication/notice to both the parties as soon as possible but not later than 30 days from the date of his/their appointment. The hearings in the Conciliation proceeding shall ordinarily be concluded within two (2) months and, in exceptional cases where parties have expressed willingness to settle the matter or there exists possibility of settlement in the matter, the proceedings may be extended by the IEC by a maximum of further 2 months with the consent of the Parties subject to cogent reasons being recorded in writing.
7. The IEC shall thereafter formulate recommendations for settlement of the Disputes supported by reasons at the earliest but in any case within

15 days from the date of conclusion of the last hearing. The recommendations so formulated along with the reasons shall be furnished by the IEC to both the Parties at the earliest but in any case within 1 month from the date of conclusion of the last hearing.

8. Response/modifications/suggestions of the Parties on the recommendations of the IEC are to be submitted to the IEC within time limit stipulated by the IEC but not more than 15 days from the date of receipt of the recommendations from the IEC.
9. In the event, upon consideration, further review of the recommendations is considered necessary, whether by BHEL or by the other Party, then, the matter can be remitted back to the IEC with request to reconsider the same in light of the issues projected by either/both the Parties and to submit its recommendations thereon within the following 15 days from the date of remitting of the case by either of the Parties.
10. Upon the recommendations by the Parties, with or without modifications, as considered necessary, the IEC shall be called upon to draw up the Draft Settlement Agreement in terms of the recommendations.
11. When a consensus can be arrived at between the parties only in regard to any one or some of the issues referred for Conciliation the draft Settlement Agreement shall be accordingly formulated in regard to the said Issue(s), and the said Settlement Agreement, if signed, by the parties, shall be valid only for the said issues. As regards the balance issues not settled, the parties may seek to resolve them further as per terms and conditions provided in the contract.
12. In case no settlement can be reached between the parties, the IEC shall by a written declaration, pronounce that the Conciliation between the parties has failed and is accordingly terminated.
13. Unless the Conciliation proceedings are terminated in terms of para 22 (b), (c) & (d) herein below, the IEC shall forward his/its recommendations as to possible terms of settlement within one (1) month from the date of last hearing. The date of first hearing of Conciliation shall be the starting date for calculating the period of 2 months.

14. In case of 3 members IEC, 2 members of IEC present will constitute a valid quorum for IEC and meeting can take place to proceed in the matter after seeking consent from the member who is not available. If necessary, videoconferencing may be arranged for facilitating participation of the members. However, the IEC recommendations will be signed by all members. Where there is more than one (1) Conciliator, as a general rule they shall act jointly. In the event of differences between the Members of IEC, the decision/recommendations of the majority of the Members of IEC shall prevail and be construed as the recommendation of the IEC.
15. The Draft Settlement Agreement prepared by the IEC in terms of the consensus arrived at during the Conciliation proceedings between the Parties shall be given by the IEC to both the parties for putting up for approval of their respective Competent Authority.
16. Before submitting the draft settlement agreement to BHEL's Competent Authority viz. the Board Level Committee on Alternative Dispute Resolution (BLCADR) for approval, concurrence of the other party's Competent Authority to the draft settlement agreement shall be obtained by the other party and informed to BHEL within 15 days of receipt of the final draft settlement agreement by it. Upon approval by the Competent Authority, the Settlement Agreement would thereafter be signed by the authorized representatives of both the Parties and authenticated by the members of the IEC.
17. In case the Draft Settlement Agreement is rejected by the Competent Authority of BHEL or the other Party, the Conciliation proceedings would stand terminated.
18. A Settlement Agreement shall contain a statement to the effect that each of the person(s) signing thereto (i) is fully authorized by the respective Party(ies) he/she represents, (ii) has fully understood the contents of the same and (iii) is signing on the same out of complete freewill and consent, without any pressure, undue influence.
19. The Settlement Agreement shall thereafter have the same legal status and effect as an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal passed under section 30 of the Arbitration and Conciliation Act, 1996.
20. Acceptance of the Draft Settlement Agreement/recommendations of the Conciliator and/or signing of the Settlement Agreement by BHEL shall

however, be subject to withdrawal/closure of any arbitral and/or judicial proceedings initiated by the concerned Party in regard to such settled issues.

21. Unless otherwise provided for in the agreement, contract or the Memorandum of Understanding, as the case may be, in the event of likelihood of prolonged absence of the Conciliator or any member of IEC, for any reason/incapacity, the Competent Authority/Head of Unit/Division/Region/Business Group of BHEL may substitute the Conciliator or such member at any stage of the proceedings. Upon appointment of the substitute Conciliator(s), such reconstituted IEC may, with the consent of the Parties, proceed with further Conciliation into the matter either de-novo or from the stage already reached by the previous IEC before the substitution.
22. The proceedings of Conciliation under this Scheme may be terminated as follows:
- On the date of signing of the Settlement agreement by the Parties; or,
  - By a written declaration of the IEC, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or,
  - By a written declaration of the Parties addressed to the IEC to the effect that the Conciliation proceedings are terminated, on the date of the declaration; or,
  - By a written declaration of a Party to the other Party and the IEC, if appointed, to the effect that the Conciliation proceedings are terminated, on the date of the declaration.
  - On rejection of the Draft Settlement Agreement by the Competent Authority of BHEL or the other Party.
23. The Conciliator(s) shall be entitled to following fees and facilities:

| <b>Sl No</b> | <b>Particulars</b>                       | <b>Amount</b>                                                                                                                 |
|--------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1            | Sitting fees                             | Each Member shall be paid a Lump Sum fee of Rs 75,000/- for the whole case payable in terms of paragraph No. 27 herein below. |
| 2            | Towards drafting of settlement agreement | In cases involving claim and/or counter-claim of up to Rs 5crores.<br>Rs 50,000/- (Sole Conciliator)                          |

| Sl No | Particulars                                                                                                                                                                       | Amount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                                                                                                                                                   | <p>In cases involving claim and/or counter-claim of exceeding Rs 5 crores but less than Rs 10 crores.<br/>Rs 75,000 (per Conciliator)</p> <p>In cases involving claim and/or counter-claim of more than Rs 10 crores.<br/>Rs 1,00,000/- (per Conciliator)</p> <p>Note: The aforesaid fees for the drafting of the Settlement Agreement shall be paid on<br/>Signing of the Settlement Agreement after approval of the Competent Authority or<br/>Rejection of the proposed Settlement Agreement by the Competent Authority of BHEL.</p> |
| 3     | Secretarial expenses                                                                                                                                                              | <p>Rs 10,000/- (one time) for the whole case for Conciliation by a Sole Member IEC.</p> <p>Where Conciliation is by multi member Conciliators –Rs 30,000/- (one time)- to be paid to the IEC</p>                                                                                                                                                                                                                                                                                                                                        |
| 4     | Travel and transportation and stay at outstation<br>i) Retired Senior Officials of other Public Sector Undertakings (pay scale wise equivalent to or more than E-8 level of BHEL) | As per entitlement of the equivalent officer (pay scale wise) in BHEL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|       | Others                                                                                                                                                                            | As per the extant entitlement of whole time Functional Directors in BHEL.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Sl No | Particulars       | Amount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                   | Ordinarily, the IEC Member(s) would be entitled to travel by air Economy Class.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5     | Venue for meeting | Unless otherwise agreed in the agreement, contract or the Memorandum of Understanding, as the case may be, the venue/seat of proceedings shall be the location of the concerned Unit / Division / Region / Business Group of BHEL. Without prejudice to the seat/venue of the Conciliation being at the location of concerned BHEL Unit / Division / Region / Business Group, the IEC after consulting the Parties may decide to hold the proceedings at any other place/venue to facilitate the proceedings. Unless, Parties agree to conduct Conciliation at BHEL premises, the venue is to be arranged by either Party alternately. |

24. The parties will bear their own costs including cost of presenting their cases/evidence/witness(es)/expert(s) on their behalf. The parties agree to rely upon documentary evidence in support of their claims and not to bring any oral evidence in IEC proceedings.
25. If any witness(es) or expert(s) is/are, with the consent of the parties, called upon to appear at the instance of the IEC in connection with the matter, then, the costs towards such witness(es)/expert(s) shall be determined by the IEC with the consent of the Parties and the cost so determined shall be borne equally by the Parties.
26. The other expenditures/costs in connection with the Conciliation proceedings as well as the IEC's fees and expenses shall be shared by the Parties equally.
27. Out of the lump sum fees of Rs 75,000/- for Sitting Fees, 50% shall be payable after the first meeting of the IEC and the remaining 50% of the Sitting Fees shall be payable only after termination of the conciliation proceedings in terms of para 22 hereinabove.

28. The travelling, transportation and stay at outstation shall be arranged by concerned Unit as per entitlements as per Serial No. 3 of the Table at para 23 above, and in case such arrangements are not made by the BHEL Unit, the same shall be reimbursed to the IEC on actuals limited to their entitlement as per Serial No. 4 of the Table at Para 23 above against supporting documents. The IEC Member(s) shall submit necessary invoice for claiming the fees/reimbursements.
29. The Parties shall keep confidential all matters relating to the conciliation proceedings. Confidentiality shall extend also to the settlement agreement, except where its disclosure is necessary for purposes of its implementation and enforcement or as required by or under a law or as per directions of a Court/Governmental authority/regulatory body, as the case may be.
30. The Parties shall not rely upon or introduce as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the Disputes that is the subject of the Conciliation proceedings:
- a. Views expressed or suggestions made by the other party in respect of a possible settlement of the Disputes;
  - b. admissions made by the other party in the course of the Conciliator proceedings;
  - c. proposals made by the Conciliator;
  - d. The fact that the other Party had indicated his willingness to accept a proposal for settlement made by the Conciliator.
31. The Parties shall not present the Conciliator(s) as witness in any Alternative Dispute Resolution or Judicial proceedings in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
32. None of the Conciliators shall act as an arbitrator or as a representative or counsel of a Party in any arbitral or judicial proceeding in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
33. The Parties shall not initiate, during the Conciliation proceedings, any arbitral or judicial proceedings in respect of a Disputes that is the subject matter of the Conciliation proceedings except that a Party may initiate arbitral or judicial proceedings where, in his opinion, such proceedings are necessary for preserving his rights including for preventing expiry of period of limitation. Unless terminated as per the provisions of this Scheme, the Conciliation proceedings shall continue

notwithstanding the commencement of the arbitral or judicial proceedings and the arbitral or judicial proceedings shall be primarily for the purpose of preserving rights including preventing expiry of period of limitation.

34. The official language of Conciliation proceedings under this Scheme shall be English unless the Parties agree to some other language.

**Format 2 to BHEL Conciliation Scheme, 2018**

**FORMAT FOR SEEKING CONSENT FOR REFERRING THE DISPUTES TO  
CONCILIATION THROUGH IEC**

To,

M/s. (Stakeholder's name)

**Sub: Resolution of the Disputes through conciliation by Independent Expert Committee (IEC).**

Ref: Contract No/MoU/Agreement/LOI/LOA& date \_\_\_\_\_.

Sir,

With reference to above referred Contract/MoU/Agreement/LOI/LOA, you have raised certain Disputes/claims. Vide your letter dated\_\_\_\_\_ you have requested BHEL to refer the Disputes/claims to IEC for Conciliation.

We are enclosing herewith Format (3) for giving consent and the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. You are requested to give your unconditional consent to the said terms and conditions of the Scheme by returning the same duly sealed and signed on each page. On receipt of your consent, matter will be put to the Competent Authority for consideration and decision.

Please note that BHEL has also certain claims against you (if applicable). BHEL reserves its right to agree or not to agree conciliation of the said disputes through BHEL and this letter is being issued without prejudice to BHEL's rights and contentions available under the contract and law.

Yours faithfully,

**Representative of BHEL**

**Format 3 to BHEL Conciliation Scheme, 2018**  
**FORMAT FOR GIVING CONSENT BY**  
**CONTRACTOR/VENDOR/CUSTOMER/COLLABORATOR/CONSORTIUM PARTNERS FOR REFERRING THE DISPUTES TO CONCILIATION THROUGH IEC**

To,

BHEL

.....

**Sub: Resolution of Disputes through Conciliation by Independent Expert Committee (IEC).**

Ref: Contract/MoU/Agreement/LOI/LOA No      & date \_\_\_\_

With reference to above referred contract, our following bills/invoices/claims submitted to BHEL are still unpaid giving rise to Disputes:

| SL. no. | Claim Description | Bill submitted to BHEL (no. and date) | Amount of the bill/claim | Amount received from BHEL | Outstanding Amount |
|---------|-------------------|---------------------------------------|--------------------------|---------------------------|--------------------|
|         |                   |                                       |                          |                           |                    |
|         |                   |                                       |                          |                           |                    |
|         |                   |                                       |                          |                           |                    |

Accordingly we request you to kindly refer the Disputes in respect of above claims to IEC for Conciliation.

We hereby agree and give our unconditional consent to the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. We have signed the same on each page and enclosed it for your consideration.

Yours faithfully,

**(Signature with stamp)**

**Authorized Representative of Contractor**

**Name, with designation**

**Date**

**Format 5 to BHEL Conciliation Scheme, 2018**  
**STATEMENT OF CLAIMS/COUNTER CLAIMS TO BE SUBMITTED TO**  
**THE IEC BY BOTH THE PARTIES**

1. Chronology of the Disputes
2. Brief of the Contract/MoU/Agreement/LOI/LOA
3. Brief history of the Disputes:
4. Issues:
5. Details of Claim(s)/Counter Claim(s):

| <b>Sl. No.</b> | <b>Description of claim(s)/Counter Claim</b> | <b>Amount (in INR)Or currency applicable in the contract</b> | <b>Relevant contract clause</b> |
|----------------|----------------------------------------------|--------------------------------------------------------------|---------------------------------|
|                |                                              |                                                              |                                 |
|                |                                              |                                                              |                                 |
|                |                                              |                                                              |                                 |

6. Basis/Ground of claim(s)/counter claim(s) (along with relevant clause of contract)

**Note**– *The Statement of Claims/Counter Claims may ideally be restricted to maximum limit of 20 pages. Relevant documents may be compiled and submitted along with the statement of Claims/Counter Claims. The statement of Claims/Counter Claims is to be submitted to all IEC members and to the other party by post as well as by email.*

### Bill of Quantity cum Price Schedule (Annexure-I)

**Project Name: PEB OFFICE AT HVDC NAGPUR, BHADLA & FATEHPUR HVDC**

**Name of Work :DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.)**

**TENDER SPEC. No.: TBSM/HVDC/PEB-OB/TENDER/26-27 Dated 20.08.2026**

| Sr.NO.   | Description of Item                                                                                                                                                                                                                                                           | Quantity | UOM  | Unit Rate        | AMOUNT             |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------------------|--------------------|
| <b>A</b> | <b>NAGPUR</b>                                                                                                                                                                                                                                                                 |          |      |                  |                    |
| A.1      | Office PEB Building As per attached Layout & BOQ 3559 sqft (approximate)                                                                                                                                                                                                      | 3559     | Sqft | 1480             | 5267320            |
| A.2      | Civil work for making the foundation and the platform with flooring (Ceramic Tiles ) of the above office building of size approximate 5000 Sqft. a. 0.6 Deep Brick Foundation Considered b. Plinth PCC Considered 125 MM Thick c. Offer set Of 1.50 MtrConsidered on all side | 1        | Lot  | 1210761.6        | 1210761.6          |
| A.3      | FRP Bio Digester Tank with Bacteria HSN Code : 73090010Capacity : 1000 literSize (cm): 100LX100WX100HThickness: 5 mm USES/DAY: 15-20                                                                                                                                          | 2        | Nos  | 20000            | 40000              |
| A.4      | AC 1 Ton                                                                                                                                                                                                                                                                      | 1        | Nos  | 30400            | 30400              |
| A.5      | AC 1.5 Ton.                                                                                                                                                                                                                                                                   | 5        | Nos  | 33600            | 168000             |
| A.6      | AC 2 Ton.                                                                                                                                                                                                                                                                     | 2        | Nos  | 41600            | 83200              |
| A.7      | DG set 25 KVA                                                                                                                                                                                                                                                                 | 1        | Nos  | 420000           | 420000             |
|          |                                                                                                                                                                                                                                                                               |          |      | <b>Sub-Total</b> | <b>7219681.6</b>   |
| <b>B</b> | <b>BHADLA</b>                                                                                                                                                                                                                                                                 |          |      |                  |                    |
| B.1      | Office PEB Building As per attached Layout & BOQ 3559 sqft (approximate)                                                                                                                                                                                                      | 3559     | Sqft | 1480             | 5267320            |
| B.2      | Civil work for making the foundation and the platform with flooring (Ceramic Tiles ) of the above office building of size approximate 5000 Sqft. a. 0.6 Deep Brick Foundation Considered b. Plinth PCC Considered 125 MM Thick c. Offer set Of 1.50 MtrConsidered on all side | 1        | Lot  | 1210761.6        | 1210761.6          |
| B.3      | FRP Bio Digester Tank with Bacteria HSN Code : 73090010Capacity : 1000 literSize (cm): 100LX100WX100HThickness: 5 mm USES/DAY: 15-20                                                                                                                                          | 2        | Nos  | 20000            | 40000              |
| B.4      | AC 1 Ton                                                                                                                                                                                                                                                                      | 1        | Nos  | 30400            | 30400              |
| B.5      | AC 1.5 Ton.                                                                                                                                                                                                                                                                   | 5        | Nos  | 33600            | 168000             |
| B.6      | AC 2 Ton.                                                                                                                                                                                                                                                                     | 2        | Nos  | 41600            | 83200              |
| B.7      | DG set 25 KVA                                                                                                                                                                                                                                                                 | 1        | Nos  | 420000           | 420000             |
|          |                                                                                                                                                                                                                                                                               |          |      | <b>Sub-Total</b> | <b>7219681.6</b>   |
| <b>C</b> | <b>FATEHPUR</b>                                                                                                                                                                                                                                                               |          |      |                  |                    |
| C.1      | Office PEB Building As per attached Layout & BOQ 3559 sqft (approximate)                                                                                                                                                                                                      | 3559     | Sqft | 1480             | 5267320            |
| C.2      | Civil work for making the foundation and the platform with flooring (Ceramic Tiles ) of the above office building of size approximate 5000 Sqft. a. 0.6 Deep Brick Foundation Considered b. Plinth PCC Considered 125 MM Thick c. Offer set Of 1.50 MtrConsidered on all side | 1        | Lot  | 1210761.6        | 1210761.6          |
| C.3      | FRP Bio Digester Tank with Bacteria HSN Code : 73090010Capacity : 1000 literSize (cm): 100LX100WX100HThickness: 5 mm USES/DAY: 15-20                                                                                                                                          | 2        | Nos  | 20000            | 40000              |
| C.4      | AC 1 Ton                                                                                                                                                                                                                                                                      | 1        | Nos  | 30400            | 30400              |
| C.5      | AC 1.5 Ton.                                                                                                                                                                                                                                                                   | 5        | Nos  | 33600            | 168000             |
| C.6      | AC 2 Ton.                                                                                                                                                                                                                                                                     | 2        | Nos  | 41600            | 83200              |
| C.7      | DG set 25 KVA                                                                                                                                                                                                                                                                 | 1        | Nos  | 420000           | 420000             |
|          |                                                                                                                                                                                                                                                                               |          |      | <b>Sub-Total</b> | <b>7219681.6</b>   |
|          | <b>TOTAL FOR NAGPUR, BHADLA &amp; FATEHPUR SITES</b>                                                                                                                                                                                                                          |          |      |                  | <b>2,16,59,045</b> |

Tender Inviting Authority: BHEL, TBG- SubContracting Department, Sector 16A Noida, UP

Name of Work: “DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.)”

Contract No: TBSM/HVDC/PEB-OB/TENDER/26-27, Date: 20.08.2026

|                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                          |               |        |                       |                                   |                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|-----------------------|-----------------------------------|-----------------------------------------------------------------|
| Name of the Bidder/ Bidding Firm / Company :                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                          |               |        |                       |                                   |                                                                 |
| <div>PRICE SCHEDULE</div> <div>(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</div> |                                                                                                                                                                                                                                                                                                                                                                          |               |        |                       |                                   |                                                                 |
| NUMBER #                                                                                                                                                                                                                                                                                         | TEXT #                                                                                                                                                                                                                                                                                                                                                                   | NUMBER #      | TEXT # | NUMBER                | NUMBER #                          | TEXT #                                                          |
| Sl. No.                                                                                                                                                                                                                                                                                          | Item Description                                                                                                                                                                                                                                                                                                                                                         | Quantity      | Units  | Estimated Rate in Rs. | TOTAL AMOUNT Without Taxes in Rs. | TOTAL AMOUNT In Words                                           |
| 1                                                                                                                                                                                                                                                                                                | 2                                                                                                                                                                                                                                                                                                                                                                        | 4             | 5      | 6                     | 53                                | 55                                                              |
| 1                                                                                                                                                                                                                                                                                                | Total amount as per rates in BOQ (as per Annexure-I) for “DESIGN, SUPPLY, CIVIL WORKS AND ERECTION OF ONE PRE-ENGINEERED INTEGRATED OFFICE BUILDINGS OF 3559 SQ FT & TWO TOILET BLOCKS, REQUIRED ELECTRICAL INSTALLATIONS, TOILET FITTINGS AND FURNITURE FOR ± 800 KV, 6000 MW HVDC NAGPUR (MAHARASHTRA), BHADLA (RAJASTHAN) AND FATEHPUR (U.P.) SITES”. - Excluding GST | 1.000         | LOT    | 21659045.00           | 21659045.00                       | INR Two Crore Sixteen Lakh Fifty Nine Thousand &Forty Five Only |
| Total in Figures                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                          |               |        |                       | 21659045.00                       | INR Two Crore Sixteen Lakh Fifty Nine Thousand &Forty Five Only |
| Quoted Rate in Figures                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                          |               | Select |                       | 0.000                             | INR Zero Only                                                   |
| Quoted Rate in Words                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                          | INR Zero Only |        |                       |                                   |                                                                 |

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## Technical Specifications for Integrated Site Office

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## 1. BIDDER'S SCOPE OF SUPPLY AND ERECTION-COMMISSIONING OF PRE-ENGINEERED BUILDING:

Design, Supply, Civil Works and Erection of one Pre-Engineered Integrated Office building of 3559 Sq Ft & two toilet blocks, required electrical installations, toilet fittings and furniture as per attached drawing.

Major supply and services included in bidder's scope:

| <b><u>S.No</u></b> | <b><u>Description</u></b>                                                                                  | <b><u>Quantity</u></b>                               |
|--------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.                 | Development and submission of required design& drawings for the approval by BHEL                           | As per BOQ & drawings provided in subsequent clauses |
| 2.                 | Supply of PEB structural materials such as columns, rafters, beams, purlins, steel sheets, insulation etc. |                                                      |
| 3.                 | Supply of PEB architectural items such as doors, windows, rolling shutters, etc.                           |                                                      |
| 4.                 | Supply of all the Furniture as per the attached BOQ                                                        |                                                      |
| 5.                 | Supply of Electrical Services                                                                              |                                                      |
| 6.                 | E&C: Erection of PEB structural materials including the civil and earthworks needed for erection           |                                                      |
| 7.                 | E&C: Erection of PEB architectural items.                                                                  |                                                      |
| 8.                 | E&C: Erection and Commissioning of Electrical Services                                                     |                                                      |
| 9.                 | E&C: Erection of all Furniture                                                                             |                                                      |

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## 2 BIDDER'S SCOPE OF SERVICES

### 2.1 LIST OF MAJOR SERVICES INCLUDED IN BIDDER'S SCOPE:

- I. Detailed Engineering, Development of drawings and approval by BHEL
- II. Technical services relating to planning, procurement, manufacturing, inspection, expediting, packing, shipping, storing, etc.
- III. Submission and obtaining approval of all engineering documents before start of works
- IV. Engineering for procurement
- V. ORDERING of all materials
- VI. Approval of make to be taken from BHEL if it is not mentioned in contract
- VII. Overall Project Management and progress reporting to BHEL
- VIII. Expediting suppliers and sub vendors
- IX. Procurement
- X. Conducting all required earthworks and civil works for erection like trenching, foundations, RCC and PCC works, etc.
- XI. Manufacture, fabrication and assembly of all required materials at site
- XII. Inspection and testing
- XIII. Painting of all works, painting at site including touch up paint
- XIV. Dispatch and transportation of materials, consumables, construction aids etc. to site.
- XV. Establishment of site office complete with all facilities and communication
- XVI. Storage, loading, unloading, security and handling at site
- XVII. Construction at site including earthwork, foundations, backfilling, PCC & RCC works, flooring, fabrication, erection and installation and Supervision of work during all the activities for completion of Pre-Engineered buildings.
- XVIII. Insulation with cladding and painting
- XIX. Engineering for interfacing all inputs and outputs
- XX. Total day to day supervision of construction including erection and specialized services, if any
- XXI. Clearance for installations from the statutory and other concerned authorities on behalf of Purchaser if any. The Contractor shall also assist in preparing application forms, providing necessary drawings, documents, test certificates etc. including necessary co - ordination with statutory and other concerned authorities.
- XXII. Liaisoning with other contractors in the Site
- XXIII. Handing over the completed PEB building to BHEL
- XXIV. Providing as built drawings

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## Notes:

Bidder to note that the above list is not exhaustive and any other service required as per the intent of this specification / project requirements / good engineering practice shall be deemed to be included in bidder's scope without any commercial implication to the purchaser. Bidder to take approval of make if it is not mentioned in contract.

## 3. CLARITY OF SCOPE IN OTHER AREAS (In addition to Cl.2.0.0):

| S.No | Item                                                                                                                                                                                                                  | By<br>BHEL | By<br>Vendor | Remarks                                                       |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---------------------------------------------------------------|
| 1    | Complete civil foundation works for all the Pre-Engineered Integrated Office building.                                                                                                                                |            | YES          | Vendor shall submit the loading details for foundation design |
| 2    | Cable-trenches within the office building                                                                                                                                                                             |            | YES          |                                                               |
| 3    | Flooring works within the office building                                                                                                                                                                             |            | YES          |                                                               |
| 4    | Plinth protection around the office building                                                                                                                                                                          |            | YES          |                                                               |
| 5    | Steps/ ramps on front/back sides of the room as applicable                                                                                                                                                            |            | YES          |                                                               |
| 6    | Composite slab, if adopted by bidder, incl. all shuttering, reinforcement, bolts, decking, formwork, fasteners, painting, finishes, waterproofing, etc                                                                |            | Yes          |                                                               |
| 7    | Electrical works including supply and E&C of wiring, room appliances (ACs, lights, ceiling fans, exhaust fans, ventilators, etc), switchboards, MCB boxes etc for the office building as specified in clause 9.5. (A) |            | Yes          |                                                               |

# Technical Conditions of Contract (TCC) for Site Enabling Work

|   |                                                                                                                                  |  |     |  |
|---|----------------------------------------------------------------------------------------------------------------------------------|--|-----|--|
| 8 | Cut out/ provision of supports & fixtures for the room appliances                                                                |  | Yes |  |
| 9 | Supply and Installation of all furniture including tables, chairs, modular work stations with power ports, Storage Almirahs, etc |  | Yes |  |

## 4. TECHNICAL DETAILS

### 4.1 Design, supply and erection of Pre-Engineered Buildings

#### 4.1.1. Design and supply of PEB structural materials

- a) After receipt of BHEL PO, following documents shall be submitted to BHEL for approval:

1. Structural design calculations including GA drawings along with BOM.
2. Design calculations shall be submitted to BHEL for approval.

- b) Vendor shall supply the structural materials such as columns, rafters, beams, purlins, tie rods, sheets, wall cladding/roofing PUF insulation, hardware etc. to the site as per the BHEL approved drawings. Raw materials for steel sections, sheets etc. should be of reputed make of supplier to similar construction / infrastructure projects conform to relevant Indian / International Standards. The Bidder should furnish documentary evidence for the same.

To the extent possible, the Contractor shall consider the standard steel sections and plates available in India. In case the Contractor uses raw materials conforming to standards other than Indian Standards, the contractor should clearly indicate the Indian equivalent of the same and approval from the purchaser is to be obtained for use of such raw materials. In case for any raw materials standards other than Indian Standards is already specified in the Contract, approval as mentioned above is not required. In case of non-availability of raw materials in India, the Contractor shall switch over to import of the required raw materials expeditiously at its own cost and responsibility. The Purchaser shall not grant any time extension, on account of any delay in the procurement of

# Technical Conditions of Contract (TCC) for Site Enabling Work

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- raw materials. The Contractor shall take samples and test them in laboratories in India and/or abroad as may be required at his own cost & time, and fully satisfy himself of the suitability of the raw materials for the purpose of the item & equipment offered by him. The Contractor shall furnish the test results to Purchaser for approval.
- c) Vendor shall also supply the J bolts/nuts/washers, alignment plates and other related hardware that are used for positioning and anchoring of the PEB structures to the RCC foundation plinth.
  - d) All the items shall be supplied directly to the project site.

## **4.1.2. Design and supply of PEB architectural items**

- a) After receipt of BHEL PO, vendor shall submit GA drawings along with BOM (item-wise description, quantity, make, model etc) of the architectural items for BHEL approval.
- b) The architectural items submitted for approval shall meet the requirements of various aspects of the room such as electrical, illumination, ventilation, exhaust, thermal, safety, security etc.
- c) Accordingly, this shall include all items such as windows with shades, doors with shades/lock/key, rolling shutters with lock/key, ventilator provisions, exhaust provisions, rain water gutters/ down comers/ pipes etc. Raw materials for steel sections, sheets etc shall be of reputed make such as Jindal Steel and Power, RINL, SAIL, TISCO, JSW Steel, Essar Steel, Ispat Industries, Lloyd Steel Industries. Vendor shall take prior approval from BHEL for the make prior to proceeding with procurement action.
- d) Vendor shall supply the items directly to the project site.

## **4.1.3. Erection of structures of PEB**

- a) All the Civil works related to PEB are vendor scope, Vendor shall complete erect the structural items such as columns, rafters, beams, purlins, tie rods, sheets, wall cladding/roofing insulation, hardware etc. as per the BHEL approved drawings / BoM.
- b) Vendor shall also carry out necessary finishing activities such as flooring, painting etc.
- c) Vendor shall deploy qualified/competent team at site to carry out the above erection activity.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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- d) Vendor shall also deploy their specialized team during plinth casting of J bolts / alignment (base) plates etc. in order to provide the needed support/guidance to the team at site.
- e) All necessary labour, tools & tackles, shuttering materials, measuring instruments, machinery shall be in vendor scope of supply. This shall include spanner sets, drilling machines, welding machines, hydra, JCB, truck, trolley etc as required for the erection work.

## **4.1.4. Erection of architectural**

- a) Vendor shall carry out erection of the architectural items such as windows with shades, doors with shades/lock/key, rolling shutters with lock/key, structural provisions for ventilators / exhausts, rain water gutters/ down comers/ pipes etc as per the BHEL approved drawings / BoM.
- b) Vendor shall also carry out necessary finishing activities such as painting etc.
- c) Vendor shall deploy qualified/competent team at site to carry out the above erection activities.
- d) Vendor shall supply the items directly to the project site.
- e) All necessary labour, tools & tackles, shuttering materials, measuring instruments, machinery shall be in vendor scope of supply. This shall include spanner sets, drilling machines, welding machines, hydra, JCB, truck, trolley etc as required for the erection work.

## **4.2.1. Structure & Material Specification:**

Insulated wall cladding or roofing shall consist of double skin metal cladding with Poly Urethane Foam (PUF). PUF must be made of continuous method PU foam and must be CFC free, self-extinguishing, fire retardant type with density 40 +/-2 kg/m<sup>3</sup> and thermal conductivity 0.019-2.2 W/(m.K) at 10°C. The PUF panels shall be a factory-made item ready for installation at site.

## **4.2.2. Fasteners & Connections:**

Special coated self-drilling screws/fastener shall be used conforming to class 3 as per AS: 3566.1 and AS: 3566.2. Steel bolts, nuts and washers complying with AS 1112:2000. High Strength Bolts for Primary Connections IS: 1367 (Part III) Gr. 8.8 / ASTM A325. Bolts for Secondary Connection IS: 1367 (Part III) Gr. 4.6 /ASTM A307. Anchor/foundation Bolts shall conform to IS: 5624 and relevant IS code.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## **4.2.3. Roof & Wall Cladding:**

PUF panels shall be made of troughed permanently colour coated metal sheets of steel for roofing and side cladding (internal and external) shall conform to the requirements of Table1 and IS: 513 for Hot-dip Zinc coated or Al/Zn coated sheets. The insulation material thickness and details shall be as specified at relevant para in the specification.

PUF insulated panels Metal Sheet for Roofing and side cladding consist of external sheet as troughed permanently colour coated sheet & internal sheet as plain permanently colour coated sheet.

Chemical composition of Troughed permanently colour metal sheet for roofing and side cladding shall conform to the provisions of same reference code to which the mechanical properties conform to.

Plain permanently colour coated steel metal sheet for ridge and hips, flashing, trimming, closure for vertical and horizontal joints, capping etc. shall conform to the same requirements as those of troughed permanently colour coated metal sheet for roof and side cladding.

[The maximum spacing of the fastener shall be 390 mm c/c along the length of purlins / runners. However exact spacing shall be as per the design done by the bidder of the fastener considering the wind load, self-load and other associated load. Minimum diameter of the fastener shall be 5.5 mm and at least 3 nos. of fastener shall be used per sheet.]

Fillers blocks as a trough filler shall be used to seal cavities formed between the profiled sheet and the support or flashing. The fillers blocks shall be manufactured from black synthetic rubber or any other material approved by engineer.

## **4.2.4. Roof Insulation & Type:**

Both metal sheets shall have an under insulation of minimum 60 mm thick PUF with density 40 +/- 2kg/m<sup>3</sup> and thermal conductivity 0.019-2.2 W/(m.K) at 10°C with gutters and down take pipes along with Flashing & Top cap of required size and colour complete with all necessary hardware complete. Roof shall be projected at-least 300 mm from the wall.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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Stiffening ribs / subtle fluting for effective water shedding and special male/female ends with full return legs on side laps for purlin support and anti-capillary flute in side lap.

Both upper and lower sheets shall be separated through spacers and fastened through zinc /zinc-tin coated self-drilling screws. The fastener size shall be calculated as per the design or manufacturers recommendations.

## **4.2.5. Wall Insulation:**

All voids of external and internal metalled walls shall have an under insulation of minimum 50 mm thick PUF with density 40 +/- kg/m<sup>3</sup> and thermal conductivity 0.0192.2 W/(m.K) at 10°C with proper supports etc. as approved.

Both the walls should be separated by spacers system made up of cold formed steel bars and fastened through zinc /zinc-tin coated self-drilling screws.

The external wall of Inverter room facing the transformer area shall be as per IS: 1646 – Code of practice for fire safety of buildings (general): electrical installations.

## **4.2.6. Doors Frames:**

Door frames shall be of T-iron frame of mild steel Tee-sections as per DSR-2013 item no 10.13. All doors shall be provided necessary fittings like hinges, handles, mortice locks, tower bolts, stopper, hydraulic door closer, etc. of CP brass complete. Numbers of doors will be as per design.

Black powder coated aluminium doors shall be with extruded built up standard tubular sections, appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixed to Pre-Engineered structure including necessary filling up of gaps at junctions with required PVC/neoprene felt etc. including hinges /pivots and double action hydraulic floor spring of approved brand and manufacture IS: 6315 marked, lock, handle and all necessary fittings as detailed in tender drawing or submitted by bidder in shop drawing and approved by BHEL.

The door entrance shall include Mild Steel single leaf door. The structural steel shall conform to IS: 7452 and IS: 2062. The holdfasts shall be made from steel flats (50 mm and 5 mm thick).

The fixtures, fastenings and door latch are to be made with same materials.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## **4.2.7. Windows Frames:**

Aluminium black powder coated section, frame shall be of 92x31 mm, minimum 16G thick as per approved design. Tinted glass and MS grill shall be provided. Numbers of windows will be as per design.

## **4.2.8. Ventilators:**

Aluminium black powder coated frame of minimum size 62x25 mm and 16G thick as per approved design. Ventilators/duct shall be provided with bird guard. Size of opening at wall for ducts shall be as per PCU manufacture and min 18-gauge GI sheet. Ducts shall be supported with suitable means, as approved during detail engineering.

All accessible ventilators and windows of all buildings shall be provided with min. 4mm thick float glass, tinted for preventing solar radiations. Suitable sunshades made out of approved colour sheet will be provided to all external windows and door. The minimum projection for the sunshades will be 450 mm and 300mm wider than the width of the opening

## **4.2.9. Rolling Shutters:**

Not Applicable

## **4.2.10. Plinth Protection:**

1.50 M wide plinth protection of minimum 75mm thick of cement concrete 1:2:4 (1cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth, shall be provided around the Pre-Engineered Building.

## **4.2.11. Floor Finish:**

Flooring, including preparation of surface, cleaning etc. shall be of cement concrete flooring as per IS:2571 with ironite hardener. The PEB Building floor shall be at least 600 mm above the ground level. Necessary ramps shall be provided for equipment entry.

## **4.2.13. Lighting:**

The PEB Building shall be provided with electric light to achieve average illumination level of 300 Lux. Vendor shall ensure that the room is designed to utilize maximum natural light during the day.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## 4.2.14. Design Parameters & Loads:

The structure shall be designed for loads and load combination as per Indian Standards (latest revisions) such as IS: 875, IS: 1893, IS: 800, IS: 456 etc.

**Dead Load:** Self Weight of Structure including Purlins, Sheeting, Girts, Bracings, weight of turbo ventilators to be added as Dead load etc.

**Imposed Load (Live Loads)** Live loads shall be as per IS – 875. For sloped roofs up to 10 deg. It shall be 0.75 KN/M<sup>2</sup>.

**Earthquake Load:** All PEB structures shall be designed for Seismic forces. Vertical Deflection and Horizontal Sway Limits:

- a) Limiting Deflection: The limiting permissible vertical deflection for structural steel members shall be as per IS 800 2007.
- b) The limiting permissible horizontal deflection for as per IS 800 2007 code.

## 4.2.15. Description of PEB Structures:

All steel materials supplied by the Agency shall be in a sound condition, of recent manufacture, free from defects, loose mill scale, slag intrusions, laminations, pitting, flaky, rust, etc. and be of full weight and thickness specified.

## 4.3. Applicable Codes & Standards:

Following codes and standards (latest editions) including their latest addenda shall be followed wherever applicable unless otherwise specified:

| Sl No | Code       | Description                                                                             |
|-------|------------|-----------------------------------------------------------------------------------------|
| 1     | IS:875-I   | Code of Practice for Design Dead Loads for Building and Structures                      |
| 2     | IS:875-II  | Code of Practice for Design Imposed Loads for Building and Structures                   |
| 3     | IS:875-III | Code of practice for design loads (other than earthquake) for buildings and structures. |
| 4     | IS:1893    | Criteria for earthquake resistant design of structures.                                 |
| 5     | IS:4326    | Code of Practice for earthquake resistant design and construction of buildings          |

## Technical Conditions of Contract (TCC) for Site Enabling Work

|    |            |                                                                                          |
|----|------------|------------------------------------------------------------------------------------------|
| 6  | IS: 800    | Code of practice for use of structural steel in general building construction            |
| 7  | IS: 801    | Code of practice for use of cold-formed light gauge steel structure members              |
| 8  | IS:802     | Code of practice for use of structural steel in overhead transmission line towers        |
| 9  | IS:806     | Code of practice for use of steel tubes in general building construction                 |
| 10 | IS:808     | Dimensions for hot rolled steel beam, column channel and angle section                   |
| 11 | IS:811     | Specification for cold formed light gauge structural steel sections                      |
| 12 | IS:813     | Scheme of symbols for welding.                                                           |
| 13 | IS:1079    | Hot rolled carbon steel sheet and strip – specification                                  |
| 14 | IS:2062    | Hot rolled medium and high tensile structural steel – specification                      |
| 15 | IS:4923    | Hollow steel sections for structural use.                                                |
| 16 | IS:1161    | Steel tubes for structural purpose                                                       |
| 17 | IS:2721    | Galvanized steel chain link fence fabric – specification                                 |
| 18 | IS :4736   | Hot dip zinc coatings on mild steel tubes                                                |
| 19 | IS:4759    | Hot dip zinc coatings on structural steel and other allied products – specification      |
| 20 | IS:1868    | Anodic coatings on aluminium and its alloys                                              |
| 21 | IS:2395-I  | Paintings of concrete, Masonry and plaster surfaces – code of operations and workmanship |
| 22 | IS:2995-II | Code of practice for painting concrete, masonry and plaster surfaces: schedule           |
| 23 | IS:1477-I  | Code of practice for painting of ferrous metals in buildings: pretreatment               |
| 24 | IS:1477-II | Code of practice for painting of ferrous metals in buildings: painting                   |

## Technical Conditions of Contract (TCC) for Site Enabling Work

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|    |         |                                                                                            |
|----|---------|--------------------------------------------------------------------------------------------|
| 25 | IS:1905 | Code of practice for structural use of un-reinforced masonry                               |
| 26 | IS:3067 | Code of practice for general design details and preparatory works for damp/water proofing  |
| 27 | SP:6    | Handbook for structural engineers (all parts)                                              |
| 28 | SP:7    | National Building Code of India                                                            |
| 29 | SP:16   | Design Aids for reinforced concrete to IS:456                                              |
| 30 | SP:20   | Handbook on masonry design and construction                                                |
| 31 | SP:22   | Explanatory handbook on codes for earthquake engineering                                   |
| 32 | SP:24   | Explanatory handbook on Indian Standard Code of Practice for plain and reinforced concrete |
| 33 | SP:25   | Handbook on causes and prevention of cracks in buildings                                   |
| 34 | SP:32   | Handbook on functional requirements of industrial buildings                                |
| 35 | SP:34   | Handbook of concrete reinforcement & detailing                                             |

For provisions not covered by any of the codes & standards, applicable good engineering practices and norms shall govern.

# Technical Conditions of Contract (TCC) for Site Enabling Work

## 4.5. ELECTRICAL SERVICES

A. Supply, erection and commissioning of following electrical services items shall be in the scope of PEB vendor. The following items minimum shall be supplied by PEB vendor to meet the required illumination level along with all required cable & accessories.

| Electrical & Illumination, Air Conditioning of Integrated Office Building     |                                                                                |      |     |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------|-----|
| This Includes The supply, Installation & commissioning of the following items |                                                                                |      |     |
| SL NO                                                                         | ITEM DESCRIPTON                                                                | UNIT | QTY |
| 1                                                                             | 18W LED batten Light (Philips/Eveready/equivalent reputed make)                | Nos  | 20  |
| 2                                                                             | 10W LED Utility Light (Philips/Eveready/equivalent reputed make)               | Nos  | 10  |
| 3                                                                             | LED Emergency Light (Philips/Eveready/equivalent reputed make)                 | Nos  | 4   |
| 4                                                                             | 5A Power point (Anchor/Cona/ equivalent reputed make)                          | Nos  | 50  |
| 5                                                                             | 15A Power point (Anchor/Cona/ equivalent reputed make)                         | Nos  | 10  |
| 5                                                                             | Ceiling fan (36") (Crompton/Olympus/equivalent)                                | Nos  | 14  |
| 6                                                                             | Small fan (24") (Crompton/Olympus/equivalent)                                  | Nos  | 2   |
| 7                                                                             | Exhaust fan (9") (Crompton/Olympus/equivalent)                                 | Nos  | 4   |
| 8                                                                             | AC Provision (Anchor/Cona/ equivalent reputed make)                            | Nos  | 8   |
|                                                                               |                                                                                |      |     |
| B. Supply, Installation & commissioning of Air Conditioning System            |                                                                                |      |     |
| SL NO                                                                         | ITEM DESCRIPTON                                                                | UNIT | QTY |
| 1                                                                             | 1.5 Ton Split AC along with all accessories<br>(Hitachi/LG/Samsung/equivalent) | Nos  | 5   |
| 2                                                                             | 1.0 Ton Split AC along with all accessories<br>(Hitachi/LG/Samsung/equivalent) | Nos  | 1   |
| 3                                                                             | 2.0 Ton Split AC along with all accessories<br>(Hitachi/LG/Samsung/equivalent) | Nos  | 2   |
| 4                                                                             | Installation and Commissioning                                                 | Lot  | 1   |

# Technical Conditions of Contract (TCC) for Site Enabling Work

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C. Supply, civil works, installation, Cabling, Testing & Commissioning of 25 kVA DG Set for above office building. Technical Specification of DG set attached.

**Notes:**

1. Installation & commissioning of above equipment and its associated cabling work within the PEB shall be in the scope of PEB vendor.
2. Above items shall be supplied from reputed makes. Prior approval of make shall be taken from BHEL if it is not defined.
3. Vendor's terminal point for cabling inside PEB shall be at the boundary point of PEB at two locations i.e. at loop in and loop out cable route
4. All the cables inside the building shall be directly routed on ceilings/walls.

## 4.6. TECHNICAL SPECIFICATION FOR ELECTRICAL SERVICES

All luminaries and their accessories and components shall be of type readily replaceable by available Indian makes.

### **LIGHTING WIRES**

Standard electrical copper wiring (fire proof) as per requirement for light point (1.5x1.0x0.75 earth), Fans point (1.5x1.5x0.75 earth), 6Amp plug point (1.5x1.0x0.75 earth), and 15Amp Plug Point (4.00x2.5x1.00 earth) Air conditioners plug points (4.00x2.5x1.00 earth) with PVC conducting. Switch socket Anchor/Cona/equivalent.

### **CONDUITS/PIPES/DUCTS INSTALLATION**

GI pull wire of adequate size shall be laid in all conduits before installation. Metallic conduit runs at termination shall have two lock nuts wherever required for junction boxes etc. Conduit runs/sleeves shall be provided with PVC bushings having round edge at each end. All conduits/pipes shall have their ends closed by caps until cables are pulled. After cables are pulled, the ends of conduits/pipes shall be sealed with Glass wool/Cement Mortar/Putty to prevent entrance of moisture and foreign material. Exposed conduit/pipe shall be adequately supported by racks, clamps, straps or by other approved means. Conduits /pipe support shall be installed square and true to line and grade with an average 1Meter spacing between the supports.

### **Ventilation**

Provision shall be made to allow fresh air from outside to enter the compartment through suitable filter capable of preventing entry of sand during severe sand storms.

The ventilation system fans shall be mounted on side walls with suitable sand filter / louver having easy access for cleaning and maintenance.

Point No 5 to 9 of spec- **DELETED**

# Technical Conditions of Contract (TCC) for Site Enabling Work

## 10. OFFICE FURNITURE & FURNISHINGS

The bidder is required to procure & install office furniture & furnishings as per the attached “Office Layout Drawings” and BOQ provided below. Any changes must be with the approval of BHEL.

All Furniture in the BOQ shall be reputed made out with 18 mm thick prelaminated particle board. Chairs make of reputed make (Sigma/neelkamal/equivalent)

| 10.1 FURNITURE: |                                                                       |              |     |      |
|-----------------|-----------------------------------------------------------------------|--------------|-----|------|
| S.N O.          | Particulars                                                           | Size         | UoM | Qty. |
| 1               | Workstation with drawer                                               | 5x2x2.5 ft   | Nos | 8    |
| 2               | Overhead/File Racks                                                   | 3x1.5x1.5ft  | Nos | 17   |
| 3               | Low Back Chairs                                                       |              | Nos | 50   |
| 4               | High Back Chairs (Executive)                                          |              | Nos | 3    |
| 5               | Sofa 2-Seater                                                         | 2x4x1.5 ft   | Nos | 1    |
| 6               | Sofa 3-Seater                                                         | 2x6x1.5 ft   | Nos | 3    |
| 7               | Conference Table                                                      | 14x4x2.5 ft  | Nos | 1    |
| 8               | Table (Base Cabinet & drawer) With Glass Top. [Side table for 1 Room] | 6x2x2.5 ft   | Nos | 2    |
| 9               | Table with Base Cabinet & drawer                                      | 5x2x2.5 ft   | Nos | 4    |
| 10              | Common Area Table (cubical table)                                     | 4x2.0x2.5 ft | Nos | 16   |
| 11              | Stool for Kitchen                                                     | 1.5x1.5 ft   | Nos | 2    |
| 12              | Slotted Angle Racks for store room                                    | 6x1.8x6 ft   | Nos | 1    |
| 13              | Slotted Angle Racks for store room                                    | 3x1.5x6 ft   | Nos | 2    |
| 14              | L-shape reception table with glass                                    | 5x3x2.5ft    | Nos | 1    |
| 15              | Almirah Cupboard                                                      | 6x4x2.5      | Nos | 2    |
| 16              | Tea Table                                                             | 3x2x1.5      | Nos | 2    |
| 17              | Bottom storage for conference room                                    | 10x3x2.5     | Nos | 1    |

### 10.2 Pantry:

#### 1. Granite Countertop ○

- Countertop made of **20–25 mm thick polished granite slab**, colour and shade approved by Engineer-in-Charge.

# Technical Conditions of Contract (TCC) for Site Enabling Work

- Granite to be machine-cut, edge chamfered/bevelled, and fixed over a rigid base with cement mortar (1:4) including necessary supports.
- Joints to be filled with matching epoxy/stone adhesive.
- 2. **Stainless-Steel Sink With Drain Board**
  - One **SS sink with integrated drainboard, standard size** (approximately **37"–45" x 18"–20"**), heavy-gauge **304 grade** stainless steel (1.0–1.2 mm thick).
  - Sink to be mounted to the Granite slab as per design, with proper sealing and supports.
  - Includes CP waste coupling, bottle trap, and connections to inlet/outlet plumbing.
- 3. **Plumbing & Fixtures**
  - Water lines in CPVC or as specified, including angle valves, unions, and flexible connection pipes.
  - Proper slope for drainage and secure connections to existing plumbing lines.
- 4. **General Requirements**
  - All work to conform to manufacturer specifications, relevant IS standards, and directions of the Engineer-in-Charge.
  - All edges, joints, and fixtures to be finished neatly and free from defects.
  - Site to be cleaned and all debris removed after completion.

## 10.4 Toilets

One toilet block attached to one cabin fitted with one EWC along with all accessories and one wash basin with accessories (as per layout).

Another common toilet block (as per layout).

### ACCESSORIES:

- *For both toilets (Hind ware / Parry ware /Cera/any equivalent)*
- *EWC, WB, Urinal with all internal connections & CP fittings with all accessories (as per drawing).*
- *Water tank 1000L (2 Nos.- Sintex/equivalent) including all piping works and supporting structure of 4m height for water tank*
- *Soap Disk, Paper holder, Mirror to be included in both toilet blocks.*

| SI No | Item                                 | Quantity | Unit | Make                      |
|-------|--------------------------------------|----------|------|---------------------------|
| 1     | EWC with Flush Tank with accessories | 3        | Set  | Parry ware /Cera/Hindware |
| 2     | WB Wash Basin with accessories       | 3        | Set  | Parry ware /Cera/Hindware |
| 3     | URNIAL with accessories              | 3        | Set  | Parry ware /Cera/Hindware |

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## General Requirements

- All workmanship to conform to IS standards and manufacturer specifications.
- All fixtures to be installed plumb, level, and securely anchored.
- Contractor shall test water supply, drainage, and flushing systems before handing over.
- Cleaning and removal of debris after completion.

## 10.5 CIVIL & INTERIOR WORKS

### 10.5.1 Flooring

- Civil Works including levelling, earthwork excavation, foundation ,plinth beams all associated civil works.
- Vitrified tiles 600×600/800×800 mm (premium grade), machine-cut.
- Skirting of 100 mm height, matching tile.
- Toilet area: Anti-skid ceramic tiles with slope towards floor traps.

### 10.5.2 False Ceiling

The false ceiling shall be made out of anti-corrosive painted 19mm square hollow section design to fix to the roof frame with suitable hangers. **The clear height of ceiling shall be 2.70M. from the finished floor level.** Cut out should be made properly wherever necessary for fixing electrical fitting. False ceiling shall be done with 8mm thick hollow extruded polymeric section (syntax or Equivalent) with tongue and groove arrangement. The colour of Ceiling should match with inner wall panels All vertical & Horizontal corners shall be neatly and smoothly finished with Aluminium sections & L-angles

## 10.6 ELECTRICAL WORKS

### 10.6.1 Cabling & Conduits

- FRLS/FR-LSH cables (IS: 7098/IS:694).
- PVC conduits concealed in walls/ceilings.

### 10.6.2 Power Distribution

- Main DB & Sub DBs installed in electrical room.
- Earthing as per IS:3043; minimum 3 earth pits.

### 10.6.3 Lighting

- LED lights for workstation, cabin, conference, and corridors.
- Emergency lights near exit passage.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## 10.7 Pantry

- Granite countertop (20 mm thick) with edge chamfer.
- Stainless steel sink with drainboard (standard size).
- Two almirahs per pantry with laminate finish.
- CPVC water lines.
- UPVC/SWR drainage lines.

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## 10.8. SAFETY & EMERGENCY SYSTEMS

### FIRE SAFETY

- Supply & Installation of Fire Extinguishers: following items shall be in the scope of the contractor.

| Sl. No. | Items                                           | Quantity | Unit |
|---------|-------------------------------------------------|----------|------|
| 1.      | 25 kg DCP type Fire Extinguisher                | 2        | No's |
| 2.      | 25 kg CO2 type Fire Extinguisher                | 2        | No's |
| 4.      | Sand Buckets (Stand with 4 buckets in each set) | 2        | Sets |

- Emergency exit signage

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## 10.10. PAINTING & FINISHES

- Plastic emulsion paint for walls.
- Enamel paint for metalworks.
- Textured paint (optional) in feature walls.

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## 10. 10 TESTING & COMMISSIONING

- Contractor shall test:
  - Electrical circuits
  - Plumbing lines
  - AC performance

As-built drawings to be submitted.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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## **11. GENERAL TECHNICAL REQUIREMENTS:**

For the design it is necessary to consider the requirements (by suitably planning the layout) of the convenience of inspection, cleaning, maintenance and repair.

Equipment design and engineering shall incorporate adequate safety features (as per applicable specifications of respective installation as well as Health, Safety and Environment Codes & Standards applicable for the subject project) to provide protection to operating personnel, equipment and environment.

No claim in terms of cost or relaxation in time shall be entertained for any redesign, rework and for the safety measures provided. If at any stage of work, any dismantling or modification or relocation of any facilities is required to be done to complete the work in bidder's scope and which has been agreed by the Owner, the same shall be done by the bidder at no extra cost or time implication to the Owner. All such changes will be executed only after the proposed drawings and work plan are approved by the purchaser.

The Bidder shall take all necessary precautions to protect all the existing equipment, structures, facilities and buildings etc. from damage. In case any damage occurs due to the activities of the Bidder on account of negligence, ignorance, accidental or any other reason whatsoever, the damage shall be immediately made good by the Bidder at his own cost to the satisfaction of the Owner. The Bidder shall also take all necessary safety measures at his own cost, to avoid any harm or injury to his workers and staff from the equipment and facilities of the power station.

### **Warranty**

Vendor shall provide warranty for 12 months for the supply and erection of PEB rooms from the date of start of erection or 18 months from the date of completion of erection whichever is earlier.

## **12. CONSTRUCTION REQUIREMENT:**

Construction, Erection & commissioning of all the items supplied by bidder is included in bidder's scope.

Bidder is advised to visit the project site and appraise himself about the local conditions and infrastructure available in the area for fulfilling their commitments under the contract. BHEL will not admit any claims whatsoever on account of Contractor's non-familiarization of local conditions.

# Technical Conditions of Contract (TCC) for Site Enabling Work

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The Contractor shall make all necessary arrangements to deliver and receive the material at site, build his own stores for the proper storage of equipment, maintain the stores and all related documents and records, transport the equipment to site for erection purpose. Necessary security arrangements also shall be made by the Contractor. Area only for construction of stores and construction site office shall be made available, free of cost, to the Contractor by the Purchaser.

The Contractor shall make his own arrangements for construction power and construction water. Construction power if available at site will be made available on chargeable basis. For Bhadla site, construction water to be arranged from nearby canal.

All machinery such as cranes, hydra, JCBs, forklifts, transport trucks, trolleys, concrete mixers, Ajax machines etc necessary for unloading, movement and installation of materials shall be organized by the bidder. Bidder shall arrange all the items required like scaffolding, rope, sling etc. for construction of the facilities in their scope.

All necessary tools and tackles such as screw driver set, power screw drivers, cutting pliers, nose pliers, spanner sets, adjustable spanners, hole saw cutter set, bending tools, torque wrenches, hack saw blades, pipe wrenches, flat / round files, drilling machines, welding machines, steel bar bending tools / templates for RCC works, spade, shovel, hammer etc shall be organized by the bidder.

All necessary measuring instruments such as measuring tapes, digital multimeters, electrical testers, meggers etc shall be organized by the bidder.

Bidder shall make their own arrangements for necessary food, drinking water and accommodation for their labour and employees posted at the site. Similarly, food and drinking water required at the site, during the construction operations, shall also be in scope of the bidder.

Bidder shall organize all necessary steps to meet statutory requirements such as labour license, PF, ESI, insurance etc and also ensure compliance with relevant acts such as minimum wages act, income tax act, employee insurance act etc for their labour deployed at site.

Bidder shall maintain updated labour register, with name, age, qualification, salary, attendance details etc at the site.

It is advised to Bidders to visit the site and ascertain all site intensive requirements such as Health, Safety and Environment (HSE) requirement, work permits and other

# Technical Conditions of Contract (TCC) for Site Enabling Work

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special requirements of site etc. Bidder shall ensure safety of man and machinery during work at site. For this necessary safety measures like use of PPEs, use of danger board/tapes etc to be ensured by the bidder. It is the ultimate responsibility of the bidder in all respect to prevent accidents at the site and safeguard man and machinery from accidents.

Bidder shall, at the completion of every work, clear off the debris, which resulted out of the work.

## **13. QUALITY ASSUARANCE:**

- 13.1 All materials, components, and equipment covered under this specification shall be procured, manufactured, erected, commissioned and tested at all the stages as per a comprehensive Quality Assurance Program (QAP). It is bidder's responsibility to draw such QAP duly approved by the purchaser.
- 13.2 Bidder shall submit their comprehensive Manufacturing Quality Plan (MQP) and Field Quality Plan (FQP)
- 13.3 It will be the responsibility of the bidder to adhere to the approved Quality Plans. The bidder shall further identify specific hold points beyond which work will not proceed without purchaser's consent so as to further ensure that he performs the above quality functions effectively.
- 13.4 Bidder to note that all the cost involved in the various Inspection and testing as per approved QAPs shall be deemed to be included in bidder's quoted price. Bidder at no point of time shall be eligible to raise any extra claim on account of any requirement necessitated as a part of approval of QAPs/ ITPs.
- 13.5 At various stages of manufacturing, procurement, construction, as per approved QAP inspection/testing shall be carried out by Inspection Agency (BHEL / Third Party appointed by BHEL / BHEL appointed third party). The inspection agency shall be indicated in the quality plan and shall be as per the approved quality plan.
- 13.6 Bidder shall notify in writing to the Purchaser, at least two weeks (Ten working days) in advance of the date and the place at which the items will be ready for witnessing of inspection / testing by Purchaser and / or PMC. In case any postponement becomes necessary, the CONTRACTOR shall provide written notification at least 48 hours prior to the original scheduled date.
- 13.7 In case bidder find any deviation or non- conformity with respect to the agreed specifications, during manufacturing of the item and where corrective action is not feasible, the bidder shall report the same to Purchaser and / or PMC in the

# Technical Conditions of Contract (TCC) for Site Enabling Work

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designated “Waiver / Deviation Request” format and seek prior approval from Purchaser /PMC before proceeding with the job.

- 13.8 Bidder after satisfying that all inspection requirements as per approved ITP and applicable specifications / documents have been taken care by Inspection Agency, shall submit copy of the Inspection Certificate and all Quality control records to Purchaser in requisite copies along with Statutory Certificates if any, duly endorsed by their Quality Control Manager.
- 13.9 Purchaser and / or PMC – End customer reserve the right to carry out surprise checks on all material either at manufacturer’s works or at site. In case of any rejection at site, the whole lot will be rejected and bidder shall get the entire lot replaced without any time or delivery implication to the purchaser.
- 13.10 Inspection Agency shall check the calibration status and traceability of all instruments used by the supplier, for testing. In case, TPIA uses their own instruments for testing purposes, similar certification shall be ensured.
- 13.11 Bidder shall submit, copy of each Inspection Certificate (IC) / Inspection Release Note (IRN) issued by Inspection Agency, along with all attachments mentioned therein.
- 13.12 No material shall be dispatched from the manufacturer’s works before the same is accepted, subsequent to pre-dispatch final inspection including verification of records of all previous test/inspections by authorized Inspection Agency and duly authorized for dispatch by issuance of Material Dispatch Clearance Certificate (MDCC).

## **14. MARKING , PACKING AND DESPATCH**

### **MARKING**

- 14.1 All items shall be marked (stamped/etched) in accordance with the applicable Code/standard/specification. In addition, the item code, if available, shall also be marked.
- 14.2 For ease of identification, the color of painted strip (wherever required) shall be as per the applicable standard.
- 14.3 Paint or ink for marking shall not contain any harmful metal or metal salts which can Cause corrosive attack either ordinarily or in service. Special

# Technical Conditions of Contract (TCC) for Site Enabling Work

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items/smaller items shall have attached corrosion resistant tag providing salient features.

## DESPATCH

- 14.4 All the materials shall be divided into several sections for protection and ease of handling during transportation. The equipment shall be properly packed for transportation by ship/rail or trailer.
- 14.5 Special notations such as 'Fragile', 'This side up', 'Center of gravity', 'Weight', 'Owner's particulars', 'PO Nos.' etc. shall be clearly marked on the package together with other details as per purchaser order.
- 14.6 The equipment may be stored outdoors for long periods before installation. The packing shall be completely suitable for outdoor storage in areas with heavy rains/high ambient temperature, unless otherwise agreed.
- 14.7 The following minimum packing procedures shall be followed :
- 14.8 All items shall be dry, clean and free from moisture, dirt and loose foreign material of all kind.
- 14.9 All items shall be protected from rust, corrosion, and mechanical damage during Transportation, shipment and storage.
- 14.10 Rust preventive on machined surfaces to be welded shall not be harmful to welding and shall be easily removable with a petroleum solvent.
- 14.11 Ends shall be suitably protected, and the protectors shall be securely and tightly attached.
- 14.12 Each variety and size of item shall be supplied in separate packaging marked with the purchase order no., item code (if available), and the salient specifications.

Prior to shipment components of the unit shall be completely cleaned, Flange faces, threaded portion and other machined surfaces shall be protected by coating with easily

# Technical Conditions of Contract (TCC) for Site Enabling Work

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removable rust preventive. All the items shall be properly packed to prevent damage during transit damage, loading, unloading and storage.

## 15 DOCUMENTATION:

15.1 The following minimum documentation shall be submitted by the vendor:

15.1.1 All PEBs GA drgs indicating base plates, anchor bolts connection Detail, purlin, roof panels, wall panels, scope demarcation etc.

15.1.2 BOM for Structural items.

15.1.3 BOM of architectural items with detail of item wise make, model Quantity etc.

15.1.4 Design analysis in STADD.PRO along with loading detail Foundation.

15.1.5 'AS BUILT' drawings .Any other document, as deemed necessary BY BHEL, during detail engineering or erection – commissioning stage.

## 16 DOCUMENTS SUBMISSION PROCEDURE

16.1 All Drawings/Datasheet/Design calculation etc. shall be submitted in soft as well as hard copy.

16.2 Soft submission of all drawings/documents is mandatory.

16.3 All drawings/ shall be submitted in AutoCAD format & all documents in MS office/PDF

16.4 BHEL shall furnish Approval/Observation of Drawings/Datasheet/Design calculation etc. on Soft Copy only.

## 17 DRAWINGS REVIEW AND APPROVALS

17.1 Review of drawings and documents issued by vendor shall be carried out by BHEL.

17.2 Approval/ review of the drawings/ documents by the BHEL would be only limited to the review of compatibility with basic designs and concepts.

17.3 The approval and /or review by BHEL shall not be construed by the bidder as limiting any of his responsibilities and liabilities for mistakes and deviations from the requirements, specified under these specifications and drawings.

17.4 The sole responsibility of the correctness of Design, Engineering & construction shall lie with the bidder, irrespective of the fact that the Drawings / Documents submitted are reviewed or not by BHEL.

# Technical Conditions of Contract (TCC) for Site Enabling Work

- 17.5 The bidder shall correct all faulty designs & constructions detected at any stage of work, without any cost and time implication to the Purchaser. The Bidder shall be responsible for and shall pay for any alterations of the Work to be accrued due to any discrepancies, errors or omissions in the Drawings or other Particulars supplied by him whether such drawings or particulars have been approved by the BHEL or not.
- 17.6 Revisions in drawings/documents shall be clearly marked within clouds. No revision without clouding shall be recognized and the same shall not be considered reviewed and approved.
- 17.7 Only the approved drawings duly stamped and signed by a competent engineer of BHEL shall be used for final erection.

## 18 Sub Vendor List:

### A.1 For structural steel:

1. It should conform to relevant Indian / International Standards.
2. It should be of reputed make of supplier to similar construction /infrastructure projects.

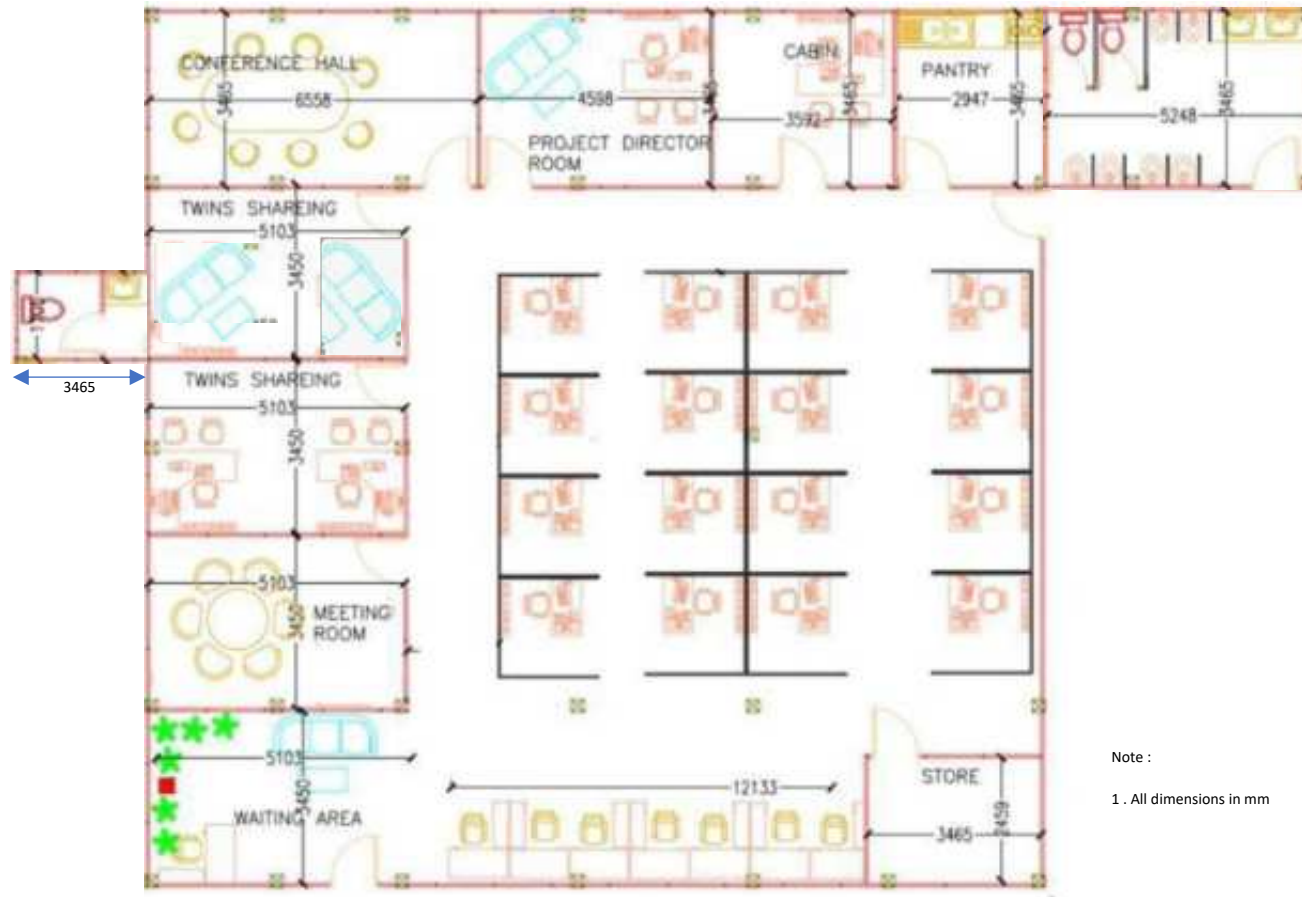
### Makes of Electrical and other items

| Item                         | Vendor                   | Remark                                                                                                                                |
|------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| LED Lamp fixtures for indoor | BAJAJ                    | Equivalent other make also may be proposed by bidder and prior approval shall be obtained from purchaser before finalization of make  |
|                              | CGL                      |                                                                                                                                       |
|                              | Havells                  |                                                                                                                                       |
|                              | Philips                  |                                                                                                                                       |
|                              | Wipro                    |                                                                                                                                       |
| Lighting panel               | Havels India Limited     | Equivalent other make also may be proposed by bidder and prior approval shall be obtained from purchaser before finalization of make. |
|                              | Indo Asian Fusegear      |                                                                                                                                       |
|                              | STANDARD ELECTRICALS LTD |                                                                                                                                       |
|                              | C&S Electric Limited     |                                                                                                                                       |
|                              | ABB Limited              |                                                                                                                                       |
| Cable Lugs                   | Dowell, Mumbai           | Equivalent other make also may be proposed by bidder                                                                                  |
|                              | Electromac Industries    |                                                                                                                                       |

## Technical Conditions of Contract (TCC) for Site Enabling Work

|                           |                                                                  |                                                                                                                                       |
|---------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|                           | Chenta Engineering Co                                            | and prior approval shall be obtained from purchaser before finalization of make.                                                      |
|                           | Forward Engineering Industries                                   |                                                                                                                                       |
|                           |                                                                  |                                                                                                                                       |
| MCB                       | Any make-Model shall have mark of CE/VDE/UL/CSA/BIS with CML no. | Equivalent other make also may be proposed by bidder and prior approval shall be obtained from purchaser before finalization of make. |
| Sanitary & Plumbing Items | Cera/Parryware/Aashirwad                                         | Equivalent other make also may be proposed by bidder and prior approval shall be obtained from purchaser before finalization of make. |
| Furnishing                | New Tech                                                         | Equivalent other make also may be proposed by bidder and prior approval shall be obtained from purchaser before finalization of make. |

# Tentative Layout Plan



Note :

1 . All dimensions in mm

**25 kVA DIESEL GENERATOR SET (AS PER CPCB-IV NORMS) WITH ACOUSTIC ENCLOSURE WITH AMF PANEL WITH  
INSTALLATION**

| Sr. No. | Item description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quantity | Unit |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|
|         | <p>Supply, installation, testing and commissioning of 25 kVA, 3 Phase, 415V AC, Silent DG Set comprising of Engine, with minimum 36 BHP, at 1500 RPM, coupled with alternator of same make mounted on a common base frame complete with</p> <ul style="list-style-type: none"> <li>a) AMF control panel</li> <li>b) Fuel tank</li> <li>c) Battery &amp; leads</li> <li>d) Silencer – Residential</li> <li>e) AVM pads</li> <li>f) First Fill of lube oil</li> <li>g) Acoustic enclosure</li> <li>h) Aluminium Power cable as per GeM Standard</li> <li>j) Transportation upto Site</li> <li>k) Commissioning</li> </ul> | 3        | Nos. |

## INTENT OF SPECIFICATION

The specification is intended to cover design, manufacture, assembly, testing at manufacturer's works, supply & delivery, properly packed for transport FOR site of one (1) no. 25 kVA Diesel Generator Set complete with all accessories and AMF Panel, as well as erection testing & commissioning at site, up to satisfactory & trouble-free operation / handing over to the Owner . The equipment shall be fully compliant with the following special requirement:

|                                |                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Noise, Emission & Smoke limits | : As per latest Amendment of Environment (Protection) Act 1986                                                                                                                                                                                                                                                             |
| Noise level                    | : Less than or equal to 75 db (A) at a distance of 1M from of Acoustic Enclosure as per CPCB Norms                                                                                                                                                                                                                         |
| Enclosure                      | : Acoustic enclosure with Residential Silencer                                                                                                                                                                                                                                                                             |
| Service                        | : Outdoor                                                                                                                                                                                                                                                                                                                  |
| Site Condition                 | : The DG Sets and its auxiliaries shall be designed for smooth, efficient and trouble free operation in tropical humid climate having relative humidity of 88% and maximum ambient temperature of 40°C. However, the maximum ambient temperature and the maximum relative humidity are not likely to occur simultaneously. |

### 2.0.0 SCOPE OF WORK

The DG Sets shall be supplied as well as installed for Standby power supply.

#### 2.1.0 SCOPE OF SUPPLY

**2.1.1** 25 kVA 415V, 3 phase, 50Hz Diesel Generator set with acoustic complete with Control Panel for protection, metering & operation and all accessories as specified.

**2.1.2** Bidder shall submit drawings, documents and manuals, as specified in details elsewhere in this specification. The Dg Set shall be compliance ISO to ISO 50001 Energy Efficient Management. DG Set manufacturer to provide copy of ISO in compliance to the same.

### 2.2.0 SCOPE OF SERVICES

Scope of services shall include but not limited to the following:

- CPCB Approval certificate (Copy of type approval certificate of offered DG Set model & copy of type approval certificate of offered engine model must be enclosed with the bid).
- PCC Foundation
- 4 Nos. GI Chemical pipe Earthing pits alongwith earthing strip of 5 mtrs per pit
- Aluminium Power Cable of suitable Size of length as per GEM standard.
- Commissioning of DG Set

### 3.0.0 REFERENCE STANDARDS

3.1.0 The design, manufacture and testing of the equipment covered by this standard shall comply with the latest issue of the following codes and other relevant Indian Standard specifications, unless specified otherwise elsewhere in the Technical Specification.

- (i) IS 13018 : 1990 – Diesel Engine for General Purpose
- (ii) IS – 13364 / IS 4722 – Rotating Electrical Machines

3.1.1 Equipment designed and manufactured to other national standards shall be acceptable provided they are in no way inferior to the above mentioned standards.

3.1.2 The design and operation features of the equipment offered shall also comply with the provisions of

latest issue of the Indian Electricity Rules, Environment (Protection) Act 1986 and other statutory requirements. The supplier shall, wherever necessary, make suitable modification in the equipment to comply with the above.

#### **4.0.0 TECHNICAL REQUIREMENT**

##### **4.1.0 DIESEL ENGINE**

- Type : The Diesel Engine shall be suitable for generating set application developing specified BHP at 1500 RPM under NTP conditions of BS: 5514 or equivalent in IS, water cooled, Turbocharged after cooled with after coolers, powered by four (4) strokes, multi cylinder with engine performance requirement as specified below. Diesel engines shall be as per MOEF (MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE) notification dtd. 3rd November 2022. Only Indian origin Engine is acceptable as per PPP (Public Procurements P-45021/2/2017-PP(BE-II)) policy
- Nominal Output : To match with, alternator 25 kVA at 0.8 pf (lagging) i.e., 20 KW.
- Revolution : 1500 rpm
- Starting System : 12 V battery operated electric motor starting.
- Fuel : High speed diesel oil
- Governor : Electronic type
- Aspiration System : Turbocharged after cooled
- Cooling System : Water cooled with radiator and fan
- Lubrication System: As per engine OEM Standard

##### **4.1.1** The governing system of the diesel engine shall satisfy the following requirements:

- Steady state speed regulation shall be adjustable between 0 to 5% manually
- Steady state speed regulation once fixed, shall not vary beyond +5%.
- Transient speed regulation shall not exceed 5% of rated speed.
- Recovery time shall be within 30 seconds.

##### **4.1.2** For fuel oil of the engine, one (1) day tank of minimum 50 ltrs alongwith fuel oil filter, level indicator and float switch shall be provided. The fuel system of the engine shall be complete with suction line, fuel filters, fuel pump, governor, manifold, injectors etc. as required.

##### **4.1.3** The engine shall be supplied complete with coupling, guard, as well as outlet exhaust pipe with silencer.

##### **4.1.4** Suitably rated lead acid sealed maintenance free batteries (for each set) capable for ten consecutive starts, along with charger (with float and boost charging provision) shall be included. Control/monitoring /annunciation requirement

##### **4.1.5** Engine shall meet the following parameters :

- The Engine shall be enclosed in an enclosure to make it work silently (as per CPCB IV norms) without any degradation in its performance.
- The fuel shall be used High Speed Diesel (HSD) as per IS: 1460.
- Filter shall be dry type air filter with replaceable elements.
- The Engine shall have closed loop lubricating system. No moving parts shall require lubrication by hand prior to the start of engine or while it is in operation.
- The Engine shall be electric starting (by 12 V DC starter motor system for 25 kVA DG Set).
- The engine shall be fitted with Electronic Governor.

**4.1.6** Instrument Control Panel shall be furnished for the engine, which shall comprise the following:

- Push Button
- Water temp. gauge
- Hour meter with rpm indicator
- Lube oil pressure gauge
- Other item as considered necessary by manufacturer

The Instrument Control Panel shall preferably be mounted on the Diesel Generator skid. Otherwise it may be of separately pedestal / floor mounted type.

#### **4.2.0 GENERATOR / ALTERNATOR:**

Alternator with rated output of 25 kVA at STP suitable for continuous operation at 1500 RPM developing 415 volts at 0.8 p. f. (lag) suitable for 50 Hz, three phase, 4 wire system. The alternator shall be brushless type, drip proof, screen protected as per IP-23, self excited & self regulated. The alternator will be suitable for tropical climate and shall conform to IS:4722. The salient features of the alternator are:

- +/- 1% voltage regulation in static conditions.
- IP 23 protection with class 'H' insulation
- Permissible overload of 10% for one hour in 12 hours of operation

| S. NO. | PARTICULARS       |   | Value                                                         |
|--------|-------------------|---|---------------------------------------------------------------|
| 1      | Type              | : | Self excited                                                  |
| 2      | KVA               | : | 25 kVA                                                        |
| 3      | Voltage           | : | 230V, solidly grounded                                        |
| 4      | Phase             | : | 3 phase                                                       |
| 5      | Frequency         | : | 50 Hz                                                         |
| 6      | Power Factor      | : | 0.8 (lagging)                                                 |
| 7      | Excitation System | : | Brushless exciter                                             |
| 8      | Insulation Class  | : | Class "H" insulation with temperature limitations for Class-H |
| 9      | Cooling           | : | Self cooled                                                   |
| 10     | Connection        | : | Star, with neutral terminal wired up to external bushing      |
| 11     | Voltage Regulator | : | Solid State Electronic type                                   |

**4.2.1** The generator set shall be able to withstand a three phase short circuit at its terminal for three (3) seconds without any injury to the machines. This shall be suitable for transient load changes and high motor starting current.

**4.2.2** Copy of type test report of Alternator must be enclosed with the bid.

**4.2.3** The alternator should be same brand as engine to avail single window service.

#### **4.3.0 AMF CONTROL PANEL**

**4.3.1** The Control Panels shall be free standing, floor mounted, metal clad cubicle type in construction, to form a compact assembly in dust / damp and vermin proof type, equivalent to IP-53. The thickness of sheet steel members shall not be less than 1.6 mm for cold rolled steel. Suitable reinforcement shall be provided, wherever necessary. Copy of IP certificate of Panel must be enclosed with the bid.

**4.3.2** The AMF Control Panel for the DG Sets shall house the following devices for control, protection and metering of the set, but not limited to meet the start-stop and operational requirements:

- (i) Contactors, with push buttons, indication lamps etc. as required, for the set.

**4.3.3** The manufacturer shall provide all the protective devices required for the safe operation of the Diesel Generator set. This shall include the following protections as a minimum, and of approved type /make:

- Over current relay
- Over / under voltage relay
- Over / under frequency relay

Alternatively suitable controller shall be provided, incorporating all the above protection features.

**4.3.4** Controller provided in DG Set / Control Panel shall have below features :

- Lube oil pressure low
- Cooling water temperature high
- Engine tripped due to over-speed
- Generator tripped due to electrical faults
- Low oil level in fuel oil service tank
- Engine failure to start
- Other items as felt necessary by the manufacturer

Metering and protection as per controller manufacturer standard is also acceptable but subjected that controller shall be of engine manufacturer only.

**4.3.5** Metering

- 3 phase current
- 3 phase voltage
- 3 phase Kilo-watt
- 3 phase KVA
- Kilo-watt hour
- Power factor
- System frequency

**4.3.6** Starting Battery

Starting battery shall be furnished along with the set, as per following particulars:

- |      |                 |   |                                                                            |
|------|-----------------|---|----------------------------------------------------------------------------|
| i)   | Type            | : | Lead acid                                                                  |
| ii)  | Nominal voltage | : | 12 V D.C.                                                                  |
| iii) | Capacity        | : | Minimum 1 Nos. 65 AH battery with each DG Set                              |
| iv)  | Mounting        | : | Inside the Acoustic Enclosure.                                             |
| v)   | Battery         | : | The Battery should be same brand as engine to avail single window service. |

**4.3.7** Battery Charger

- |      |                 |   |                                                                                             |
|------|-----------------|---|---------------------------------------------------------------------------------------------|
| i)   | Type            | : | SMPS based                                                                                  |
| ii)  | Charging System | : | Automatic float and boost charging                                                          |
| iii) | Input voltage   | : | 230V 1 phase, 50 Hz.                                                                        |
| .    |                 |   |                                                                                             |
| iv)  | Capacity        | : | Adequate to restore the fully discharged battery state of full charge in twelve (12) hours. |

#### **4.4.0 BASE FRAME**

- (i) The DG set complete with its accessories shall be mounted on a common base frame.
- (ii) In case the manufacturer recommends vibration isolators for the installation of the equipment, the same shall be included in their scope, in required quantities
- (iii) AVM Pads as per engine manufacturer standard shall be provided with each DG Set.

**4.4.1** Sound Proof Enclosure: This is a special sheet metal fabricated on CNC machine and Powder coated. The enclosure is designed for reducing the sound level as per approved CPCB norms.

The Acoustic enclosure consists of the following:-

- a) **Acoustic Insulation:** Insulated and noise reduction type, properly clamped shall be provided on all doors, roof and sides to absorb noise.
- b) **Door Locks and Door Hinges:** Special designed Stainless steel Door Locks and doors hinges ensuring for smooth operation and long life.
- c) **Residential Silencer:** Absorption type non-resistance Residential Silencer insulated from inside with glass wool shall be provided to suppress exhaust noise from the engine.

#### 5.0.0 PERFORMANCE REQUIREMENT

| Sl. No. | Particulars                   |   | Performance Requirement                                  |
|---------|-------------------------------|---|----------------------------------------------------------|
| 1       | Nominal output of the set     | : | 25 kVA                                                   |
| 2       | Rated speed                   | : | 1500 rpm                                                 |
| 3       | Rated voltage                 | : | 230 volts                                                |
| 4       | No of phases                  | : | 3                                                        |
| 5       | Power factor                  | : | 0.8 (Lagging)                                            |
| 6       | Rated frequency               | : | 50 Hz                                                    |
| 7       | Overload capacity             | : | 10% for 1 hour                                           |
| 8       | Over speed withstand capacity | : | 110% of rated speed for 1 min                            |
| 9       | Voltage Regulation            | : | Within +/- 1% of rated voltage from no load to Full load |
| 10      | Frequency Regulation          | : | Within +/- 4% from no load to full load                  |

- 5.1.0 The DG set OEM shall have facility to test the DG set at 0.8 pf at full load. Bidder shall provide a certificate issued by an independent govt lab to confirm that the OEM has the required facility to test the DG set at 0.8pf at full load.

#### 6.0.0 TESTS AT SITE

DG Set shall be tested during 10-15 minutes running at site. Diesel and load will be provided by the department.

#### 7.0.0 TO BE SUBMITTED WITH THE BID

- Manufacturer's catalogues,
- Copy of ISO : 9001 : 2015 certificate issued in the name of DG Set OEM,
- Copy of ISO : 14001 : 2015 certificate issued in the name of DG Set OEM,
- Copy of ISO : 27001 : 2013 certificate issued in the name of DG Set OEM,
- Copy of ISO : 19011: 2018 certificate issued in the name of DG Set OEM.

#### 8.0.0 OTHER MANDATORY TECHNICAL REQUIREMENT IN BRIEF

| TECHNICAL SPECIFICATION                                |         |          |
|--------------------------------------------------------|---------|----------|
| Generator Prime Rating at rated rpm ( as per ISO-8528) | kVA     | 25       |
|                                                        | kW      | 20       |
| Frequency                                              | Hz      | 50       |
| Power factor                                           | lagging | 0.8      |
| Voltage                                                | V       | 230 (1Ø) |

|                                                          |          |                                                                                                                                                                                  |
|----------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Governing Class (As per ISO 8528 Part-V)                 |          | G3                                                                                                                                                                               |
| Noise Level @ 1 mtr                                      | dBA      | as per CPCB Norms                                                                                                                                                                |
| Fuel Consumption @ 100% load                             | Ltrs/hr  | Not more than 8 Ltrs/hr                                                                                                                                                          |
| Fuel Tank Capacity                                       | Ltrs     | Minimum 50 ltrs                                                                                                                                                                  |
| Weight of genset with canopy                             | Kg       | Not more than 800 Kg                                                                                                                                                             |
| Electrical Battery starting voltage                      | Volts-DC | 12                                                                                                                                                                               |
| <b>ENGINE</b>                                            |          |                                                                                                                                                                                  |
| Rated output (Prime Continuous rating as per ISO 8528-1) | kW       | Minimum 26 KW                                                                                                                                                                    |
|                                                          | HP       | Minimum 36 BHP                                                                                                                                                                   |
| Engine must be as per CPCB-IV Norms                      |          |                                                                                                                                                                                  |
| Cooling System (mandatory)                               |          | Liquid Cooled                                                                                                                                                                    |
| No. of Cylinder (Mandatory)                              | Number   | 3                                                                                                                                                                                |
| Cubic Capacity <sup>2</sup> (Minimum)                    | Ltrs     | Minimum 1.65 ltrs                                                                                                                                                                |
| Bore x Stroke                                            | mm       | 86 X 94                                                                                                                                                                          |
| Rated Speed                                              | RPM      | 1500                                                                                                                                                                             |
| Fuel System                                              |          | HSD                                                                                                                                                                              |
| Emission reduction                                       |          | DOC (Diesel Oxidation Catalyst) system                                                                                                                                           |
| Aspiration                                               | TA       | Turbocharged after cooled                                                                                                                                                        |
| Lube Oil sump capacity (Minimum)                         | Ltrs     | 5.95 ltrs                                                                                                                                                                        |
| Coolant Capacity (Minimum)                               | Ltrs     | 5 ltrs                                                                                                                                                                           |
| DEF Capacity (Minimum)                                   | Ltrs     | NA                                                                                                                                                                               |
| <b>ALTERNATOR</b>                                        |          |                                                                                                                                                                                  |
| Type                                                     |          | Brushless, Self excited                                                                                                                                                          |
| Insulation Class                                         |          | Class H                                                                                                                                                                          |
| Protection                                               |          | IP – 23                                                                                                                                                                          |
| Type of AVR                                              |          | Solid state Electronic type                                                                                                                                                      |
| Alternator Efficiency (at 100 % load)0.8 pf              | %        | Not less than 88 %                                                                                                                                                               |
| Max Voltage Dip at Full Load 0.8 pf Lag                  | sec      | ≤ 20%                                                                                                                                                                            |
| Max Time to build up rated voltage at rated RPM          |          | < 2 sec provided engine reach the rated speed                                                                                                                                    |
| <b>PANEL</b>                                             |          |                                                                                                                                                                                  |
| Panel Type                                               |          | AMF Panel with required switches / cutouts, Contactor and SMPS based battery charger                                                                                             |
| IP protection                                            |          | IP - 53 / IP – 55 (certificate to be furnished alongwith Bid)                                                                                                                    |
| Acoustic Enclosure                                       |          | Sheet metal fabricated on CNC turret punch press and Powder coated with 7 tank process. The enclosure should be designed for reducing the sound level as per approved CPCB norms |

### 8.0.0 PACKING

- 8.1.0 The materials shall be property packed before dispatch to avoid damage during transport, storage and handling.
- 8.2.0 Proper arrangement shall be provided to handle the equipment.

## **9.0.0 INSTALLATION, ERECTION, TESTING AND COMMISSIONING**

- 9.1.0 The Contractor shall provide PCC type foundation with the ratio of 4:2:1 shall be provided. The length and breadth of the foundation shall be 300 mm more from the respective length and breadth of the DG set. The height of the foundation shall be 400 mm i.e. 200 mm below and 200 mm above the ground level.
- 9.2.0 The generator set, control panel, as well as the neutral of the generator shall be effectively earthed. The Contractor shall provide 4 Nos. GI Chemical pipe Earthing Pits (Chemical) with chemical power, chamber cover etc alongwith total 20 mtrs of GI Strip (5 mtr with each Pit) . Out of these 4 earthings, 2 are for DG Set and 2 are for neutral.
- 9.3.0 Power cabling as per GeM Standard shall be done by the contractor. Necessary aluminium power cable, cable glands, cable end lugs, PVC numbering ferrules, tapes etc. shall be supplied and installed by the contractor. In case Power cable beyond 60 mtr is required, then the same will be provided by the department.
- 9.4.0 Residential Silencer and The exhaust pipe upto Silencer shall be provided with each DG Set
- 9.5.0 The Supplier shall follow occupational health and safety norms, Bidder shall provide copy of ISO 45001 in compliance to the same.

## **10.0.0 EXCLUSIONS TO BIDDER SCOPE**

Following (a to f) are not in scope of Bidder:

- a) Any type of statutory approval
- b) Diesel & load required for commissioning at site
- c) Exhaust pipe beyond Silencer
- d) Cable beyond 60 mtr
- e) Head loading, Dismantling etc (at site)
- f) Any type of Civil or electrical work not given in specifications

## **11.0.0 OTHER SPECIFIC TERMS**

- 11.1.0 Warranty: 24 months from date of supply or 18 months from the date of commissioning whichever is earlier.
- 11.2.0 Remote monitoring system to monitor engine is required & the same must be from engine manufacture only.
- 11.3.0 Shelf life of the DG Set should be 10 years.